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A NEW STELÉ FROM ATHENS.

[Plate I]

1.

Apparently there had been sculpture on the missing half of the marble stelé lately acquired by the British Museum from Athens a seated figure with hand upraised (Pl. I). There is a trace of the raised arm and also of a footstool. The subject had therefore been one of those scenes of parting or meeting so common on Athenian stelae. But the young man leaning on his staff is not of the usual Athenian type. In several respects he resembles a youthful Heracles on a relief from Mt. Ithome now in Athens, which figure it has been the custom to regard as Polycleitan (Fig. 1). So far as the pose of the head and the Diademusos-like modelling of the body are concerned that opinion may be right. Only we must remember that the somewhat formal modelling of the thorax both in the Ithome relief and the new stelé is not unfrequent in Greek art, at least from the time of Lysippos onwards. A familiar instance is the Hermes on the sculptured drum of a column from Ephesus in the British Museum. It is a modification of the type of Polycleitos and may have set in much earlier than Lysippos. It may even have extended to Athens.

In the Ithome relief Heracles leans forward on his club; in ours the young man leans on his staff as in the so-called conversation-scenes on vases of the best time, e.g. the kylix, E 59 in the British Museum. On our lekythos E 698 is a young huntsman standing with right hand on his side and head poised much as in the new relief. As compared further with the Ithome relief the bodily forms of the new figure are rendered with greater definition, and the main outlines are more precise. The contrasts between nude form and drapery are more finely balanced. The whole bearing of the figure is more attractive. The surface is on the whole well preserved, though there is a good deal of incrustation which has become fossilized, so to speak, on the marble. The height of the stelé is 1 ft. 11½ in.

1 Outline in Schoene, Gr. Reliefs, Pl. 27, No. 119; cf. Kekulé, Bildwerke in Theben, No. 374.
I am permitted to add here some remarks on a stele of a different kind. It is one which occurs amid the reliefs on a moulded vase of black ware acquired some years ago by the British Museum from Thebes. The vase is of the class generally known as Megarian bowls. The subject of the reliefs is the Rape of Proserpine (Fig. 2). It is a familiar subject, but in this

1 I have to thank Miss Godden for the drawing of this vase.
instance there are peculiarities which deserve notice. First of all there is
the stele. It is placed so as to separate two stages of the myth, the one
transpiring on earth, the other in Hades. On the right of the stele is seen
the chariot of Pluto approaching, preceded by Hermes and followed by the
Irte goddesses, Demeter, Athené, Hecaté and Artemis. On the left of the
stele are the reeds of Acheron and beyond them two of the Danais with
their pitchers. The stele is inscribed ΕΥΣΕΒΩΣ and must therefore be
regarded as indicating the entrance to the abode of the blessed (τὸν
εὐσεβῶν λειμῶνει). It represents the Λιξαν πολυς which figure in early
Christian as well as in classical literature. At the same time it is to be
distinguished from the exit from the face of the earth which was conceived
otherwise. In Sicily the exit was through a cave. On a fragmentary vase

![Fig. 2.—Minoan Bowl from Thera. In Brit. Mus. (Diam. 7 in.).](image_url)

from Eleusis the chariot of Pluto is seen plunging down into the earth, half
lost to sight, through a sort of χάσμα ρής. On a fresco of the Catacomb of
St. Praetextatus at Rome illustrating the journey after death of Vibia, the wife
of a priest of Sabazios, under the guise of the Rape of Proserpine, we have in
the first scene the chariot of Pluto approaching a round hole in the earth to
which Hermes conduces it. At a later stage Vibia appears being led through
an archway—a hollow stele in fact—by an ἀγέλες δυνας towards a banquet
of the blessed.
When Persephone arrived in Hades she was believed to have found meadows there as rich and flowery as those of Hymettus from which she had been so rudely carried off. These flowery meadows are made the most of on the vase. It does not appear, however, that the scene of the chase—two hares and two hounds—under the chariot of Pluto and therefore on earth, is continued in the meadows of the lower world. As compared with the two swans in the terrestrial scene, we find only one in Elysium.

The arrival of Persephone in Hades was associated with the Theogonia and, bearing this in mind we at once recognize the boy amid the reeds of Achelous playing on his flutes as a type of the boy who led the way in marriage processions as we see, among other instances, on our white pyxis D 11, where the boy marches busily playing his flutes. But this boy among the reeds, though dressed in the ordinary manner, has two small horns on his forehead. He is therefore a young Pan. Reeds are a natural enough environment for Pan and from his association with nymphs it was perhaps an easy step to connect him with the marriage of Persephone. But so far I have not been able to find any mention of that circumstance in ancient literature. A mask of the goat-headed Pan appears under the stèle.

A. S. Murray.

1 Claudian, De Ingenua Poemata ii. 237:

Zephyrus illus nectaribus balans
perpetua flora quasi novi praebiit Hymen.

See also Arnaud xi. 648:

larger his campae aether et lamine vastit.

purpureas, sphenique summi, hos sidus noctum.


Pal. xxv. (App. Pfeur.) 177.

ovs Pindos filius de ovi ἐχθροκτόνου θυσαλος
και λεγομαι αὐτὸν ἱδουκτέον χρῆται.
THE GONG AT DODONA.

"Sounding brass or a tinkling cymbal."—1 Cor. xiii. 1.

The Greeks had a proverb which compared talkative persons to "the gong at Dodona."\(^1\) Menander (342-291 B.C.) in his Archeiphos\(^2\) made one of his characters remark:

'Give this creature Myrtile the nearest touch or simply call names, and there's no end to her talking. To stop the gong at Dodona, which they say sounds all day if a passer-by lays a finger on it, would be an easier job than to stop her tongue; for it sounds all night as well.'

A fragment of Kallimachos\(^3\) (c. 310-c. 240 B.C.) implies the same proverb:

...'lest it might be said that I was but awakening the echoes of the bronze at Dodona.'

Aulus Aristides (129-180 A.D.) in his encomium on the four great statesmen of Athens\(^4\) observes: 'When it becomes necessary to vituperate

---

\(^1\) Zeph. 8. 3 κύκλος καλλικρατικός ἐτε τὰς πάντας παλαιάς καὶ νεόκρατες. Homer. O. 22 κύκλος καλλικρατικός ἐτε τὰς πάντας παλαιάς. Cyp. 6. 32 κύκλος καλλικρατικός ἐτε τὰς πάντας παλαιάς.

\(^2\) Quoted by Steph. Byz. s.v. Λαδέσα, where the MSS. give τὰν καὶ Λαδέσα λαβοντος καὶ Λαδέσσας ἣμους. Huntley cf. τὰν καὶ Λαδέσα λαβοντας καὶ Λαδέσσας ἣμους. Schmeider Call. ii. 286 notes that the first line is quoted by Chosecluseus petit in Thes. p. 416, 15, επ. 16, 16, 5, 116, 4, 273, 35, 280, 30. Bekker added p. 1228, Lemma, prusa. p. 1228, and is thus enabled to restore the true reading οὕτω καὶ Λαδέσα λαβεντας καὶ Λαδέσσας ἣμους.

\(^3\) Quoted by Steph. Byz. s.v. Λαδέσα, O. 1. 2 κύκλος καλλικρατικός ἐτε τὰς πάντας παλαιάς Λαδέσας καὶ τὰς αἰσθήμας Λαδέσας

\(^4\) Quoted by Steph. Byz. s.v. Λαδέσα, O. 1. 2 κύκλος καλλικρατικός ἐτε τὰς πάντας παλαιάς Λαδέσας καὶ τὰς αἰσθήμας Λαδέσας.

\(^5\) Homer, 13. 205b, that the Λαδέσα was another name of the Λαμπραία. For the text of the fragment I follow Meineke (70. 5).

\(^6\) Quoted by Steph. Byz. s.v. Λαδέσα, where the MSS. give τὰν καὶ Λαδέσα λαβοντος καὶ Λαδέσσας ἢμους. Huntley cf. τὰν καὶ Λαδέσα λαβοντας καὶ Λαδέσσας ἢμους. Schmeider Call. ii. 286 notes that the first line is quoted by Chosecluseus petit in Thes. p. 416, 15, επ. 16, 16, 5, 116, 4, 273, 35, 280, 30. Bekker added p. 1228, Lemma, prusa. p. 1228, and is thus enabled to restore the true reading οὕτω καὶ Λαδέσα λαβεντας καὶ Λαδέσσας ἢμους. He follows Hecker in supposing that the frag. occurred in the Prologos to the dida. and that the poet meant "now count no queen a Muse among all the Muses, but only a literary queen of the gong."
and attack your opponents; you would not compare them to the Dodonaean gong. * Later still the sophist Prokoptos 1 (450–513 A.D.) wrote: "we have become a veritable Dodona gong." And an anonymous grammarian in Cramer's *Analecta Ι* says: "your babble drown the gong at Dodona."

The proverb, then, was sufficiently well known for close upon a thousand years. But when we enquire—what precisely was this famous gong?—we are confronted with a tangle of different explanations. In the following pages I shall attempt to ascertain (1) the form, and (2) the function of the gong in question.

(1) THE FORM OF THE GONG AT DODONA.

In discussing the rival views that have been propounded with regard to the shape of the gong it will be convenient to present in tabular form the evidence of scholiasts and lexicographers before proceeding to comment upon them.

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<td>Unknown</td>
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<tr>
<td>Cod. Cudillianus 177 red</td>
<td>Unclear</td>
</tr>
<tr>
<td>Eustath. Od. § 327 red</td>
<td>Unspecified</td>
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<tr>
<td>Synes. loc. 3. 406 red</td>
<td>Possibly a <em>lirion</em></td>
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2 Salm. loc. 3, 225, 11 τὸν Δωδώνων χάλκινον εὐρυχωκίας.
3 *Catafragmae* print: ἐν δὲ μία Μάδιν φιλιν. ἢ τοίς τινι διὰ τὸν Δωδώνων δίδρα τίχους ἢ ἰχνεν, ἀλλὰ μίαν καὶ διάμετρον τοῦ ἄλογον ἀφέν. τοῖς τινι διὰ τὸν ἰχνεν εὑρίσκεται. But this is doubtfully ungrammatical.
5 Σταύρη 41 A. Leutsch would read αἱ ἐν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῖσιν τοῦ σιγέτος. *A MS. of the fourteenth century containing a compendium of Suidas amplified by important additions 'insipiens un veritatis' in Basili. Schmidtewin thought that the author, so far as his proverbs are concerned, was founding upon Aristophanes of Byzantium. 7 Presumably Eunapius the lexicographer, a contemporary of Galen, to whom Eustathios was much indebted (W. Christ. Gr. Lit., p. 765).
THE GONG AT DODONA.

The foregoing extracts describe the oracular shrine (ιερός, μαντεία) of Zeus at Dodona as having no walls (τοιχώμα μη ἕχοντα) but in their stead a ring of tripods or caldrons (τριπόδες, λέβητες) placed so closely together that, if one were knocked, the vibration would go echoing on round the whole series. This description is referred to the Attic annalist Demon, who in addition to his Ἁρθις wrote some forty books περὶ παραμύθων. The facts relating to him are collected and sifted by Schneidewin in the Παροιμιογραφία Γρεκή i. p. viii f. Schneidewin concludes that Demon flourished about 306 B.C. But the conclusion is precarious. All we can say with certainty is that Philochoros composed a treatise against Demon's Ἁρθις,1 and that Philochoros was discharging religious duties at Athens in 306 B.C.2 Demon's literary activity may have covered twenty or thirty years before the date at which Philochoros wrote. Schwartz in Pauly-Wissowa ii. 2181, 33 does not venture beyond the statement: "Demon, vor Philochoros."

The assertions of this fourth-century writer are by no means chimerical. It is not at all improbable that in primitive times the oracle at Dodona had no walls, and that the numerous votive tripods belonging to Zeus were arranged as a fence round the sacred enclosure.3 In the absence of a χαλκοθήκη nothing could be more natural. The acoustic phenomenon too is credible enough. If the caldrons were of equal dimensions, or if variation in size was balanced by variation in thickness, a note of the same pitch could be propagated from A to B, from B to C, etc.4 The accuracy, therefore, of Demon's information need not be called in question. It has however been doubted whether his account affords a satisfactory explanation of the proverb τὸ Δωδοναῖον χαλκεῖον. The Greeks themselves5 objected that the proverb spoke of a single gong whereas Demon described a series of caldrons or tripods, which could hardly have been termed a χαλκεῖον. Now at first sight this objection seems conclusive. But further reflection shows that it is not very cogent. If the series of tripods really served instead of a wall round the sacred spot, a space would be left for entrance, and it would be natural for the visitor to touch one or other of the two tripods to right and left of the entry. The particular tripod thus touched occasioned the whole sequence of echoes and might fairly be described as τὸ Δωδοναῖον χαλκεῖον. This arrangement admirably suits the wording of Menander and Kallimachos. The former says λέγοντες ἡξεῖν, ὅν παρὰ τῷ ποίῳ, with which cp. Demon's διατε τόν ἐνόχον ἀποτέμενον παραπέμπειν, τῷ ἐπάνιστοι κ.τ.λ. The latter uses the phrase τόν ἐν Δωδοναὶ, χαλκόν | ἑσταίρω, and elsewhere speaks of

1 Suill. a.v. Φιλόχορος mentions his work ἐν τῷ Δωδοναί Ἄρθις, and Harpur. a.v. Ἀρτέμιδος εἶναι ὑπὲρ διὸς ἀντριγορρατίς. 2 Dion. Hal. de Dom. 8: see Schneidewin J. E. G. l. 580. 3 Analogous examples are not wanting. According to Paus. x. 5, 9 the original temple of Apollo at Delphi was made of laurel, and the second temple of wood and feathers (see Frazer op. loc.). Reich in Pauly-Wissowa i. 1669, 7 suggests that the Καρπάδος of Delian inscri. was a large platform connected with the famous καρπάδος θεός, which was made from the horns of goats sacrificed in Apollo. Paus. iv. 10, 3 states that "a gong caldron is set on each extremity of the wall of the temple at Olympia." 4 Cp. a well-known experiment with two or more tuning-forks. 5 See the passages cited in full below.
ἀνεγέρθησα λέβητος. On the whole it may be granted that Demon’s statement is reliable and provides us with at least a possible explanation of the proverb.

Nevertheless the objection considered above together with an alternative explanation was already forthcoming in ancient times—witness the following:

Suid. s.v. Δανθωνίων χαλκίσσων... Αριστοτέλης ἔστω πλάσμα διελεχθέντως διό ἐστιν αὐτοκόλλητο εἰς τὸν οὐρανόν. Αὐτοκόλλητον αὐτοκόλλητον διό ἐστιν αὐτοκόλλητον εἰς τὸν οὐρανόν. Αὐτοκόλλητον αὐτοκόλλητον διό ἐστιν αὐτοκόλλητον εἰς τὸν οὐρανόν.

God. Caelinaeus 177. Ἀμπτοτέλης δὲ διό ἐστιν αὐτοκόλλητον εἰς τὸν οὐρανόν. Αὐτοκόλλητον αὐτοκόλλητον διό ἐστιν αὐτοκόλλητον εἰς τὸν οὐρανόν. Αὐτοκόλλητον αὐτοκόλλητον διό ἐστιν αὐτοκόλλητον εἰς τὸν οὐρανόν.

Kasthell. Cod. 1 1 3 3 7 7. Ἀμπτοτέλης δὲ διό ἐστιν αὐτοκόλλητον εἰς τὸν οὐρανόν. Αὐτοκόλλητον αὐτοκόλλητον διό ἐστιν αὐτοκόλλητον εἰς τὸν οὐρανόν.

The objection to Demon’s interpretation is introduced in Suidas’ article by the words <proc Δήμων. When it is remembered that Philochoros wrote πρὸς τὴν Δήμωνα Αριστίδα (Suid.) and again ἐν τῇ πρὸς Δήμωνα αὐτογραφή (Harpocr.), it becomes highly probable that, as Bernardy conjectured, the name of Philochoros has dropped out and left a lacuna before πρὸς Δήμωνα. The restoration cannot, however, be regarded as quite beyond doubt, because the author of the rival interpretation too is said to have attacked Demon (ὡς πλάσμα διελεχθέντως).

That author, if we may trust our sources, was Aristotle. Most modern critics, on the strength of certain passages shortly to be discussed, assume that Ἀμπτοτέλης is a blunder for Αριστοτέλης. Hence our paragraph is not included among the fragments of Aristotle in the Berlin edition. And yet it is far from certain that Aristotle did not write it. The philosopher’s extant works appear to have been composed during his residence at Athens, 335—323 B.C. And Demon, as I have shown, flourished before 300 B.C., quite.

1 Call. l. Od. 338. χαλκίσσωσιν διερατοτέλησα λέβητος. This, however, may refer to the later and more elaborate λέβητος: see below.
2 μαστυγιας C.
3 Αριστοτέλης Αριστοτέλης Αριστοτέλης: Αμπτοτέλης Αμπτοτέλης Αμπτοτέλης: Αμπτοτέλης Αμπτοτέλης: Αμπτοτέλης.
4 Müller F.H.G. iv. 328 reads ητείς καὶ ἀκομοῖον.
5 Αλεξίπτερος C.
6 Δήμων A.
possibly as early as 330 B.C. There is then no chronological impossibility in the matter. Again, Aristotle is known to have given much attention to proverbs, as being the "relics of primitive philosophy" (frag. 2, 14746 b), and to have made a collection of them (παροιμίαις τὰς Διον. Λυκ. 3, 26, παροιμίαις ἀθρόοις; Athen. 2, 60 C). Further, his well-known ethical method included an examination of previous opinions (ἐννοία) as a preface to his own amended views. I incline, therefore, to believe that Aristotle did pen this account of the gong at Dodona as part of his Παροιμίαι, intending to improve upon Demon's interpretation of the proverb. But whether the author of the argument ὁι ἀνίκειοι κ.τ.λ. was Aristotle or Philochorus can hardly be determined.

What then does Aristotle's statement amount to? There were at Dodona a couple of columns, supporting respectively a caldron (λίθης) and a boy (παιδιὰ) grasping a whip whose bronze lashes, when swayed by the wind, struck the caldron and produced a reverberant sound.

Some further evidence is obtainable:

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1 He was one of the earliest writers of Αριστοτέλης. The order, as given by Schwartz loc. cit., is Kleidemus or Kleitobulus, Andonoth, Demos, Philochorus, etc. And W. Christ Gr. Lit. pp. 480, 558, argues that the older Αρίστοτελης were one of the main sources of Aristotle's 'At. Dai. If so, Aristotle may well have had Demon's works before him.

2 See further Schneidewin in Phil. J. 1870, p. 11 ff. He concludes: "hieratetum anonymum in honour of Thymoleon and other heroes:

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Aristotelis non dubito.
I have placed the extracts from Zenoibius, etc. in parallel columns with that from Stephanus of Byzantium because, though they do not expressly refer their contents to Aristides, it is probable that they are derived from him. Stephanus seems to have obtained his information about the proverb from the famous paroemiographer Lukiflos, of Tarra in Creta. Zenobius the sophist is known to have epitomised the proverbs of Didymus and Lukiflos; his epitome was not, however, minutely accurate, for he often neglected to name his authorities. Zenobius' compilation in its turn became the basis or groundwork of various others. Of these later collections the one that bears most resemblance to the work of Zenoibius himself is that which is still known by his name. Another collection of importance, which draws largely from

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THE GONG AT DODONA.

the same source, is that represented by codd. A.B.V.\(^1\) Cramer anec. Pariss 4, 239 seems to be a third. If so, we obtain the following stemma:—

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Lukillos of Tarra

Stephane of Byzantium

<table>
<thead>
<tr>
<th>Zanobias</th>
<th>Didymos</th>
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Lukillos of Tarra, the sponsor for the information contained in this group of extracts, is identified by Usener\(^2\) with Lukillos (or Lucilios) who wrote two books of epigrams in the reign of Nero.\(^3\) At that date, as he himself observes, the handle of the whip held by the statue still survived, though its lashes had fallen off. A native of Dodona told him that formerly the gong, when struck by the whip, resounded for long; Dodona was a stormy place and the wind swayed the lashes; this constant vibration occasioned the proverb. For the rest, Lukillos relies on Aristeides, who copied the account given by Polemon. This Aristeides was presumably the author of three books \(\text{περὶ \ παροιμιῶν} \) quoted by Athen. 14. 641 A. It is commonly assumed\(^4\) that he is further to be identified with the author of the \(\text{Μνησιακὰ} \) (2nd cent. B.C.); but this assumption is unfounded.\(^5\) Nor can we equate him with P. Aelius Aristides the rhetorician: for, though Aelius Aristides is known to have mentioned the gong at Dodona,\(^6\) his date (129–189 A.D.) precludes the possibility of his having been followed by Lukillos. We must be content to date the Aristeides of our passage before Lukillos and after Polemon. Polemon the \(\text{περισσωρρητής} \), who is cited as the ultimate source of the description, was in all probability an eye-witness of what he describes: for he is known to have travelled throughout Greece and to have indited such treatises as \(\text{περὶ \ τῶν \ ἐν Σικυών πινίκων} \); \(\text{περὶ \ τῶν \ ἐν Δελφοῖς \ θυγατέρων} \); \(\text{περὶ \ τῶν \ ἐν Λακεδαιμονίᾳ \ ἀναθημάτων} \); \(\text{περὶ \ τῶν \ ἀναθημάτων \ τῶν \ ἐν ἀκροτῆλε} \),\(^9\) k.t.l. He was \(\text{προσευμος} \) of Delphi in 177/6 B.C.\(^11\)

The description thus carried back to a satisfactory source in the second century B.C. tallies in the main with that of Aristotle, but adds little or nothing to his account. It conveys the impression that the whole \text{οξεία \ χάρα} was of no great size (\(\text{χαλκέον...οὐ \ μέγα, \ παιδάριον, \ μαστίγιον})

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\(^1\) Par. Gr. 1. p. xxx f.
\(^3\) Anth. Pal. ix. 572.
\(^4\) E.g. by Müller P.R. G. v. 266.
\(^5\) W. Schmid in Pauly-Wissowa li. 886, 42.
\(^6\) See the quotation given above, p. 5.
\(^7\) Athen. 15. 567 a, cp. Diod. Lauri. vii. 183.
\(^8\) Plut. quaeat. moq. v. 3, 575 E.
\(^9\) Strab. 13. 574 c.
\(^10\) Strab. ix. 1. 18.
\(^11\) Weisner-Foncart, narur. de Delphos n. 18, 200.
A few other details are to be had from Strabo vii. frag. 3: ὅτι ἡ παροιμία, ὡς ἐν Δωδώναις χαλεῖοι, ἐνετένει αὐτοί ἐξέβιβασεν. χαλεῖοι ἐν τῷ ἱερῷ, ἔγινεν ὑπερεκλειμένοι αὐθαίρετα, κρατώντα μιστίνχα χαλεῖον, ἀνάπλησαν ὑπὲρ τὴν ἁπάντια ἄρησις μέσιν, ἀπολήματος. ὑπερεκλεισμόνα ἔγιναν ἀπὸ αὐτῆς ἀστραγάλους, οἵ τι συλλυπτεῖ τὸ χαλεῖον δυνάμει, ὅπου ἀπεφέρθη ἀπὸ τοῦ ἀνέμου, μεκρίς ἄχους ὑπερετίχοστο, ἐνεπροκένθην τὸν χρόνον ἅπαντι τῆς ἀρχῆς τοῦ ἔχου μέχρι τελόν καὶ ἐπὶ τετρακοσία προεκθέος ὁ θεὸς καὶ ἡ παροιμία ἐλεύθη. Η Κερευάς μάστις.

It will be noticed that Strabo uses the imperfect tense: "there used to be (ἡ) a gong," etc. He was writing the fourth book of his Geography in the year 18 A.D., and the seventh century a few years later. It might therefore be thought that his account is inconsistent with that of Lukillus, who describes the gong as still existing, though damaged, c. 54-68 A.D. But the word ἡ γόνως may well be merely the conscientious preretite of an author who is relying upon a previous narrator. That previous narrator was probably Apollodorus, the celebrated grammarian of Athens; so that the details given by Strabo likewise date back to the second century B.C. They are moreover, on the face of them, trustworthy. That the whip was dedicated by the Corectrians, that it consisted of three chains tipped with buttons, and that you could count four hundred before the reverberation died away, are small points not likely to have been invented.

This circumstantial account, supplemented by the descriptions already recorded, enables us to form a fairly clear idea of the whole contrivance. In the accompanying restoration the bronze lobe and stand are copied from specimens actually found at Dodona, the attitude of the boy is based on that of the Piombino Apollo; the whip-handle represents an original found at
Herculanenum, and the lashes, from the stele of an arochigallus, exactly correspond to Strabo's words, Carianos' conjecture, that the gong and the statue stood on the two columns that formed the propylaea of the temenos, is not indeed inconsistent with Strabo's expression en twi iepa and might even claim the support of the Syrian parallel to be mentioned later on; but it is architecturally improbable.

One question remains: Which was the real Diodonion xalkeion—the gong thus restored or the series of tripods described by Demon? The gong thus restored we have traced back certainly to the close of the second century B.C. in Aristides' version of Ptolemos' account (not to mention Strabo's extract from Apollodoros), probably to the latter part of the fourth century B.C. in Aristotle's description. And most of the literary evidence available tends to support its claim. Nevertheless, our earliest authority, the fragment of Memander's Arrephoros, is strongly opposed to such an identification—the gong at Dodona, which they say sounds all day if a passer-by lays a finger on it (en paraphw ev parina). A gong mounted on a pillar could hardly be brushed by ev parina. Again, the fragment of Kallimachos cited above—ton en Diodonion xalkeion | ἕγερεν—seems more applicable to one of Demon's tripods standing on the ground than to Ptolemos' caldron mounted on a column. Finally, Clement of Alexandria expressly distinguishes the Diodonion xalkeion from the xelipta Theoproteion, as does his follower Theodoret of Cyprus:

Clem. Al. Prot. 11 Dion. 225 a toivn xalx.

[Read Theoproteion for MSS. Theoproteion and keep MSS. xalkeion. The last sentence is apparently, as Theodoret saw, a confusion between the oak of Dodona and the desert oracle of Ammon. J. B. Mayor, a. xaptimarmen for xaptimarmen: but the phrase may be taken from an ambros tag, xaptimarmen xalkeion: the mistakimarmen of the instructions.

All these allusions may be harmonised if we assume—and the assumption involves no improbability—that the original Diodonion xalkeion was the row of resonant tripods round the sacred enclosure, and that at a later date (14th century B.C.), when buildings were erected, these were replaced by a more elaborate and artistic gong mounted on two pillars as described above. The whip of the new gong, either presented at first by the Corycians or subsequently renewed by them, gave rise to the second proverb mentioned by Strabo, ἤ Κερκυραῖον μαστίξ.

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1 Rich s.n. 'Bagrum,' Dar. Sagd. II. 1155, Fig. 3082.
3 Dodone et ses ruines p. 388 foll.
(2) The Function of the Gong at Dodona.

Thus far we have dealt with the outward aspect of the gong; we have still to discuss its purpose and significance. A triple division of the topic will conduce to clearness. Why was the sound of bronze desirable? Why was it produced by means of a whip? Why was the gong mounted on a couple of columns?

An early scholiast on Theocritus ii. 36 quotes Apollodoros περὶ θεῶν to the effect that bronze was employed in all kinds of purificatory ritual (πρὸς πᾶσαν ἁφοσίσεως καὶ ἀπεκδακῆς because it was regarded as pure and an averter of pollution (καθαρὸς...καὶ ἀπελαθτικὸς τῶν μασμῶν). The context shows that by bronze is meant the beating of bronze (ὁ τὸν χαλκὸν ἤχος), and specifies two occasions when this was customary, viz. during eclipses of the moon and at funerals. That bronze was beaten by the ancients at lunar eclipses appears from various passages in the Latin authors. Similarity at the rising of Series the inhabitants of Coes used to clash weapons by way of averting malefic influences: any obscuration of the star they regarded as portending a year of sickness. The beating of bronze at funerals is less familiar. But our scholiast again cites Apollodoros for the statement that the sound of bronze was appropriate to the departed (οἰκείως τοῖς κατοιχομένοις) and, on the same authority, gives a couple of examples. The first of these refers to the

1 Athens Bic. Gr. ii. 193, 9 ff. τὰ χαλκεῖα τῶν τάχυων ήχων. The same (30 Gen.) χαλκοῦ πάνω τοῖς Ρεισένιοι, εἴδωλον 4. 5. — Gen. Vul. τὰ χαλκοῦ εἴδωλα. — Gen. — Μερίτας Schmidt, Iwan Kottas, έδωκεν Κόσιλινγκ, εἴδωλα = 'σωμελία σώματα.' Ηγομένη, έδωκεν Heussler (πωλιντικο) εἰς τοὺς πελάβους 4. 5. Gen. — Αλεξίος ναυς τῆς έκδήλωσι καὶ τῆς (τα ριενες τοις καταχομένων καταχω-


3 See Harduin in Philo. N. H. ii. 12.
4 See Perturi in Juv. vi. 422 f.

7 Harialdeis Pontius ap. Cic. de.mixivo i. 130 'στέλει θεὸς νεκρών οὐσίαν αὐτούς τοις καταχωμένοις διήθος καταχωμένοις εἰς εὑρίσκειν αὐτούς τάς

Eleusinian Mysteries. At Athens, he says, the hierophant beats a gong, (ἄτικροφεῖν τὸ καλύμενον ῥήχειον) at Kore's invocation.¹ The allusion is seemingly to a scene in the sacred drama; and O. Gruppe² is probably right in supposing that the gong was sounded to ward off cithonian powers. Phantoms of the sort are called ἀγαναυσμάτα in Stob. flor. 120, iv. p. 107 Mein,³ and Tzetzes on Lycochrist 77 (i. 388 M.) says ὁ γὰρ κύριος βασίλεα λίω τὰ φάραγμα, ἡς καὶ χαλκὸς κρυφθεῖς, εἰς τὸ τιμωτόν. Lucian too, when contrasting the conduct of a certain woman with that of ghosts, remarks (philosophides 15) τὸ κατὰ τῶν φαύνων πέτφθην ἐκείνη μὲν γὰρ ἢν φόρον ἄκουσθη χαλκὸν ἡ σιδήρου πέφεβην—καὶ ταῦτα γὰρ ἥνει φατὲ—ἀμη ν δὲ, ἢ ἄγρυφον που φοβόθ, ἐρχεται πρὸς τὸν ἱχθυ. The phrase χαλκὸς κρυφθεῖς⁴ recalls Pindar's epithet for Demeter, χαλκοκρυτόν... Διμήτηρος (Isth. vii. 3 ff.). There is no doubt that the clashing of bronze in various forms was characteristic of her cult. A formula used by the mystics was ἐκ τυμφάνων ἄθανον, ἐκ κυμμάδων ἀτέλειν, κ.τ.λ.⁵ The Ravenna scholiast on Aristoph. Ath. 709 says: 'They called Demeter Αὖχαι (the noisy) from the noise of the cymbals and drums which was made in searching for Kore.'⁶ Another scholion adds ἡ ὑπὸ τοῦ ἱπποῦ ὁν παρακά τοῖς περὶ τὴν γῆν τοῖς ἐστι 'Ἀδηνίσι ἀποψισιν.⁷ Leornont⁸ shows that between the sacred fig-tree and the bridge on the sacred way was a place called Echol, where the ministers of Eleusis made this din with ἱχθυα while the procession of mystae was returning to Athens. Velleius i. 4. 1 states that, according to one account, the fleet from Chalkis which colonised Cumae was guided 'nocturno aures sono, qualis Cerealisus sacris cieri solet.'⁹ Orin etym. p. 18, 24 accounts for the epithet 'Αὖχαι by quoting the following tale from a scholion on Aristophanes now lost: τοῖς Ταυραγαρίοις μεταπείπασα εἰς τὴν Ταυραγάρα εξελθεισα καὶ ὅρα ἡ Δημήτρι θαυμάσα αὐτοῖς ἀκολουθήσαι τῷ γενομένῳ ἤχῳ καὶ ὅτου ἐν παῦσται ἐκεῖ πόλιν κτίσαι. καὶ διώκειν αὐτοῖς ἴνα παῦσται κυμμάδων καὶ τυμφάνων. καὶ παῦσται περί τὴν Ἀκτινικήν ἔκτισιν πόλιν καὶ ὀρθέσοντα ἐπὶ τὸν Ἀὐχαίας Δήμητρον. Finally, a terra-cotta lamp published in the Bulletin Archeologico Napoletano iii. 182, Pl. vii shows a pair of cymbals slung from the 'pomegranates of Proserpine' and next to them the 'ear of corn of Ceres' (Elworthy The Evil Eye p. 384, Fig. 184).

The second example of the funereal beating of bronze given by the scholiast on Theocritus is the Spartan practice of beating a caldron (κροτείν χίτην) on the death of a king. Saglio in Dar.-Sagl. i. 1561 remarks that

¹ Kochl loc. cit. Gr. ont. p. 24, ix. 1 figures a votive cymbal with Thamaliu ixer. ΚΑΜΟΥΝΕΒΤΕΑΙΚΟΡΝΑ: on which see Hufmann Dial. l. 52, no. 81, Robeis τι. 244, α. 237α, and especially Stuhlmeck in Alh. Myth. 1888 xxi. 210 who reads Καρπ Καρπ τούτων τού Καρποῦ τού Καρποῦ κ.τ.λ.
² Gruppe Gr. Myth. p. 54, α. 6.
³ See Leornont in Dar.-Sagl. ii. 576.
⁴ Cp. Rahil Peplio 218, 2; and Hook 3. 332 ff.
⁵ Leornont ibid. p. 571 f.
⁶ So at. x. 290, 36 ἐκτὸς κυμμάδων ἄθανα τοὺς Κηροὺς ἱχθυα.
⁸ Cp. Ath. ii. 499 f. 'καὶ τὰ συνήπ οἵτων συναφές ἔστιν ὀποῖοι σύναφες ἔστιν τοῖς ἱπποῖς σύναφες κυμμάτων' is referred by Buhkian to the rites of Demeter rather than to those of Cybele (Hermit. B. Dim.).
"tintinnabula" are sometimes found in tombs and suggests that the same superstitious reason may account for a very singular gong or cattle found in a grave at Vulci (Fig. 2064). 1 Pottier id. 1697 notes that cymbals in the hands of Sirens have a funerary meaning and quotes examples. 2 In medieval and modern times the gong has been replaced by a bell. 3 On the one hand evil spirits are exercised by 'bell and book'; on the other, the 'passing bell', 4 is still tolled for the dead.

The same prophylactic or apotropaic virtue explains the beating of bronze in other cults besides that of Demeter. When Saimatha at her magic rites hears the dogs barking, she exclaims 'ο θεός ἐ στούδουν τὸ χαλεῖον ὥς τάχως ὕξει (Theocr. ii. 36), i.e. the chthonian Artemis 6 is approaching, make the spot holy ground by banging the bronze.' On the bronze votive-hands collected and discussed by Jahn 7 among other apotropeic emblems appear 'a tympanon, a bell, krotala, cymbals,' etc. 7 Of those in the British Museum 8 one has a 'tambourine,' 9 and another a 'pair of cymbals.' 10 Magic, as usual, imitates the rites and adopts the paraphernalia of established religion. The Asiatic Kybele was honoured by women τύμπανοι καὶ βρασσαὶ καὶ καλλικτίνων | βόμβως βρέμουσις αὐτάρχεαι κυμβάλλον (Diogenes trag. Scande ap. Athen. xiv. 636 α). 11 She too, like Demeter, was called χαλεκράτης (Orph. hymn. 41). And in the closely associated worship of Attis the initiates' formula ἐκ τυμπάνον βρασσα, ἐκ κυμβάλλον τέτσακα, γέγονα μόνος Ἀττιος 12 was almost identical with that used in the Eleusinian rite. A bas-relief in the Louvre 13 represents the sacrifice of a ram to Attis: from an old oak are suspended two cymbals or bells. 14 Similarly on a coin of the elder Faustina, 15 which shows Kybele enthroned with Attis at her side, a

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1 Riese in Pauly-Wissowa i. 1886, 11 a.p. Anastili describes a shula with a number of small metal knobs found in a tomb and explains them as a prophylactic rattle: see Anastill d. Inst. 1882 Pl. Q. 7.
4 On it see Thielben: Dyer The Ghost World, p. 15.
5 Roehl l'accol. Gr. swid. 1897 p. 36, 8 figures a votive symbol with Laocoon inscr. ΟΧΙΩΡΙΑΝΘΕΦΕΡΑΙ ΛΑΜΜΑΤΙ. - Oratt ένισσαν αὐτὰ, on which see Roberts Ep. 1. p. 254 t. 1. no. 222. Other symbols inscribed to Artemis Limnatis are I.G.A. 50

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2 F. T. Elworthy: The Ess Eiga p. 327, enumerates the tympanum on one hand, bell on one, cymbal on two, cymbals on three.
4 Id. no. 575, Fig. 22.
5 Id. no. 576.
6 On the cymbals, tympana, and krotala used in the worship of Cybele see Rapp in Realen Ztschr. ii. 1898, 44 ff., Decharme in Derc. Sagl. i. 1892, t. 190, Pottier id. 1897.
7 Firmic. Matera. de orac. profan. relig. 18 Halm.
8 Fohlsch Cat. 545, Reinsch Beih. Rép. Stat. i. 161. On, the relief from a Kybele and Attis altar in Remsleiter Denkm. p. 801, Fig. 866, which shows two bells along from a pipe.
9 Botticher Beih. Rép. Stat. i. 161. 23 Hescher Loc. ii. 1847, Fig. 2.
A couple of bells is attached to a stump in the background. The dance of the Kuretes and Korybantes with clashing shields served as an ἀποτροπαῖον, averting evil from the infant Zeus. The armorium horror is met with in other myths. When Horakles was at a loss how to drive the Stymphalian birds from their covert, Athena gave him bronze clappers (χάλκεα κράταλα) which she had obtained from Hephaistos: with these he scared them and, as soon as they rose, he shot them down. In imitation of this exploit the Argonauts on reaching the island Aetias, at the advice of Phineus, scared the fierce birds that inhabited it by the clash of shields and spears. The Korybantes also used various other instruments of percussion for the same purpose, e.g. κορυδαλλός ἄφθιματος χάλκεα βότρυν (Anth. Pal. vi. 165, 3 Phalaikos). Similar jingles were perhaps in vogue in the Kabiric mysteries: the British Museum possesses a small bronze bell from the temple of the Kabirei at Thebes inscribed in punctured letters ΠΥΡΙΑΣ ΚΑΒΙΡΩΝ ΚΑΙ ΠΑΙΔΙ = Πυριάς Καβίρων καὶ Παιδί. The attendants of Dionysus constantly carry tympana, which are sometimes edged with a row of small bells, or else cymbals. P. Gusmao Pompeii p. 186, after figuring many of the little bells found at Pompeii, observes: Les clochettes étaient utilisées aussi comme moyen de protection et souvent attachées à des phalli. O. Jahn in Berichte d. k. Sticks. Ges. d. Wissenschaften, Philol.-Hist., 1855 p. 79, says: 'Nicht selten sind an den phallischen Amuletten Schmitten angebracht, besonders gegen gespenstische Einflüsse. hielt man diesen Klang wirksam.' He cites Ant. d. Erck. vii. 95—99, and adds: 'An den Phallien in und bei Nîmes sind sie auch im Relief abgebildet.' A remarkable example is given in Reimach Rep. Stat. ii. 75, 4. In the middle ages bells were often embroidered on bed-curtains and other hangings, as also on ecclesiastical vestments. A writer in Folk-lore ix. (1898), p. 79, compares this practice with that of negroes in Florida who 'embroider the corners of their pillow-shams and bed-spreads with hand-bells.' In Scevos at carnival time a highly interesting beast-dance with bells is still kept up: vide the description given in the Annuel of the British School at Athens vi. 125. Mr. F. T. Elworthy (The Evil Eye, pp. 356—358, Figs. 166—169) depicts a whole series of silver amulets worn by the modern Neapolitans as a protection contre la jetation. They are of several different types, but from all alike is suspended a set of small bells (ibid. p. 368) that tinkle with the movements of the wearer. Necklaces composed of bells or fringed with bells were also worn.

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1 Roscher Lex. ii. 1815, 15 ff. According to Pfeiler-Robert i. 134, 'nützliche Gebrauche, beobachtete Ross Kleinm. T. auf der Insel Mygale an der Küste von Lykien.'
2 Apollod. ii. 5, 8. Cf. Dion. iv. 13, ἀντικρατείναι. χάλκεα πλατύμης, καὶ διὰ ταύτης ἡποκρονικὴν ὄψιν, ἐξεπάθη τῷ ἐφί, καὶ πᾶσα τῇ συνεχείᾳ τοῦ κράτους ὁδὸς ἐπανολεμήθη καθώς ἔπιστη τῷ Λαμνή.
3 Ap. Rhod. ii. 1049 ff., Hygin. fab. 39. The latter expressly cp. the armed dance of the

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Cerulean.
6 Roscher Lex. ii. 1815, 7 ff. Reimach Rep. Stat. ii. 146, 1 = Cursius, 36, 1, a house which according to Cursius represents Cerite Trappant sur un gypsonum.
6 Curs. 312, Fig. 11.
7 E.g. Brit. Mus. Pears Cat. iv. F 58. In F 593 c. Manook manrice = a gypsonum in 1 hand, and in r. a bell (5) painted white.
8 Roscher Lex. i. 1855, 26 ff.
perhaps as possessing prophylactic properties. Several vases in the British Museum depict Pegasus wearing a necklace of bells or 

bullae. The Louvre collection contains a couple of elaborate necklaces found by Salzmann at Camiros. One represents a centaur and an 'Asiatic Artemis' alternately, on such thin plates of gold that it must have been intended for the dead, not the living. The other is of thicker gold and represents lions, birds, etc. Both are furnished with rows of swinging knobs or bells of gold. That such articles of jewelry had more than a merely artistic purpose cannot be proved. It is however probable, cp. Ioann. Chrys. in I Cor. xii. 7 (x. p. 125 Par.) τι Μελέτησι τα πεπλαττα και τους καθονας τους την χειρος ξηραμενους και τον κακουν ετυμον και τα άλλα τα πολλας αντιας γεμοντα, δεν μηκεν ετερον την παιδι τερπιται ολη ή την απο τον σταυρον φιλακην. We are inclined to compare the golden bells and pomegranates on the robe of the Jewish high-priest. In the annali dell' Inst. for 1875, p. 50 ff., Bruzza published the inscription on a small bell of gold found on the Esquiline; it reads

ΤΟΙ ΚΟΜ ΜΑΧ ιΝ-†
ΥΠΟ ΤΕΤ ΛΓΜ ΑΙ †+

The archaizing V (for Y), the distribution of the letters in groups of three, and the legend itself all attest the magical character of the bell. Τοις ὡμμασι ὑπότεταγμαι, 'I am subject to evil eyes, seems to be a hexameter tag from some incantation. This accounts for what is otherwise inexplicable, the use of ὡμμασι instead of the normal ὡθαλια. The evil eye is in prose ὡθαλιας βασαλας, φθεοτος, or νεκροσ; but in verse ὡμμα might stand, cp. Io. Tzet. Chil. xii. 820 f. πᾶσαν βασαλας γυνοσκε, την δι' ὡμματων βλάβην, ἐδα φαιον βαίνονταν και βλέψεις ὡμμάτων. Anth. Pal. xi. 192 Anon. Ὁ φθόνος ἐστι καίστος, ἐστὶν τι τι καλόν ἐν αυτῷ, της γαρ φθεοτος ὡμμα και κράσιν. The word ὑπότεταγμα means perhaps 'I am subject to,' 'I am exposed to,' evil eyes. Whoever deduced the bell may thus have recorded on it the complaint from

2 Figured in Dec.-Sagl. ii. 789. Figs. 383, 936.
3 Exodus xxviii. 21 ff., xxvii. 35 ff. Cf. Zech. xiv. 39. 'In that day shall there be upon the bells of the horses, Halt unto the Lord.' Mr. W. Crooke (Popular Religion and Folklore of N. India p. 108) mentions priests among the Gonds who wear bells for the purpose of scaring demons.
4 O. John loc. cit. p. 31 n. 9 of ωμμασι for βαίνοντα. cp. the grammarians' etymology of ωμμανος et. φθεοτος, ανακαλας (schol. Aristoph. Pol. 571, schol. Theocrit. v. 12, Epip. mag. 190, 26).
5 Cp. P. G. 6792.
6 I cannot quote another example of this use of the word in Greek. Was it a translation of the Latin 'subjectas'? Or should we suppose, with Bruzza (p. 55 f.), that it is the bell which speaks: 'Io καμπάλας σοι εστι, ἐκείνος το μένος, στρατηγός τον μένος, στρατηγός τον μένος.'
which he would be set free. Bruzza quotes another inscribed bell, again in all probability prophylactic, which bears the names of Athena, Tyche, Artemis and Hephaestus.¹

On Italian soil gongs and bells had the same significance. Coins of the gens Petillia show the facade of the second temple of Jupiter Capitolinus; in the intercolumniations are suspended by chains three gongs or bells,² one for each of the three 'cellae.' This recalls Suetonius' story about Augustus (Suet. Aug. 91): 'He constantly resorted to the temple on the Capitoll dedicated to Jupiter Tonans, and dreamed that Jupiter Capitolinus complained of the worshippers being drawn away from himself till Augustus replied that Tonans had been installed as Jupiter's door-keeper. In consequence of this dream he shortly afterwards decked the gable of the temple (sc. of J. Tonans) with bells, which hung down almost to the doors.'³ Plautus in describing a sacrifice 'summo Iovi' makes Pseudolus hurry off to fetch 'hostias, i victimas, lanios, duo cum tintinnabulis.'⁴ Coins of the gens Minucia represent a column of unusual shape bearing a male figure with toga and staff. From the abanas are suspended a couple of gongs or bells. At the foot of the column are two lions' heads and two ears of corn. The whole is flanked by an augur with his lictor on the right, and a man treading on a ball (!) and clapping cymbals (!) on the left. This singular monument commemorates the public services of L. Minucius, consul in 458 B.C. and decemvir in 450 B.C., who as praeceptus annonas⁵ detected the supposed plot of Sp. Maelius. According to Livy he was rewarded 'bove aurato,' extra portam Trigeminum.⁶ But according to Pliny and Dionysius,⁷ by a column surmounted by a statue. To this statue the coin-type refers. Its details are much debated,⁸ but the gongs at least may be prophylactic.⁹

At the ancient festival of the Lemuria one of the ceremonies by means of which the pater familias drove out the ghosts was the beating of bronze vessels; Ov. Fast. v. 441 f.; Teumessaque concræpat acer, et rogam, ut teetis exspectat umbra suis. Zonaras aav. vii. 21 states that when M. Furius Camillus triumphed for his victory over the Venientes a bell was attached to the triumphal car, and remarks that the same thing is done in the case of

¹ Min. Kircher, p. 6, pl. 58, Montfaucon Antiq. sigl. i. pl. 58.
⁵ Liv. 17, 18, 7.
⁶ Groenovius cjt. "bove et arvo".
⁷ Liv. xi. 16, 2.
⁹ praecipuam annonas extra portam Trigeminum manibus stipe collata" (a memorial column was erected), op. xivii. 3. ⁴ "Minucius Augustinus, qui Sp. Maelius caegaratus, farris pretium in trinis annudie ad assum rodiget undecimis plibus tribunum; qua de unus statua et extra portam Trigeminum a populo stipe collata statuta est." With this agrees Dion. Hal. scepi "idem saeculo" p. xxxvi ed. C. Mallar.
¹¹ Babelon loc. cit. says: "Les clochettes suspendus au monument servaient à annoncer l'ouverture et la fermeture du marché."
criminals led to execution ina μηδεις βαδίζονσιν αὐτοῖς εὐχρημοποιομενος μισήματος ἀναπτύμηται. In both cases evil has to be averted, on the one hand from the community and the triumphing general whose success may call down the θείοι φθόνοι, on the other hand from non-offending members of society who may be polluted by the social outcast. Bruzaa loc. cit. p. 84 f. compares the treatment of S. Sisininius 1 and Alexandrine customs as exemplified in the ill-usage of Ss. Cyrus and John 2 and S. Macarius. 3 The Salii, who beat their ancilia or sacred shields with batons or weapons of some sort, 4 are compared by Dionysius 5 with the Curetes; and it is fairly certain that the purpose of their performance was prophylactic. 6

Pliny N. H. xxxvi. 19, 4 quotes Varro's account of the mausoleum erected by Porcenna, King of Etruria, for himself at Clusium: 7 the five pyramids that surmounted its square base were 'ita fastigiatae ut in summum orbis nuneus et peteus omnibus sit impositus, ex quo pendebat exspecta est esternia tintinnabula, quae vento agitata longe sonitus referens, ut Dodonae olim factum.'

The mention of Dodona recalls us to our original question. What, in the light of these various usages, was the real meaning of the Dodonean gong? Obviously it too was an ἀποτρόπαιον intended to preserve the sacred precinct free from pernicious influences. At first the whole series of tripods and subsequently the gong on the two columns kept up a continuous clang which was a potent means of averting evil. The interpretation thus inferred from analogous practices elsewhere does not, however, at first sight agree with what we are told as to the purpose of the gong at Dodona by certain late Greek writers. Their statements are as follows:—

1 Ruhnart Arch. Minus. p. 538 Vermouth 1721 quae velut animal tamquam sancti Sibylli corpus includit, nullae sacrae hostis simulacra coniugium ligavint, quasi vidgens tintinnabulam vocant.

2 Mal. οἴνους. Rom. iii. 312. 'Hintinnabulam enim sagittate magnum in collo suspendere, et cum his ad templum sumum currere, et evanuere eam clamans praepenitit.' Op. the mediaeval 'food' in 'rap and bellas.'


4 Dionys. ib. 70 mentiones hæc λέγοντες τοὺς εἰς τὸν κατὰ τὸν ἀποτελεσμὸν ὡς τὸν ἐγγυήριον ἄφων.

5 ibid.

6 See Warde Fowler Roman Festivals p. 39 ff. 'the old Latins believed that the Spirit which was beginning to make the crops grow must at this time [March 1] be protected from hostile demons, in order that he might be free to perform his own useful functions for the community.'

7 Otto. Num. Rom. ii. 69, Martini I. Aet. enarrat. p. 206 f., Doc. Sugi. ii. 380, p. 378. With it should be compared a remarkable object in bronze said to have been found in central Italy, and figured by S. Reinach in L'Antiquité Vii (1899), 188, fig. 411.

8 Frazer IV.
Nonnus the abbot, and Kosmas of Jerusalem belong to Byzantine times rather than to classical antiquity. The paragraph in Suidas s.v. Δοδώνει in part agrees with Kosmas, for whom Suidas entertained feelings of the greatest veneration, in part recalls another scholion on Gregorius Nazianzenus. The statements of these post-classical sources have been accepted, perhaps too readily, in modern times. They may be mere guess-work, based on the well-known method of divination at Dodona by means of the whispering oak. At the same time there is some reason to believe that the sounding gong or gongs of Dodona were regarded as oracular. The scholiast on Clem. Al. prodr. 11 speaks of them as "an oracle of Zeus." Callimachos in his hymn to Delos 286 describes the priests of Dodona as "ministers of the never-silent caldron," which probably implies, though it does not definitely state the manic nature of the gong. Philostratus perhaps makes the same implication when, speaking of a view of Dodona, he says (ἰσαγ. ii. 33) καὶ τὸ γοργόν ὀρέ τὰ ἀκτὶς τιθεν καὶ ὁ μάθημα τοῦ μεστοῦ ἔλεγχος τῷ μνημοσύνῃ τῷ ἄστυ οὖ ἐν αὐτῷ τείμαται, οὐ πάντως ἐπιβαλλομεν τῷ γείτον τῷ στόματι, εὐθὺς χαλκεῖν ἀνέκειτο τῷ Δίῳ κατά Δωδώνην ἔχον τι πολλά τῆς ἡμέρας καὶ μέχρι λάβασα τῆς αὐτοῦ μή αἰσθητός. Finally, the paroemiographers record some singular legends, which may bear on the point:—

Zenob. ii. 34 Βοιωτοί παρέτεσαν αὐτῷ καταρακτήριον ὁμήριον." Ἡμπαλαῖος γὰρ φασὶν, χαρπομυθίαν τοις θείοις περὶ πολλὰς ἀναφέρονται.

Plut. 19 μαντεύσας (A) κατάρα τι

Codd. V. B. 8 μαντεύσας (B)

1 W. Christ Gr. Lit. p. 904.
2 Krumbocher Byz. Lit. 177 f., 880.
3 Kosmas is described by Suidas s.v. Ιαλτίς ὁ Δαμασκηνὸς, οἱ άγαθοὶ κυρίακος καὶ παντοκράτωρ τοῦ εἰρημένου, τὸ γαλαζωμένον καὶ πολλὰ παραθέτω τοῦ ἐναυναίον καὶ Κύπρον πόλεμον ἔτοιμον. Θάνατος, 1296 ἐνίκησεν τοὺς μάχης ἀνθρώπων μαντείας.
4 s.v. by Bouché-Boech. Hist. de la scien- tification ii. 306.
5 Schl. Clerc. Al. prodr. 11 Θεοτοκίαν ἡ τὸ ἐκλέγεται μαντείον καὶ διὰ τοῦ λαβατόν ἤχεται τό σαλπηρίας. This rather hazy account harks back to the Dorian arrangement of a row of tripod caldrons.
6 Call. h. Del. 286 τοὺς θεραπεύει δεμάκατε δικάς "ἀποτελεῖ τὸ λάβατον.
8 The collection of prophecies fathered upon Phalaris goes back to the grammairian Sabazios, who flourished in the time of Augustus and Tibertina (W. Christ Gr. Lit. p. 105), according to O. Cruzes Ind. hist. 706, 1887 and 1895.
9 On these MSS. see p. 1, n. 7.
The story given on the authority of Herakleides states that Myrtila, a priestess of Dodona, was cast into a caldron (λέβητα) of heated water by the Thebans. The anonymous version speaks of a seer called Boubos as the victim of their sacrilege. The words Βόμβος μάντις in this context are perhaps significant: the prophetic reverberation (Βόμβος) has given rise to an eponymous prophet.

The prophylactic meaning which attaches elsewhere to the sound of beaten bronze may be reconciled with the oracular functions suggested, if not proved, by the foregoing passages. It is quite possible that the gong or gongs, which in early days served as an ἀποτράπαιον for the oracle, came to be consulted as themselves oracular. Such a transition or development can be paralleled from certain analogous cases.1

The game of 'kottabos' is an example in point. Introduced into Greece from Sicily,2 it was commonly regarded as a kind of erotic libation.3 In its usual form, it consisted in discharging some drops of wine (λάταξ, λατάγη) from the cup in such a way as to make the upper disc or πλάστης fall from its support on to the lower disc or μάννα; with a loud clang, e.g., Antiphanes4 οπ. Athen. xvi. 666 f.—667 A.

B. κοτταβισθείς τίνα τρότου;
A. ἐγὼ δεδώκα πάνθε- δα δὲ τὸν κότταβον
δάφει ἐπὶ τὸν πλάστημα ποιήσας πεσεῖν
B. πλάστημα πολλάν;
Γ. τούτο τούτικείμενον
ἀνω τὸ μικρόν, τὸ πυρογόνον, λέγει.
tούτ' ἐστὶ πλάστημα.
A. ὀφφυς ὁ κρατὼν γίγνεται.
B. τούτ' ἐστιν τις τούτ';
A. ἐὰν θύρη μόνον
αὐτῆς, ἐπὶ τὸν μίναν πεσεῖται καὶ ὕφασι
ἐστὶν πάντα πολλάν.

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1 For the remarkable instance of bell-worship among the Gonds of N. India see p. 28 n. 4.
2 Athen. x. 427 b, xi. 176 α, xx, 666 3, 668 b, K. Aristot. Ethik. i. 12. 197b 29, Huygh. s. v. κότταβος.
3 Athen. x. 427 9 ἢ δὲ ἀφίζεται τὸ μέτα στίψις ἄρχειν ἀποδεικνύει τις θεΐας, δ' ὁ κότταβος τοῖς ἐρωτευόμενοι καθί. This is stated on the authority of Theophrastus δ' τῷ ποτὶ μίνῃ.
4 Antiphon. Ἀφοβόηται Τυραλ. fr. 1, 4 ff., Mela.
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B. πρὸς θεον, τῷ κοττάβῳ
πρόσετι καὶ μάσης τις ὀσπερ ὀικέτῃς;

In short, the kottabos-stand was a kind of gong which the merry-makers vied with each other in sounding. The upper disc was sometimes—perhaps traditionally—supported by a small bronze figure. Dar.-Sagl. iii. 867 f., fig. 4207, represent an existing stand surmounted by a man a homme ou, dont le corps pose tout entier sur la jambe gauche; la droite est levée en l’air par un geste violent, comme s’il dansait ou s’il cherchait à garder son équilibre compromis; la main droite, également levée en l’air, tient un objet indistinct de forme conique.' The tragedians, when they allude to kottabos, seem to have in view a figure of this sort. At least the point of their allusions is the frequent blows sustained by a human head.

Aesch. Odys. ii. 178 Dind. says—

Εὐρύμαχος ὁκ ἄλλος ὡδεν ἰόσαινατο
ἐβριξ’ ἐγριμοίως ὡκ ἐναισίον εἴμαι.

ἐν μέν γὰρ άτηρ σκοπᾶς όδε τομόν κάρα,
τοῦ δ’ αγκυληθού κοσσαβίδος ἐστὶ σκοπᾶς
ἐκτειμών ἠβάσα χείρ ἐφέστο.†

Eur. Oid. fr. 566 Dind.—

πυκνοῖς δ’ ἐβαλλον Βασιλείου τοξεύμασι
κάρα γύροντος τὸν βαλούτα δι’ στέφειν
ἐγι’ τετόμην, ἀθλα κοσσαβίου διδιώς.

Soph. Schol. Sam. fr. 482 Dind.—

τάδ’ ἐστι κπαμύκαν καὶ φιλημάτων ψόφοι,
τὸ καλλικοτταβοῦτι νικητήρια
τιθήμα καὶ βαλοῦτι χάλκειον κάρα.

All three passages mention a κάρα in connexion with the game. Sophocles in his Satyricon drama is describing an actual kottabos-stand and speaks of the χάλκειον κάρα as being struck: Athen. xi. 487 d., who cites the fragment, explains this to be τὸ ἐπὶ κοττάβου ἐφεστικόν, but by a confusion * identifies it with the μάσης. Aeschylus and Euripides refer respectively to a human and a divine κάρα treated in the same ceremonious way. It is, then, tempting to compare the kottabos-stand with the apparatus at Dodona. In both cases we have a small bronze figure of a man on the top of a column who is instrumental in causing a clang of bronze. The resemblance would be complete, if it could be shown that the kottabos-statuette ever carried a whip. What was the ‘objet indistinct de forme conique’ in the right hand of the statuette described by Lafaye †? There is perhaps a special point in Plaut. Trin. 1611, where Stasinus expecting a flogging exclaims:

‘cave sis tibi ne bubuli in te cottabi crebri crepont.’

* Cp. our ‘dumb-waiter’ of similar shape.
† See Dar.-Sagl. iii. 866, n. 4.
The "cowhide cottabus" that will rouse the echoes is a whip. The jest becomes more subtle if we may assume that the figure supporting the πλάστιγχι sometimes bore a whip. In favour of the suggestion might be cited a gloss of Hesychius and the Etymologiae Magnum:

Hesych. πλαστιγχ, μάστιγ, το ζυγών τον ἀντίροχον, καὶ τον ἀνθρώπων λίπραν, καὶ τὸ πρὶν τὸν κοττάθυν τοπέσσαν. καὶ μέρκος τον ἀνθρώπων θέρεσιν καὶ σφαγῆς τον ἔρωτρα.

The passage of Aeschylus referred to by the εἰ. mag. is Aesch. Cho. 289 f., where the doom pronounced by Leoxias upon Orestes, if he should refrain from slaying the murderers of his father, is διοκεσθαι πόλεως ἁλκασθάτον πλάστιγμα λυμανθέν δέμας. Dr. Verrall ad loc. says: "The context, taken in connexion with known practices about lepers, madmen, and other such outcasts, suggests that here it is some metal object, which was attached in a painful way (λυμανθέω) to the victim, so that he could not easily remove it, and was so made as to give a sound, warning people of his approach. Small metal plates, suspended so as to clash, would have the effect and correspond to the name." Weekley would read μάστιγα. But all difficulty disappears if an early form of kottabos-stand had a bronze statuette of a man lashing a gong. The word πλάστιγχι properly denoting the gong, or disc might easily be used by a tragedian of the metal scourge, the thing striking, not the thing struck. However that may be, I incline to believe that the kottabos-stand was originally a feasters' gong intended as an ἀποτρόπαιον, and that the sound of the bronze came to be considered a love-oracle, precisely as the Dolona gong was first prophylactic and subsequently amant.

Another example can be adduced of an apotropaic gong whose original purpose was mistaken. We have already seen that during the sacred drama at Eleusis the so-called ἤχεια was beaten to avert evil influences. It is probable that this was the true purpose of the series of bronze bowls or ἤχεια, of which Vitruvius gives a detailed account. They were poised in niches (cellae) under or among the seats of the auditorium, and were arranged at carefully, calculated intervals along one row if the theatre was small, along three if it was large. As understood in Vitruvius' day, their function was to increase the brilliance and sweetness of voices from the stage, the various notes being echoed on by the various ἤχεια. Saglio in Dar.-Sagl. ii. 449 remarks: "L'efficacité de ce procédé acoustique et même la possibilité d'y recourir a été tour à tour admise ou contestée. The probability is

1 Guaman Pompei, p. 126, "Les clouchettes étaient pendantes les éclisses de luxe et l'an assignait pour conduire les ovins ou suppl. See the ext. cited above p. 20.
2 See p. 13.
3 Vitr. 1. 1 and v. 5.
4 Vitr. 3. 1. "in cellis sub gradibus," v. 5 "inter sedes theatrici constitutis cellis."
that bronze vessels tuned according to the Vitruvian rules would take up and prolong the, particular notes uttered on the stage in such a way as to produce a confused murmur or reverberation—obviously a hindrance, not a help, to the actors and the chorus. This reverberation or metallic echo was, however, to primitive ideas highly desirable as an ἀποτρόπαιον. It served to keep the precinct holy during the sacred performance. The mathematical refinements described by Vitruvius were probably a later device to ensure a continuous sound. That the Roman architect should have misconceived their purpose and ascribed to them a musical significance is in no way remarkable: for musical instruments consisting in a series of tuned bowls were not unknown to the Romans.  

We have seen that the sound of bronze, in whatever way produced, was regarded as prophylactic. Why? Presumably because a metallic clash or clang would strike terror into the hearer. Primitive man seeks to frighten his superhuman, in much the same way as he frightens his human, foes. The banging of gongs and the ringing of bells in religious ceremonies is the counterpart of similar practices in warfare. Livy, for example, makes the consul Manlius say of the Gauls: 'quattuorium scuta in patrimon quendam medium horrendum armorum crepitus; omnin de industria composita ad terrorem.' And Aeschylus, describing the equipment of Tydeus’ shield, says: χαλκήλατοι εκέρειοι κοδωνες φοιβοι. Bronze was particularly efficacious in warding off evil because it was the metal consecrated to religious purposes by immemorial usage: the gods were averse to novelties and lingered in the bronze age long after their worshippers had passed on to higher levels of civilisation.

The next question before us is: Why in the later Dodonaean gong was this prophylactic sound produced by means of a whip? Apparently, the use of the whip was itself prophylactic. Mr. Frazer has collected from all parts of the world examples of the expulsion of evils: in such cases the beating of gongs is often accompanied by the cracking of whips. To quote but one instance: 'In the Tyrol...on the famous Walpurgis night...men and boys make a racket with whips, bells, pots, and pans, while on the same occasion in the Bohmerwald mountains all the young fellows of the village...crack whips for a while in unison with all their strength. This drives away the witches; for so far as the sound of the whips is heard, these malevolent beings can do no harm. The peasants believe firmly in the efficacy of this...
remedy. A yoke will tell his sons to be sure to crack their whips loudly and hit the witches hard; and to give more sting to every blow the whiplashes are knotted.\footnote{\textit{ibid.} iii. 91 f.} Mr. Frazer subdivides his examples into 'occasional' and 'periodic' expulsions. The gong at Dodona (like the tomb of Porsonna to which Varro compared it) would fall under a fresh category, that of 'continuous expulsion.' It combined the clanging of bronze with the lashes of a whip in such a way as to form an extremely potent \textit{apoptro̱pavōs}. The same combination occurs elsewhere with the same meaning. \textit{Jahn}, op. cit. p. 105 discusses the emblems found on so-called 'votive-hands.' To the examples cited by him may be added two in the British Museum.\footnote{\textit{Brit. Mus. Cat. Bronzes nos.} 875, 876. \textit{Elworthy} \textit{The Fict. Egg} p. 327 mentions the whip on four votive-hands known to him.} On one of these (No. 875) a two-thonged whip represented next to a \textit{lympseus}\footnote{In Roscher Lex. ii. 1071, fig. 8, Kybele, driving her lion-chariot, holds a two-thonged whip (!) in her right-hand and a \textit{lympseus} in her left. Was the combination accidental or designed?} recalls the three-thonged whip and neighbouring calendata at Dodona. Again, in the cult of Rhea the whip was brought into connexion with the sound of bronze. According to \textit{Apollonius Rhodius} the Argonauts propitiated Rhea with an armed dance, clashing swords and shields together; hence the Phrygians worship her with \textit{ρωμδος καὶ τυπάνω}. The scholiast explains \textit{ρωμδος} to be \textit{προχίκος, δι' ατρέφοντι} \textit{ιματί τυπτομε καὶ οὔτως κτύπω} \textit{απτελο̱σα}—in short, a humming whip-top. Such tops were commonly made of bronze\footnote{\textit{Ajp. Rhed. i.} 1134 ff.} and, as used in Rhea's cult, were like the \textit{lympseus} undoubtedly prophylactic. Similarly one form of \textit{λυ̱γξ} seems to have been a whip-top.\footnote{\textit{Elworthy} \textit{The Fict. Egg} p. 327 mentions the whip on four votive-hands known to him.} It is represented on a well-known vase belonging to the Van Branteghem collection,\footnote{\textit{Fedhlin} \textit{Cat. de la coll. Van Branteghem}, no. 67 = \textit{Dar. Sphl. ii.} 1154, fig. 3057.} which depicts a young woman with a whip in her hand and a top spinning at her feet. It has not, I think, been noticed that there is an allusion to this kind of \textit{λυ̱γξ} in \textit{Pind. Pyth. iv.} 213 ff. Aphrodite there teaches Jason how to bind Medea to his cause by means of the \textit{λυ̱γξ}—

\begin{quote}
δύψα Μέδεας τοκέων ὑφέλουσ' αἰσθ., ποθείων ὡς Ἑλλάς αὐτῶν ἐν φραστικῷ καλομέναν δανέος μάστιγι. Πειθέω, τοι τις Ἰασών ὁμήκος ὁ αἰνει τὸν κατάλογον τόνοις ἐκφέμοι ὁμοιότατος. Χάρα γάρ σε τὸν νευτικὸν καταδικάσασθαι θεοὺς κατοικισμῷ καὶ κατηρισομένου ἅγιον ἱερὸν ἁγιάσασθαι τοι ἀνευρέσθαι μνήμητα καταληύπησαι.
\end{quote}

will love of Hellas lash the heart of Medea into a mad whirl of passion. Again, it was for prophylactic purposes that both whip and bell were attached to the car of the Roman \textit{triumphator}.\footnote{\textit{Zonaras} viii. 21 gives off an \textit{αὐτριγκικός} : \textit{ἐπὶ κάθεν ἀρχηγοῦ καὶ μάρτυρος ἁγιασθείς, ἀμφιθεατέο} τὸν καὶ ἀποτελεθήναι καὶ δεραφθῆναι, Ἀποκριτῆς καὶ παντοδέους καὶ διακαταθήκην διαλέγον. τε διὸ ἄν \textit{τοὺς ἀποτρήμας παρακαθηκότας θεοὺς κατοικισμῷ κατηρισμῷ καὶ καταληύπησαι μνήμητα καταληύπησαι.} It will hardly be doubted, then, that the association of whip and gong at Dodona was designed to provide a particularly powerful means of averting evil from a particularly sacred enclosure.

\footnote{\textit{ibid.} iii. 91 f.}
THE GONG AT DODONA.

It remains to ask: Why was the whole apparatus mounted on a couple of columns? Our first inclination is to answer: For no recondite reason at all, but simply to place it out of harm's way, or perhaps because the sound would be heard better if the gong was raised to some little height. Further consideration lessens our confidence in such matter-of-fact explanations. At least it will be well to compare similar gongs in use elsewhere before coming to a hasty conclusion. In the Kri islands (S. W. of New Guinea) evil spirits are propitiated by means of gongs etc., hung from the cross bar of two poles.1 Maori war-gongs were slung from a bar laid across two uprights and were sounded by a man who sat on a scaffolding of poles.2 The kottabos-gong, as we have already seen, was regularly mounted on a thin column or stand and sometimes topped with a mannikin in bronze. So too the Minucian statue stood on a column, to which were attached a couple of gongs or bells. But the most striking parallel to the gong at Dodona is one first remarked by O. Gruppe,3 who drew attention to Lucian de Syria, dea 29. The Syrian author of this important treatise4 describes the temple of Hierapolis and its ritual. Among other things he tells us that at the propylaea of the temple were certain phalloi thirty cubits in height, erected by Dionysus. Twice a year a man ascended one of them and spent a week on the top in prayer. This φαλλοθύτης, or stylites, if so we may call him, never slept during his seven days' vigil, and he accompanied his prayers by beating a bronze gong (άμα δέ εὐχόμενος κροτεί ποίημα χάλκεον, τό αίζει μεγά και τρύχω κυνομενον). The author adds certain views that had been held with regard to the practice: 'it is usually supposed that thus raised on high he holds converse with the gods and begs their blessings for the whole land of Syria, while they being near at hand can hearken to his prayers. Others maintain that we have in this custom a reminiscence of Deukalion's flood, when mankind in fear of the waters fled to the mountains and the tallest trees. The latter account fails to convince me any more than the former. I think however that the inhabitants act thus in honour of Dionysus. My reason for thinking so is as follows: those who erect phalloi to Dionysus set wooden men upon them—why, I will not explain—and, as it seems to me, this man climbs up in imitation of the wooden figure.' This remarkable passage is calculated to give us pause. There may have been some special sanctity attaching to the position of a person or thing raised on a column. 'Whatever,' says Mr. Frazer,5 is permeated by the mystic virtue of taboo may need to be isolated from earth and heaven,—and one of the simplest methods of isolation would be to set the sacred object on a column, where it would be so to say suspended between heaven and earth. Of objects thus separated from the profane none were more common in Greece than tripods. Greek vase-paintings constantly represent them as standing on the top of a more or less

1 Frazer, Golden Bough, II. 63.
2 G. F. Angas, Savage life and Scenes in Australasia and New Zealand, front. to vol. ii shows the pole or war-gong being beaten.
3 Handbook of Hist. Ant. V. ii. 1 p. 355 n. 7.
5 Frazer, Golden Bough, II. 198.
attenuated column, sometimes adorned with fluttering fillets as a further indication of their sanctity. Now the Dodonasan gong served instead of a whole set of tripods. It was therefore suitably placed on a pair of consecrating columns.

The same exalted position would obviously be accorded to the whip used in connexion with the gong. An interesting analogy is here offered by the practice of the natives in some parts of N. India. Mr. W. Crooke states that, if the god of a village shrine is believed to be absent or sleeping, a drum is beaten to awake or recall him, and this answers the purpose of scaring off intruding spirits... There is one special implement which is very commonly found in the village shrines of the hill country south of the Ganges. This is an iron chain with a heavy knot at the end to which a strap like a Scotch tawse is often attached... This is known as the gyanda: it hangs from the roof of the shrine and is believed to be directly under the influence of the deity. Mr. Crooke goes on to describe how ‘the Baiga priest, when his services are required for the exorcism of a disease ghost, thrashes himself’ with this whip. Among the more primitive Gonds the chain has become a godling, and is regularly worshipped. In serious cases of epilepsy, hysteria and the like, the patient is taken to the shrine and severely beaten with the holy chain until the demon is expelled.

To sum up. I have endeavoured to prove that the gong at Dodona had two forms, an earlier and a later. At first it consisted in a series of resonant tripods arranged round the oracular shrine in such a way as to keep up a constant hum of bronze. Subsequently these tripods were replaced by a more elaborate gong—a lebes and a mastigophoros of bronze, each standing on its own pedestal, and so placed that the wind would cause a continuous vibration. From first to last the gong was an άποφασις of the most potent kind. In its original shape, the sound of bronze that echoed round the sacred precinct served to scare away all evil influences. Later on, its prophylactic virtues were intensified by the addition of the Coreyrema whip and safeguarded by its elevation on a couple of columns.

ARTHUR BERNARD COOK.
A. PROTO-ATTIC VASE.

[Plates II.-IV.]

I.

The term Proto-Attic, which is our equivalent to the German Früh-
attisch, and is formed on the analogy of Proto-Corinthian, is of course only a
loose definition, intended to apply exclusively to a small class of Attic vases
which fall between the periods represented on the one hand by the Dipylon,
and on the other by the vases of the stereotyped Attic black-figure style.

For this later limit the François vase would naturally be the typical
representative, were it not that, as we now know,1 the white on that vase
is laid direct upon the clay instead of in the true Attic manner upon a pre-
pared black surface. Within these two limits we should strictly speaking
place the Vourva, Marathon, and the Menidi vases, as well as the large series
of Tyrrenian amphorae; and possibly yet other classes of the same kind
may be found among the Acropolis fragments; but for our purpose these may
be regarded rather as tributaries of the main stream, and not as proto-Attic
in the limited sense.

Seeing that it is now generally agreed that the Dipylon branch of Geo-
metric vases at least was of Athenian manufacture, the term must obviously
not be pressed to its full significance any more than the correlated term
proto-Corinthian. It is certainly curious that the study of vases (which in
other respects is not unscientific) should absolutely bristle with loose and
misleading terms: Mycenaean, Pontic, Tyrrenian, Nolan are only some of the
instances of this strange fatality. Perhaps the time may come when the
thousand and one questions concerning the origins of vase-fabrics will be
finally settled, and then it will be time enough to reconsider the tangle of
nomenclature. For the present, however, the terms are convenient, so long as
they are generally accepted; and if any further justification be needed for
"proto-Attic," it will be found in the close analogy which this fabric bears
to the proto-Corinthian.

The first serious attempt to bridge the gap between the latest Dipylon
and the earliest black-figure vases of Athens was made by Böhlau in Arch.

1 Jahrbuch, 1887, p. 281 (note on p. 135).
Jahrbuch 1887, p. 58; previously the only published landmarks for this unexplored tract were the fragments given in Benndorf's Gr. u. Sic. Vasehe, pl. 54, 1-2; and Furtwangler's Schüssel aus Aegina (Arch. Zeit. 1882, pl. 9-10, together with the fragment on p. 207). Since Böhlau wrote, however, the list has steadily increased; the most important of the new examples being the Netos amphora in Ant. Denkm., i. 57 and the Peiraen amphotera published by Couve in 'Ep. Apx. 1897, pl. 5, which bring us nearer than any hitherto to the lower limit of date of the series. When the long-awaited publication takes place of the fragments from the Acropolis, we shall probably have a fair idea of the stages out of which the François vase grew. It is a period of supreme importance, for it witnesses what is practically the birth of Athenian vase-painting as a separate entity; the traditions of a cramped rectilinear method are dropping away, and a flood of new life-giving impulses is setting in; any fresh material which will illumine this period is welcome, and especially a vase like that before us, which offers a store richer perhaps than any specimen hitherto known.

II.

The vase shown on Plates II.-IV, is put together from a series of fragments found in the spring of 1896 and 1897 in the excavations of the British School on the site of what we believe to have been the Gymnasium of Kynosarges. The results of these excavations went to show that the Gymnasium was erected on a site which previously to the fifth century had been in use as a burial ground. Judging from the analogy of many similar instances, this large vase must have stood on the outside of a tomb in place of a stele; it was probably broken up long before the Gymnasium was built, and we found some of its fragments lying in the soil beside an angle of the large wall, along with loose fragments of human bones. Close by this spot we also uncovered the wall of a late Roman building (perhaps part of a caleidarium) and among the fragments of tile which were set into the mortar of this wall I found several more pieces of our vase: probably the Roman builder had turned them up in digging his foundations and used them. The task of chipping the fragments piece by piece out of the exceedingly hard Roman mortar was a delicate and laborious one which it was impossible to entrust to the Greek workmen; and when they were safely detached, there still remained the work of cleaning each fragment. Broken as the vase was into small pieces, which were covered on both sides with lime deposit or mortar, there was at first nothing to show that they formed part of a painted vase; and they

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1 P. Schadow, Eine attische Grablegung, p.10 foll. It would be interesting to know whether any or all of these monument vases have the base perforated, with the object of allowing the drink-offerings to percolate into the tomb for the refreshment of the deceased. Our example is too fragmentary to admit of a decision on this point. As the base is decorated, it probably belongs to the class which, as Schadow remarks, stood free on the grave, and were not partially sunk in the earth.
might easily have been rejected as worthless; but fortunately a piece of the richly decorated handle gave the clue, and as a sharp look out was kept, I think I may say with certainty that we recovered all that was possible.

As will be seen from the drawings, a large portion is unfortunately lost, but the pieces which are preserved are sufficient to enable us to restore with practical certainty both the form and nearly all the original decoration.¹

III.

The vase is one of those large amphorae or pithi which, as has been already stated, belongs to the same class as the Netos amphora (Ant. Denkm. i. 57.) and the Peiraean amphora (Eph. Δοξ. 1897, Pl. VII.), and stood probably on the outside of a tomb.² Like the Netos amphora, it shows traces of a metallic origin in the broad flanged lip, decorated on the under side with a row of projecting knobs,² evidently derived from the heads of the rivets which in the metal original would have served for the attachment of the outer and inner surfaces of metal. To the same metal origin is doubtless also due the finely modelled openwork of the handles (Pl. II. Fig. 2), which in our vase are much more elaborate than in either of the instances just quoted. In order to find an analogy for them, we must go to the large Boeotian pithi of the same period, which have been exhaustively studied by de Ridder in his article in Bull. Corr. Hall. xxii. (1898), p. 497 fol. De Ridder points out that this treatment of the handle is found also in some large amphorae from Thebes, and has drawn up a list (ibid. p. 508) of vases showing this peculiarity; but of all those named by him, none approaches our specimen in boldness and originality of design.³

The basis of this form of handle appears to consist of a series of circles, one above the other, extending from the outer edge of the handle to the neck of the vase; these circles are partially filled in with two eye-shaped pieces, each consisting of a series of five similarly shaped pieces: the whole is in fact an ingenious geometric pattern composed of intersecting segments of the same

¹ The drawings were made by me and coloured by Mr. V. Anderson, who also carried out under my direction the suggested restorations of the groups of figures. After my arrival in England Dr. Zahn most kindly undertook to compare the drawings with the original in Athens, and added valuable notes upon the details of colour. I ought perhaps to explain that the white and purple are not so uniformly well preserved as the illustration might lead one to suppose: the white used for the flesh that has particularly suffered; but the restorations are in every case justified by the actual remains of colour. The completed shape shown on Plate IV. is only a rough diagram intended merely as a key.

² The height is approximately 1.49 m., with a diameter at the lip of .528 m. It is remarkable that the proto-Attic vases of this class are all much of the same height; the Netos vase measures 1.22 m. and the one published by Conze in F.I. 1897, pl. 5, measures 1.10 m. Exactly similar knobs occur on the Netos amphora and on the tripod vase published by Conze in F.C.H. xxii. pl. viii; in a Boeotian pithos with reliefs (ibid. p. 485), they are used as an ornamental band.

³ An interesting illustration of the metallic origin of such handles is offered by two bronze pithi from the Pelschich tomb (Br. Mus. Cat. Brooms Nov. 438, 459), with openwork handles which evidently belong to this category.
circle. The spaces between the large complete circles are decorated with painted lotus flowers; at the top, in place of the circle, are two smaller circles side by side, with painted centres and arching lines above, which seem clearly to be intended to represent a pair of human eyes. With this use of eyes in the decoration of handles may be compared the eyes painted beneath the handles of Median vases,¹ which are in other respects closely related to the vases of our class. Probably in both cases the origin is to be looked for in Mycenaean art, as for example in the Warrior vase, which has eyes painted beneath the branching horn-shaped handle. Curvilinear decoration has frequently a tendency to take this form, as we see, for instance, in the pair of eyes introduced among the floral ornament of the Euphorbos pinax.

Turning now to the decoration of the vase itself, we see that the painter has divided his available space into three main fields. First, on the neck is a nearly square panel, occupied with a group of two wrestling figures (Plate II. Fig. 9), while a third figure, of whom only the extended hand is preserved, has been an interested spectator on the right. Of these wrestlers, unfortunately, neither is at all fully preserved, only the head, bent elbows and the legs of the figure on the left, and the lower part of the figure on the right remaining. But here again we have sufficient to admit of a fairly probable restoration; the figure on the left is evidently likely to be the victor; he has caught his opponent by the throat with both hands, and, pressing the other's head over his own left shoulder, is crushing the life out of him. The group of muscular straining figures recalls the fine lines of Πεδιλ. xxiii. 714:

τετράγωνον ἄρα νοῦτα θρασείαν οὕτω χειρῶν
ἐλξόμενα στερέως.

The intensity of the action is well brought out by the drawing of the two bent elbows pressing into the victim's back, and also by the contrast of the fierce action of the left hand of this figure, which helplessly, as it seems, tries to grasp the conqueror's left thigh.² The head of the victor is bearded, but we are left in doubt as to the sex of his opponent. The technical peculiarities of drawing of all the scenes will be dealt with presently.

On the shoulder (Plate II. Fig. b) a comparatively narrow band has been decorated with the stock subject for friezes of this Orientalizing period, the browsing deer; but, inasmuch as the space is limited on each side to the attachment of the handles, the artist has here treated it as a panel: only two animals are introduced, and these are symmetrically confronted.²

The largest field is that upon the body of the vase (Pl. III. and Pl. II. c-d); here is a great chariot drawn by a pair of winged horses which are about to

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¹ Arch. Jahrb., 1887, Pl. 12.
² The browsing deer occurs singly on the Hymettos amphora, and as a frieze on the Anatolos amphora, the pitheon in Es. 'Agora, 1882, Pl. 8, and the fragment in Ath. Mitth. 1883, Pl. iii. It is also found on the Athenian gold band in Arch. Zeit. 1884 Pl. x, 2. The nearest analogy to our group occurs on a fragment from Argina in Ath. Mitth. 1897, p. 295, Fig. 18. For a discussion of its origin in Greek art, see Dümmler in Jahrb., 1887, p. 18.
start off to the right; their driver, who appears to be a woman, has already raised in both hands the reins, but turns her head to look at the scene which is proceeding behind her. Standing in the car is a stately draped man who is fully turned to the left and seems to be conversing with a similarly draped figure who stands on the ground confronting him: this last figure, on the isochephalic principle, is drawn on a larger scale than the others. As to the sex of this figure again it is impossible to decide, as the flesh is in every case coloured white: but the flowing drapery is perhaps in favour of its being a woman.

As is usually the case in these large monument vases, the obverse side is alone intended to be seen: the subject decoration only extends on each side as far as the handles: the reverse in our instance has been covered with a trellis-work pattern laid on in broad strokes of a large brush filled with the brownish black of the design. The field of each design is occupied with ornamentation designed to occupy every available space; these ornaments are partly rectilinear survivals from the geometric period; but there is already a preponderance of the floral element which is partly a survival from Mycenaean and pre-Mycenaean art, and now probably comes back into Attic painting largely through the medium of some Oriental influence. The same mixed characteristics are seen in the subsidiary bands of merely decorative pattern. On the lip is a double band of super-imposed triangles, coloured alternately black and purple; next, around the raised knobs twines a painted cable pattern; one strand painted white with a black edge, the other black: both these patterns are familiar in proto-Corinthian ware. Then comes a purely geometric design suggesting basket-work, composed of alternating hatched triangles. A geometric pattern of zigzags borders each of the designs on shoulder and body, and below the last is a floral pattern of double spiral and palmette. The lower part of the body is encircled with rays suggested originally by the lotus flower, and round the foot are two bands of chequers: both these designs are commonly used in the proto-Attic class.

As the reverse is practically undecorated, it is tectonically necessary to close off the designs of the obverse on each side; for the two upper subjects this is already effected structurally by the handles; but in the case of the chariot group the artist is constrained to do it with his brush: he closes the scene with a single vertical line, but with a fine artistic sense relieves the harshness of this by making it the basis of a beautiful spiral pattern with small inserted palmettes, an elaboration of the design already in use for the band around the body. The origin of this pattern is of course Mycenaean.

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1 The drapery would be equally appropriate for a male charioteer, but perhaps as the horses are winged, the figure is more probably not an ordinary mortal charioteer.

2 For this pattern, see Courc in B.C.H. xvi. (1892), p. 29 and the instances there quoted. To these may be added the flared lobes in the British Museum, Royal Mus. Gr. Fig. 25. In our vase, the greater part of the reverse side is lost, but the pattern seems to have consisted of plain broad bands, intersecting diagonally and finishing (at the upper and at any rate) in semicircular loops.

3 Unfortunately only a portion of one of these rays is preserved (Plate II., 4); but it would appear from this fragment that there was not on every vase the second smaller band of rays or waves in the interstices of the larger band, such as is frequently found in proto-Attic vases.
into which art it had doubtless come from Egypt, as the well-known comparison of the Treasury ceiling at Orkhomenos with the Theban tomb shows. In the very early fragment from Aegina, which is perhaps of Argive fabric, published by Pallat in *Ath. Mitt.* 1897 p. 308, Fig. 31a, an attempt is made to use a complicated spiral form for filling in the field. Spirals as a vertical border for the sides of a scene are found in Dipylon ware, as for instance on the large Boeotian amphora published in *Eph.* *Aph.* 1892 Pl. 10, where a running spiral closes the reverse scene: another example is the Boeotian pithos with reliefs *B.C.H.* 1898 Pl. 5; but the most striking parallel is perhaps that offered by the advanced geometric vase from Athens published in *Ath. Mitt.* 1892 Pl. X. In that vase, which belongs to a stage between the Dipylon and proto-Attic styles, the main scene is bordered on each side with a pattern of double spirals arranged in vertical bands, which may fairly be considered the direct ancestor of the spiral pattern on our vase. Its subsequent history on vases is interesting: for in it we see the origin of the spiral and palmette ornaments which henceforward will be used, through all Attic iconography at least, to decorate the surface below and beside the handles. It is characteristic of the general tendencies of development in the history of vase-painting that the more elaborate form should come first, and gradually simplify in the best period before expanding again in the decadence: an intermediate stage in early B.C. ware is however seen, e.g. in the vases of Exekias, who uses (*B.C.H. Cat. Vases* ii B 210 for instance) a highly complicated series of spirals below his handles, which sprawl over the otherwise free field: and in the Ionian amphora in *Gerhard Att. Vases* Pl. 317-318. What might have happened in Attic vase-painting we see in the 'Melian' class, where this spiral pattern, starting probably from a similar origin, has spread a rank growth over the vase and becomes first a dominating and then even an exclusive feature of the design.

The clay is of the usual proto-Attic character, a warm reddish-brown, fairly levigated, with occasional fragments of stone left in, which here and there cause the surface to fly: the exterior is prepared with a thin slip of the same tone, and on this the design is laid first in brown outline. This outline, in the case of the human hair, the animals, and the chariot, is filled in with a thin black, which in parts allows the background to show through. The hand of the figure in air is by accident also coloured black; otherwise the human flesh is everywhere indicated with a wash of creamy white laid direct on the clay. In some cases this colour overlaps the brown outline, showing that, as we should expect, it was subsequently laid on. Purple (laid generally on a black background) is employed for the pupils of the eyes, and

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1 This can hardly be otherwise than accidental, and yet it is curious to note that the fingers of this hand have been carelessly drawn in the manner appropriate for black silhouettes, that is to say, with engraved lines. It is as if the artist, conscious that he had made a mistake, decides to make the best of it; apparently he is unaware that he can lay his white over the black and so obtain a more brilliant effect than is acquired by laying it direct on the clay. But we are still a long way from this innovation, to which neither Sophilos nor Klitias, in the works they have left us, seem to have attained.
parts of the drapery, horses' wings, deer's neck, etc.; also to heighten the effect of portions of the floral ornaments in the field.

One very interesting feature of our vase is the introduction of the engraved line; it is of course unusual to find it, as here, in conjunction in the same vase with drawing in reserved outline: but this transitional stage is also represented elsewhere. It occurs, for instance, on the Euphorbos plate as well as on the so-called 'Rhodian' vases of mixed style, and also in a vase of Attic fabric which perhaps more nearly than any other approaches the date of our specimen. It is a fragmentary vase published by Pernice in *Atl. Mitth.* 1895, Pl. III., Fig. 2. On that vase, as on ours, the engraved line is only used for the inner markings of animals or inanimate objects; the human face is still treated in outline; the artist is not yet sufficiently at home in the new 'invention' to trust himself to make full use of it; he prefers still for the more crucial parts of his design, such as the human anatomy, to fall back on the old method of outline drawing.1

It is a period of experiment; and so we find yet a third method of inner marking employed. The upper part of the horse's wing, which is rendered in black silhouette, has the inner details drawn in thin white lines: one wonders why this method, which obtains as a regular process on some of the sarcophagi from Clazomenae and also on the well-known vase fragments from Kyme in Aeolis,2 did not find more favour in Athens; among Attic vases this is the only instance which I know of its occurrence.

So long as outline drawing was employed for the flesh of both sexes, it was natural that white colour should also be used for the flesh of both men and women; its application probably arose from a desire to throw up the human figure against the background; and even after outline drawing was abandoned, the practice still continued. Thus: on the Acropolis vase of Sophilos the flesh of both sexes is white throughout; and on the fragments from the Acropolis published in *J.H.S.* xiii. (1892-3), Pl. XII., Fig. 1, one at least of the figures is similarly treated. In that case, the intention being to distinguish three figures side by side in separate planes, the central one is coloured white; in another group (on the l. of the design) the near-figure is coloured entirely purple, the further one black. The principle is of course frequently adopted in b.f. vases of a later period, as applied for instance to the horses of a chariot, but is not found later as applied to male figures. In all these cases the white is laid directly on the ground of the clay, 3

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1 This seems to bear out the suggestion of Pernice loc. cit., that the invention of engraving was brought about in Attic vase painting.

2 Dümmler in *Neue Mitth.* iii. (1888), Pl. VI., his statement (ibid., p. 160, that "für die Inneneinzeichnung der Gestaltung sehr stark verwandt ist," is a misapprehension, due probably to the fact that he studied these fragments only from a drawing. As a matter of fact, there is no trace of engraving on them; all the details are indicated by fine lines of white.

3 That is, on the fragments published in *Atl. Mitth.* 1889, Pl. I., as to which Winter (ibid., p. 9) states definitely that such is the case. Whether this applies also to the new fragments noted by Wollers (Jahrb. 1898, p. 23, note 8), does not appear in the Menidi vase attributed to Sophilos the flesh of Hercules is coloured black with purple face, as in the Naxos vase.
whereas in Attic black-figure vases from Amasis downwards, it is laid on a prepared black coating.

The question is important in view of the famous reform in painting which Pliny (H.N. xxxv. 56) attributes to Eumorus of Athens, who is said to have been the first to distinguish the sexes. On vases it seems certain that this distinction obtained at Corinth before it reached Athens. In early Corinthian vase-painting, such as the pinaxes, the outline drawing is usually reserved for the flesh of women. If the Plinian story means anything, it may perhaps imply a somewhat fuller distinction, such as is found for instance on Egyptian wall-paintings and papyri of the middle kingdom—where the women are tinted white, and the men a rich brown. In the Mycenaean wall-paintings the usage seems to have been constant, as one might expect from their close association with Egyptian methods: on the Knossos frescoes, as Evans remarks (E.E.F. Arch. Report, 1900, p. 63) the Egyptian conventions of flesh colouring are maintained—ruddy brown for men, white for women; and the same system is found at Mycenae (Eph. 'Arch. 1887, Pll. 10-11). It is quite possible that it may have lasted on in wall-paintings of the Greek mainland until the time of Polygnotos at least, or even later: certainly the stele of Lysaia suggests this. But even if it died out there, this Mycenaean tradition, like so many others, survived in the Ionian schools of the sixth century. From here it seems to have affected other vase-fabrics, the Melian and proto-Corinthian at any rate and the centre (Rhodian or otherwise) which produced the Euphorbos plate. Wherever the influence reached of the genus pitterae Asiaticum, it probably brought a trace of the Egyptian convention: on the Caere terracotta paintings it is responsible for giving the man a preposterous purple flesh tint while the women are drawn in outline. The cheerful custom of smearing a god's face with vermilion on feast days may possibly have grown out of the same tradition; even if it had an origin in ritual,1 it would have seemed more familiar to a people accustomed to brick-red men in their works of art. It is found in full use on a class of Ionian vases from Naukratis;2 and even supposing that the wall-painters of Athens had discarded it, Ionian influence may well have caused its re-introduction into the studies of Athens. The reddish-brown which is sometimes applied to men's flesh on Melian vases may be referred to a similar origin, and probably the habit which obtains in some proto-Attic and Corinthian vases of colouring the men's flesh purple may be due to the same cause.3 The painter of the Euphorbos pinax (Salzmann, Neopylote de Camiros Pl. 53) seems indeed to have employed a somewhat similar method: the figures of the warriors are there first drawn in black outline and then washed in with a pigment which seems to be a mixture of purple and thinned black:

1 As to this, see Bouquet in Br. School Annual, iii, p. 66.
2 Coloured Illustrations of these will appear in vol. i of the British Museum Catalogue, now in preparation.
3 The 'Invention' attributed to Euphanes would apply if necessary to the brick-red colour of the male flesh in Egyptian and Mycenaean art. I cannot see the connection with Miles which Stasikaska (Ath. Mitt., 1899, p. 376) suggests.
it looks as though the artist was endeavouring to supply the want of the brown flesh tint which he must have seen elsewhere but which was not included in his range of pigments. The Athenian artists, not possessing the secret of the preparation of reddish-brown colour, use purple as a compromise. The artists of the proto-Corinthian fabric in the more developed stage are acquainted with a brownish pigment which is probably intended to represent the tint used for men's flesh in Egyptian art. It is used sparingly at first; as on the Berlin Censaurus vase (Ark. Zeit. 1883, Pl. 10) but on the Chigi vase (Karo in Ant. Denkm. ii. Pl. 44-45) we see it in full use. So far as I know there is no instance of its occurrence in Attic vase-painting. The painters on a white ground (such as Pasias) employ a thinned black which gives an orange tint, and this is occasionally found on the red-figure kylikes (see e.g. E. M. Vase Cat. iii, E. 12, E. 36) but here its use is confined to hair and drapery and is never applied to flesh. That some such method of tinting men's flesh obtained however among Attic painters of the sixth century (as distinguished from vase painters) is shown by the painting published in Eph. Areg. 1887 Pl. 6, where the flesh of the warrior is coloured a rich brown.

Before turning to the subjects represented, it still remains to consider some details of style and technique not yet noted, in which the present example presents unusual features, or which may be of assistance in determining its position in the series of proto-Attic vases.

The first thing that strikes one as regards the human figures is the enormous eye, which is quite out of proportion to the size of the face, and gives a kind of 'œil de poule' effect. One might suppose that this was due to a lack of skill on the part of the artist; and yet this can hardly be the case, seeing that in other details, such as the horses' wings, he shows that he can easily accomplish minute brush work. The true cause is I think to be found in the traditions of silhouette drawings, from which the art of this vase is not yet wholly free. In the Dipylon style, the whole face is in silhouette except the eye, which is indicated by a dot within a space left unpainted; the difficulty of making this 'reserved' space small within a washed-in silhouette is self-evident, and we need only look at even the more advanced examples of Dipylon ware, such as the Analatos and Hymettos vases, to see that the difficulty had not then been overcome. Our artist, though working under far easier conditions, still reproduces the eye to which his Dipylon forefathers have accustomed him. More than this; it will be noticed that the spaces around the eyeball, and between eye and eyebrow, are not coloured white like the rest of the face, but are left in the ground colour. Now the space occupied on our vase by eye and eyebrow together, corresponds to the 're-

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1 See Pallat in Ath. Mitt., 1897, p. 367 note 8, and p. 312.
2 It was this difficulty which led the painters of animals on the 'Rhodian' vases, before the introduction of engraving, to leave the head, and sometimes the feet, in outline, while the body was drawn in silhouette.
3 This peculiarity was pointed out to me by Dr. Zahn. On the Menidian fragment (Jahrbuch, 1898, Pl. 1, Fig. 1) and on the Bemdraft Phalera fragment, the corresponding space is left unpainted from the purple which covers the rest of the face.
served space which serves for the eye on Dipylon vases: it looks very much as if our artist began by laying on a white silhouette in the Dipylon manner, leaving a reserved space for the eye, which however is here filled in with more detail than the black Dipylon silhouette permitted. This plan moreover had the advantage of preserving, in a measure, the contrast of colour which exists in nature between the white of the eye and the flesh. In the Caeretum-cotta slabs (J. H. S. x, 1889, Pl. vii), a further stage is reached, the faces of the men having the white alone of the eyes left in the whiter background colour, while the flesh is coloured deep red.

In the treatment of the ear, the artist is to a certain extent breaking fresh ground, as this feature is not represented on the Dipylon heads; the result is a crude and uncertain drawing very far removed from the elaborate decorative form of the ear on the Netos amphora or the Argiva fragment (Benndorf, Gr. u. Sic. Vas., Pl. 54, 1). The same is also true of the treatment of the hair over the forehead; in our vase the edge of the hair is an almost flat line around the face, and in profile is not indicated above the contour of the skull; the next stage seems to be that of the Netos amphora, where the line around the face is slightly waved, and the contour is naturally rendered; even here we have not yet reached the typical archaic formalised row of spiral curls around the forehead, the first indication of which appears in the Phialeron fragment (Benndorf, loc. cit., No. 2). In this respect again our vase adheres to Dipylon tradition; but just as, in the advanced Dipylon vases, some care is taken to render the long falling mass of back hair, so here this receives a careful and naturalistic treatment. This lower bunch is tied at the nape with a band, represented by a reserved line; in the case of the charioteer it is coloured purple, but the fact that no trace of purple can now be seen on the upper part may be accidental: the careful arrangement in this instance in two bunches is not quite intelligible; probably the artist meant to indicate one mass as falling on each shoulder, but got into difficulties owing to the head being turned to look backward. The same care is bestowed on the wavy beard of the figure in the chariot, which terminates in three twisted ends; it offers a contrast to the closely trimmed stiff beard of Heracles, which suggests a comparison with the Egyptian form: the one is more appropriate to the workmanlike hero, the other, with its suggestion of Ionic

1 Thiersch. Tyrrh. onk., p. 168, gives a somewhat different account of the reasons which led to the human eye receiving a more naturalistic treatment in the case of women (white ground) than of men (black ground). The fault of his argument seems to me to lie in the fact that he ignores the proto-Attic stages which led up to the 'Tyrrhenian' style. The earliest form of the eye in black-figure treatment is not, as he asserts, a plain engraved circle, with two engraved horizontal short strokes—that is merely a careless shorthand which occurs in all stages of b. f. ware—but the method shown on the Benndorf Phialeron and Netos examples; i.e., a double circle, with the angles of the eye-space correctly rendered on either side.

2 This is precisely the stage arrived at in Mycenaean art such as the heads on the silver cup in Myc. Appendix. 1887, Pl. 7, Fig. 9c. In one of these heads, while the upper part is so treated, the part below the nape is shown as falling in three wavy coils.


A PROTO-ATTIC VASE. 39

ἀθρώτος, is part of the gala attire in which the dead person sets out on his long journey. Both beards, as well as the pupils of the eyes throughout, are coloured purple; this polychrome treatment of the face is of course what we are accustomed to in the sculptures of the sixth century, where a conventional colouring is accepted in the desire to render the fact that hair and eyes are not all one monotone with the flesh. The purple beard is found occasionally down to a quite advanced period of the black-figure style; the purple colour for the eyeball, which may partly be due to a feeling that this colour detaches itself from the white ground of the face less glaringly than black would do, is henceforward regularly used in Chalcidian vases, and occasionally on the earlier Attic b.f. vases, in the representation of women, that is to say, wherever the flesh is painted white.

The absence of moustache is in keeping with the general habit throughout early Attic and Ionic vase painting; and yet it can hardly have been a universal habit in Athens at any rate to shave the upper lip, for the moustache is occasionally found even in proto-Attic vases, and by the middle of the sixth century figures rather as a rule in Attic vases. The earliest noticeable example of a moustache known to me in Attic art is the Netos vase, where both Heracles and Nessos wear it; that of Heracles is trimly turned up in the Imperial military style; that of Nessos is represented by a formless mass of horizontal wavy lines; probably the artist got into difficulties in trying to emphasize here (as he has done in other beards) the contrasted types of hero and centaur. On the little proto-Attic vase published by Böhlau in Jahrbuch, 1887, p. 46, Fig. 7, of two figures with beards, one has a moustache and the other has not; we may probably conclude that no special significance attached to the question, such as the well-known passage in Plutarch Cleom. 9 might tempt us to suppose.

The details of anatomy in the wrestling group were applied in thinned black laid on the white, and have consequently for the most part flaked off, if they ever existed; it is curious to note the strongly stylistic development which our artist has already reached in the drawing of the knee, which resembles that of Ionian art as shown for example in the sarcophagi of Klazomenae and certain vases (J.H.S., 1885, p. 181).

The drapery shows no folds, but is treated simply in squared masses of colour; the chiton of the charioteer has been covered with dots, one more of the methods surviving from the Dipylon style; that of the standing figure is decorated with a diagonal scale pattern. This pattern is of course a survival from Mycenaean and even pre-Mycenaean art; in the Dipylon style, where

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1 Dionysus affects the same fashion on the Acropolis fragment in J.H.S., 1892-3, Pl. xi.
2 This scale pattern and the fringe pattern below were both apparently painted on a white ground, but the traces are not sufficiently clear to warrant its restoration.
3 A very clear example of a dress like the one on our vase, with scale pattern all over and a fringe pattern round the hem, is shown on the ivory statuette from Mycenae, E.B. Arg., 1888, Pl. 8, Fig. 4.
silhouette is the principal method, there is no scope for it, but in the proto-Attic style it again comes into prominence.¹

The chariot is of the same general form as that shown on the proto-Attic vase published by Coxe in 'Eph.' 1807, Pl. 5, with the double curve in the side supporting a curving antyx, which rises in a high arch in front; this last seems to have been designed with a view to distributing more evenly the strain of the chariot pole, as well as providing an attachment for the reins when the horses were standing.² A peculiar feature of it is the twisted support which apparently comes in the centre of the arched front, and which, if our artist is accurate, tapers gently downwards. This arrangement, or rather, traces of it in a modified form, are to be found on Attic vases of the succeeding stages: on the proto-Attic vase just quoted, the upper part of the front arch of the antyx is twisted; in most subsequent instances the arch is represented in its true profile perspective, i.e. merely as an upright bar: but this bar is very often rendered in a manner which clearly shows that it is twisted like ours: such instances are the Kolchos oinochoe (Wien. Vorleg., 1889, Pl. I. 2b); the chariot of Hermes and Maia on the François vase (Furtwängler and Reichhold, i. Pl. 1-2); and B. M. Vase Cat. ii. B 147, B 285, B 275. The intention is apparently to provide a purchase for anything (whether reins or polestay) which might be fastened round it: such a fastening would slip down on any upright bar which was smooth.

It is noticeable that the purely decorative group of browsing deer and the bodies of the horses are drawn in silhouette, while the human figures are rendered in a more natural colouring: the same principle seems to have been observed in the Sophilos fragments in Ath. Mitt. 1889, Pl. I, where the upper band has the human figures drawn in outline and filled in with white, while the lower hand, apparently a decorative group of animals, is, if we may judge from the portion of wing which is preserved in silhouette, of the ordinary b. f. style. It looks as if the style which eventually became the ruling method was as yet regarded as the less successful of the two; and it seems odd that in the Phaleron fragment and Nektes vase, which cannot be a great deal later than our vase, the b. f. method should already have asserted itself to the complete exclusion of the other. The reason is probably to be found in the growing familiarity of Attic artists with the engraved line: in our vase it is used only in a tentative fashion, and, in the case of the hair, even side by side with the older system of a 'reserved' line.³ For this reason I think we may claim that our vase is one of the earliest, if not the earliest, example of the use of engraving which has yet been published, at any rate among Attic vases.

The engraved line around the chariot wheel seems to be put in with a pair of compasses, or some similar appliance, which has also been used while

¹ See for instance Ath. Mitt. xx. (1895), Pl. iii, Fig. 2 (wing) J.H.S. xiii. Pl. 21 (dress).
² It is necessary to restate this, because Tischner, Typik, amst. p. 138 apparently regards the scale pattern as a comparatively late introduction into Attic art.
³ Ktiriphoi, Hippolyto 1188, ἀλφαρίτης Μηχα-νίς ἐπὶ ἄργαν.
⁴ A similar instance of outline drawing and engraving on the same vase is the proto-Colinadian fragment from Aegina published by Pallat, Ath. Mitt., 1897, p. 306.
the clay was soft to measure the circles for the openwork pattern of the handles, probably as a preparation for cutting it out; parts of these engraved circles on the handle are filled in with paint. Zahn remarks that in certain parts of the front side of the handle traces of white colour are visible beneath the paint of the ornament, and concludes that the whole of this surface was covered with white before the decoration was laid on. He also notes that two at least of the bands of pattern, viz., the hatched triangles on the neck and the zigzag band above the chariot group, show traces of white within the pattern, as if these too had been previously prepared with a white ground, similarly to the handles.

From what has gone before I think we are justified in placing our vase at the head of its class, that is to say, as the earliest yet published of the series which follow the Hymettos amphora and the Analatos hydria. This conclusion is borne out by a study of the ornaments in the field. Alone of the series the Kynearges vase retains the horizontal rows of zigzags, as well as the stiff leaves or palmettes springing from the ground as in the Analatos example. The nearest analogy in this respect is offered by the Benndorf Phaleron fragment, then follows the Benndorf Aegina fragment (also of course an Attic work); then the Netos amphora, in which the field ornaments have been reduced both in size and in number, until they bear the same relative proportion to the figures of the design as, for instance, on the finer proto-Corinthian lekythi; then the amphora published by Couve, and lastly, the Aegina bowl with the Harpies.

IV.

The identification of the subjects, in the absence of any inscriptions, is a matter of some difficulty. In the conjunction of a struggling pair of nude figures on the neck with a departure scene on the body, one is tempted at first to recall the great Amphiaraurus vase in Berlin, where both these subjects are found together. On that vase the principal group is identified by inscriptions as the departure of Amphiaraurus (as in the chest of Kyphes, Paus. v. 17), and the wrestling group as Peleus and Hippasichmos. Neither of these identifications will apply well here; the quiet leave-taking scene is contrary to all precedent for that of Amphiaraurus, and the wrestling scene does

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1 I do not here include the amphora referred to by Boblau, *Afos fia*, *Nekr.,* p. 167, note "*, which, so far as I can judge from the rough tracing kindly sent to me by Boblau, forms an interesting link between the Amphaios vase and our example. The Burgon bowl in the British Museum must be very nearly of the same period. Boblau has very kindly further allowed me to see his notes of some small vases and fragments at Eumenis which from the character of the ornament on them may also be added as helping to fill this gap.


3 Boblau (*Afos fia*, *Nekr.,* p. 117), who uses the term Proto-Attic in a more limited sense, places the Harpy bowl before the Netos vase; but surely considerations of style make this improbable.
not appear on our vase to be a friendly contest, but rather a combat to the death.

For the subject on the neck of the vase, the clue is perhaps supplied in the hand of the figure on the right: this evidently belongs to a spectator who, by the action of the hand, expresses a lively interest in the contest. For this reason, as well as the deadly character of the action, the scene can hardly be an ordinary wrestling bout in the palaestra, but must represent a mythological subject: the only hero who is likely to figure in so early a stage of Attic art in such a contest is Heracles, who is already, as the Nekyios vase shows, coming into the scope of vase-painting; and the only personage with whom Heracles is ever associated in a scheme like this is Antaeus. The issue of the contest is already placed beyond doubt, and, as usual in all subsequent representations of this myth, Heracles is on the l.; this is in keeping with the custom which obtains through all early vase pictures of making the action move from l. to r. The third figure standing on the r. can hardly belong to Athene or Io, who are usually placed on the l. beside the hero; it must belong to a sympathiser with Antaeus, perhaps his wife Andromoe or Iphinoe, who in some b. f. vases figures in this place in the scene.

It may perhaps be urged against this view, that Heracles would probably be distinguished by one or other of his characteristic attributes; in the absence of so much of the design we cannot definitely assert that this was not the case; but even if it were, a Heracles without attribute would not be without a parallel in vase-painting. The fragments of a primitive amphora or pithos in the Geometric style from Cameiros, some of which were published by Salzmann in *Necr. de Cameiros*, Pl. 39, include others which Salzmann did not give, and which show that the Centaurs there represented are being attacked by a human figure who is hurling a spear at them. This figure can hardly be any other than Heracles, and yet he has there no distinctive attribute, any more than on our vase. These fragments from their style must be assigned to a late stage of the advanced Geometric period, a date very little preceding the date of our vase.

It seems to be a generally accepted view that the Antaeus legend does not come into Greek art until comparatively late. Furtwangler remarks that it does not occur on Attic vases until the late b.f. style. But the evidence for this is of course only negative: as a matter of fact, the earliest representation hitherto known appears to be that on *Brit. Mus. Vase Cut.* ii. B 222, which by no means belongs to the late but rather to a very early stage of Attic black-figure ware. I suspect that some early unidentified wrestling scenes are renderings of the myth which have not been distinguished from typical palaestra scenes. Such an example is the adjoining Fig. 1, which is part of a frieze running around the cover of a vase in the British Museum, B 596. The rest of the frieze is occupied with the contest of Theseus and the Minotaur in the presence of five men and two women. The group in Fig. 1

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4 Furtwangler in Roscher's *Lexicon*, and *Antaios.*
6 Of early Attic-Ionian style.
is conceived exactly on the usual scheme of Hercules and Antaeus; the latter is even in a small way identified by a rough patch of hair on the back, and yet the palaestra is so strongly in the artist's mind that he has borrowed for his left hand spectator the figure of an athlete running with 

ἁλτερας, and only thinly disguised him by putting a cloak over his shoulders and a leaning-staff against his left side. It was probably felt that Hercules could not wrestle in a lion-skin, and it did not at first occur to vase painters that his attributes could be hung up in the field.

From a comparison with our vase, I am inclined to think that we may identify the same subject in the Bocotian pithos with reliefs published by de Ridder in B.C.H. xxii (1898), pp. 497, 501. Here are two figures beginning to wrestle, and on the right a woman in distress looking on. De Ridder suggests Hercules and Kyknos; but in all subsequent representations of the

Fig. 1.

Kyknos legend the contest is with weapons and not one of wrestling. It is true that the contest in this instance is not clearly rendered, the figure on the left (presumably Hercules), merely grasping the other by the wrist; but this lack of clearness may easily be attributed to the limitations of the Bocotian artist, who at this stage would have found a complicated group of crossing planes impossible.

The representations of the Antaeus contest on vases of the sixth century may be divided into two principal types. In the first, which appears to be the earlier and by far the most usual, the hero locks his arms around the chest or neck of his adversary, and with head also pressing against the other's shoulder or chest, squeezes him to death; it is this type (adaptable also for the contest with the Nemean lion) which specially distinguishes the Antaeus contest from

1 The same detail is found in other representations of Antaeus; see for instance Gerhard, Anz. Par. ii, pi. 114.

2 The same type came later to be used for the contest of Theseus with Kerkyon, *see* *e.g.* the Euphorion Theseus cup, and *cf.* *Bibl. Vas. Cat.* iii, E 38 (Duris).
all others. The second type conforms more to the rules of Greek athletics, and is borrowed direct from the palaestra; in this, Heracles, upright, grasps the neck of Antaeus in the hollow of his l. arm and pummels his adversary’s head with his r. fist. This is the regular pankration, but an examination of the Antaeus scenes shows that it was comparatively seldom adopted on vase-paintings. Of the list given by Klein Euphronios, p. 122, the vases fall under one or other type as follows:

(i) Squeezing type, a, b, g, i, A, C, D, to these must be added Br. Mus. B. 196 and J.H.S., 1899, Pl. 1.

(ii) Pankration type, c, f, E.

A combination of both types is given in k; where Heracles grasps Antaeus by the neck with his l. as if to throttle him, and pummels him at the same time with his r. fist. In e alone is there a variant; here Heracles pulls the l. leg of Antaeus forward, and pushes the head back, so as to break his neck. Whether the combatants stand upright, lean forward, or sprawl at full length on the ground, depends entirely on the exigencies of the space to be filled; for the narrow frieze presented by the exterior of a kylix or shoulder of a hydria, the last is of course preferred; but in any case, so long as the artist’s powers remain somewhat limited, the upright composition is generally adopted, as in our vase.

As regards the chariot group, we are on more uncertain ground, especially as the sex of two of the figures is indeterminate. The arrangement of the dress of the driver suggests the female sex, but this is not conclusive evidence, when we remember that male charioteers of all ages were usually draped to the feet, and it must remain an open question. Nor are the winged horses much help: Studniczka, in publishing (Ath. Mitt. 1894, p. 306) a fragment from Aegina with a similar scene, remarks that the free introduction of winged horses in early art is hardly a distinction of any particular deity or hero, but is intended as the ordinary expression of the wondrous speed possessed by the horses of heroes as well as of Gods.

A similar group of a chariot containing two figures and drawn by a pair of winged horses occurs as the decoration of a dress upon the François vase, Furtwängler and Reichhold, Pl. 3, Fig. 3: the driver in this case is a bearded man, and beside him is a beardless figure wearing a polos and therefore presumably a goddess; a comparison with the almost identical group on the Molian fragment in Conze Mel. Thong. p. v. seems to confirm this. On the Menidi vase (Jahrbuch, 1898, p. 28) a similar chariot group was probably represented; and Welz quotes the terracotta models of a chariot offered at the Menidi tomb as showing that, at a period not much later than that of our vase, such a group was popularly associated with the idea of the

1 Klein’s statement (Euphronios, p. 122) that on early b.f. vases Heracles is about to lift Antaeus in air is not the generally accepted view; this version of the myth is now recognised as of late origin. Also when he says ibid.
heroised dead. It was indeed a conventional subject for tomb monuments already in the days of the Mycenaean steleæ: and it occurs on the Proto-Attic vase already quoted (Böhlau, Aus Ion. Nekr. p. 107, note ***) probably in the same connection. We may therefore I think conclude that our chariot group is sepulchral; the woman who in the Menidi vase confronts the chariot, may be taken as corresponding to the figure on the 1. of our group. The heroised dead man, decked out in his best, turns from the chariot of death to take a last farewell of the friend whom he is leaving on earth; it is in fact a materialised archaic rendering of χορηγὸς χαῖρε.

Since the above was in type, I have seen among the fragments from the Acropolis, now in the National Museum at Athens, a fragment of a large proto-Attic vase which belongs to a stage very little later than the one here published. On it is the head of a human figure to 1. closely resembling the head on the Aegina fragment (Benndorf, Gr. u. Sic. Vas., Pl. 54, No. 1); the flesh is painted white, but the ear, the white of the eye, and the space between eye and eyebrow are left in the natural colour of the clay (see supra p. 37). The lower part of the face is wanting, so that it is uncertain if this figure was male or female; another interesting feature is the introduction of the formalised row of spiral curls on the forehead (supra p. 38).

Cecil Smith.

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2 On the vases from Enkomi several instances of this subject occur, see Brit. Mus. Excavations in Cyprus, p. 39, Fig. 47, Nos. 882, 883, 896, 888; p. 45, Fig. 71. No. 927 shows a similar chariot drawn by winged quadrupeds.
NEW EVIDENCE ON THE MELIAN AMPHORAE

[Plate V.]

§ 1.—The Latest Addition to the Class.

The importance of the 'Melian Amphorae' in the history of early vase-painting has long been recognised, but the difficulty of locating an isolated fabric which in itself consisted of only five complete examples, all of uncertain provenance, has hitherto prevented any adequate treatment. Any extension of the class would therefore have been welcome. But the amphora which is now added to the list [cire Appendix] has a value in itself beyond its cumulative importance. Not only is there stronger evidence in this case than in any of the others that the vase was actually found in Melos, but the decoration of the vase adds new figure-subjects and new schemes of ornament to those previously recognised as characteristic of the class. Indeed the whole 'Melian' class as at present constituted consists of large and elaborate vases, ceramic masterpieces, each of which possesses its own individual scheme of decoration. This appears very clearly in a comparison of the present amphora with two typical examples from those previously published, namely, the Herakles\(^1\) and the Artemis\(^2\) amphora. In the Herakles vase the painter has produced his effect by an elaborate and ornate treatment both of the figure-scenes and of the ornament forms. It excels both of the others in freedom of drawing, richness of field-ornament, and the elaboration of the costumes of the figures. But it lacks a certain stiff dignity both in general design and in the pose of individual figures that forms the charm of the Artemis amphora. This latter vase is probably the finest of the series and is approached by none of the others in the sweeping lines of the winged chariot-horses. But it suggests that its author, though a more original draughtsman than the painter of the Herakles amphora, was at the same time one of less experience. He has not learned the value of uniformity in the field-ornament: the spiral ornament about the legs of the horses is in thorough harmony with the design, but elsewhere it becomes petty and restless. The new amphora seems to occupy an intermediate position in point of date and style. Compared with most examples of the class, it is extremely simple in its arrangement of figures, and the general effect of the decoration is derived less from the figure-scenes and more from the size and simplicity of its spiral

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\(^1\) Ep. 'Apc. 1894, p. 206 \textit{app.}

\(^2\) Curs. Meliola \textit{Thompson}, Vam A.
NEW EVIDENCE ON THE MELIAN AMPHORAE.

ornament. The characteristic field-ornament is the meander-cross which, with its straight lines and angular forms, gives an air of severity to the whole design very different from the variegated and tapestry-like appearance given to the Herakles vase by the fine floral rosettes freely and evenly distributed over the field. A comparison of the neck-scenes upon the three amphorae well brings out their different characteristics.

It is just this individual character of the several 'Melian amphorae' that has rendered it especially difficult to assign to the class its true position in the history of vase-painting. The artist in marking his work with his own peculiar genius tends to obscure any sure indications of date, locality, and foreign influence. It is the more commonplace and mechanical fabrics that best reflect the artist's environment with the least refraction in passing through his own personality. It is necessary to place the masterpieces of any particular style into the background of the general fabric before the questions of date and locality can be fully discussed. Especially is this the case with the 'Melian amphorae' where the external evidence is sadly lacking, and the question can only be argued on stylistic grounds. It seemed only right, therefore, in publishing a new example of the amphora to take note of the new evidence that has lately appeared to supply the needed background for the class. And since this new evidence has not yet been published and is somewhat inaccessible in its present position, a summary description of it is here put forward as a preface to the actual publication of the new amphora.

§ 2.—The Rheneia Find.

The first announcement of this new evidence was given in the Report of the Greek Archaeological Society for 1898. In the summer of that year Mr. Stavropoulos, the Ephor of Antiquities at Mykonos, had, in the course of trial excavations in the island of Rheneia, made discovery of a large deposit of human bones, mixed with potsherds and other objects representing a period from the seventh down to the latter part of the fifth century B.C. The deposit was all found together within a walled enclosure. This enclosure lay close to the sea-shore, almost directly opposite to the old town of Delos, which stood facing it across the narrow channel between the two islands. In the deposit lying within the enclosure Mr. Stavropoulos recognised the contents of the graves brought over to Rheneia in the course of the Great Purification of Delos undertaken by the Athenians in the year 426/5 B.C. (Thukydides, iii. 104, and i. 8). That the identification is correct can hardly be doubted. At two points in the enclosure were found stone coffins, some fragments going back well beyond the middle of the sixth century. The whole question of the find in its relation to the literary authority, and the light it throws upon the system of purifications in Greece, remains to be discussed by Mr. Stavropoulos.

1 Πρακτικά της Αρχαιολογικής Εταιρείας 1898, p. 100.
2 The modern Megale Delos.
3 No trace of the earlier purification of the island by Peisistratos (Her. i. 64) has been found, though the present find includes vase-
thirty in all, carefully sealed with lead and containing red-figure vases of the latter half of the fifth century. These coffins Mr. Stavropoulos considers to have contained the bodies still undecomposed at the time of the Purification. This gives a most welcome date, for it fixes, within a limit of two years at most, the style of red-figure painting represented on the vases.

A full description of the find as a whole, with a discussion of the many points of interest that it raises, is to appear in due course. But by the extreme courtesy of Mr. Stavropoulos it is here permitted to give a provisional account of the new evidence drawn from the find and to discuss its bearing on the 'Melian Amphorae.' That such an account is strictly provisional must be recognised from the fact that no complete vase has yet been put together from the fragments, and that a large mass of fragments still remains to be sorted.¹

The find consists mainly of pot-sherds, for most objects of any value seem to have been stolen in antiquity by the workmen engaged in removing the graves. Among these pot-sherds are represented, in greater or less proportion, most of the vase-fabrics of Greece from the seventh to the fifth century. Very numerous are the fragments of Geometric, Corinthian, black-figure and red-figure vases: less numerous the Proto-Corinthian and the fabrics of the Asian coast or the islands. The latter fabrics include Thuran hydriai of the type found in Thera itself by Hiller von Gaertringen (Arch. Anz., 1897, p. 78): 'Eikellura' or Samian amphorae of the type represented in Arch. Anz., 1888, p. 141, No. 2943; Rhodian amphorae as Arch. Anz., 1886, No. 2944; Rhodian plates of various types: and finally, fragments of two Naukratis vases, one a true Naukratis chalice and the other a bowl with friezes of 'Rhodian' goats outside and bands of white and purple on the black interior (Naukratis, Vol. II, pp. 30–40). In addition to these there are more or less isolated examples of other vases which are akin to the foregoing in general style, though certainly not of identical fabric. They do not seem to be represented elsewhere in Museums.²

§ 8.—The 'Delian' Vase-Fabric.

Quite unique in size among the other fragments was a series that can have belonged to nothing else but a group of 'Melian amphora.' Not more

¹ The aim of the present account is simply to call attention to the find, since the publication of Mr. Stavropoulos' final account of his work cannot be expected within a year or two. Many boxes of fragments still remain to be sorted, and after the final sorting there will still be much time required for putting the vases together; no light task for a man working with a single assistant. Whatever value the present description may possess is entirely due to Mr. Stavropoulos, who has exercised the most scrupulous care in sorting the fragments and gave the most generous aid in the examination of them. He is of course in no way responsible for the writer's mistakes or omissions.

² The detailed description of these fabrics lies outside the scope of the present paper. The whole find is of extreme interest, not only for the presence of new fabrics but perhaps even more so for the unexpected absence of so many known fabrics. Only one Mykonian vase occurs, and that of poor and late style. Samian ware is represented by six amphorae, all of the same type, and Rhodian by twenty amphorae (three also all of the same type) and a few plates.
than one or two fragments belong to any single vase; but it is clear that at least ten vases are represented, and their shape and decoration are clearly those characteristic of the true goat-head-handled 'Melian amphorae.' It is not clear why these large vases are represented by so few fragments, whereas the smaller vases, though equally broken, seem in most cases to have their full complement of fragments. It may be that these large amphorae served, as at Athens, for σιγμάτα upon the outside of the grave, and so were not removed with the actual contents of the grave, though a few fragments fell by accident among them. A fragment of one of these amphorae was almost the only pot-sherd of importance found during the

Fig. 1.—Key to Decoration of Hydria. (Scale about 1 diameter.)

French excavation of Delos itself. But in the Rheneia find these 'Melian' fragments do not form an isolated group. In the same find were fragments of a very large number of smaller vases which agree absolutely with the 'Melian amphorae' in clay, technique, ornament forms, and figure types. There can be little doubt that they actually belong to the same fabric as the larger amphorae, and that they supply at least some part of that background which was lacking to the 'Melian amphorae' in their former isolation. There seems to be no true representative of the class in any European

1 The sketch here given represents no actually existing vase. It is a conjectural restoration based upon a number of separate fragments and is intended only to show the arrangement of the frizes and the general appearance of the vases.

In the case of this and of several other figures in the text it seemed best to give a mere transcript of the original sketch, since the rougher drawing is often more faithful to the original. The spiral designs and other cases of finer detail work were kindly redrawn for me in Athens by Mr. Baker-Pepys.
museum, but at Rheneia it is represented by a larger number of fragments than any other style. The fragments found form a thoroughly homogeneous class. The clay is red and filled with shining mica-like grains. It varies considerably in its degree of firing and consequently in its hardness at the present time. The slip is laid thickly over the clay and gives a smooth, firm surface of a cream or sometimes lemon colour. The black paint is fine and true but never very lustrous. Purple is freely used, and white for line-drawing. Nearly all the vases represented by these fragments were either amphorae or hydriæ. There are remains perhaps of two hundred and fifty such vases in the Mykonos Museum. The two forms of vases closely resemble one another both in shape and decoration. Fig. 1 gives the general shape of the hydriæ seen in front-view, showing the horizontal side handles. At the back of the vase a vertical handle springs from the neck close under the rim and runs down to the shoulder. It is of flat ribbon shape, never fluted, and is almost rectangular without any further curve than a slight softening of the angle formed by its horizontal and vertical portions. The amphorae are distinguished from the hydriæ by having two such vertical handles, one on each side of the neck, and by omitting the horizontal side-handles. In the hydriæ the presence of the side-handles at the level of the greatest circumference of the vase divides the main frieze into four panels, whereas in the amphorae the main frieze is continuous since the vertical handles do not reach below the shoulder. On the other hand the amphorae have two equal-sized panels on the neck, whilst the hydriæ have either three panels or a continuous frieze only broken at the back by the single handle. With these exceptions of the neck and the main frieze the decoration of the two forms of vase follows the same lines. The whole scheme of decoration is arranged in friezes and may be roughly tabulated thus: —

**Hydriæ.**

*On the lip (usually rounded in shape)* —

Simple vertical or oblique lines, lunettes or chevrons.

*On the neck* —

(a) A profile Head in front panel with a framing on either side consisting of a band of cross-hatched lines between simple vertical lines; very rarely the hatched band is replaced by some other device: in the side panels is usually a spiral motive (cf. Fig. 6).

**Amphoræ.**

A profile Head in each of the two panels into which the neck is divided: the Heads are sometimes replaced by spiral motives and sometimes by figure-scenes, e.g. a Sphinx.

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*The description of the decoration here given must in the present incomplete state of the setting of the vase-fragments, be considered as tentative; nor has it been possible to enumerate all exceptional instances.*
NEW EVIDENCE ON THE MELIAN AMPHORAE.

(b) A continuous spiral frieze (Figs. 7 c and 8 h).

On the shoulder—

(a) A narrow band of dots, bars, circles, or "pomegranates".

(b) A wider frieze below the first containing usually either a large bar-pattern or a double-spiral design.

In the main frieze—

Here divided by the side-handles into four panels, viz.: a large panel at back and front with a smaller one under each handle: the front panel holding the main scene; usually with a hatched framing on either side as on the neck. The back panel has a large volute-anthemion (Fig. 2).

The frieze being here continuous is usually occupied by a continuous design, e.g. water-fowl or running deer; sometimes, in place of the continuous design, a pair of animals occupy both the front and the back.

In the lower frieze—

(a) A narrower band with much variety of ornament, chevrons, bar-pattern, plain or broken macander, double-spirals, or continuous returning spiral, concentric circles on a hatched background (Figs. 7 a and 8 f, g, i).

(b) A wider band usually occupied by rays springing from the foot. The rays differ considerably in size and type (Fig. 4). Sometimes they are replaced by a large bar-pattern or a double-spiral design (Fig. 7 a).

On the foot—

A band of large black dots.

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This upper shoulder-band seems to be copied from an actual necklace. The ornament forms used occur not only on the Heads painted on the vase-necks but also on certain early female statues from Delos.

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The vertical handles have a simple decoration, usually of the type shown in Fig. 5. The horizontal handles of the hydriae are tubular in shape and are painted black. In the panel below them is usually a volute design, as Fig. 3, but in certain cases it is replaced by a large Eye.1

§ 4. — 'Delian' Ornament: Forms and Figure-drawing.

In the general scheme of decoration the two most characteristic forms are the Heads and the spiral ornament. The representation of the human head as a form of ornament is common to several vase fabrics; 2 but it is unusual to find, as at Delos, the female head so employed. The only true parallel is in the 'Melian amphora' where the common usage is supported by similarity of drawing. The Heads are all drawn in profile except in one case where there is apparently a Head drawn in full face, though the fragment containing it is so much obliterated that it is hard to be certain of it. The face is always in outline, and in the best examples the profile runs in a true unbroken line from forehead to chin. In the weaker examples the line is broken either

Fig. 8.—Panel from Neck of Hydria. (Scale 1/4 diameter.)

at the nostril or the lips. The hair hangs down the back of the head in black silhouette divided into two masses by a wavy vertical line either painted

1 This use of a single Eye under each handle has a parallel on the Thracan hydria already mentioned (p. 18).

2 Most regularly on a type of Attic black-figure amphora (cf. Thiessch Tyrrhenische Amphoren, Pl. II). More isolated instances are the Myrina vase (B.C.H. 1834, pl. vii.) and the Ionian amphora in Berlin No. 1674. An instance of a female head is on an amphora from Daphnete (Poll-Dappert, Pl. XXXI). Less directly, analogous instances occur on Corinthian, Phalanx and Mykenese vases and on Ionian Kykylke.
in white paint over the black or "reserved." On the forehead, it is arranged in variously-shaped curls. Around the head is a fillet, usually painted purple with an edging of white or either side. Sometimes the fillet is elaborated by bearing a high diadem or a flower-shaped ornament in the front. The shoulders of the figure are usually seen, and the short-sleeved dress is either painted purple or decorated with a scale-pattern drawn in outline. Earrings are almost universally worn, and are of the form of the gold earrings from Camirus now in the Louvre (Salzmann, Pl. I.). Slight variations of the Head type are made by introducing one hand, with or without a flower, raised in front of the face (cf. the vase from Myrina, B.C.H. 1884, Pl. VII.): or by introducing simple forms of field ornament, as on the "Melian Amphorae," or
lessening the size of the Head panel and introducing a band of rays or chequer above or below it.¹

But the spiral is really the characteristic form of ornament that gives homogeneity to the whole class of vases. In many cases spiral designs practically cover the whole decorative field, and on all vases the spiral is the basis of decoration. Especially common is the double spiral. This is used in each of its three possible forms, viz., the S-shaped spiral, the ordinary volute and the incurving volute. Figs. 7 and 8 show the principal variations. Nos. (h–w) and (h) are from the necks of hydriæ: nos.

¹ These heads have an interesting parallel in that of the so-called Nike of Arethusa from Delos. It is perhaps dangerous to lay much emphasis upon the resemblance in the shape of skull and profile, but the coiffure and dress at least afford a basis for argument. The hair is arranged in the same way both over the temples and at the back of the head. The necklace is of the same form in both. The Nike has nothing but the upper rosette of the earrings still intact in the stone but the metal pendants are represented by dowel holes. She wears a similar short-sleeved chiton and the little indented circles that cover it may well be the guiding lines for a painted scale-pattern as on the chiton worn by the Head figures on the vases.
(a), (f), (g), (i), from the lower ornament bands. Fig. 2 shows a volute anthemion from the back panel of a hydria, and Fig. 3 the volute from the panel under the side-handles. These various designs illustrate two special features in the employment of the spiral forms, features to which attention had already been called in relation to the ‘Melian amphorae’; (a) the use of a filling-in or background of cross-hatched lines, accompanied by an employment of purple ‘ties’ for holding the design together; (b) a filling-in of the vacant angles of the design by floral palmettes.

A second class of ornament forms is that consisting of simple geometric and linear forms. These include the herring-bone, chequer, running meander and meander cross, rays, zeta-pattern, rosettes and bar-pattern.

Occasionally other ornament forms which do not fall within either of these two classes, the simple geometric and the spiral, occur on the vases. Chief among them is the four-petalled rosette (Fig. 9), which perhaps represents a lotus-flower seen in full face. The lotus-band of the type already known in a single instance on the ‘Melian amphorae’ (Rieg, Statuen, Figs. 53 and 66) occurs only once, and seems to be foreign to the style.

The figure-scenes on these vases usually occupy the main frieze round the body of the vase, though occasionally they occur on the neck. They represent, in most cases, anima’s or birds: sometimes a single figure standing alone in a panel (lion, swan, cock), sometimes pairs heraldically opposed (bulls, boars, stags), sometimes continuous friezes (cows of water-birds or running goats). More elaborate scenes are those of a hound pursuing a goat or of a lion seizing its prey. One vase has a scene that recurs on one of the ‘Melian Amphorae’ (Conze, A), viz., a head between two horses facing one another. Of the monstrous animals the Siren and Sphinx appear, the latter with a spiral anthemion crest, except in one case where it wears the high-crested helmet usually associated with Athena. The scenes with human figures are limited in number and simple in type, figures leading or riding horses, or driving in chariots. In one case a female figure is holding a grazing horse by a long cord, and in another a single figure of a young man clad in long chiton and holding a sceptre occupies the whole panel. On one vase the ‘Flying Nike’ figure occurs, and on another the front of a hydria is occupied by two female Heads facing one another (Fig. 10).

The drawing of the animals is vivacious, but usually follows fixed types. Two types of lion, for instance, are clearly marked and often occur on different sides of the same vase. One has its head in profile, drawn in outline, presenting a very spirited appearance with its great teeth and lolling purple tongue. The other has the head in full face, drawn in silhouette except for the eyes. In both cases the body is drawn in silhouette, with shoulder and belly marked by purple and white lines: the
neck is often purple with white dots upon it, and there are purple patches, with an edging of white, on the back and thighs.

In technique the vases make large use of the early method of 'white line' drawing. 'Reserved' lines for marking the belly or shoulder are foreign to the style; but in certain cases the purple of the neck or belly is painted upon a reserved space and not over the black. Outline drawing, however, is common. The boars (e.g.) have their heads sometimes drawn in outline though more commonly in black silhouette with reserved spaces for marking the eyes. Purple is freely used both in large patches and for fine drawing upon black; e.g., birds' feathers are marked by white and purple lines painted over the black silhouette. White dots are occasionally painted on the purple patches. Incision occurs on what seem to be the later vases of the group. It is used most often for birds' feathers, but also in one case for decorating the purple necks of deer with little incised circles. There are some examples of incision within the outline in the same way that it is used on the great fragments of 'Phaëron' ware from the Akropolis (Arch. Anz. 1898, p. 10). Some of the Sphinxes and of the male human figures have the faces painted purple, and in a few cases a true flesh-colour is used resembling that of the 'Melian am-

![Figure 19. Scene from Chief Frieze of Hybla. (Scale 1/4 diameter.)](image-url)
NEW EVIDENCE ON THE MELIAN AMPHORAE.

Drawing is employed and there are no inner markings in white or purple: the spiral designs are somewhat weak and tentative, and the field ornament too small and irregular. (2) The spiral ornament is drawn with greater boldness and finer sweep of line; and the field ornament is kept very uniform, often consisting of rosettes of the same shape throughout the field. The profile of the bowls is drawn with a continuous and true line. (3) Somewhat petty variations complicate the spirals, foreign motives of ornament are introduced and the friezes become overlaid with ornament.

The vases hitherto described are the hydriai and amphorae which comprise the great bulk of the class. But there is also a small number of vases of other shapes that evidently belong to the same fabric. Chief among them are a number of flat plates with raised rims. These differ from the Rhodian plates in having handles in place of suspension holes, and in having their decoration on the exterior, whilst the interior has only plain black bands painted upon the cream slip. One small phiale-shaped saucer has similar decoration outside and plain bands inside. A large bowl, of which only fragments of the off-set lip have been found, was adorned with the same lotus band that occurs on one of the amphorae (p. 55). Two similar but much smaller bowls had in the one case a row of volutes between vertical lines, and in the other S-shaped spirals between similar vertical lines.

§ 5.—Local Origin and Name.

This new evidence, which the Rheneia find has brought to bear upon the 'Melian amphorae,' has thus given a wide extension of the class. And this extension has made it possible to lay down with greater certainty what are the essential characteristics of the class as a whole, as distinguished from what is merely characteristic of individual vases. Such characteristics put in a summary form seem to be shortly these: (a) A fine slip with brilliant polychrome technique. The drawing is freehand brushwork, incision being only used for minor details. The draughtsman has a fine command of technical methods, using in his drawing both plain outline, plain silhouette, and outline filled in with colour. (b) The decoration of the vase is arranged in friezes, the ornament forms being either simple geometric forms or freely drawn spiral motives. (c) The figure subjects are free and spirited in drawing. Many of them show close observation of nature, but it is controlled by the general tendency of the Hellenic imagination towards the formation of fixed types both of scenes and simple figures. (d) In shape and moulding the vases preserve a thoroughly plastic character with no trace of metal work. They comprise many vases of large and elaborate shape which must imply a history of development extending back over several generations of potters.

But unfortunately, the extension of internal evidence supplied by the

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1 One form of rosette that is used in this way seems to be peculiar to the style. The whole centre of the rosette is reserved in the slip, and the black surface around it is again divided off into sections by narrow reserved lines.
vases has not been accompanied by an equal measure of new external evidence to throw light upon the date, locality, or earlier history of the style. The whole class as it appears in the Rheneia find stand strikingly isolated. In spite of the development traceable (p. 56), the vases all appear to belong more or less to the central period of the style. There are practically no transitional vases suggesting either the first beginnings or ultimate end of the fabric. The vases, too, are all on the same general level of merit. Vases of inferior manufacture are so entirely lacking as to suggest that only the contents of those graves with σφαίρα extant at the time of the Purification were transferred to Rheneia. The graves that through age or poverty lacked any outward memorial may either have been left undisturbed or have had their contents simply thrown into the sea as not meriting a place in the new grave-enclosure. Moreover, the contents of the graves, excepting those which contained the later Attic red-figure vases, seem to have been cast into the new enclosure without any system of chronological or local arrangement. Even any certain evidence for the locality of the class is still to seek. Not that the previously-known "Melian amphora" can offer any serious bar to assigning the whole fabric to a Delian origin. It is fully recognised that the name "Melian" is merely hypothetical, and that there is no conclusive evidence that the amphora came from Melos (vide Appendix). Moreover, on a question of numbers alone, the actual goat-head-handled amphorae found in Delos or Rheneia outnumber all those found elsewhere. But a more serious difficulty is caused by the doubt whether Delos ever produced vases from its own manufactory. The present inhabitants of Mykonos (the nearest populated island to Delos) import most of the clay for their pottery from Siphnos, for the native clay of Mykonos is coarse and black; and it is improbable that the knowledge of any good bed of clay nearer than Siphnos should have been lost since classical times, for the potter has never ceased to ply his trade among the islands of the Aegean. The fine red clay of which the Delian vases are made is not at all like the present clay of Mykonos. Both of them indeed are thickly sintered with micaceous fragments, but micaceous clay appears all over the Aegean and affords no proof of locality. The evidence, then, though it is only negative evidence, makes against the existence of good potter's clay in Delos or its immediate neighbours. On the other hand, it was very easy to import raw clay into Delos, much easier than to import made vases; and it is only natural to suppose a body of potters dwelling around the temple and supplying the vessels required both for the cult of the god and for the general usage of his attendants and pilgrims. There is, therefore, at least the support of probability in holding that both the "Melian amphora" and their kindred vases from Rheneia belong to a Delian fabric, and in calling the whole class by the common name of Delian.

I have picked up sherds of micaceous red clay as far apart as Aegina, Syra, Pergamos and Samos. The collection of modern Greek pottery in the Sculpey Museum will show the wide extension of such clay at the present day. How far beds of similar clay may exist at different localities in the Aegean and how far there was and is one chief centre of export I do not know.
§ 6.—Connection with Contemporary Fabrics.

Accepting therefore the name of Delian and the general characteristics of the whole fabric as discussed above, we have now to consider briefly the position of the fabric in the history of Greek ceramography. The nearest analogies are the sub-Mycenaean fabrics of the South-East Aegean such as the various Rhodian, Samian, and Theran styles. The examples of these which occur at Rheinis have been mentioned above (p. 48). All of them stand at much the same period of development and have many points of kinship with one another not only in clay and technical methods but also in ornamentation. But they have by no means all followed the same line of development. On none of the other fabrics does one find the Delian characteristic of the spiral as the basis of the ornament forms. On the Theran hydriæ there is a greater use of the guilloche, on the Samian of lunettes; whilst Rhodes, falling under stronger Oriental and Egyptian influence, develops the palmette and the lotus patterns. Each style, too, has its own shapes and its own figure-types. Even the great spirals that do occur on one class of 'Samian' ware are of different character from those of the Delian vases. They are rather conventionalised tendrils than geometric spirals, and approach more closely to the plant forms of the Mycenaean style both in their suggestion of natural growth and in the freedom with which the design covers the whole body of the vase.¹ They are never confined by the purple 'ties' or hatched background which characterise the Delian spiral designs. The whole group of these sub-Mycenaean fabrics, together with the Delian, should be considered as a series of sister fabrics. There is between them some small interchange of ornament forms; but none of them seems to have exercised any directly formative influence upon the others.

The chief influences that actively affected the ceramic fabrics of the seventh century were undoubtedly, on the one hand, the Geometric, and on the other the 'orientalizing' influence of Ionia. Delos, lying in the centre of the Aegean, might well be expected to fall to a considerable extent under both influences. In actual fact the Delian vases show very slight traces of either. In respect to the Geometric style this will hardly be in dispute. An absence of strictly Geometric patterns marks all those sister fabrics in the Aegean of which we have just spoken. Even on the Theran hydriæ the linear patterns are not sufficiently numerous or characteristic to justify their classification as Geometric.² The Delian vases have only such simple forms of linear and geometric patterns as are common to all early primitive handicrafts.

But if the absence of Geometric characteristics on the vases is obvious, the reasons for such absence are more difficult to see, for one cannot doubt.

¹ Cf. Böhl, Stilfragen, pp. 158 sqq.
² The Theran hydriæ at Mykene constantly employ a band of trellis-work pattern, but it is of so simple a character that it can hardly be called distinctively Geometric.
the strength of Geometric influence in Greece at this period. Indeed, true Geometric vases were actually found in considerable numbers among the miscellaneous fabrics of the Rheneia enclosure: and the question of the relation of the two styles: the Geometric and the Dorian, is certainly relevant to our consideration of the general position of the Dorian vases.

In the case of Delos, as in all other problems connected with the Geometric style, the issues are greatly clarified by plainly differentiating two distinct classes of vases which are usually comprised under the common name of Geometric:

(1) There is first the whole class of local Geometric fabrics, which are the immediate sequel of decadent Mycenaean art throughout Greece. It is a wide and somewhat ill-defined class, for the term Geometric, as so used, covers almost as many varieties of style as it does localities. It is composed of fabrics which have a uniform basis in their inheritance of Mycenaean technique and derive their ornament forms from Mycenaean prototypes, although they have followed very different paths in their treatment of these Mycenaean forms. They are in fact the direct continuation of that degeneracy of Mycenaean pottery that resulted from the overthrow of the Mycenaean power, an overthrow that replaced the demand for such ware as the big floral vases of the Knossos palace by a demand for commoner household vessels that could be more mechanically produced. Moreover this downfall of the Mycenaean thalassocra was followed by an isolation of localities which inevitably tended to produce local varieties of patterns and peculiarities of design. Hence one finds different Geometric patterns as characteristic of different localities. Thus in the Boeotian Geometric the vertical zig-zag line predominates, in the Argive the straight horizontal band; whilst in Crete the ‘running hare’ is perhaps the commonest.

(2) To be distinguished from this there is the true Attic Dipylon ware, which, although no doubt originating from the degenerate forms of Mycenaean pottery from which the other varieties of Geometric ware are sprung, yet stands quite distinct as a developed style. As if through some peculiar advantage of the Attic soil the Mycenaean stock there sent forth a new growth which rapidly overshadowed its offshoots in other localities. Perhaps even at this early period the Attic potter was giving evidence of his versatile adaptability and innate feeling for style; he certainly worked under better conditions than his neighbours and it well may be that a settled constitution, free maritime intercourse and absence of foreign invasion combined to produce in Attica a far more rapid development than elsewhere. The decadent Mycenaean was carried forward into what was really a new and independent style. And with the re-establishment of closer intercommunication in the Western Aegean, this Attic style seems to have been widely diffused by exportation of Dipylon ware and to have had a deep influence upon the less advanced Geometric fabrics throughout Greece. Imitation of the imported Dipylon vases everywhere tended to blot out the more primitive styles of

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1. Boehm, Jahrbuch 1888, p. 349.
local development, and so to merge all the former local varieties in an apparently uniform Geometric style.1

Both these classes of Geometric ware are represented at Rheneia. There is a number of true Dipylon vases and of local imitations of Dipylon, but at the same time there are other vases which suggest a local Geometric style. Such vases are, e.g., the series of high-handed skyphoi decorated with concentric semicircles. These semicircles are usually arranged in panels on a black vase, and are often made to overlap one another. Somewhat similar vases have been found in Caria (J.H.S., viii. p. 69); in Crete (Amer. Jour. Arch., v. p. 311. Fig. 4: Pls. VIII. and IX.), and in Rhodes2 (Arch. Anz., 1886, p. 136, No. 2906); and also by Mr. Stavropoulos in certain poor graves in Rheneia itself.3

The presence of these Geometric vases at Rheneia shows clearly that—although the 'Delian style' has not absorbed any Geometric pattern either from the Attic Dipylon ware or from the decadent forms of late Mykenean pottery—yet the Delian potters must have had a full knowledge of the Geometric ornament forms. Under these circumstances it is hard to account for the absence of all characteristically Geometric influence in their work. It can only be explained on the supposition that some stronger influence was in operation, some style where vigour of design and freedom of brushwork could prevail even in rivalry with the refined and skilfully wrought products of the Dipylon potter.

Is this influence to be found in Ionia? It is certainly tempting to look for Ionic influence in Delos, and one can hardly doubt the great influence exercised by the industrial art of Ionia upon the Aegean at this period. But the question of Ionic influence, so far as it affects the vases of Delos, depends entirely upon the further question whether Ionia did actually possess any vase-fabrics of her own in the seventh century. For, if not, Ionic influence cannot have given its present character to the purely ceramic style of the Delian pottery. Ionia is commonly represented as the great depository of Mykenean culture, when the Mykenean power broke down in Greece and the islands, and it is from the rich store preserved in the Ionian cities that all

1 It was this apparent uniformity of the Geometric style that gave plausibility to the theory that the Geometric ware came into Greece with the Dorian invaders as a fully developed style, but that theory is really inconsistent both with the character of the Dorian invasion and with the topographical distribution of Geometric ware in the Aegean. The same superficial uniformity of the style gave countenance also to the false use of the name 'Dipylon' to denote all Geometric ware in whatever locality it might be found. The error of that use of the name has already been pointed out by Dr. Wide and others in discussing the local variations of Geometric patterns, yet the late Geometric hydria recently found at Kavousi (q.E.E. 1901, Pls. III. and IV.) shows clearly that there is local variation not only in ornament forms but also in the technique of figure-drawing.

2 Besides the vases from Rhodes now in the Berlin Museum, there are other vases of the same style still remaining in private possession in Rhodes itself.

3 These graves contained nothing but the usual, rudest-fashioned vases and a series of little sistle-shaped iron instruments. Mr. Stavropoulos suggests their connection with the Cretan Islanders (Thnik. 1. 8); but the discussion of the question must await the full publication of his researches in the Cyclades.
those Mykenaean motives which gradually found their way afresh into Hellenic art of the seventh century were drawn. At the same time Ionia was the intermediary for Oriental influence upon Hellas, and it was through her factories of metal work and textiles that Western Hellas learnt the ornament forms and fantastic conceptions of the East. In short the great change which passes over every branch of Hellenic art towards the close of the seventh century is explained by attributing it in large measure to the reaction of the Ionian cities upon the mother-country. But this Ionic influence seems always to be due to the metal or textile manufactures of Ionia, never to her ceramic wares. It would seem indeed that Ionia had no ceramic products to export. Nowhere in Western Asia had the potter's art developed to such a point that there could be any part for Ionia to play as intermediary for the transmission of Eastern pottery into Western Hellas. Nor is there any reason for assuming that Ionia had at this period originated any ceramic industry of her own to rival or influence the long-established factories of the islands. Excavation along the Ionian coast has revealed nothing but a few Geometric vases of the poorest type;¹ and although on the Aeolic coast to the north, fragments have been found at Myrina² and Larissa,³ which are of a style closely connected with Rhodian and other island wares, they are so few in number that one cannot deny the possibility, if not probability, of their being foreign imports.

One plausible argument for the existence of early vase-fabrics in Ionia might well be drawn from the magnificent vases produced by Ionia in the sixth century. Such vases as the Pontic amphorae, the Caeretan hydriae, the Eye-kylikes or the Daphniae fragments rival even Attic products in brilliancy of technique. But all these fabrics belong to the fully developed black-figure period of the middle of the sixth century, and there is nothing in them to necessitate that a long-established school of local pottery should lie behind them. Indeed they distinctly suggest that they did not originate in a clay fabric at all. The Caeretan hydriae are the finest representatives of the class, but in these the whole shape is metallic in design, and such details as the rosettes around the handle-bases must be copied directly from metal examples. The freshness, too, and originality of the designs can hardly have been developed in industrial art but must have been taken from larger paintings. In the Pontic amphorae, again, one naturally looks for survivals of an earlier period in the subordinate bands of decoration; but these long meaningless animal friezes are far more suggestive of Eastern metal-work than of the 'Island' style of ceramic decoration. And similar arguments apply to the other fabrics. There is nothing in them to suggest that Ionia was the great radiating centre for the pottery of the seventh century.

Nor is the argument derived from the Clazomenae sarcophagi more adequate than that based upon the vases. At the time when the sarcophagi were made, the real and living style was the black-silhouette, the developed

¹ Athen. Mittheil. XII. 222. Cit. J.H.S. XVI., p. 293.
² R.C.H., 1884, p. 569.
black-figure style that has its place at the head of the sarcophagus. The outline drawing of the foot and sides was only a survival of an earlier process of technique. But there is no reason for assuming that this process belongs especially to the Asian coast. It is certainly very extensively employed by the island potters, and there is as yet no adequate evidence for its employment upon the mainland. One may therefore justly reject it as evidence for any Ionian school of pottery prior to the black-figure.

Nor again is the existence of Ionic ceramic models necessary to explain these fabrics of Greece proper which show most clearly Ionian influence. The two vase-fabrics of the mainland which are most commonly accepted as showing Ionic influence are the Corinthian and that peculiar Attic ‘animal-frieze’ style that first came into prominence at Vourva. That these two styles of vases exhibit Ionic characteristics is quite true; but at the same time it is equally certain that these characteristics are not ceramic. It is a commonplace of criticism in discussing the decoration of Corinthian vases to insist on its textile origin. The adaptation of design to surface, the colour-system, the needless cross-hatching with incised lines, the overcrowding of the field with shapeless rosettes cannot have originated in a clay product. The last feature especially is foreign to any true ceramic style. In the Delian vases themselves the development of the field ornament runs parallel with the increase of foreign influence upon the original style. On the other hand, the Vourva class of vases is characteristically metallic both in shape and decoration. The animal friezes with their frequent heraldic grouping and constant repetition of the same animal, the rows of uniform rosettes, the plain silhouette drawing without use of white or reserved spaces, the incised lines—all are strongly reminiscent of metal-work. One detail of the animal friezes is in itself quite decisive in indication of metal technique, viz. the curious marking of the shoulder with a double incised line, a peculiarity which forms a universal characteristic of the Vourva class and which can be nothing else but an imitation of the raised band marking the shoulder in repoussé bronze reliefs.

In support of the metallic character of this Vourva ware may be mentioned another class of vases which are of somewhat similar style and are constantly found in conjunction with it. The vases are of rough

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2. Athens, M. de T. 1890, p. 318 sqq. 3 If the vases from the Marathon tombs (A.M. 1889, pl. II, and III) and from Melos (Jahrbuch, 1898, p. 197 sqq.) are of this style occur at Delos, among the Akropolis fragments, at Eleusis and on other Attic sites. It is represented in many European museums.
4. This little detail is also of value in directly refuting the suggestion that the Vourva style is in any way an imitation of the Corinthian. The two styles are really quite distinct. The Vourva style came from Ionis to Attics not by way of Corinth but from the North-East. Its connexion with Etruria has already been pointed out (Becklin, Aus Univ. und Ital. Alter, p. 116); and this connexion has recently been confirmed by further finds of Etruscan vases. Undoubtedly at times there is a certain measure of fusion between the Corinthian and the Vourva styles; but in essence the Vourva ware represents a wholly distinct influence, the influence upon Attica of the Ionian metal-work, transmitted not directly up the Saronic Gulf but through the Euboean cities and the Eastern Dames of Attica.
execution and displeasing in their general effect, but the large number of them and their uniformity as a class necessitate careful consideration. At first sight they would seem to be nothing but rude imitations of Vourva ware, the animal figures being roughly copied and then slashed across in all directions by a mass of carelessly incised lines. But a closer examination shows that they possess marked characteristics of their own. The figures represented are almost exclusively Sphinxes or Sirens, heraldically grouped and adorned with tall diadems. The errors of incision are repeated in the same form upon vase after vase, and this constant repetition compels the supposition that the studied carelessness is an intentional characteristic of the class; a supposition supported not only by the large numbers and wide diffusion of the vases but also by their presence at such great religious centres as Delos and Eleusis, the natural homes of hieratic conservatism. That the fabric is an Attic one is shown both by its connexion with the Vourva vases and by the localities at which it has been found, and it is impossible to suppose that the Attic potters would have turned out such quantities of bad vases without some special purpose. That purpose is evidently imitation, and the imitation of some ware whose technique is foreign to true ceramography, the technique of metal-working.

Both Asia Minor then and the Greek mainland have as yet failed to supply any adequate evidence for considering that Ionia played any important part in the development of Greek vase-painting during the seventh century. Italy and Sicily offer the same forms of Ionic influence as Greece itself. The later Etruscan bucchero ware is commonly held to reflect directly the influence of Ionian industrial art. But every detail of the Etruscan bucchero vases proclaims the metal originals from which they are copied. There is not even any trace of an intermediary fabric intervening between the metal proto-type and its clay imitation. Shape, decoration and colour are all apparently directed to making the clay vessel a passable substitute for the more expensive vase of metal.

Ionia then must cease to stand for the unknown quantity in early Greek ceramography. However great may have been the influence of her metal-work and textiles upon western Greece, it cannot be used to explain the origin of any purely ceramic style such as that of the Dorian vases. That origin can only be sought in some long-established school of experienced potters. It must too be a school which starting with the spiral as the
basis of its pattern-book has worked out the various types of spiral design. In itself indeed the spiral is so simple and universal an ornament-form that it is unnecessary to trace its primary origin back to any one single source. But the spiral designs of the Delian vases are developed along distinct and definite lines: they possess a formal and individual style of their own, and cannot be treated merely as the spontaneous product of the Delian potter.

§ 7.—Connection with Earlier Fabrics.

Spiral designs of such a character as those on the Delian vases cannot be derived directly from Mykenean art. For, although Mykenean art makes such use of the spiral as is justified by its intrinsic value for decorative purposes, it is only in rare cases that it uses it as the central motive of a large body of ornament. Moreover, the Mykenean potters did not originate the spiral. They themselves had received it as a heritage from an earlier age. The early inhabitants of the Aegean islands had worked out the various types of spiral design long before the Mykenean power had spread itself over the Aegean. It is the art of the pre-Mykenean islanders that is the real source of such works as the Steiae from the Grave Circle at Mykene. They are directly in line with the earliest painted pottery and the incised bucchero vases of the Aegean. But if the spiral designs of the Mykenean age are aligned with the pre-Mykenean pottery, may not the Delian vases be added to the same straight line of development? The great interval of time that separates them from the earlier vases of the Aegean islands is no insuperable barrier at so early a period. If the old artistic forms of the Aegean retained such vitality as to assert themselves at the height of the Mykenean power, it is but natural to suppose that they would again become prominent when the weight of Mykenean domination was removed.

By thus affiliating the Delian vases to the early pottery of the Aegean one may offer a possible explanation of the striking isolation of the Delian style, hemmed in by the two opposing influences of the seventh century, the Ionic and the Geometric, and yet unaffected by them: a close sequel of Mykenean art, and yet not derived from it. It is isolated because its roots are too deeply set to be affected by any contemporary influences. It has its origin in the innate artistic impulse of the Aegean islanders, an impulse which found its natural outlet in the decoration of earthenware vessels no less in the seventh century than a thousand years earlier. In that earlier period clay had been the material out of which were made not only the vessels for eating and drinking, for the storage and cooking of food, but all the other household requisites of the primitive fisherman or herdsman. And this constant use of earthenware brought with it a wonderful sense of appropriateness in the working of clay, giving to the material its full plastic value in the modelling of vases: forming altogether such a vigorous school of pottery as might well suggest the origin of the Delian ware.

And the ornament forms of the early pottery are in full accordance.
with the suggestion. The great series of painted pottery from Phylakopi has been roughly divided into three periods. The first, the 'Painted Geometric' period, includes the forerunners of a very large number of the Delian patterns. Simple linear patterns such as the chevron, curvilinear forms as the scale-pattern, and finally the spiral itself, form its chief decorative motives. Fig. 11 shows a selection from its spiral forms. At the same time there are other points of connexion between this period and the Delian vases. The metope division of the field of decoration by means of bands of cross-hatched lines has already come into use. So, too, the use of Eves as a form of ornament is common to both periods, and a parallelism to the 'necklaces' of the Delian vases (p. 51) is shown by the anthropomorphic treatment of the 'breast' vases at Phylakopi. The second, or 'naturalistic' period at Phylakopi, is very suggestive of Delian technique in its free brush-work and its polychromy, especially its rich use of red in combination with black, often in the form of a black outline around a red central mass. Its direct use of natural forms, bird, fruit, and flower, for decorative purposes had been considerably tempered by conventionalism before the time of the Delian vases, but the same naturalistic spirit breaks out again in many of the animal figures of the later vases. The third and latest period at Phylakopi seems to show the native ware after it had fallen under Mykenaeans influence. It still retains the polychrome treatment and the patterns inherited from the preceding periods, but spirit and spontaneity are gone. The decoration is compressed into friezes and the patterns are mechanical. The period, though in this respect a period of degradation, has its importance as being the nearest in time to the remanent Delian vases. It helps also to explain the origin of the uniform frieze-arrangement of the decoration on the latter vases. Both classes of vases suffer alike from a certain mechanical hardness.

Footnote: Annual of the B.S.A., Vol. IV, p. 276 seq. No attempt has been made to assign any of the foreign fabrics found at Phylakopi to their proper localities. It is sufficient for the present argument if the unbroken series of native ware be taken as typical for the whole Cycladic area.
which results from this exact division of the decorative surface, and both have that lack of spontaneity in the ornament forms which is due to the fact that they are the inheritance rather than the creation of the potter. Fig. 12 shows certain designs taken from the later vases of Phylakopi and indicating parallelism with the Delian ware.

§ 8.—Conclusion.

The comparison then of the Delian ware with the early vases of the Aegean islands as exemplified at Phylakopi indicates a close parallelism both of general principles and of details. On the one hand the Phylakopi vases represent a native Aegean school of pottery, a school possessed of a rich store of experience both in the modelling and decoration of vases, and still deriving its vigour from its direct application to the needs of daily life and its true appreciation of its material. They reveal a developed ceramic art having a free command of technical methods both in its line and colour, and having a range of patterns that extends from the simple linear forms of the earliest period, through the development of spiral and naturalistic motives, to the stereotyped friezes of the ‘imitation Mykenæan.’ They are, in short, the products of such a school of ceramic art as could hardly have failed to influence the later pottery within the same area.

On the other hand the remascent pottery of Delos demands in itself the existence of an earlier school of pottery to explain not only the homogeneity of its style but its power of turning out such large and elaborate vases as the ‘Melian amphorae.’ The lack of evidence for the period immediately preceding that of the Delian vases cannot really cut off these vases from their more remote predecessors. In the history of every locality a continuity of the minor handicrafts may justly be presumed, and in the history of the Aegean islands there is nothing to disprove such a presumption. The continuity between the earlier and the later vases, which is shown alike in their artistic spirit, in their general principles of decoration and in the detailed forms of ornament, may well be based upon a continuity of population. What was more natural than that, when Delos rose to fame as the seat of the Great Festival, the old Island craft should spring up again to new life. Here at Delos would congregate the best craftsmen of all the Cyclades, and here would come the versatile Ionians from Asia with all their novel suggestions of Oriental conceptions and designs. Here, too, would be a continuous demand not only for the statelier vases, lustral or dedicatory, employed in the service of the god, but also for those humbler vessels that served the need of the pilgrims who thronged his shrine. What else was needed to set forward a great renaissance of the old Island industry? New suggestions and new demands revived once more that art of pottery which from the beginning had had its home in the Aegean. The result was the Delian fabric, whose evidences are the ‘Melian amphorae’ and the potsherds of Rhenea. 

J. H. Hopkinson.

1 It does not fall within the scope of the Delian style upon contemporary and later present paper to trace out the influence of the fabrics, but what has been said therein in
APPENDIX.

THREE EARLY ISLAND VASES RECENTLY ACQUIRED BY THE BRITISH SCHOOL AT ATHENS.

I.

The vases known as Melian amphoraes form one of the smallest and, hitherto, one of the most detached classes in that mass of early ceramic material to which archaeologists have long been looking for a solution of some at least of the perplexed questions of the origins of Greek art. As long ago as 1854 Gerhard published in a paper dealing with the cult of the Persian Artemis a remarkable sherd1 which was given him by Ross on his return from a tour in the Aegean islands and is now in Berlin. Some eight years later Conze published three large goad-handled amphoras2 of so closely similar a technique that he was content to have his plates coloured from the Berlin fragment. Since then J. Bohlau3 and K. D. Mylonas4 have each added one vase to the series, so that up to now the Melian fabric has been represented by five amphorae and a fragment.

To these a sixth may now be added, which is here reproduced (Fig. 1). The fragments of this ware were purchased in Meles, during the recent excavations of the British School at Phylakopi, by Mr. Cecil Smith, who satisfied himself that the vase was actually found in the island and at the spot asserted by the vendor. There were indications that in antiquity the vase was not buried in the graves, but stood above and outside it. The fragments have since been skillfully rearranged, and it now stands, largely, it must be admitted, in plaster,5 in the small collection of the School at Athens.

respect to "fouine" influence carries with it the position that much of the so-called Orientalizing influence upon the mainland fabrics—that influence which, e.g., developed the Phiale and Early Attic styles out of the Dipylon—must be accredited to Delos.

1 Arch. Zelts. 1854, Pt. LXI.
2 A. Conze, Melische Thesmophorion, Leipsic, 1882. These vases, lettered A, B, C, by Conze, are now in the Ethnographic Museum at Athens, where they are numbered 911, 913, 914. They were unearthed at Athens at the time of their publication, when two of them were found in the Royal Palace, the third at the house of one of the magnates. All three however were said to have come from Meles. Vase A is the most important of these, and is referred to in the text as the "Apollo and Artemis" vase, being that which has for its main figure-subject a representation of Apollo and three Muses in a chariot confronting Artemis who holds a stag by the horns. Those who are familiar with the originals are well aware that the large reproductions in Conze's work are in some respects misleading. In the lithographed plates the colour of the ground is too brown and too dark. In the others the use of dotted surfaces for purple is confusing, and the original effect of certain kinds of field ornament cannot be given by tracing their outlines.
3 Jahrbuch, 1857, pp. 231—234, 31, XII, No. 914 in the Ethnographic Museum. This vase, which is considerably smaller than the others, is fitted with a cover. Strictly speaking it has no figure-subjects, the human animal and mythologic forms being merely decorative. Its provenance is unknown.
4 Ephemer. Archv. 1894, pp. 228—238, with a general sketch and two coloured plates by M. Gilliéron. This amphora, which is numbered 354 in the Museum, was said by the vendor, but without support of evidence, to have been found in Crete. It is referred to in the text as the "Herales" vase from its main figure-subject.
5 The whole vase is unfortunately in very bad condition. Large portions were missing altogether, and the surface and edges of those which remain were so much worn as to make their reassembly difficult. This task has been successfully accomplished by members of the British School and by Mr. O. H. Mylonas in the Ethnographic Museum. In the drawings an attempt has been made to reproduce what a prolonged examination reveals to have been present once, rather than to suggest the features still visible on a casual inspection.
The amphora is the largest of its class, measuring 1'07" in height, while the perimeters of the neck and body are 1'38" and 1'2", respectively. The close analysis of the Herakles vase by M. Mylonas in the *Ephemeris* makes a detailed description of its decorative scheme unnecessary, as the two vases, though by no means identical in style, have much in common. The vertical edge of the lip shows a decoration of black squares. On the neck is a figure-subject limited on either side by a narrow panel of hatching finished at top and bottom by a purple band, the remaining and larger portion of the surface of the neck being occupied by a finely drawn pattern of large spirals. At the junction of the neck and body is a narrow frieze, composed of a bar pattern on the obverse side of the vase, and changing to a key-pattern on the reverse. This feature reappears on the Herakles vase. On the body of the amphora and beneath the panel of the neck comes the main figure-subject, corresponding to a secondary and similar panel on the reverse. For these the vertical hatched borders are formed by the extension of the goat handles at the sides. Beneath each of the handles is represented a pair of human eyes, a large inverted volute descending between them from the central abax. The decorative scheme below this level is complete enough to be understood from the illustration. Only one fragment of the foot was discovered, but it is sufficient to show that the base was of the normal Melian type, both in its decoration and in the characteristic narrow rectangular openings by which it was pierced.

The vase is of a red clay seminated with micaceous fragments, and was covered originally with a lemon-coloured slip. On this the decorative work is painted mostly in black varnish paint. The male flesh is painted with a pigment resembling burnt sienna up to a black outline, and purple is used for the decoration of the dresses and for the ties of the spirals. It may well be that white was employed, as for dot-rosettes on the draperies, but of this it is impossible to be certain. The work is throughout freehand and the drawing occasionally of a spirited and original kind. In the frieze of spirals immediately below the main figure-subject may be seen a good instance of the artist's independence of mechanical aid. The motive of curvilinear spirals not fitting satisfactorily into the space at his command, he effects his join, sans phrase, by a spiral form of a different character. Quite a variety of technical methods are employed in the panels. The female faces are in pure outline, the male in outline filled in with colour. The upper garments are in black silhouette, the under are rendered by hatchings of various design upon the slip. Of incised lines occasional use is made, but apparently only in accessories.

Of the figure-subjects the best preserved, which is that on the neck of the vase, is reproduced on Pl. V. Here, as on the corresponding panel of the Herakles vase, two figures, a male and a female, face one another in an ornamented field. The former is bearded and has a purple fillet in his hair. He wears a long striped chiton, and over this a full purple-bordered himation hanging evenly from either shoulder. He has black foot-gear reaching above his ankles, and carries a cantharus in his right hand. The female figure wears a long chiton bordered at the top and bottom, with the rest of its surface painted with hatched lines. She has a himation similar to her companion's which she draws forward with her right hand—the ideal of modesty in Greek art, though it is more often the bridal veil that is thus extended.

Who are these deacon figures that thus confront each other apparently in grave converse? An interesting parallel, suggested by Professor Percy Gardner, is furnished by that Spartan stele on which are represented a male and female figure seated side by side, the female holding a cantharus. It is possible on this analogy that the panel may represent some place of that ancestor worship which holds so important, but scarcely yet a defined, place in the long record of Greek belief. By another interpretation the cantharus would suggest Dionysus. If this be accepted, the figure seems to represent not so much the Thracian lord of wine as the kindly, one might say the homely, patron of the island vineyards. Of oriental attributes he has none, unless his flowing robes be considered as such. If the male figure is Dionysus, there is a good deal to be said for identifying his companion as Ariadne. Mythologic scenes were certainly represented on these amphorae, and her story was told in Naxos, and so may be said to belong to the Cyclades. But though
FIG. 2.—SMALL BOWL FROM MELOS.
a single figure would seem at first sight to require some such definite identification, it
should be remembered that we have on the neck of the Herakles amphora a closely
similar figure-subject in which Herakles is seen confronting a female figure for whom it seems
impossible to find a definite identification. From this analogy it would perhaps be better
to consider the lady on our vase merely as a complementary figure—perhaps in this case
a Maenad introduced as an appropriate companion to the god. In these early days even
a Maenad might be thus decorously attired.

On the body of the vase and below this panel was the principal figure-subject of
which scanty traces remain. Close inspection of these and careful comparison with other
Mellan amphorae enable us to reconstruct the main outlines of the picture, but not its details,
nor its interpretation. A bearded charioteer, grasping goad and reins in his right hand, stands
in a chariot drawn by winged horses. Behind the chariot walks a lady in laced chiton and
black chiton, while on the off-side of the horses, and facing the charioteer, stands a
similar figure holding a tripod flower in her hand. There appears to be nothing in the
dress or attributes of the figures nor in their number or disposition, to enable us to assign
any definite mythological significance to the scene, though from the corresponding chariot
scenes on other Melan vases and the wings given to the horses in this case, it seems likely
that some at least of the figures represent divine personages. A certain quietude in pose,
which is still to be detected in the scanty remnants of the panel, makes it unlikely that any
vigorous or animated episode, such as that which forms the main figure-subject of the
Herakles amphora, was here represented. What is left would be more in keeping with a
scene of funeral significance, such as we should expect to find on an amphora obviously
devoted to funeral purposes. On the reverse side of the vase was a corresponding panel,
of which just sufficient remains to enable us to say, with the help of analogous vases, that
it represented, after an humble fashion, two horses facing each other across an elaborate
spiraliform ornament.

It can hardly be doubted that the new amphora takes an intermediate place in the
series of Melan vases. The scanty remains of the figures have a certain stiff dignity equally
removed from the naive attempts of the earlier amphorae and the opulent mannerism of the
later. This angular beauty is heightened not only by the free use of the 'windmill' as an
element of design in the field, but also by the devices with their straight folds, simple
fashions and broad unpattered borders. Lastly, that the artist, if earlier in date, had a
firmer eye for design than his successor, cannot be doubted, if we pay heed to the rest of
the decoration of the vase. On none are the spirals better drawn, more simply and more
broadly arranged, more effectively left to tell their own tale.

II.

The small bowl here reproduced (Fig. 2) was acquired in Malos, and is now in the Ethnico
Museum in Athens. The vase, which was found in numerous fragments, has been
satisfactorily reconstituted as far as its form goes; but though the design is perfectly intelligible
on inspection its original colour has in great part disappeared, the surface being now in
a uniformly dark and greyish condition, as if from the application of oil varnish. It
measures 11 cm. across the mouth, 65 cm. in its greatest circumference, and is 15 cm.
in height. To this little bowl there seems to be no exact parallel in form and decoration.

In shape it is nearly spherical, but it has a thin flat lip pierced with holes as if for
the attachment of a lid and a foot simply formed of a fillet of clay. As its base is decorated
with a rosette it seems likely that the easily added foot was as it were an after thought, and
that this type of vase was originally and primarily intended for suspension.

1 A second bowl, also acquired by Mr. Cecil
Smith at Melos, is practically identical in shape
but shows a decorative scheme of swans upon
the shoulder. This vase has a lid in the edge
of which are holes corresponding to those
perforated in the rim of the bowl and thus show-
ing their purpose. Other than this the nearest
analogies to our vase seem to be the bowls
described by E. Forrer, Bulletin de
Correspondence hellénique, 1886, p. 424, all
Turning to the decoration of its surface we are in a measure reminded of the patterning of the large Melian amphoras. Its basis is still the spiral and vinicula, but the simple spiral forms of the larger vases are abandoned for a design of greater complexity, in which the upper portion is composed of inverted spirals, and the cross-hatching is further accentuated throughout. A further innovation is the large band of black encircling the bowl at its greatest circumference and dividing the design into two equal parts. Slight differences in the preservation of its surface indicate that this band was once embellished with a purple stripe edged with white, a feature which appears on Rhodian amphoras. Foreign also to the decorative schemes of the Melian amphoras are the dotted surfaces contained in an outline seen in the fleur-de-lys additions to the opposed spirals in the main design, and in the carelessly executed rosette on the base. In the case of animal forms such dotted surfaces occur both on Rhodian and Boeotian vases, and also on the sarcophagi from Chaeroneia.

But for the application of this technique to forms derived from natural growth we have an exact parallel in the field ornaments of an amphora of the later Dipyon style, and also in the same elements of a large bowl found at Thebes.

In its technique the bowl is more clearly reminiscent of the large amphoras than in its decoration, as it has precisely the same lemon-coloured slip with the design applied in uniform black pigment.

III.

The Geometric amphora reproduced in Fig. 3a is 50 cm. in height, and measures 65-5 cm. round the neck, and 110 cm. round the body. It is of a hard red clay, covered originally with a thin polished slip of yellowish brown, the decoration being applied in a varnish paint of a darker brown. The colour has however been spoiled by subsequent varnishing.

The neck is low and cylindrical, the handles horizontal and inclined outward. The decoration is confined to the upper part of the vase, the lower half being covered with the brown varnish paint, except for two reserved bands. The decorative scheme is intelligible from the cut. The vertical surface of the projecting lip shows alternate squares of slip and glaze. Below this the neck and the upper part of the amphora are covered with an arrangement of vertical zigzags, horizontal lines, and sigma-shaped markings running in such case completely round the vase (Fig. 3b). Below this the space between the handles is divided into three metope-like divisions by vertical lines. On the obverse the central square is filled by a primitive type of water fowl, those adjacent on either side having circles enclosing a quatrefoil rosette in the middle and triangular ornaments at the corners (Fig. 3c). The arrangement on the reverse is precisely similar, except that dotted rosettes take the place of the triangular ornaments in the corners of the exterior squares (Fig. 3d).

The amphora was in the possession of the historian George Finlay, and was included in the recent gift of his library to the British School at Athens. By some unexplained caprice, when it came into the possession of the School it had been ornamental with a frieze of red

of which, however, are without the foot. The Neopap vases published by the Egypt Exploration Fund afford a curious though, I suppose, an accidental parallel. One of those is in the British Museum, a little bowl numbered A 16728, in Case I, which contains vases mostly from primitive tombs in the Greek islands. It has no foot, and the holes for suspension are horizontal piercings in ears attached to the sides. It is completely covered with a decoration of thin and rather straggling spirals in red varnish paint on a buff ground. This bowl was brought by Mr. Greville Chester from Samos, and in Upper Egypt.

1 Unless the upper edge of the neck of the amphora published by Nothnagel (cf. supra p. 69, footnote 3) presents the same feature.

2 Jacoby, 1907, p. 156.

3 Jacoby, 1887, pl. 2.

4 Ibid. pl. 4.

5 If, as is possible, the vinicula of the spirals on the bowl were originally purple, we have a further resemblance.
NEW EVIDENCE ON THE MELIAN AMPHORAE.

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figures cut from some publication, and heavily coated with varnish. We are in no doubt as to its provenance, as a note in his diary expressly states that he acquired it in the island of Thera.

It seems likely that this island is the real provenance of the late Geometric class of vases previously called Boeotian to which our amphora belongs. Two of them were certainly found in Boeotia, the other three are of uncertain origin; but since the publication of Dr. Wide's article the Freiherr Hiller von Gärtringen has given an account of the discovery in the necropolis of Thera of two classes of Geometric vases, the second of which is identical in fabric and decoration with those enumerated by Dr. Wide, while the isolated amphora now published is further proof of the Thera origin of the whole class. A further argument for this change of name is supplied by the similarity of the class in question to the earlier class of Thera vases found on the same spot. Both groups have the same low horizontal handles, in both the decoration is confined to the neck and shoulder, and a front side of the vase is recognised, while decorative forms common to both classes are the Geometric water fowl and the circles enclosing rosettes.

But if these vases are to be assigned to the Thera potter, it seems probable that he had, in these early days a market for his wares in Boeotia. Not only were two Thera amphoras there found, but there is good reason for supposing that the vertical zigzag on the neck, which occurs throughout the Thera class, is a characteristic of the Boeotian Geometric style.

Another close parallel to this class of Thera ware is to be found in the well-known type of Geometric cylix, having the interior painted black (often with narrow purple bands) and the exterior divided on either side into three metope-like divisions, of which the central contains the familiar water fowl of Geometric art, while the others have as a rule diamonds of crudely hatched cross lines.

There are in the rendering of animal forms on this class of Thera vases two peculiarities of drawing, viz., the use of dotted surfaces to cover parts of the body, and of an unbroken line enclosing the shoulder. When the Rhenoia finds, which contain a considerable amount of evidence on these points, are fully published, further light may be thrown on the correlation of these vases with other classes by the consideration of the locality and diffusion of these features. It may be a pure coincidence that the fine Griffin-headed jug acquired by the British Museum from the Castellani collection and now called Aeginaean, was said to have come from Thera. But it is certainly remarkable that it has in common with the Thera amphora not only these two peculiarities of animal drawing, but also the tripartite metope division of the shoulder, and the lozenge pattern and the guilloche among its ornament forms.

John H. Baker-Perouze.

1 In the Jahrhuck for 1897, pp. 195-199, Dr. Wide gives a list of them. They are Nos. 885, 896 in the National Museum at Athens, of which he gives photographs: two vases, one in Leyden and one in Paris reproduced by Conze, Zur Geschichte der Ausrage der griechischen Kunst, Taf. XI, 1, 2; and the Stockholm vase, which was the subject of Wide's article, and of which he gives a reproduction on Pl. 13, 14.

2 Archäologischer Anzeiger to the Jahrhuck for 1897, p. 73.

3 Cf. J. Holzwarth, Jahresber. 1885, p. 325.


5 Annu. 1877, Taf. d'Arg. CD. 5, 18.
THE ZAKRO SEALINGS.

[Plates VI.—X.]

§ 1.—The Types.

The circumstances under which a find of impressed clay nodules was made in a Mycenaean house at Kato Zakro, in East Crete, in May 1901, are related in the Annual of the British School at Athens vii. p. 133. The nodules are of a fine clay baked, probably intentionally and not by the conflagration which destroyed the house, to varying shades of red. A great number are broken, but the more perfect, including many bearing two and three impressions, show a groove on one edge, about an eighth of an inch deep and a little more wide, scored with straight and oblique scratches. This is the impress of something cylindrical, to which the nodule was pressed while still wet. The appearance of the clay in the grooves shows that this object was not textile, and it may most reasonably be supposed to have been a reed, perhaps a papyrus stalk. The number of nodules is in all about 500.

Out of 144 varieties of type represented, the nodules bearing 137 were found in good enough preservation for their different faces to be cast in Cúndia and photographed for this paper. I group the types in the following catalogue by their more obvious affinities, not by their association on the nodules. The significance of the latter fact I will deal with in the following section. Several specimens were found of certain types, and as in some cases different specimens retained different parts of the impressions, I had a number of drawings made by Monseign E. Gilliéron from the original nodules, most of which I add here as a supplement to the photographs of the casts (Plates VI.—X.). They are larger than the originals by one diameter. No one of the gems or rings, with which these nodules were originally impressed, has come to light.

A.—Genus Types

Pl. VI. 1. (Fig. 1) Call Sceoi* (Two Specimens).
A two-storied altar or shrine to left crowned with two sets of horns of consecration, and showing two pillars in its upper story. Before it is a standing male figure, with left

* Abbreviations used in this article:
B.M. = British Museum Trys Catalogue.
B.S.A. = Annual of the British School at Athens.
F.D. = Further Discoveries, &c., by A. J. Evans in J.H.S. xvii.
arm extended backwards, and indication of a waist-cloth. Midway a draped female figure Pl. VI.
suspended in air. Behind the male is a second 'altar,' apparently also two-storied, with
'trees of consecration' on the lower platform; and a leaf-like bloom on a stalk, issuing
from the altar, droops over the horns.

A similar 'altar' is figured in A.G. ii. 21, but with the horns shown inside (cf. also T.P.C.
Figs. 32, 39); and the suspended figure is a feminine repetition of the descending gods
shown both on a well-known Mycenaean ring, and on the Knossian ring, published by Evans
(T.P.C. Fig. 48). Plants issuing from 'altars' often occur (T.P.C. Figs. 48, 52, 55, 56,
59), but a single bloom is new. See T.P.C. §§ 24-26, for as much explanation of
this type of cult scene as can at present be given. I question, however, if the 'altars' are
not rather houses or shrines, terraced up a hill-side, as the Zakro structures certainly were
terraced; and if the significance of the type is not the descent of a beneficent divinity upon
a newly-erected house or temple.

2. Cult Scenes? (Two Specimens, one with No. 22, the other with No. 20, on the reverse of
theodule).

A female figure, draped in the 'Babylonian' petticoat, in the centre with left hand
extended towards a pillar or tree. Behind her a male figure with right knee forward.
On the other side of the 'tree' a male figure with right hand on breast. On True cult, see
T.P.C. No very near parallel to this type is known.

3. (Fig. 2) Cult Scene? (Single Specimen).

Woman draped in attitude of adoration (?) before a gigantic woman seated on a throne.
To left, a third female figure apparently in act of departure. For the seated female
(goddess) cf. T.P.C. Fig. 31, and for the whole scene Fig. 64. This impression is a
reversed replica of an unpublished Knossian sealing, found by Mr. Evans.

4. (Fig. 3) (Three Specimens).

A female in flounced bell-skirt, supporting a goat whose head falls back over her
right shoulder. Before her appear either the edge of a structure built of stone courses, of
which five or six areprojected, or a bank of foliage conventionally treated. These
impressions might almost have been made from the Vaphio cornelian figured in A.G.,
Plate ii. 23.

5. (Fig. 4) (Single Specimen).

Demon with heraldic head and human limbs, in act of adoration before a female in
flounced skirt. The scene is parallel in its arrangement to that on a Knossian sealing
published by Mr. Evans in B.S.A. VII. p. 18, Fig. 79. In the case of my own type it is
impossible to be certain of the character of the monster's head. The tail may be bicornis,
but also may be canine, and certainly the monster is nearly related to the adoring dog-apes of
Egypt.

6. (Fig. 5) (Single Specimen).

Two draped figures, both apparently to right. Between them a 'hedge' suspended in
air. Cf. remarks of Evans in B.S.A. VII. p. 54. Before the right-hand figure is an object
such as that which Furtwängler calls a *Flachenmünze* (‘flat-pressed’) in explaining a Heraclean gem (A.G. ii. 49). Compare No. 47 below.

The form of the *babrya* is that rendered familiar by the famous gold signet from Mycenae (e.g. in T.E.C., Fig. 4). But the form of the dress in our type is new, and will be seen in the two succeeding types more clearly. It seems to be a kind of knickerbocker gathered in below the knee and very full in the thigh, or else an apron-like prolongation of the bodice falling before and behind, but cut up at the sides.

**Fig. 4 (No. 5).**

**Fig. 5 (No. 6).**

**Fig. 6 (No. 8).**

7. (Single Specimen.)

Two figures in the same dress as in No. 6 in animated converse. That on the right carries a spear (7).

8. (Fig. 6) (Ten Specimens.)

Three figures moving right with arms held as in running. Same dress as in 6 and 7.

The leading figure has a long lock of hair pendent on the back, and all seem to be female.

9. (Single Specimen.)

Two female figures, and between them a suspended object like a star or the lower part of an icon, which the left-hand figure seems to be adoring. She wears the usual long bell-skirt. The other has a much shorter skirt, possibly identical with the dress seen in Nos. 6-8, and her attitude suggests a ritual dance. Behind her a suggestion of a plant (?)

10. (Thirty Specimens, with No. 97.)

A female figure in long bell-skirt with hands on breast, opposed to a figure with cap and long mantle (?) from neck to feet.

11. (Single Specimen.)

Semi-nude male figure before a second advancing energetically to left and draped in a robe girtled at the waist and depending in folds to the knees. Behind this figure a suggestion of a plant (?)

12. (Four Specimens, with No. 73.)

Scene of combat. A nude warrior, striding over a second lying equine with head to left, receives with levelled spear a third who rushes at him from the right.

These scenes of combat are common types, cf. B.M. No. 73, and the Mycenaean ring P. C., Fig. 431.

13. (Single Specimen, with No. 87.)

Scene of combat almost identical with No. 12, but found with different reverse type and showing slight variation: e.g. the right-hand warrior is larger, in proportion to the others, than in No. 12.

14. (Single Specimen.)

A broken-up type in the last stage of degradation, placed here because it may possibly be derived from a combat-scene.
THE ZAKRO SEALINGS. 79

15. (Fig. 7) (Two Specimens, one with Nos. 34, 37, the other with Nos. 136, 59.)
Nude man apparently holding a kid in each hand, towards which two nanny-goats stretch their heads.

16. (Five Specimens, none in good condition).
Two series of squatting figures, one above the other and divided by a line. An exact replica of a Knossian sealing, not yet published, but described by Mr. Evans in B.S.A. viii. p. 102.

B.—MONSTERS AND DERIVATIVE TYPES.

17. (Eight Specimens, with No. 127.)
Monster with horned-bull head and pronounced bovine ears and tail, but apparently human trunk, arms, and legs, seated to right with left leg crossed upon right knee, and hands extended. Unquestionably a Minotaur type, but a new variety. (B.S.A. vii. Fig. 45.)

18. (Four Specimens, with No. 83.)
An almost identical Minotaur seated to left, with gaping mouth. The fore-limbs are shown to be human arms by their upward curve. (B.S.A. vii. Fig. 45.)

19. (Single Specimen, much rubbed, with Nos. 131, 51.)
Apparently another Minotaur seated to right, but being more rudely engraved, the limbs are confused. They appear however to be certainly human.

20. (Fig. 8) (Single Specimen, with Nos. 86 and 98.)
Full-length 'Eagle-lady,' of a type cited by Evans J.H.S. xvii. p. 370 as occurring on an unpublished gem in his collection, which is however of much ruder workmanship, winged and skirted, with trussed legs emergent from the flounces. Compare a gold ornament from the third shaft-grave at Mycenae (Schliemann, Fig. 273). Above, a suggestion of cloud, rock, or foliage. Compare for this inter alia the Vaphio goblets.

21. (Seven Specimens, with Nos. 61 and 28.)
Derivative type of 'Eagle-lady.' The trussed legs survive without detail or realistic form. The breasts have shrunk away between the wings, and the head has become aniconic—a mere cap, such as appears on a Vaphio gem (Eph. Arch. 1889, pl. 10, No. 37) and is familiar on Mycenaean ivories (e.g. P. C. Fig. 389). A Cretan carnelian in the British Museum (Cat. 75) presents a similar cap, doing duty for a head.

22. (Three Specimens, with Nos. 50 and 63.)
The last type broken up into meaningless curves and lines.

23. (Thirteen Specimens, with No. 58.)
A variant of the 'Eagle-lady,' below her double row of breasts is a fan-tail, identical with the vulture-tail in Egyptian representations.

24. (Fig. 9) (Seven Specimens, 5 with Nos. 60, 112; 2 with Nos. 112, 103.)
Similar type. A female bust with armlets, bracelets, and necklace, and hands on the
II. VI. (Fig. 10.) (Six Specimens, with Nos. 33 and 45.)
A variant which partly follows 25, the head being now completely supplanted by the cap. In the matter of wings it follows No. 29.

26. (Single Specimen, with No. 29.)
A derived winged type, showing a perversion of the head similar to that in No. 24.

7. (Single Specimen, with No. 76.)
A variant of the 'Eagle-lady' type, with bird-head and nothing human, but the strongly marked breasts; fan-tail instead of human termination.

28. (Seventeen Specimens, with Nos. 21 and 61.)
Derived from 26. The head has become assimilated to the fan-tail below. The breasts are gradually dropping.

II. VII. 29. (Single Specimen, with No. 85.)
Practically identical with No. 25, but the work is rather coarser, and the breasts are slightly more pendulous.

30. (Three Specimens, with Nos. 67 and 69.)
A distant derivative of the foregoing; the breasts having survived as a double bow-shaped coil.

31. (Fig. 11.) (Two Specimens, both showing traces of a second type on the reverse, now indistinguishable.)
The same bow-shaped coil as in No. 30, but more elaborate, and surrounding a winged body, not unlike two caps (cf. Nos. 24, 25) placed one on the other. Below, a rope pattern, and at the sides conventional lotus blooms of a kind familiar in Mycean moulded gold work (cf. Schil. Myc. Fig. I62). The whole scheme recalls most forcibly the Vaphio gem, representing a horned cap, published by Tsountas in Eph. Arch. 1889, Plate 10, No. 37.

32. (Single Specimen, much defaced, with No. 35.)
As far as it can be made out, this type is the 'Eagle-lady' broken up. A reminiscence of the flounced skirt and legs remains; the trunk has become a pillar between two protruberances, which were the breasts; the wings are fast disappearing, and the head is probably gone.

33. (Ten Specimens, with Nos. 132 and 90.)
A possible derivative of No. 25, or an independent variation, or even a naturalistic effort to represent a bird displayed.

34. (Fig. 12.) (Four Specimens.)
Monster with a bearded goat's head, eagle wings and human trunk and legs, the latter draped in drawers, supported by a waistbelt.
35. (Fig. 13.) (Single Specimen, much robbed, with No. 32.)
A type similar to No. 31, but apparently ending in the female skirt, like No. 20.

36. (Fifteen Specimens, with No. 64.)
The same type as in No. 34. In all probability (the head is broken in all the impressions) turned to left, and smaller.

37. (Single Specimen, with No. 15 and 24.)
Variant of the winged Man-goat type in more vigorous action to right. The head seems to be that of a ram with curling horns, and ears well marked. The legs appear to be fully draped, and there is a tail.

38. (Single Specimen, with Nos. 65 and 66.)
Practically the same type as 34, but with large breasts and wings both folded back. The forward wing of 34 seems to survive here in the two lines projecting from the breast. The off-leg is clearly shown in profile behind the near one.

39. (Eight Specimens, with No. 43.)
The same type, still further broken up, the breast becoming detached, and the forward wing surviving in a single line.

40. (Single Specimen, with No. 50.)
Pegasus or Sea-horse—uncertain because the hind-quarters are indistinguishable.

41. (Two Specimens.)
Winged Sphinx to left.

42. (Single Specimen.)
Winged Sphinx to right.

43. (Eight Specimens, with No. 39.)
Bull-headed monstrosity with eagle wings and human female trunk, hind-quarters spread and fan-tail from the arms. A fantastic Minotaur type of singularly fine execution (L.R.S.A. vii. Fig. 45).

44. (Thirteen Specimens, with Nos. 48 and 78.)
The same spread human hind-quarters with fan-tail as in No. 43, but surmounted by a suggestion of a human face with hair on end; a degradation of type No. 78 (?), with which it is associated on the sealings.

45. (Six Specimens, with Nos. 25 and 53.)
Same hind-quarters, but lotus bloom above.

46. (Single Specimen, with indistinguishable reverse, No. 132.)
Same hind-quarters, become wholly detached. Above the lotus survives an ill-executed ox-head, on either side of which something like wings seems to be indicated. This type should be related also to Nos. 54 and following and 81 and following, and is evidently mixed with them.

47. (Single Specimen.)
This described type is possibly a degraded metamorphosis of the preceding, the crested ox-head having taken the likeness of a four-fingered gauntlet or a flaming torch. At each side are traces of what look like similar 'gauntlets' or 'torches' inverted. Compare No. 6 above and also a Cretan gem in A.C. iii. 7.

48. (Thirteen Specimens, with Nos. 44 and 78.)
A variant degradation of No. 44 with Macaund added above.

49. (Fig. 14) (Two Specimens, with No. 130.)
Double dog head, with single wing rising between.

50. (Single Specimen, much broken, with No. 46.)
A lion-headed monster, with human arms, one upraised, and a suggestion of a wing above the shoulder. Probably a degradation of some winged type, not here represented.
52. (Thirteen Specimens, with No. 23.)
Two birds heraldically opposed, with a large lotus bloom between. The opposed birds in Schliemann, Myc., Fig. 480 supply a very close parallel.

53. (Six Specimens, with Nos. 25 and 45.)
The two birds degraded to a formal scheme, the bodies having disappeared and tails become exaggerated.

54. (One Specimen, with Nos. 15 and 37.)
The two bird heads, created and magnified, but similarly posed. Below, a suggestion of something like a degraded lion-mask.

55. (Single Specimen, greatly defaced, with indistinguishable reverse, No. 141.)
The two birds degraded, and probably ending below in a complete lion-mask as in the succeeding type.

56. (Three Specimens, with Nos. 22 and 23.)
The two birds still further degraded, and tending to be wholly subordinated to the lion-mask.

57. (Fig. 10), 57 A. (Seventeen Specimens, with No. 73.)
Two impressions in different states of preservation from the same seal. A remarkable modification of the Bird-mask type. The lion-mask has become dominant; the birds' heads grow up out of its ears, and changing their direction, now oppose each other across a lubvsoj, possibly developed out of the lotus bloom in No. 51, duplicated.

58. (Three Specimens, with Nos. 74 and 84.)
A variant degradation of the Bird-mask type, showing faint survival of the twin birds and lotus above the mask, and below it a pair of wings.

59. (Single Specimen, with Nos. 15 and 135.)
So far as this type can be made out, it shows the mask much degraded and becoming prolonged upwards; the indistinct outline below seems to represent the upper edge of the wings of the preceding type.

60. (Five Specimens, with Nos. 24 and 112.)
A derivative type. The birds survive in even less distinct form than in No. 64, but the lotus is intact. The wings have become curved horns from either side the muzzle. It is easy to see how, if turned upside down, this type would lead to the ox- or moustion-masks of Nos. 81 and following.

61. (Seventeen Specimens, with Nos. 21 and 28.)
The foregoing type in a variant form, having the same original. The birds are stylized
and wingless, but retain their old direction, and the lotus bloom between them is degraded, not changed. The lion-mask though a good deal degraded, retains some features, e.g. the ears, in a realistic form. Though an independent variant and probably earlier, I place it after the foregoing, since this modification of the wing-horns prepares the way for the following types.

62. (Single Specimen, with No. 33.)
Lion-mask of more realistic type retaining in two upward curving protuberances, and indistinctly in some form of crest, a reminiscence of the birds; and in the lower projections, a survival of the wings.

63. (Single Specimen, with Nos. 23 and 56.)
The same. The birds survive only in a looped crest, and perhaps in the upward curve of the upper pair of projections. The lower pair tends to disappear.

64. (Fifteen Specimens, with No. 38.)
Slight alteration of the foregoing, approximating to a fox-mask. Only the upper pair of projections survives.

65. (Single Specimen, with Nos. 38 and 68.)
Enlargement and slightly coarser form of the foregoing.

66. (Single Specimen, with reverse type identical with No. 33.)
A parallel degradation, going back to the original Bird-mask. The birds' heads remain as formless knobs on either side of a stylized lotus; their bodies have become two bow-shaped lines, instead of one as in No. 33; the mask is greatly degraded, approximating to its form in the types immediately preceding, and the muzzle projections are developing fantastic tips like the horns of the mouflon in No. 83.

67. (Three Specimens, with Nos. 30 and 69.)
The lion-mask in a variant and more naturalistic form.

68. (Single Specimen, with Nos. 38 and 65.)
The same, with elongated forehead growing upwards, and surrounding hair becoming more pronounced.

69. (Three Specimens, with Nos. 38 and 67.)
The same. The forehead has grown upwards into a palm-like crest. Whiskers pronounced, and recalling the wing developments of preceding types.

70. (Two Specimens, with No. 77.)
The crest developed into a palm, and the mask almost degraded away.

71. (Fig. 17) (Twenty-eight Specimens, with No. 89.)
Elaborate variant modification of the same type, affected by reminiscences of other types. The mask much degraded, but retaining traces of whisker lines; the palm crest elongated till it resembles a lotus bloom. Buttery wings added with star or flower.
Pt. VIII. centres. This 'comma' or leaf-like type of wing with a round centre is familiar in Mycenaean work (cf. e.g. Schliemann, Myc. Fig. 275). The projections on each side of the mask below look like degradations of the skirt-bouclés and emergent draped legs of types 20-22.

72. (Single Specimen, with two indistinguishable types.)
Final degradation: the mask is gone; the drapery and legs survive only in a small hose-shoe. The butterfly wings, with their centres, remain as the chief constituents of the type, and the palm-crest survives as a trefoil. (compare gold ornaments from the third Mycenaean shaft-grave. (Schliemann, Myc. Figs. 275, 293.)

73. (Fig. 19) (Seventeen Specimens, with Nos. 37, 57.)
A curious, but fairly certain, derivative from the pressailing. The spines of the butterfly wings remain, and the trefoil between them has developed into three objects suggestive of the leaves of a prickly pear or the ends of a cattle's tentacles. The scalloping of the wings has been accentuated, and the projections broadened, till they approximate to axe-blades. The original mask survives as a mere stem.

74. (Fig. 19) (Three Specimens, with Nos. 56 and 84.)
Front view of female sphinx with cap and 'comma' butterfly wings.

75. (Four Specimens, with No. 12.)
Same type as foregoing, degraded.

76. (Fig. 20) (Single Specimen, with No. 27.)
A grotesque human bust with demoniacal features, set in a butterfly's (or bat's) wing; perhaps developed out of the star- or flower-centre of the 'comma' wings in the foregoing types.

77. (Fig. 21) (Two Specimens, with No. 70.)
Apparently a squatting griffin-like monster, with butterfly or bat wings, seen in profile. Hind-quarters, as seen, probably suggested this form in types 45-50.

78. (Fig. 22) (Thirteen Specimens, with Nos. 44 and 48.)
Monster with human head, wings covering all the body, and lion's legs. But for the legs the suggestion of a cherub is very strong.

79. (Two Specimens, both imperfect, with Nos. 03 and 111.)
A winged monster, similar to the last in having lion's legs, of which one only is seen. Head gone. At its feet scuffles some animal of which only part of the hind-quarters appears on our specimens.

80. (Fig. 23) (Nine Specimens, with No. 124.)
A type which partly explains the two foregoing, being an evident degradation of two opposed lion-sphinxes, which had perhaps one head between them. The head survives as a loop, and the common body has been modified into a rudely-drawn beaveress.
81. (Fig. 24) (Two Specimens, with Nos. 82 and 108.)
A new type of the same class as the preceding series, and probably a derivative from the same original Bird type. A moufflon- or ox-mask takes the place of the lion-mask. The wavy lines below the muzzle are probably derived from wings, as in Nos. 60 and following. Compare the style of this type and the two next in order with that of the Heraeum gem in A.O. Pl. ii. No. 42.

Fig. 23 (No. 80).
Fig. 24 (No. 81).
Fig. 25 (No. 83).

82. (Two Specimens, with Nos. 81 and 108.)
Same type much simplified; the wings are represented only by curves each side of the muzzle.

83. (Fig. 26) (Four Specimens, with No. 15.)
Fantastic variant of the same type. The birds are broken up into a meander such as frequently appears on Mycean objects (cf. the bone roundels Schliemann Myc., Figs. 128, 129). The horn tips are developed into bestial heads. Lines below the muzzle are simplified and assimilated to types 63 and following.

84. (Three Specimens, with Nos. 58 and 74.)
Same type with meander and horns simplified.

85. (Single Specimen, much perished, with No. 29.)
Same type, varying in the upper part in some manner not now distinguishable.

86. (Single Specimen, with Nos. 20 and 98.)
Same type, but with wings and a *cap* precisely similar to that on a Vaphio gem (Eph. Arch. 1889, Pl. 10, No. 37).

87. (Single Specimen, with No. 13.)
Similar type in large, but whether winged or not below the muzzle, it is not now possible to say.

88. (Fifteen Specimens, with Nos. 90 and 132.)
An independent degradation of the Bird-mask type. The original birds are represented by the two up-curving lines above the mask, and their heads and the lotus have been confounded and come out as a four-spoked wheel (?). The wings of the birds and the wings or wavy lines below the muzzle have become double horns, with an abrupt upward curve. The mask is much degraded.

89. (Twenty-eight Specimens, with No. 71.)
A type showing certain analogies with the foregoing series e.g. lotus, and patterns below which seem to represent the last degradation of the lion- or moufflon-mask. The objects below this again seem to have bird bodies but formless bestial heads.

90. (Twenty-five Specimens, with Nos. 33, 132 and 88.)
Possibly another and further reduction of the same type, preserving the lotus above. Compare, for a very close analogy, the ornament on a gold object found in the third Shaft Grave at Mycenae (Schliemann, Fig. 303, and reversed, P. C., Fig. 547).
Pl. IX. 91. (Single Specimen.)
The foregoing type in the last stage of degradation (?)

92. (Fig. 26) (Twenty-one Specimens, with No. 129.)
Two seals of which I show one only. The other has the antlered head to right (No. 139). Obviously a derivative, showing relations to more than one preceding type. These raised human hands and the row of bulbus objects below the stag's head correspond closely to the arms and breasts of the 'Eagle-lady' type No. 23. The antler's outline recalls the 'comma' wings, and the head from which it springs has probably come into being, contra naturam, later than, and to explain, its growth.

Fig. 26 (No. 92).

Fig. 27 (No. 99).

93. (Two Specimens, with Nos. 79, 111.)
Four lion-masks, opposed.

94. (Single Specimen.)
Quatrefoil, placed here as a possible degradation of the foregoing type, but to be compared with gold-leaf ornaments from Mycenae (Schliemann, Figs. 231, 286, 290).

95. (Single Specimen.)
An ox-head.

C.—NATURALISTIC TYPES.

96. (Fig. 27) (Single Specimen.)
A bull: traces in the field behind the head of a human figure (?). Probably a scene of τριβαλβολώσις. From a gold ring.

97. (Thirty Specimens, with No. 10.)
Bull in course.

98. (Single Specimen, with Nos. 29 and 88.)
Same type as foregoing.

99. (Single Specimen.)
Bull to right in attitude of following a cow. A Vaphio gem (A.G. Plate II., No. 49) corresponds very closely and cf. the famous golden goblets from the same find.

100. (Three Specimens.)
Bull at the charge to right; on one specimen an object is seen over his quarters which suggests a female icon.

101. (Single Specimen.)
Bull or cow to right with head turned back. Compare a Vaphio carnelian (A.G. ill. 42).

102. (Single Specimen.)
A scene of the chase! Bull in flight to right, turning its head towards a lion or dog attacking its quarters. In front a man.
103. (Single Specimen.)
Bull to right, standing before a tree.

104. (Single Specimen, with No. 113.)
Combat of a lion and a bull on rocky ground.

105. (Two Specimens, with Nos. 24 and 112.)
Two lions in full course before a palm-tree. Rocky ground below. For their action, cf. S. Reinach, 'La Représentation du Galop' (Ibert, Arch. 1901, p. 440 ff.). This sealing supplies a characteristic example of the free Mycenaean representation of the galop-solant, less exaggerated than in the case of lions on the Mycenaean daggers.

106. (Single Specimen.)
A lion to right, turning his head. Compare, for the style, the gold ring found in the fourth shaft grave at Mycenae (A.G. ii. 8).

107. (Single Specimen.)
A lion to right as before.

108. (Two Specimens, with Nos. 81 and 82.)
A lion to right. The tuft of his tail shows over his back.

109. (Single Specimen.)
Lion to left, turning towards a spear which has transfixed him.

110. (Single Specimen.)
Combat of bull and lion? very like No. 104 reversed.

111. (Two Specimens, with Nos. 79, 83.)
Two lions heraldically posed to front.

112. (Fig. 28) (Seven Specimens, with Nos. 24 and 60.) Pl. X.
A portal (= Gate-Shrine?), with lions reversed on either hand. The attitude of the animals is characteristic of Mycenaean art. Compare many gems, and such compositions as the Menidi ivory figured in P. and C., Fig. 408.

113. (Two Specimens, with No. 13.)
Lion head to left.

114. (Four Specimens.)
Lion springing on a goat.

115. (Single Specimen.)
Two goats.

116. (Single Specimen.)
Two goats.

117. (Four Specimens.)
Lion springing on a goat or mouflon.

118. (Single Specimen.)
Two goats or mouflons.

119. (Single Specimen, with No. 104.)
Two goats.

120. (Single Specimen.)
Goat in course to left, turning his head. Compare, for the style, the flying stag on a Mycenaean ring (A.G. ii. 8).

121. (Single Specimen.)
Goat to right.

122. (Single Specimen.)
Goat to left tethered or speared?
123. (Single Specimen.)
  Goat in course to right.

124. (Single Specimen.)
  Goat to left, turning towards spear, or tether-rod.

125. (Single Specimen.)
  Goat standing to right.

126. (Single Specimen.)
  Goat to left.

127. (Eight Specimens, with No. 17.)

128. (Single Specimen.)
  Two cocks facing across an altar.

129. (Twenty-one Specimens, with No. 99.)
  Bird displayed. The attitude is not natural, and the eyes at the roots of the wings betray a survival of something, perhaps the breasts of a mixed type.

**D.—Miscellaneous Types.**

130. (Fig. 29) (Two Specimens, with No. 49.)
  Five towers built of ashlar masonry on a hill; three shields of the usual Mycenaean type below.

![Fig. 29 (No. 130).]

![Fig. 30 (No. 131).]

131. (Fig. 30) (Two Specimens, one with Nos. 19 and 51, the other with Nos. 61 and 144.)
  The façade of a shrine divided into panels or compartments (cf. T.P.C. Figs. 65 and 66) with two shields below. Unfortunately both specimens are in such bad condition that details of the type remain very doubtful; but something like the 'horns of consecration' appears in an upper storey to left, and at the sides are possible traces of human figures.

  These two last types show obvious use of the shield as a symbol, probably of divine protection extended to the buildings associated with them. No. 130 would appear to represent a whole city, or at least the castle of a chief, No. 131 a particular shrine.

132. (Twenty-five Specimens, ten with Nos. 33 and 90, and fifteen with Nos. 88 and 90.)
  Three rosettes or schini with conventionalized lotus blooms between. No doubt a derived type like those associated on the same sealings.

133. (Single Specimen.)
  A simplified 'labyrinth' scheme.

134. (Nine Specimens, with No. 86.)
  Pattern directly developed from the spiral on such an Egyptian scarab as is figured in
THE ZAKRO SEALINGS

PETRIE, *Egyptian Decorations, Art, Fig. 34 (See Fig. 31). Compare also another, and probably Pl. X.*

later, form of the same pattern on a Zakro pierced ‘weight,’ published in *B.S.A.* viii., Fig. 40. 4.

135. (Single Specimen, with Nos. 15 and 59.)

A further development of the spiral into a coil.

136. (Single Specimen.)

Group of pictographs. Another impression shows the group reversed, with the vase symbol on the right (No. 140).

137. (Single Specimen.)

Group of pictographs.

E.—Types NOT ILLUSTRATED.

Certain reversals of types illustrated have been mentioned, but as the sealings on which these appeared were distinct, they had better be catalogued separately:—

138. Winged human figure to right; cf. No. 36.

139. Antlered stag’s head to right; cf. No. 92.

140. Group of pictographs; cf. No. 136.

Other types too fragmentary for illustration are:—

141. Confused derivative type: the beak of an eagle is the only thing clearly distinguishable; reverse of No. 53.

142. Part of a draped human leg; reverse of No. 46.

143. Row of broad arrow-heads down the axis of the gem.

144. An indistinguishable type, with Nos. 51 and 131.

I add here (Fig. 32) a copy of an inscription traced with a fine point on a hollow disc made of the same clay as the sealings, and found with them. The legend is in the Knossian linear script. On the rim of the disc appear two faint impressions of a seal-type (two goats). Cf. *B.S.A.* vii. p. 133.

\[ \text{Fig. 32.} \]

§ 2.—Remarks on the Types.

(a) Their Period.

Analogies which certain of these types present to products of Mycenaean art, discovered elsewhere in the Aegean area, have been indicated in the foregoing catalogue. I will resume those which most clearly place Zakro types in relation to other finds whose period has been determined with approximate precision.

Correspondences with *Vaphio* are the most common here, as at Knossos,
Types 4, 31, and 99 might well be by the same hands as the Vaphio gems quoted ad loc., and with No. 31, types 21, 24, 25, and 86, present very close analogies. Among identities in style the hog of No. 127, the bull of No. 101, and the lions of Nos. 108, 109 may be especially remarked. To the Shaft-grave objects, found at Mycenae, the Zakro types, Nos. 71, 72, 94, 106 and 120, stand in intimate relation. Coincidence with Knossos finds is closest in Nos. 3 and 16.

These correspondences have a much wider significance if it be conceded that different impressions on a single nodule were made at virtually the same moment. It is hardly likely that the clay could have been softened afresh to receive second and third impressions, without impairing the distinctness of the first. If the baking, which these sealings have all undergone, was intentional, we should have double proof that the stamps were made at one time. Further, if not so certain, it is at least highly probable, that the twice and thrice stamped nodules were impressed each by a single two or three faced seal, such as are commonly found in East Crete, and in that case the original engraving of associated types may be assumed to have been contemporaneous.

Thus the Eagle-lady types are brought into relation with Vaphio through the association of No. 28 with No. 21, and of No. 20 with No. 86. The Bird-Mask types come into the same group through the association of No. 60 with No. 24, No. 61 with No. 21, No. 58 with No. 25, and Nos. 81, 82 with No. 108. The Hindquarter type, in any case obviously related to the Eagle-lady types, is brought in directly by No. 25. The best of the Minotaurs (No. 17) is associated with No. 127. Association with No. 71 puts type No. 89 into relation with the Mycenaean Shaft-graves, and shows that, though derivative, it cannot be far removed from its original, at least in time.

A careful examination of the remaining types reveals general homogeneity of style. There is no type which from this point of view must be placed necessarily either distinctly earlier or distinctly later than those just enumerated. Even such degraded types as Nos. 14 and 81 have a parallel at Vaphio (Eph. Arch. 1889, Pl. X., No. 17).

The period of the Mycenaean Shaft-graves, of the Vaphio burial, and of the acme of Mycenaean Knossos, is broadly the period of these Zakro gems, as determined by their own character. In the case of such objects as signs, often preserved in use for centuries, it is best to use internal evidence only. In this Zakro case the age of the gems would not necessarily follow from that of the pottery or bronze found near the sealings, nor on the other hand, can the age of the house, in which they were found, be determined safely from the period of the gems.

(b) Origin and Reason of the Monster Types.

The types in the foregoing catalogue might have been assorted more broadly into two classes, according as they may reasonably be held to have been
Fantastic or Realistic in intention. The first class would have comprised just the 78 types of our class B. But to have adopted that division at the outset would have been to beg several questions, e.g. the non-religious character of the Monster types (for no cult-type can be properly called Fantastic), and the religious character of certain genre scenes.

The main object of the catalogue is to show that the vast majority of types in class B are of purely local derivation, being variations of a very few types. It is a fact to be noted, before we proceed, that these variant types, which seem to have been obtained by the degradation or breaking up of others, must have been engraved so nearly contemporaneously with their originals that modification through unconscious action of the artist, or his want of understanding of the model is very difficult to credit. Not only is the general style throughout, as has been said, homogeneous, but in certain cases, e.g. Nos. 79, 44 and Nos. 67, 69, we find actually on the same nodule types, which under ordinary circumstances we should judge to stand to one another as original and derivative, divided by a considerable interval of time. The obvious and attractive analogy of Celtic coin types cannot therefore be applied to these sealings, almost all made in one place and at one time. It seems most probable that we have here an instance of modification made consciously and with full understanding in order to vary signet-impressions, that might otherwise have easily been counterfeited or confused.

A small number of independent Monster types, however, remains. Can anything be determined as to the origin and reason of these? The fondness of Mycenaean artists for representing Monsters is well known. Their civilisation evidently was in that stage, well expressed by Robertson Smith (Religion of the Semites p. 87), speaking of the Mesopotamians. "In the region of plastic art, the absence of any sharp line of distinction between gods and men on the one hand and the lower creation on the other is displayed in the predilection for fantastic monsters half human, half bestial." In the case of these Zakro types, however, few will maintain that the fantastic forms have anything to do with cult. We seem to be looking at the product of a yet further stage of art, which has passed from monsters with a meaning to monsters that are pure fancy. The single doubtful class among the Zakro monster types is that of the 'Minotaurs' (Nos. 17–19), which it is hard to suppose were independent of a cult probably existing contemporaneously at Knossos. They are, however, not very like any Bull-man types hitherto known in Aegean art.

If these Zakro types do not represent fantastic gods, still less do they seem to represent priests or votaries of a theriomorphic worship. Mr. A. B. Cook's ably supported theory, set forth in the 14th volume of this Journal, has not carried conviction to those best acquainted with Egyptian or Asiatic monstrous forms; and the balance of present opinion inclines decidedly towards such a theory as Winter's, which sees in modification of foreign types, as e.g. the Egyptian hippopotamus-godless, the origin of the strange forms

*Jahrbuch, 1890, p. 108.
which Mycenaeans artists would probably not have been themselves able to explain. The credit accorded to this theory will be greatly increased by a shell-relief which was one of the most interesting discoveries made last year at Phaestos. By the great kindness of Professor Halbherr I am permitted to reproduce it here (Fig. 33). A glance is enough to assure anyone familiar with Egyptian art that these figures are first cousins of those Nilotic divinities, whose one arm is raised in exactly this pose, while the other, pendent, holds the ankh.

![Fig. 33.](image)

If we are to trace the parentage of these Zakro monsters it is in the direction of Egypt that we must look. Among the types in the other classes of our catalogue there are at least two striking parallels to Egyptian art, namely the adoring monster of No. 5, and the spiral pattern of No. 134. But the commonship of our monsters with Egyptian art, though clear, is not very close. Nearly all the Zakro types are winged, whereas winged monsters are not conspicuously characteristic of Egypt. The Sphinx of the Nile is wingless till a late period, and remains commonly so to the end. The human-headed hawk, and winged goddesses, like Maat, have little analogy with the Mycenaeans forms. On the other hand, in Mesopotamia winged monsters, as common art-types, belong to a late period, later indeed than we are led to ascribe to the Zakro types by their obvious analogies.

This is, however, only to say that the Zakro types were not taken bodily from any alien art; but a relationship may still be traced in details. We look to their most characteristic feature, the wings. There are four forms of wing represented. (1) The eagle or hawk wing with long terminal quills. This appears in more than 75 per cent. of the winged types. (2) The form only slightly modified from No. 1 which is seen in type No. 58 only, and anticipates the pinions of Hermes’ πτερόν τον πίθαλα. (3) The upcurving almost spiral wing between the dog’s heads in type No. 40. (4) The scalloped butterfly or bat wing.

It is a notable negative fact in regard to 90 per cent. of these forms, that there is no trace of the *scorpius* wing, which has influenced so largely Egyptian art, and, by derivation, Mesopotamian wings. The beetle wing-case, sur-
vivials of which appear both on the Assyrian bulls and the eagle-headed demons of Assyria, has left no sign of itself on these Mycenaean wings. The single exception is the stylized form No. 3, whose curve is that to which Phoenician and later Greek types have accustomed us; it is probably derived from the upcurved wing often seen on Egyptian scarab representations, and sometimes in those of the hawk. Even were there no difficulty of date, it could not be maintained reasonably that the free and naturalistic bird-wings of the Zakro types were derived from the highly stylized and composite Mesopotamian wing-forms, themselves almost undoubtedly of Egyptian derivation. In Egypt alone the prevailing Zakro form occurs (with similar type of fan-tail) in representations of the vulture (cf. Perrot and Chipiez i. Fig. 408). The Mycenaean artists have, however, with the true artistic instinct that we have learned was theirs, referred the counterfeit to the living model and produced a more realistic representation, which stands to the decorative Egyptian forms as the "practicable" wings of the fifth century Greek art stand to the "impracticable" wings of the Archaic period.

The occurrence of so many novel winged types in Mycenaean art will raise a question as to a possible relation between them and the winged types of archaic Greek art. Among the objects found by Schliemann in the shaft-graves at Mycenae were two gold ornaments representing winged monsters, a griffin and a sphinx (Myc. Figs. 272, 277); but these were easily relegated to the category of eastern importations, and did not disturb Langbehn in his contention that winged types belong to a late and fully developed stage of the Greek genius (Flügelgestalten der ältesten griechischen Kunst § 8). The sphinx has reappeared on ivories, e.g. those of Spata, and the griffin on gems; but other winged types have remained so rare that, until this unexpected discovery of sealings was made at Zakro, no question of relation to archaic Greek art had been raised. There is certainly a prima facie reasonableness in supposing that Greek winged types were derived rather from those previously existing in the same area than from alien and distant schools of art; and in fact two Zakro types very closely anticipate later Greek types. The one is No. 58, very suggestive of the Hermes pinions; the other is No. 40, which may be compared alike with the early Pegasus on Corinthian coin-types, or the sea-horse on those of Lampacus. The wing-form most commonly seen on the sphinxes and other types in archaic Greek art is represented among the Zakro types only by No. 40; but the common Zakro form is found often enough on seventh and sixth century objects; for instance in the Nike type on coins of Cyzicus, in Siren types on Corinthian and Rhodian vases, and the Typhoeus of the Volute vase in Munich. This form easily passes out of, or into, the upcurved spiral form, as may be seen by looking at the series of griffins on early coins of Teos. That fifth century wings should approach nearer to the Zakro wings than do the more archaic ones is to be expected; for the same artistic instinct of naturalism had been at work in Greek art since its renaissance, as in Mycenaean art.

D. G. Hogarth.
FIRST REPORT OF A JOURNEY IN PISIDIA, LYCAONIA, AND PAMPHYLIA.

PART I.

As the task of publishing the immediate results of this journey has been entrusted to me, my first duty is to acknowledge the many obligations under which Professor W. M. Ramsay has placed me. Neither my companion Mr. G. A. Wathen of St. Peter's College, Cambridge, nor I, had had previous experience in this form of research, and we were fortunate in beginning the study of Asia Minor under his auspices. A large proportion of the materials here given was collected by him alone; and it is no exaggeration to say that without him we could have accomplished practically nothing, even if we had made the attempt. As I am increasingly conscious that the period of noviciate, on which I then entered, did not end with the journey, I am glad to think that my obligations to him extend to the time of the preparation of this Report. The same reason also makes me glad to know that Professor Ramsay is himself working these results into their place in the General History and Geography of Asia Minor. In this gladness all those interested in such studies will share.

My next duty is to thank all those who, in various ways, helped us to carry out the objects we had in view. On the one hand, we are especially indebted to the British Ambassador at Constantinople and to the Turkish Governor of the Vilayet of Konia; on the other, the funds at our disposal were largely increased, not only by the gifts of friends, but by contributions from the Managers of the Craven Fund, Cambridge, and the Worshipful Company of Mercers, London.

Professor and Mrs. Ramsay, after nine weeks spent in Asia and Phrygia, reached Konia on May 29, 1901; Mr. Wathen and I reached it on the 13th of June. We left Konia on the 13th of July. As our departure was hastened by the extreme heat, it may be well to note that travelling is possible in the table land from the middle or end of April to the end of October, or even the middle of November. June, with the last days of May and the early days of July, is the best time. In May thunderstorms are frequent, and in July the weather tends to become too hot. In a country with no roads to speak of, a thunderstorm is a serious hindrance to exploration. We hired a house in Konia, and made it our head-quarters for the whole of our stay; thence we made excursions to those localities which we wished to explore. The intervals between the excursions we spent either in making arrangements for our next journey, or in copying inscriptions in or close to Konia. We found this plan added considerably to
our comfort, and thereby to our efficiency. We also found that continued residence in one place drew attention to our work, and that the longer we remained in a place the greater became our chance of hearing tidings of sites and inscriptions, either on the spot or at a distance. As in a less degree this was true also of Khatyn-Serni, where we stayed four days, it would probably answer to establish head-quarters of a more temporary kind in such localities as promised good results, but are not suitable for a very long stay. I may add also that, within certain limits, a large party has distinct advantages: besides bringing more eyes and hands and ears to the work, it has from its mere numbers an appearance of greater importance, and thus secures better treatment and results.

A.—Boy-Sheher Excursion.

Our first joint excursion was to the district east and south-east of Boy-Sheher Lake, where we hoped to discover some evidence which might help to fix the boundaries of (Byzantine) Pisidia, Lycaonia, and Pamphylia.

The first day was occupied in the journey to Kizil-Euren; we examined the ruined Khans we passed, but they produced no inscriptions.

Kizil-Euren (Misbeia ?)

On the second day we were more fortunate. Kizil-Euren stands on the side of a hill, just where the pass from Konia begins to widen out and to form the small triangular-shaped plain which lies west of Kizil-Euren, between it and the Baghazik Deré. The arabah-route from Kizil-Euren goes nearly due west: it passes close to two ruined Khans (one is marked in Sterrett’s map), and crosses the entrance of a small valley which goes away to the north: it then skirts the foot of the mountain on which stands the old castle, Assar-Kaleci, and enters the pass which leads through the mountains to Yanuslar.

\[\text{June 18th, to Kizil-Euren (p. 95).}\\
\text{19th, to Yanuslar (p. 100).}\\
\text{20th, to Sekli-Serni (p. 105), via Tschukur-Aghyl (p. 101) and Serimlik (p. 104).}\\
\text{21st, to Kizil-Kasabah (p. 106), via Kiosk (p. 106).}\\
\text{22nd, to Gmurrumz (p. 108), via Khlok-Dede (p. 108) and Tchamah.}\\
\text{23rd, to Boy-Sheher (p. 108).}\\
\text{24th, to Fassiller (p. 112), via Kara-Assar (p. 110) and back to Kara-Assar.}\\
\text{25th, to Davghanas (p. 113), via Bagendar (p. 113) and Tchamah.}\\
\text{26th, to Konia, via Yunnuslar.}\\
\text{\footnotetext[1]{The distance from Kizil-Euren to the entrance of the pass along this, the northern boundary of the plain, is about four miles. About three}}

\[\text{Part I will contain the inscriptions collected during this excursion (A, pp. 95-114). It will also contain the inscriptions from Konia Museum (B, pp. 115-118) and selected inscriptions from Konia and its immediate neighbourhood (B, pp. 119-125). With the rest of such inscriptions, and with those kindly handed over to us by Dr. Diamantides, I hope to deal in Part II, which will also contain inscriptions from the district East of Konia, that is to say, from Zaredd-Khan (Ἰστρας Ναός), Yaguhlili-Talayt (Zaoureyan) and their neighbourhood. Part III will contain the inscriptions collected from the Lycaonian plain to the South of Konia; the chief places we visited being Khatyn-Serni (ἡσπερός), Doura (Νεα Ταύρα). Kun-Eynik, Ghiyda and Sekli-Khan.}

For A, the following itinerary may serve the purpose of an index.
As soon as we were clear of Kizil-Euren, we left the arahah-road and took a rough road which leads round the hill on which it stands. This is the road from Kizil-Euren which ultimately goes to Aghris and Buhumia. After following it for about fifty minutes in a westerly direction we came upon the remains of several dwellings cut in the rock. From these dwellings the bearing of Kizil-Euren is 73°, of the valley east of the Bagharrzik Dére and Assar-Kalesi 285°. They have every indication of having belonged to a religious community of the Byzantine period. Two only need any description: the first, now used as a stable for cattle, had once been a chapel; it was cruciform in shape and measured thirteen feet by eleven. The dome, formed like the rest of the chapel out of the live rock, is now partially destroyed. The entrance to the chapel was through a porch containing, on the right and left respectively, two inscriptions (Nos. 1 and 2), much defaced and extremely difficult to read. We were able to decipher enough to show that the chapel was dedicated to the Mother of God. Outside the porch on the right was a receptacle for holy water, and on the left a flight of steps conducting to the top of the rock. On each wall of the western area was a small cross, and on the back wall of the eastern apse the Christian monogram and the letters Α and Ω, all enclosed within a circle. The annexed plan will, I hope, render any further description superfluous. Two of our party visited Assar-Kalesi.

mile north-west of Kizil-Euren (vide infra p. 190) leads nearly due south to Buhumia. The distance from the entrance of this pass to the mouth of the Bagharrzik Dére is also about three miles. Both Kizil-Euren and the small plain lie very high.

1 With the porch the measurements were seventeen feet by eleven.—the shape of a Latin cross.
2 The traveller should arrange to reach the chapel in the late afternoon, when the light is best.
No. 1.—On the right of the porch of the Chapel. W.M.R., H.S.C.

+ΟΥΤΟΚΟΝΑΟϹΟΠΑ +ὁὗτος ὁ ναὸς ὁ πά-
ΝΚΕΠΤΟΚΕΠΑΝϹΕΒ ναστος κὲ πανοςθ-
ΤΚΜΙΟϹΕϹΤΙϹΠΑΝ ἀ]σμὸς ἐστιν τὶς παν-
ΥΜΝΙΟΤΟΥ/Κ ΠΑΝΑΧΙΔ ṅετόυ κ]παναχ]μ]ν]
ΤΟΥΚΠΑΝΜ/ΚΑΡ του κέ]πανουκ-
ΙΣΤΟΥΚΕΠΑΝΕΝΔΟ κ]πανουκ]
ΞΟΥΚΟΙΑ ΛΟΤΟΤΟΥΚ ζοῦν κ[έ]
ΜΟΧΚ. ΠΑΝ ιατού κὲ πανεπό-
Ν ΠΑΝΑΓΙ]

10 Κ
ΑΔ/ΣΙΩΝΙϹΙΟΝ
ΘΕ ΚΕ ΠΑΡ
Ο ΜΑ
Ρ. ΤΟΛΥ ΕΝ

15 Κ
Μ

20 .Ε
ΟΥ Τ
Ε]

This inscription consisted originally of twenty-two lines, thirteen of which can be restored. That which is lost in the first part is probably no more than a few Byzantine epithets of the Virgin, whose name perhaps occurs at the end of line 13. I hardly think the name of a saint is to be looked for either in line 7 or 8; παναχαράτου would, naturally go with θεοτόκου, and if there is a double dedication the Virgin’s name would be expected first. The loss in the second half of the inscription may be more serious. The lines, both in this inscription and in the next, are irregular; and it is sometimes hardly possible to determine to which line a letter belongs.
No. 2.—On the left of the porch. W.M.R., H.S.C.

This inscription was apparently of the same length as the preceding, but it is even more illegible and difficult to restore. Πολξενομεν in line 1, [ἀγαθοντες i.e.] των ναον in line 2, and των κυριων in line 3, is all we can read with even approximate certainty. Perhaps, as Professor Ramsay pointed out to me, the last four letters of line 6 (ΜΙΟ) may be part of the word Μισθεία, but the reading of the whole inscription is doubtful; and from what we were able to read we regarded it as liturgical in character.

The second dwelling might well have been one of the cells in which the members of the community lived. It measures 27 ft. by 18, and is 8 ft. high. The door is to the south. There are niches in three of the walls, apparently for the reception of the belongings of the inhabitants. The arrangement of the niches on the east wall, one of the longer sides, is elaborate, but can be sufficiently indicated by a rough elevation. The recess to the right is set back about one foot. The niches are five or six inches deep. This cell is about one hundred yards north-west of the chapel.¹

![Diagram of a cell with niches]

This cell was the only one, so far as we could find, which contained any inscription, and that inscription (No. 3) was much defaced. The letters are deeply cut and of a late type.

¹ The other cells are to the north of it, and are all more or less similar in their arrangements.
In line 1 the K may be IC, as the two strokes are not completely joined; the H in the same line has its horizontal stroke slightly slanting, and might be taken for M or even N. The line of the roof makes it improbable that a letter stood after H. In line 2 there are marks after the N, which may be a K but are more probably scratches on the stone; after the I there are traces of C or some curved letter, but most of it has been destroyed. It is doubtful whether any letter stood in the second space indicated in this line. In line 3, there are traces of an A at the beginning; the horizontal stroke of the second letter is slightly slanting, and after the fourth letter there are indications of a horizontal stroke proceeding from its top. There is an upright stroke after the space. Though any restoration must be provisional, I venture to suggest for the first three lines: ἀλκτέλον [σωρ] (the italicism v for w is found in No. 1) τῆ[υ γ] π[α] [κα] [ια]. ΚΟΜ may be the beginning of the name of a person, or it may be another epithet preceding by κατ. The restoration ἀλκτέλον in line 1 also occurred to us.

Between this settlement and the stream (close to the latter; see Sterrett’s map) there is a tepē. We searched it for inscriptions but found none. We found, however, a large number of stones with Graeco-Roman mouldings and the ruins of a Byzantine church. We found, also, a stone (36 inches by 13) with the figure of a man carved on it, all the more interesting because it was one apparently of the same series with two relief-slabs which we found at a fountain east of Kızil-Euren. They are parts of a frieze with hunting scenes in a rude style. The distance from the tepē to the entrance of the Derê I should guess to be about a mile. The road is direct, and it has in parts a stone foundation. The bearing of Kızil-Euren from the tepē is 92°; that of the lower of the two khans near the road leading to the Baghazzik Derê, 33°.

Our road from the settlement to the tepē was so circuitous that I can give only an approximate idea of the distance between the two. It was probably rather over a mile. The tepē is conspicuous, however, both from the entrance to the Derê and from Kızil-Euren.

I have followed Professor Ramsay in identifying the city which once occupied this site with Mithicea, one of the cities of the Orondeis. Though epigraphic evidence is wanting for this identification, all other evidence is strongly in its favour. The Orondeis had another city, Pappa, which can be placed with certainty at Yonunlar, some ten miles off. Pappa was in Byzantine Pisidia. The territory of the tribe, however, extended into

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1 As the stones are found near water or marshy ground, we thought this was Turkish work and probably not Roman or Byzantine.
2 See below p. 191.
Lycaonia, to which province Mistheia was assigned. The natural boundary between the two provinces heretofore would be the mountains which surround the Bagharzik Dere and separate the tepê from Yonuslar. The site would appear, therefore, to be in Lycaonia, and such as to fulfill the conditions required for Mistheia. Mistheia and its κατάποιν; moreover, come into prominence during the wars with the Arabs. It was a place of great military importance—so great that its capture in 712 was considered worthy of record in a campaign which ended in the siege of the capital. Independently, therefore, of the testimony of Anon. Ravena (ed. Pinder and Parthey, p. 103; cf. p. 105) we should look for it on an important road. In the district within which it must be sought there are only two such roads—the direct road from Iconium to Philomelium and the road from Iconium to Antioch. The strong position on the former road appears to have been Kaballa; no stronger position could be found on the latter than the Bagharzik Dere near the entrance of which the tepê stands. It only remains to add that the ruins of an old castle—Assar-Kalesi—crown the heights surrounding the pass, and that the capture of Mistheia by Abbas in 712 was followed by the capture of Antioch in 713.

\[ \text{Yonuslar} (= \text{Πάτσα}) \]

Our road from the entrance of the Bagharzik Dere must have followed \( \text{vide p. 100} \) the line of an old Roman road. The only apparent trace we could discover of it on the east of Yonuslar was by no means above suspicion; it was the headstone of a Turkish grave, turban complete, made perhaps from an old milestone. We could find no trace of an inscription on it. It stands just at the entrance of the valley, from the Kizil-Euren side. Three inscriptions from Yonuslar are given by Professor Sterrett (\textit{Wolfe Expedition}, Nos. 313, 314, 315). The first of these is fragmentary and written in rude characters. As our transcription of it differs slightly from Professor Sterrett’s, I give it in uncials without any attempt at restoration.

No. 4.—W.M.R., H.S.C.

\[ \text{Κωλ/ΤΟΥΔ} \]
\[ \text{ΓΗΤΟΒΟ} \]
\[ \text{ΑΛΩ} \]

We searched for the stone on which No. 315 is inscribed, but we did not find it where Professor Sterrett said it was to be found. We were told that it had been taken to Kara-Ali, a village two hours north-west of Yonuslar, and built face downwards into the staircase of the mosque. Circumstances prevented us from visiting Kara-Ali; but, though the visit might prove disappointing, it would be worth a subsequent traveller’s while to include it in his

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\(^{1}\) See below p. 114.  \(^{2}\) Theophanes, \textit{ch. Migne}, viii., p. 276. \(^{3}\) Cf. also Ramsay, \textit{Historical Geography of Asia}
tour; and we regret that we could not do so ourselves. It is accessible also from Seliki in about two hours. Fortunately the particular object for which the inscription might have proved useful has been attained by other means. The two inscriptions next following place the identification of Yunoslar with Pappa practically beyond reasonable doubt. The first was found in the spring of 1901 by Mr. J. G. C. Anderson of Christ Church, Oxford, and was copied by us in June at Yunoslar. The second was found by us at Tchukur-Aghyl, a village about two miles south-west of Yunoslar. The stone is in the wall of the djami near the staircase. The name of the village is given by Professor Starrett wrongly, as I believe, as Tchukur-Aghzi.

No. 5.—W.M.R., H.S.C., G.A.W.

The date of this inscription is fixed by the titles of the emperor as later than A.D. 103. The omission of the title Parthien would point to a date prior to 116; of the title Optimus to a date prior to 114. According to Dion Cassius (Ixxvii. 17) Trajan was in Asia Minor in 114. There is no evidence to show that he ever came as far north as Pappa. The words of Dion Cassius are καὶ ὁδῷ διανοιαὶ ὅν, ἐπὶ τε τῆς Ἀσίας, καὶ ἐπὶ Λυκίας τῶν τε ἑκάσιον ἐθνῶν, ἐς Σελεύκειαν ἐκομισθῆ; and they, as Professor Ramsay pointed out to me, imply that the journey was made by sea.

No. 6.—W.M.R., H.S.C., G.A.W.

1 Professor Starrett says 'it is certain that the stone was contained an official document, which probably gave the name of the place.'

2 Other inscriptions in which the word Πανίτεστι occurs are given by Ramsay (op. cit. p. 398) and Starrett (W.E. pp. 196, 255). They are found at Antioch, Bellaighus, and Saghir respectively. Their character prevents them having any force against an argument founded on the discovery of two inscriptions such as Nos. 5 and 6 on the site.
The stone measures 52 inches by 22. The inscription occupied 42 inches by 11 1/4. About half the lines of the inscription are recovered. In line 7, ΟΑ are scarcely legible. Marcia Otacilia Severa was the wife of the Roman Emperor, Philip the Arabian. As he usurped the throne in 244 and was murdered together with his son in 249, the inscription can be dated within narrow limits.

Of the inscriptions found at Yonislar, the next in importance is that found on a Roman milestone, now used as the headstone of a grave in the cemetery a few minutes east of the village. It is upside down and some of the writing is below the level of the ground.

No. 7.—W.M.R., H.S.C., G.A.W.

IMP CAESAR IVI FAVGVST
TO PONT MAX COS XI DESIG
XII IMP XV TRIB POTES XIX
VIAM SEBASTEN CVRANTE
CORNVO QV LA LEG O 5
PROPRÆTORE///FCIT

As there is no doubt about the dative (TO) in line 2, there has evidently been some confusion in this case between the two forms which this kind of inscription takes. The usual form for this series is that found at Selki (p. 105, where the restoration is given). This inscription was also seen and copied by Mr. Anderson. The date of the milestone is A.D. 6. The name of the road is the Via Sebasta. The propraetor’s name was Cornufius Aquila. The route of this road can be best discussed after the evidence collected at Selki (Nos. 11 and 12), Khiaq-Dedê (p. 108) and Geurummez (p. 108) has been given.

In a field east of Yonislar, not far from the milestone, we found two Christian inscriptions.
It may be taken for granted from the cross on the stone, that Orestina was a Christian. The word μακάριος may not justify us in saying she was a martyr, but the point is interesting. Orestinos is the name of a Christian presbyter whose monument is found at Bedel-Kaleh near Khatyn-Khan (611 ft. 3980 m).

The ε of Τάτειος was begun on the second τ.

The remaining inscription is found in a house not far from the principal oda. The stone was originally triangular, but the upper part has been broken off. The inscription occupies the lower part. Above the inscription is the foot of a cross, and on each side of the cross an eight-pointed star. Professor Ramsay tells me that six-pointed stars are frequent in the Christian inscriptions in Lycaonia, and eight-pointed in those of Pisidia. Both are found elsewhere; but he has noticed no eight-pointed stars in Lycaonia, and no six-pointed stars in Pisidia. The inscription is as follows:—

The title Βικάριος (or οὐκείριος) is well known as the title of a civil official (cf. Du Cange and Sophocles αὐτὸν γερόν). The character of this monument made us wonder if the title was used here as a technical ecclesiastical term. It would be interesting if this were the case, and there is nothing in the nature of things which would make such a use unlikely. I can, however, find no authority for it. The use of Βικάριος in the letter of Hadrian I. con-
tain'd in the Acts of the Seventh Council (Mansi 12, 1058 —τὸν ἐκατέρωτον ἐκεῖνον, of the Roman bishop as the representative of Peter and Paul) is worth noting.

On leaving Yonuslar our course lay south-west through Tchukur-Aghyl to Sevindjik. With the exception of the one already given, we found no inscriptions; but at Yegiren (two miles from Tchukur-Aghyl) we found two carved tombstones. The one was triangular in form and had a base of sixteen inches; a lion was engraved on this stone. The other was a fragment—about one-third—of a larger stone, originally of similar shape; the portion which remains measured two feet by fifteen inches, and was from the lower left-hand corner. The subject depicted on the stone is a funeral feast, the treatment of it being not quite conventional. From left to right are represented standing a boy, two women and a man; they are on the left of a table; under the table stands a water-pot.

**Boundary Stones near Sevindjik.**

At Sevindjik we were told that at no great distance there were two stones with writing on them. We went, therefore, up the low hill to the west of Sevindjik, and, after going in an almost true westerly direction for twenty minutes, we came across the two fragments of the first stone. The fragments lay some ten yards apart; on the one was the lower part of a Ç, on the other the rest of the Ç and the letters ΚΣ. The second stone, still intact, was forty minutes almost due west from the first, and had on it the letters ἈΠΔ with a second Δ carved to the right of the first. The Δ's were six inches high, the Π ten. The stones were large flat masses of common stone, and were presumably numbers 227 and 134 of a series of boundary-stones running from east to west. For the western terminus of the series, the shore of Bey-Sheher lake: at once occurred to us. In the line, however, which we were following, the shore is, according to Sterrett's map, nine or ten miles distant from Sevindjik. We cannot certainly allow more than four miles an hour for our rate of travelling; and, in order to place the first stone of the series on the shore, we must assume that its earlier stones were somewhat further apart than those we met with. The lake is so natural a western boundary for the πολιτεία to which the stones belonged, that I have not much doubt that such an assumption may be made. The assumption is rendered easier by a discovery we made three days later, when, in travelling from Gueurnmez to Bey-Sheher, we had to traverse—westward of the second stone—the probable line of the series; and we found what may fairly be taken as three separate traces of its continuation towards the lake. The first and second were the fragments of two stones, similar in character to the first two, piled in two heaps, as far as I could judge, in the right line. The third stone was some few minutes nearer to the lake, but was also, I should say, in the right line. It was only partially broken, and had on it traces of a Δ and some other letter. The ground on which it had originally rested had been dug up in search of treasure. It was about a mile north of Eflatu Bunar. Taking
all things into consideration, it is very probable that the boundary of two
cities ran roughly east from the lake, passing a mile north of Eflauin Bumar
to within a mile or so of Sovindjik. The city to the south would be the city
which once occupied the site of Bey-Sheker, where Professor Ramsay places
Karallia; and the boundary of the city would in that case be also the boundary
of the Byzantine Province of Pamphylia. To the north would be the
Byzantine Province of Pisidia, and perhaps the territory of the πέλαγος which
stood on the site of Kirili-Kassaba. The scales, it may be noted, on the large
map which accompanies Professor Starrett’s Wolfe Expedition are wrong
1:600,000; a trifle under ten miles to the inch, not five as the scales
represent it. The figures, therefore, on the scales must be corrected from 5,
10, 15, &c. to 10, 20, 30.

Selki-Serai

From Sovindjik we went to Selki-Serai, where we found the 44th and
45th milestones of the Via Sebaste. With the help of the milestone at
Yonnuslar, they can be restored almost to completeness. One of these must
be the one mentioned by Sarre (Reise in Kleinasien, p. 122).

No. 11.—W.M.R., H.S.C., G.A.W.
IM CAES
AVGVSTVS ON
COS XI DESIG XII
XV TRIB POT XIX
VIAM SEBASTE CVRAN
CORNVTQ O ALE
SVO PRO PRAETO
LIV

No. 12.—W.M.R., H.S.C., G.A.W.
NC
AV VSI
CONSA DE I
VIAM SEBASTE
CORNVTQ OVIL
PROP PRAET R
XLIV

The type of inscription which originally stood on these milestones may
be restored as follows:
Imper(ator) Caesar, Divi filius, Augustus,
Pon(ific) Maximus, Co(n)sul(um) XI, Desig(natus)
XII, Imper(ator) XV, Trib(unicia) Potes(tate) XIX,
Viam Sebaste, curante
Cornyto Aquila legato suo
pro praetore, fecit.
Kiosk and Neighbourhood.

From Selki we went to Kirili-Kassaba via Kiosk. The discovery of two fragments at the latter place—the one the finial of a roof—with the eight-point star on them, may imply, especially in conjunction with other evidence that Kiosk was in Pisidia. The inscription found at Yenidje (No. 14), as well as that found at Toldje (No. 15), is of little importance.

No. 13.—W.M.R., H.S.C., G.A.W.

[Kolosse]///

The first two letters of line 1 are very doubtful.

No. 14.—W.M.R.

ϕι
Καίλαλαλαλιμι
Μιςενικε

No. 15.—W.M.R., H.S.C., G.A.W.

Ενς
Αμμ
Τεκνη-
Ρκιανωι
Ειρνηημ
Μιςεχαρ

Below this inscription, which is Christian, are two shepherd’s crooks crossing each other. The last two inscriptions were copied on our journey from Geurummez south.

Kirili-Kassaba.

Though we were not able to discover any fresh inscriptions at this place, we took the opportunity to examine afresh the inscriptions given by Professor Starrett (An Epigraphical Journey in Asia Minor, pp. 184–186).

Of No. 187 in his book we made as follows:—

No. 16.—W.M.R., H.S.C., G.A.W.

//οἰοισκαρπ///οκταιωναιοις
Δολαιαματρωνηθκαιελαιοι
Συνθιωγκακιηθυουηθμης
Χαριν.
The first three letters of line 1 are much defaced. They may be ΛΩΛ, but probably they are the first three letters of Ιωλιος. The lid of this sarcophagus is used to support the bridge which stands near. We could trace the following letters on its edge. The restoration, with the exception of the father's name, is very doubtful.

No. 17.—W.M.R., H.S.C., G.A.W.

ΛΗΗΗ ΑΥΣΙΜΑΧΟΥ ΕΙΤ
ΔΙΩ
Ν

In No. 188 the last letter of line 2 should be a Κ, and the restoration of the two first lines Θεοφιλας, Σεβαστος, υπελευθερος (perhaps the second e in this word is 0). There is an unengraved space after ἐπίτροπος in line 3.

In No. 189 we read as follows:—

No. 18.—W.M.R., H.S.C., G.A.W.

ΟΥΡΝΟΥΣΙΑΙΩΝ
ΟΥΛΑΣΙΑΙΛΑΛΑ
ΤΗΝΛΑΤΟΠΟΛΟΓΩΤΑ
ΤΗΝΜΑΤΡΩΝΑΝΧΥΝ
ΓΕΝΙΔΑΚΥΝΚΑΝΗΤΙ
ΚΩΝΤΗΝΣΕΜΝΟΝΤΑΘ/}
///ΦΙΛΟΤΕΚΝΟΝΓΥΝΑ///
Κ//////ΚΑ//////ΠΟΥΡΝΙΟΥ
ΜΑ/////ΡΚΕΛΛΟΥΤΟΥΚ
ΤΙΣΤΟΥ

In lines 8 and 9 there is a hole in the stone, which has not there been engraved. The final a of γεναίκα we could not find, nor the final ν of σεμνοτήτην. We could find no traces of PA at the end of line 9, but there was room for the letters and Professor Sterrett reads them. Line 1 is undoubtedly the first line of the inscription and has lost only a few letters at the beginning; the Δ also is certain. Otherwise I should like to adopt the suggestion of a friend and read Καλλιπορης Σίλιαν with the names of Calpurnius' child or children before it. The epithet ϕιλότεκνος would in that case be appropriate.
Khiak-Dedé or Kirikli.

At Khiak-Dedé, which we visited on our way from Kirili-Kassóba to Geurrummez, we also verified the inscriptions given by Professor Sterrett (Wolfe Expedition, pp. 194–196).

In No. 319 the restoration of the inscription should read as follows:

No. 19.—W.M.R., H.S.C., G.A.W.

Bae Séi Paπtaλéaντος ‘Αμφιαπρί
Kóstouros tō ἄνδρι kai Mνησίθεο ‘Αμφείινονος.
Kóstou ‘Αμφείινονος Bae Séi tē μητρί.

In line 6 of No. 320 we could just discern the right hand upper stroke of the Υ, before τίς. The restoration must therefore be ὄψις and not τέκνας.

Of one of the two milestones of which Professor Sterrett speaks, it is impossible to make anything. The other, which has lost the upper half and practically all the inscription, was dug up for us. We were able to make out the following symbols, XXX///, i.e. Milin passuum XX... I thought I could trace IX after the XX.

The existence of three milestones (we were shown a third), or parts of them, at Khiak-Dedé, implies that the Roman road from Antioch to Selki passed at no great distance. The village in fact stands just on the western edge of the long glen down which the road from Neapolis must have come.

The identification of this last city with Karagatcher, put forward by Professor Ramsay so far back as 1884 (op. cit. p. 396), is confirmed by an inscription, fragmentary but of great importance, which we discovered at Khiak-Dedé.

No 20.—W.M.R., G.A.W.

ΤΩΝ///
ΤΗΛ///
ΤΕΛ///
ΣΩΤ///

Τέλαντίτων ὁ δήμος ἐτίματεν
Τηλέραιων τόν καὶ Βιανόρα
Σωτήρα

Télemachus Bianor is mentioned in two inscriptions found at Salir (five miles from Karagatcher, W.E. Nos. 328, 329). A Telemachus is mentioned also in E.J. No 183, at Karagatcher. All mention of him, or his family, confirms the impression given by this inscription that they were persons of rank and public spirit.

On our way south from Khiak-Dedé we passed through Tchaush to Geurrummez. At Tchaush we found nothing. On the east side of Geurrummez we found, in fairly complete preservation, the remains of a bridge of undoubted Roman workmanship. From Geurrummez we went to Bey-Sheher vid Yenidje and Edlatun Bonar.
The Via Sebaste.

It may be convenient to collect together the evidence with regard to the construction and course of this important road. We are now able to say for certain that the name of the road is the Via Sebaste, and not the Via Regalis; and that it was constructed in B.C. 6 by Cornutus Aquila. It connected the Pisidian colonies of Augustus. We know from a milestone that it went to Comana, and that the distance thence by road to Antioch was 122 Roman miles. This number corresponds with the sum of the distances from Comana to Apollonia and from Apollonia to Antioch. Professor Ramsey has, therefore, pointed out that the Antioch-Comana branch must have gone by Apollonia. As no other milestone on this branch can be assigned for certain to the Augustan period, we cannot trace its course with precision. With regard to the other branch, which connected Antioch and Lystra, we are, thanks largely to discoveries made in the past twelve months, in a far better position. It went from Antioch to Karagatch, and thence somewhat east of Khiaak-Dedé, where it probably divided. One branch went south to Bey-Sheher via Kirili-Kassaba, where a milestone of large size is to be found; the other went via Geurnmez and Selki-Serai to Yunoslar. It is with this second branch that we will deal first. As the two milestones we found at Selki-Serai (Nos. 11 and 12) are consecutive, it would appear that they are at present near their original position; and as the numbers on them agree closely with the direct distance of Selki-Serai from Antioch, they may be taken to confirm the evidence afforded by the Roman bridge at Geurnmez, that the Via Sebaste—or rather the branch which went to Lystra—followed a direct route across the plain from near Khiaak-Dedé to Selki-Serai. We followed it for some distance after it left Selki-Serai; and it can be traced as far as Yunoslar, where another milestone (No. 7) has been found. From Yunoslar the natural, in fact the only practicable, course for the road is through the Baghurjak Deré. It is when the eastern entrance of the Deré is reached that its course becomes doubtful. It is impossible to lay much stress on such evidence as is afforded by the track of which I have made mention on p. 99, and it is very doubtful whether the work is Roman work at all. It is, however, highly probable that the road followed more or less the line of this track, passed by the tepe; across the plain, and over the pass by Bulumia to Zoldera (Lystra). The evidence, such as it is, is chiefly circumstantial. Compared with the alternative routes, there is a saving of half the time, or practically a day’s march. From the mouth of the Deré to Zoldera, as the crow flies, it is 28 miles; from the same point to Konia and on to Zoldera it is over 50; even if the road turned south as soon as the hills west of Konia were passed, it would not reduce this latter distance by much. We were told that there was a horse-track, not now practicable for waggons, from the tepe to Zoldera vid

1 Compare C.I.L. 6974 and Nos. 7, 11, 12. Serai 41 or 42.
2 C.I.L. 6974.
3 The distance by road from Antioch to Khiaak-Dedé is 28 or 29 miles, from Antioch to Selki.
4 This milestone has an inscription on it legible.
Bulumin; the route, however, was reported to be easy; it is certainly not high, and offered no serious difficulty to baffie the skill of Roman engineers. Indeed I think it more than likely that our informants, fearing that we should go to Bulumina, framed their answers accordingly, and exaggerated the difficulty of the pass; we had an arabah with us and one of our informants was the arabahji. There are two points, moreover, of a more positive nature which ought not to be neglected: first, in the Acts of Paul and Thecla, Onesiphorus is said to have come from Iconium to meet St. Paul; he proceeded along a road from Iconium as far as the Royal Road that leads to Lystra. At the junction of the two roads he met St. Paul. Whether that point of junction was near Kizil-Euren or not, may not be certain; but the main destination of the βασιλισσής ὁδός—or the Via Sebasti, for the two names may be taken as equivalent—was clearly Lystra. This, moreover, appears to me to imply that the Via Sebasti did not go to Iconium, and even that the road from the junction to Iconium was the less important of the two roads. All this is consistent with the Bulumin route. The second point I mention with some diffidence. On Ptolemy's map the distance of Lystra from Pappa is as near as may be the distance it would be by Bulumin. The bearing he gets wrong. His accuracy in one detail may be due to the fact that he had the measurements of a Roman road to guide him.

Turning to the southern branch of the road, we are left more or less in the dark as to the course it followed, or indeed as to its existence. There is a milestone of large size at Kirili-Kassaba. It is probable enough in itself that the site of Bey-Sheher was occupied by the Romans even in Augustus' time, and it is somewhere in this region that we are almost bound to look for Parfais. For some distance before Bey-Sheher is reached, a road, either Roman in its construction or constructed from Roman materials, runs by the side of the caravan-route; the bridge at Bey-Sheher is made apparently from similar materials, and it has a portion of one arch—the right-hand portion of the first arch from the Itcheki-Sheher side—of definite Roman work. There are milestones south of Bey-Sheher at Gulgurum, Avshar, and Akechel; but as they are either inscribed, or for all practical purposes illegible, they are of no use to fix either the name or the date of the road to which they belong. They are, however, of large size.

**Kara-Assur.**

Our route from Bey-Sheher, however, did not follow the line of this road, though we kept on the left bank of the Irmak as far as Begdenir; then we crossed the river to Kara-Assur. Both there and at Fassiler we found many sepulchral monuments, and not a few traces of Christianity. At Kara-Assur we turned to the left as soon as the village was reached, and, following a footpath leading round the foot of the hill on which Kara-Assur stands, we found the Christian symbol ω̂̊ι̊ carved on the rock, and frequently repeated. Farther (two minutes) west and directly behind the last houses of the

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1 Chap. 1, of Ramsay, *The Church in the Roman Empire*, p. 38 ff. and the note on p. 81. 2 The Emperors were called Βασιλισσής in purer, *reflected* in Latinizing Greek.
village, we found, at a height of forty or fifty feet, a small niche about 38 inches by 25, of which the following is a rough representation.

As the figures within the niche were two animals and a man, and as the animals had some resemblance to lions, it is easy to conjecture Daniel in the den of lions as the subject of the group; it was a favourite subject among Christians. The work, however, is not of early date. There are many sarcophagi behind the village, and more still on the steep side of the hill above the village to the west. These latter are raised on steps cut out of the rock, from which in many cases the sarcophagi also are cut. At the top of the hill to the west, in the dip between the two peaks, there is a level space of ground about five yards by four. On the south side of this space there is a sham door cut in the face of the rock, and round it are seats. A piece of rock near the centre of the space, but rather to the north, has been hollowed out to form a bowl. The letter ψ, I presume φ, is found on the walls. Kara-Assar is visible on one side, and there is a magnificent view of the lake to the north-east. More than one of the sarcophagi had been inscribed, but the inscription on one only was at all legible.

No. 21.—W.M.R., H.S.C., G.A.W.

Ἀπ. Μ[}

This inscription was carved on a raised panel, and on each side of it was a garland in relief. At the foot of the inscription were two leaves, pointing inwards, one on either hand. In another instance the sarcophagus had carved on its face a bust with a garland on either side.

1 The topmost step in one case was 6' 3" by 12' high, the next was 10' 6", the third and the fourth decreasing proportionally in length. By the side of the top step were two, flat projections, perhaps for statues.
Fassiler.

Two of us took the shorter but steeper road from Kara-Assar to Fassiler, passing over the mountains to the east; the others went by the plain. Inscriptions from Fassiler are given by Professor Starrett, Wolfe Expedition, pp. 168-170. To inscription No. 277 of his collection the following additions should be made. Between the Dioscuri there is an altar; line 5 is almost certainly ΚΑΔΑΜΕI; line 6 CI only (−Σαδαμειτι).  

On the right of the valley in which lies the Hittite stele described by Professor Starrett, both on the face of the rocks and in the high ground beyond them, there are abundant traces of a burying-place of considerable extent. As at Kara-Assar, the monuments and tombs are cut in the rock itself. One tomb had a panel with a six-pointed star on each side. Another had the busts of four persons cut in high relief. A third was divided by two pillars into three compartments. In the centre compartment were two twigs of vine with a bust between them. On the right above was another bust, on the left an object completely defaced. In the right compartment was a half-figure holding some symbol, perhaps a thunderbolt; in the left compartment there was a seat. This burying-ground produced only two inscriptions, one of which is a mere fragment.

No. 22.—W.M.R., H.S.C., G.A.W.

Αὐρ. Τίττος Κάστορος ἐτοίμασεν ἐατὴ μνήμης χάριν.

No. 23.

[No readable text in the image]

We found also a small stele, the lower part of which has been cut off. It now measures nine inches high by seven wide. Two busts in high relief are carved on it, that on the right being that of a man; that on the left is smaller and probably represents a woman. The head of this smaller figure is radiated and the rays—it is probably an elaborate head-dress—are painted red. The following letters are all that remain of the inscription—ΚΑΥΜΕΝ. At the top of the stele is a small circular hole with a boss in its centre. The woman, it should be noted, is on the right of the man.  

If it is a fair inference to make from the existence of the six-pointed star, mentioned above, that Fassiler was in Lycaonia, it is fair also to infer from the method of burial a close connexion between Fassiler and Kara-Assar, and to carry the borders of Lycaonia westwards as far as the Irnak.

1 Lines 5 and 6 may give the old name of Fassiler. I have, however, Professor Ramsay's permission to mention his conjecture that Fassiler and Yassula are identical. Experiments made with Turks on many occasions showed that to Turkish ears there is little difference in sound between the two names. When Professor Ramsay asked the way to Yassula he was told how to go to Fassiler.

2 Cf., however, Ramsay, Cities and Bishoprics of Phrygia, 1., p. 262.
Baindir.

On leaving Kara-Assar we kept on the east side of the river to Tetricl, Aydandjik and Baindir, where we found the following half-metrical inscription, written in good characters round the edge of a sarcophagus. Characters Ω, Ε, Λ.

24.—W.M.R., H.S.C., G.A.W.

*Ενθάδε κεῖτε ἀνήρ πολλῶν προφερέστερος ἀνήρον Φλωύος
Φλωύαν[τι]ος δι’ ἐν...

Davghana.

Thence we went vié Tehonia to Davghana, where we found four inscriptions; two of which, however, came from Kara-Ali, and one from a place called Karjja-Euren-Eyuk. This last is inscribed on a mock panel cut on a flat stone. The letters are very rude—as rude as the spelling. The δ is formed thus Δ, the α thus Α.

No. 25.—W.M.R., H.S.C.

Αὐριλία
Δόμνα ἐντάδε
χίτε

Of the two inscriptions from Kara-Ali one is a mere fragment ΕΙΤΙΚ ΜΝΜ. The other is inscribed on the upper part of a panel on which is a relief; above the panel is a pediment the right half of which is lost.

No. 26.—W.M.R.

ΑΤΤ ΛΜΥΝΤ
Ν ΛΑΣΕΝΕΚΕΝΚΙ
ΠΤΩΑΡΕΤ
ΕΝΕ

The remaining inscription is

No. 27.—W.M.R.

ΗΑΙ
ΠΙΠΠΙ
ΕΝΘ
ΑΔΕΚΙΤ

From Davghana we returned in a single day to Konia—a day which added no inscriptions to our collection. I am able, however, by Professor Ramsay’s kindness, to publish three inscriptions found and copied by him in 1886, and, I believe, not published hitherto. They belong to the district through which we had been travelling.

H.S.—VOL. XXII.


No. 28.—W.M.R. 1886.

ΚΑΙ ΒΑΛΒΙΟΑΣ ΑΜΟΟΥ ΚΑΙ ΤΑΡΑΣΙΚ ΤΑΤΑ ΚΑΙ ΚΡΑΣ.

ΣΟΣ ΚΡΑΣΙΟΥ ΓΕΩΛΙΚΟΣ ΜΝΗΜΗΣ ΧΑΡΙΝ

καὶ Βαλβίος Αμοὸν καὶ Ταραςικ Τᾶτα καὶ Κρας-

ςος Κρασίου Γεωλίκος μνήμης χάριν.

The stone on which this inscription is found is carved in a somewhat elaborate manner. It is divided into three compartments by pillars. The outside compartments have an arched top, the centre compartment one which forms two sides of a triangle of which the angle at the apex is very obtuse. At the apex is a boss. In the centre compartment is a horseman facing right, in the right and left compartments are respectively a woman and a man facing inwards. The names represent Isauria, Pisidia, and Rome.

Millevis near Douchlama.

No. 29.—W.M.R. 1886.

ΧΥ ΠΑΡΟΝΤΟΣ

Χ(ριστο)ον ταροντος

No. 30.—W.M.R. 1886.

ΤΡΟΧΜΕΝΟΝΤΕΣ

ΤΑΦΩ ΛΑΝΔΕΤΕΚΙ

ΑΤΟΙΣ ΦΕΤΟΙΣ

ΜΗΣ

[πα-(?)]

τρός μὲν ὑπὲς [ἐν

τάφος ἐκ ἐν τῆς κυκλωντὸς φίλτ-

άτοις [μη]-

μής

With reference to this last inscription (which is in iambic senarii) I have Professor Ramsay's authority to say that after our recent exploration he adheres to his opinion that Kaballa is to be placed at Tchigil, and not at Kavaku. It is at the latter place that Mr. Anderson and Mr. Sarre wish to place it, and for a time Professor Ramsay was inclined to defer to their authority (see J.H.S. 1898, p. 128).

B.—Konia.

I have already mentioned that we occupied the time between our journeys in collecting inscriptions in Konia. Counting those which are now in the Museum and those which came to us through Dr. Diamantides, the number of them is considerable. The space at my disposal enables me to give at present only those which are now in the Konia Museum,1 and some of the more important inscriptions from Konia itself. The rest I hope to publish later.

1 There is no indication that any of those that I give under this head came from Konia originally.
Konia Museum.

No. 31.—From Buz-Kir (district round Isaura). W.M.R.  

Ἰακὸς ὁ λατύτος ἑπόητης.

The sculptor’s name is given in C.I.G. add. 3827 yy, 3830, add. 3857 τ, add. 4216 and 4393, but these inscriptions give no clue to the name of the sculptor here. The monument was adorned with an arcade, one arch of which remains complete, with parts of two others. In the centre (and complete) arch are three figures.

No. 32.—From Istapen (Isinda Pisidiae). W.M.R.  

A woman between two horsemen, facing inwards.  

Μάρκας Ἀπολλωνίου Διοκό-  

ρος εἰχής.

This type of monument is dealt with very fully by M. Perdriset in the Annual of the British School at Athens, No. III. pp. 156-160. The woman he identifies with Helen, the horsemen with the Dioscuri. In his opinion a connexion, direct or indirect, can generally be established between the places where this type is found and Sparta.

No. 33.—From Adalia (Attalia Pamphylien). W.M.R.  

ΜΑΡΚΟΣ ΑΥ  

ΦΑΙΟΙ ΣΩ  

ΖΟΝΤΙ ΥΠ  

ΕΡΤΕΚΝ  

ΩΝΕΥΚΗΤ  

Μάρκος Ἀδ-  

ηλις Σῷ-  

ζοντι ὑπ-  

ἐρ τεκν-  

ων εὐχήν


No. 34.—From Ambar-Arama. W.M.R.  

ἈΔΡΙΝΔΟ  

ΙΑΝΟΥΥΙΟΥΘΕΟΥΝΕΡΟΥ  

ΝΟΥΚΙΑΜΑΡΙΟΤΟΝΗ  

ΚΑΙΟΔΗΜΟΣΤΟΒΑΛΑΝΕ  

ΚΑΣΙΈΡΟΚΑΝΕΝΠΡΟΥΤΤΙ  

ΣΕΝΤΟΣΠΡΕΚΒΑΙΑΝ  

ΓΟΥΣΕΒΕΠΛΗΘΟΝΤ  

1 These inscriptions and others recorded by Starrett (W., E. Nos. 57, 69) and giving the sculptor’s name come from rude localities.
In line 3 Professor Ramsay notes that the $\Delta$ is probable, the $\mathfrak{M}$ certain.

Τραγανό]',$Αδριανο[Σεβ(ατη)$ [θεο[Τραγανο[υπω]()]θεο[Νερου[ανω]()]Σιδαμαριστο[υ]()]βουλ[η]
καὶ $\delta$ δήμος το [βαλανη[ω]
καθίτρωσαν επὶ Βρούττι[ου Πρα[ς[ε[ντος πρεσβ(ετο[υ) καὶ ύστερατρ[η]
γου Σεβ(ατο[υ), ἐπιμεληθήτων τῶν δελτὼν

Bruttius Praessens was legatus Augusti pro praetore. A Gaius Bruttius Praessens, probably the same person, was consul a second time with Antoninus Pius in A.D. 130 (C.I.G. 3175, a decree which conferred on Smyrna, in accordance with Hadrian's intention, the right to institute games such as he had already instituted at Athens). In C.I.G. add. 5875a (Venusia) a man called Sagaris offers a thank-offering to Mithra for the safety of Bruttius Praessens, whose steward he was. Sagaris is found in C.I.G. 3973, 4066, 4083 (Σαγάριαν), all from Phrygia and Galatia. This inscription has also been published by Professor Ramsay in the Revue des Études anciennes, 1901, p. 279. Sidamaria he says is absolutely unknown: if the $\mathfrak{M}$ were not certain and Sidallaria could be read, the town might be identified with the Byzantine fortress Sideropolis which was situated in this district. The first half of the modern name (Arrab) may represent the last half of the old name. This inscription was, I find, published by M. Pridik in the Revue de l'Instr. publique de Saint-Pétersbourg, 1900 (March–April), pars philologica, p. 19. Cf. Cagnat, Inscriptions Graecae ad Res Romanas pertinentes, p. 127. M. Pridik confirms the $\Delta$ and $\mathfrak{M}$ in line 3. He conjectures the words Άυτοκράτορι Καίραπι before Τραγανό.

No. 35.—Also from Ambar-Assu. W.M.R.

ΕΥΧΗ
ΜΑΡΚΟΥ
ΚΕΚΡΙΤΙΝΗ
ΜΕΤΑΤΩΝΕΙ
ΔΙΩΝΑΥΤΩΝ

Εὐχή
Μάρκον
κε Κριτίνη
μετά τῶν εἰ-
δίων αὐτῶν

The inscription given on page 16 of the Wolfe Expedition (No. 11) is now in the Konia Museum. A few letters have been destroyed in transporting the stone: otherwise our readings do not differ from Professor Sterrett's in any important point. The restoration of the last line should be, I should think, τοῦ θυγατέρα τῆς ἐκ ἀνέψυχαι

and the girl commemorated would be the daughter of Polycletus not of Sibylla.

Of the localities from which the other stones were brought there is no indication. Three of these are of the same type as the stone mentioned by Sterrett, Epigraphical Journey, p. 196.¹ They are solid blocks in the shape of

¹ This stone is now in the Museum at Konia.
small sarcophagi. The two ends represent temples with gables, between whose columns stand figures in bas-relief.

No. 36.—W.M.R., H.S.C.

Φάκονονανδρα Αει
Μνημής Κεμνονα

Φαλάζων Κόπων(α) ἄσπρα [αὔτης] ἀδείμηστον
µυής [χάριν] κε Μίμωνα

Α. Φαλάζως Κόπων, a Christian, is mentioned in Sterrett E. J. No. 231 (Konia).

No. 37.—W.M.R., H.S.C.

Μάσωναν
Κε Φράστωνα

The name Μάσωναν is, I believe, unknown.

No. 38.—W.M.R.

At one end between the columns are the figures of a man and woman. Above the woman's head is TATA, above the man's ΤΑΣ. In the pediment of the other end is the name ΑΝΤΩΝΙΟς, below the pediment ΝΑΝΝΙΩΣ.

No. 39.—W.M.R.

Λιονιονοθ///
Τιολιομερω///
Απίοιοιοια///
Απειανυφ///
Νεκτχε///

The stone has been broken on the right. The woman's name may be τολια Γεία.

No. 40.—W.M.R., H.S.C.

Σύμφωος Συμφωος
φορούνεκτχεν
εαυτόκαιθεν

N. Αι κ Α

TATA
Καιγαιονιον

Aytou
Μνήμης Χάριν

Between the fourth line and the fifth, the left portion of which is lost, there are the figures of three persons, on the left a man, on the right a woman, and in the centre a boy. The heads of the three figures reach into the fourth line and cut the inscription. The boy is shorter than the other two.
No. 41.—W.M.R.
ΕΛΙΝΟΥΣΓΑΙΟΥΛΟΥΚΙΟΥ
ΣΥΕΘΙΟΥΣΑΥΤΗΖΩΝΚΑΙΟΥ
ΡΙΑΦΡΟΔΙΤΟΥΔΙΜΗ
ΜΗΧΑΡΙΝ

The letters are faint and sometimes hardly legible. Between lines 2 and 3 are figures of a woman and a youth, the youth being on the right. The first names in lines 1 and 2 are doubtful. The name Σελίνω (acc. case) is found in O.L.G. 2373 b.

No. 42.—W.M.R.
ΘΕΡΟΣ
ΝΑΙΚΙΤΙΕΙ
ΜΗΧΑΡΙΝ
ΕΛΑΝΤΣΟΝΗΛΑΗΝ
5 ΑΔΙΚΗΕΙΕΙΚΕΧΟΛΩ
ΜΕΝΟΝΕΧΟΙΤΟ
ΜΗΝΑΚΑΤΑΧΩ

The husband’s name may be Έλευθέρος. In 6 and 7 perhaps ἔχοι το[ν] Μήρα; but the late Phrygian inscriptions often use false middle optatives (see Ramsay in Philologus, 1889, p. 754).

No. 43.—W.M.R.

Αδριήλιος) Σαυνα¬
ος σον τη
συνβιβριν μο¬
ν Παναρι¬
ατιν ανεσ¬
τήσατε
το το ἤλωκαν¬
τότο ἡμῶν
πατρὶ Ευ¬
γενιον πρε¬
σδυτέρον μνήμης
χάριν.
FIRST REPORT OF A JOURNEY IN PISIDIA, ETC. 119

Σίσινος, a deacon, is mentioned in Starrett, E. J., No. 215. He joins with two others in erecting a tomb to a priest called Δωμίτας. With regard to the place in which No. 215 was found, Professor Ramsay notes that it is not Konia, and that the words ἐπὶ τῆς πόλεως εἰρησκομένης ἐν 'Ικουλιο do not occur in Dr. Diamantides' note-book.

Konia and neighbourhood (First Collection).

No. 44.—Church of St. George. (Altar.) W.M.R.

AIEAROSXEBASTOS Καίσαρ Σεβαστός [Αὐτοκρ.
ΤΩΡΕΙΠΟΙΗΣΕΝ αὐτῷ ἐποίησεν τῷ προ-
ΚΗΝΙΟΝΤΗΠΟΛΗ σκόπου τῇ πόλει διὰ
ΥΠΟΥΠΡΕΒΕΣ Ποιητίου πρεσβε[βα[νοῦ]

The simplicity of the title would more than suggest Augustus. Professor Mommsen says 'that it is extremely improbable, I should think, impossible, that this name should signify another Emperor than the first.' In C.I.G. 3991, a Lucius Pupius Praesens (not probably Ποιητίου as in the restoration) is commemorated as the benefactor and founder of the city of Iconium and the procurator of the province of Galatia. He, however, held this post in the reigns of Claudius and Nero. Even if this inscription is later than Augustus, promotion from the one branch of the service to the other was not the rule and the procurator and the legate are hardly likely to be the same. This inscription is published by Cagnat (op. cit. p. 124) from M. Heberdey's restoration which is as follows:—[Αὐτοκράτωρ Καίσαρ Σεβαστός [Θεοῦ] ὦ, αὐτοκράτωρ, ἐποίησεν τῇν σκόπην καὶ τῷ ὑποσκόπην τῇ πόλει τῇ Ἰκουλιῶν ἐπὶ Ποιητίου πρεσβε[βα[νοῦ]. He assigns to it a date between 7 and 14 A.D.

No. 45.—W.M.R.

///ΒΕΡΙΟΥΚΑΙΣΑΡΟΣΣΕΒΑΣΤΟΥ///ΧΙΡΕΥΣΤΩΔΕΥΣΕΡΩΝ
ΓΑΙΟΣΙΟΥΛΙΟΣΟΦΙΟΣ ΠΛΟΥΤΩΝΙ
Τῷ Βερίῳ Καῖσαρος Σεβαστὸς
ἀριστερὰς τὸ δεῦτερον
Τίτῳ Ἰουλίῳ Οὔαρος
Πλούτωνει.

'Οὔαρος or Οὐάρος is probably a native name, not the Latin Varius. The correct restoration can hardly be ὁ Ἀριωτος.

The third inscription (No. 46) is the second milestone of a road constructed (or repaired) by Hadrian. From the locality in which the milestone was found—the cemetery of Seidliger, east of Konia—the road probably led to the east, and it may be the road which some thirty-five miles further on we found
near Yaghli Baiyat (Σαυατρα). If the reading Trib. Pot. xiii.¹ be right, this road was constructed in the year 129. Before his visit to Alexandria in 131, Hadrian had been in Asia Minor.

As the shape of the milestone is, I believe, unique, I give zincographs of the inscribed side and a horizontal section taken near the base. The inscription is on a panel projecting from the stone.

No. 46.—W.M.R., H.S.C., O.A.W.

Imp. Caesar Divi Traiani Parthici
F. Divi Nervae Nepos, Traianus Hadrianus Aug.(ustus), P(ontofex)
Max(imus), Trib(unicia) Pot(estate) XIII (?),
Co(nst[]u]m[.] III, P(ater) P(atriae)

The fourth inscription (No. 47) is one in honour of L. Aelius Verus, who was adopted by Hadrian in 135, and died in Jan. 138. The 21st year of Hadrian began in Jan. 137, and the tablet must have been erected near the end of Verus' life. Cf. B.C.H. 1899, p. 420.

¹ The reading may be xii, the last i being hardly visible and doubtful.
No. 47.—In the museum, but found at Konia. W.M.R.

L AELIO CAESARI L(uvio) Aelio Caesari,
IMP TRAIANI HADR // Imp(eratoris) Traiani Hadr[i-
ANI AVG PONTIFI ani Aug(usti) Pontif[i-
CIS MAXIMI TRIB cia Maximii Trib(unicia)
POT XXI IMP T CoS Pot(estate) XXI Imp(eratoris) II Co(u)s(ulis)
TH P.P. FIL DIVI TRAIA HI Patria Patr[iae Filio, Divi Train-
NI PARTHICI NEPO ni Parthici Nepo-
TI DIVI NERVAE PRO ti, Divi Nervae Pro-
NEPOTI TRIB POTEST nepoti, Trib(unicia) Potest(ate),
COE T COL AELIA HA Co(u)s(uli) II, Col(onum) Aelia Ha-
DRIANA AVG d(ria) Aug(usta)

The next two inscriptions (Nos. 48 and 49) are milestones of Antoninus
Pius, the first belonging probably to the year 141, and the second to the
following year. The first was found in the streets of Konia, the second in a
cemetery to the north. The second may have belonged to the road joining
Iconium and Laodicea Combusta.

No. 48.—W.M.R., H.S.C.

MP C ARIDIVI Imp(eratoris) C[assa][ri, Divi
TRA THIC Traiani Par[thici]
NEP TIDIV//NERV Nep[ot][i, Div[ti] N[e]v-
AE IDNI ae [Pronepot][i, Div[i]
HADP ADIIO Hadr[ian]i Filio, Tit[io
HADRI TITIO Hadr[iano] An[to-
NINOAN STIF, nino Au[g(usto), P[t]i[f]i[ci]
MAXT STIII Max(imo), T[rib(unicia) Pote]st(ate) III,
COE -///IL// Co(u)s(uli) III

Line 9 ends with L, but the restoration of the latter half of the line is
very difficult. The engraver has blundered. Apparently after omitting
Hadrian's name at the beginning, he inserted it after Nerva's and then began
to carve again the words DIVI TRAIANI, which stood after it in his copy.

No. 49.—In a cemetery to the north. W.M.R.

IMP
CAESARI DIVI HA Caesari, Divi Ha-
DRIANI FILIO DIVI drianii Filio, Divi
TRAIANI PARTHICI Traiani Parthici
NEPOTI DIVI NERV Nepoti, Divi Nerv-
AE PRONEPOTI TAE ae Pronepot[i, T(ito) Ac-
LIO HADRIANO /// 70 lio Hadriano [Ant[io-
NINO AVGVSTO nino Augusto,
PONTIF MAXIMO Pontif[ici] Maximo,
TRIB P /// T IIII COS /// Trib(unicia) P(o)rei[estate] IIII, Co(u)s(uli)[III],
MIL PAS /// VM Mil(lia) pas[s]um
III
The next inscription (No. 50) must concern Caracalla; it is later than 211, and as Geta is not mentioned probably later than 212, the reign of Commodus is ignored.

No. 50.—W.M.R.

IMP IVI IMP(eratori) [Caesari, D]i
SE' ITA S[ptim[i Sever[i] A-
MA: FIL ma[x(imi) Augusti Fil(io),
DIVI NI PI[ Divi [M(arci) Antonini] Pi[i]
GERM SARM NEPOTI Gym[an(ici)] Sarn(atici) Nepo[tii],
DIVI ANTONINI PII PR Divi Antonini Pi[ [i] N[epoti],

No. 51.—In the Museum, but found in Konia. W.M.R.

ΟΝΕΟΝΚΟ H 'Ikonew Ko-
ΙΩΑΛΑΙΑΡΡΟΥΝ Λοφεία Λαυκίων 'Αφρούμ-
ΙΟΛΟΝΟΝΙΑ Λόφου Ὁλυ-
ΣΕΥΙΟΝΗΡΩΜΑ λευτρος νος ήρωα
ΤΙΤΩΝΑΛ [οίκεος Βουλῆς(ι)]

An Arruntius is mentioned in C.I.G. 3485 (Thyatira), add. 38821 (near Aboon Kara-Hissar) and 4196 (Kotch-Hissar near lake Tatta); also in Sterrett, E. J. 191 (Konin). The difficulty of this restoration is the spelling Εἰκώνεων, but Mr. Hill tells me it can be paralleled by the spelling 'Ανεμουρ-

No. 52.—W.M.R.

Σω σβένης
Ούµαρτεώς
Διὲ εὐχήν

No. 53.—W.M.R.

ΑΓΑΘΗ ΤΥΧΗ
ΙΟΥΛΙΩΝ ΠΟΠΛΙΩΝ
ΤΟΝΚΡΑΤΙΚΟΝΠΙΤΡΟ
ΠΟΝΑΓΝΕΙΑΚΑΙΔΙΚΑΙ
ΟΣΥΝΗΠΑΝΤΑΣΤΥΠΕΡΒΑ
ΛΟΜΕΝΟΝΟΧΡΟΑΥΤΟΥ
ΑΚΑΛΠΟΡΕΥΤΙΚΡΙΝΈΥ

Λυγιβή τύχη
'Ιούλιων Πόπλιον,
τὸν κράτιστον ἐπίτρο-
πον, ἄνδρεια καὶ εἰκα-
σούνη πάντας ὑπερβα-
λόμενον τοὺς πρὸ αὐτῶν
'Λουκίου Καλπίκριτον'/Ορέατης, πρίγκεψ.
FIRST REPORT OF A JOURNEY IN PISIDIA, ETC. 123

ΚΑΙΛΟΓΙΟΘΕΤΗΤΗΣ ΕΛΑΜΨΕ
ΕΙΚΟΝΙΕΩΝ ΚΟΛΙΟΝΑΙΟΝ
ΕΑΥΤΟΥ ΚΑΙ ΤΗΣ ΠΑΤΡΙ
ΔΟΣΕΙΣ ΠΑΝΤΑ ΑΤΕΥΕΥ
ΓΕΤΗΙ

καὶ λαογιστὴς τῆς λαμπρᾶς
Εικονίων κολιονάς, τῶν
ἐαυτοῦ καὶ τῆς πατρί
δοσι εἰς πάντα εὐερ-
γέτην.

For this inscription compare B. C. H., 1899, p. 418 ff. For πρήσυν and λαογιστής, see Marquardt, Staatsverwaltung (ed. 1873) I., p. 507, note 3, and p. 487 ff.

No. 54.—W.M.R., H.S.C., G.A.W.

ΚΟΙΝΤΟΣΕ
ΟΥΡΗΝΟΣΜΑ
ΞΙΜΟΣ
ΝΕΜΕΣΕΙΗ
ΠΗΚΟΙ

Κώιντος Ἐ-
βουρηνὸς Μά-
Ξιμος
Νεμεσίη
πηκοί

This inscription is given by Sterrett (E. J., No. 246) though he does not restore it. The name, Quintus Eburnenus Maximus, occurs in No. 55 and No. 56 (= Sterrett, E. J., No. 192). If the person is the same, he lived in or after the reign of Hadrian; he was high-priest of the Emperor-cult and he married the daughter of Gaius Eburnenus Valens. He had two sons, one of whom was called Maximus. In B. C. H., 1899, p. 593, M. Pernitz gives the following restoration of Sterrett's copy, Κώιντος με[ε]ίμος Νεμέσις [ναέθηκεν]. He adds the comment, 'in mine room αἰ Leonium.' In view of the more complete transcription, this restoration must be abandoned.

No. 55.—In the Museum. W.M.R.

ΚΕΒΟΥΡΗΝΟΣΕ
ΜΟΣΑΡΧΙΕΡΑΣ ΑΜΕΝΟΣΕ
ΣΕΒΑΣΤΟΙΣ ΚΑΙ ΚΟΛΙΟΝΑΙΣ
ΚΛΑΥΔΙΟΚΟΙΝΟΝΗΜΕ
ΙΩΝΙΑΞΕ ΟΥΤΕΚΑΙ
ΤΑΣ ΠΡΩΤΑ ΤΕΛΙΔ
ΣΥΝΤ ///
ΓΕΚΤΟΝΙΟ///

Κ(ώιντος) Ἐβουρηνὸς Μ[ε]ί-
μος ἀρχιερατίμος θεοῖς
Σεβαστοῖς [ἐν] κολιοναί
Κλαυδιοκοινόνης με[τά]
ιῶν Μαξ[ί]μου τε καὶ [...
τὰς πρῶτας σ]ε[λιδα]
σῦν τὴν σπήλαινα
γι ἐκ τῶν ἱδίων

The σέλανες are the benches in the theatre (Anecdota BBkeri 62). Τάνος may be the name of the second son, σπήλαιον is used of the place behind the scenes of a theatre (Pollux, 4, 125); I suggest a kindred word σπήλαγμα as a restoration, though there is no evidence for its use in such a

sense,
No. 56.—W.M.R., H.S.C., G.A.W.

ΟΥΡΗΝΑΝΜΑΞΙ
ΜΑΝΩΣΟΥΓΑΤΕΡΑΓΑ
ΙΟΥΕΒΟΥΡΗΝΟΥΣ
ΟΥΑΛΕΝΤΟΤΩΓΥΝΑ
ΚΑΙΚΟΙΝΟΥΣΕΡ
ΙΝΟΥΜΑΞΙ

This inscription is the same as Sterrett, E. J. No. 192. The letters are 24" high.

No. 57.—Altar-stone in the church of St. Eustathius. W.M.R.

ΔΑΜΑΡΚΕΛΛΙΝΟΣ
ΥΠΟΔΗΜΑΤΟΥΡΓ
ΓΟΣΚΑΤΕΕΚΕΥΑΕΝ
ΟΜΗΔΙΚΟΝΕΚΤΩΝΙ
ΔΙΩΝΕΑΥΤΩΚΑΙΜΗΓ
ΝΑΙΚΙΚΑΙΟΙΟΙΤΕΚΝΟΙ

ΟΓΑΝΔΕΕΠΙΚΕΙΣΙΟΝ

ος ἀν δε ἐπιστηίσιτε, δόσαςε κ.τ.λ.

The word ὑποδηματούργος I cannot find; ὑποδηματάριος is given in Stephanus. For τὸ μηδίκων, compare Ramsay, Cities and Bishoprics of Phrygia, I, p. 75. Θέματα [Μ]ηδικα, the restoration suggested by him in the note, but rejected as improbable, would appear to be correct. Τὸ μηδίκων is a sepulchre equipped in the Median style; θέματα μηδικά are couches of Oriental or Median form.

No. 58.—W.M.R.

ΓΟΥΡΑΚΙΟΧΑΝΗΠΑΓΑΒΟΣ
ΕΝΘΕΥΔΕΙΩΤΕΠΕΙΛΙΑ
ΕΝΕΝΑΝΠΡΟΠΟΙΟΙΕΡΕΥΣ
ΘΕΟΥΣΙΔΤΟΥΟ
ΤΩΚΟΜΑΝΤΡΑΚΟΝΔΑΣ
ΟΙΔΑΙΟΧΟΤΑΙΟΠΑΙΝ
ΤΕΥΞΕΝΕΚΑΛΜΗΛΗΧ
ΚΑΙΚΟΣΜΗΝΑΣΕΠΙΤΥΛΒΩ

Τούφδος ἀνήρ ἀγαθὸς
ἐνθεύδει όστε πτελεια
ἡν ἐν ἀνθρώπωι ἱερεὺς
θεοῦ ὑψίτου
τῷ στῆλῃ Τροκώνδας
ὁ διάδοχος καὶ ὀπατὼν
τεῦχ ἐνεκε μνήμης
καὶ κοσμήσας ἐπὶ τοὺμμῳ.

In a building; the stone adjoined others on which were completed the crosses which stood on the right and left of the inscription. The letters are good. Τούφδος, a presbyter, is mentioned in Sterrett, E. J. No. 197; a Τροκώνδας in No. 206 (both Konia). Both inscriptions are in memory of slaves bred in the house. This inscription is in rude hexameters. For θεῖος
The inscriptions in the museum have come together by accident and have no connexion with each other. It is not so, however, with the inscriptions collected from Konia itself, some of which correspond to distinct periods in the history of the city, while others throw light on its life. No. 44, which is almost certainly Augustan, and therefore not far removed in date from the dedication at Lystra and the milestones of the Via Sambate, is a witness to the care of the Imperial Government for those important native cities which it did not at the time see fit to raise to the rank of colonies. It is not unfair to see in No. 45 signs of the response of the native population to Imperial good government. The vigorous road-making (or road-repairing), to which Nos. 46, 48, and 49 bear witness, marks a period of development of commerce and prosperity. It is interesting to connect this making of roads with the new status of Iconium to which No. 47 testifies, and again to connect both with the condition of affairs in the Empire farther East produced by Trajan’s wars. Ambar-Arase (No. 34), it should be noted, lies also on a road from west to east. Of the remaining inscriptions less can be made; but the monument to Julius Publius (No. 53) among the public servants, and the names of Arruntia (No. 51) and the Eburnei (Nos. 54, 55, 56) among families of prominence and public spirit in the district, show that the efforts of the emperors were well supported locally. Nos. 45, 52, 54, and 59 are dedications to native gods, usually under classical names; in No. 58, θεὸς ψιστὸς is a title which belongs to both the native and the Jewish religion, it suggests Jewish influence, and it marks a stage in the general adoption of Christianity; it may even in this instance stand on the monument of a Christian presbyter. It is interesting to contrast in Nos. 47 and 50 the treatment of Verus with that of Commodus; and to find, in the connexion claimed by Caracalla in the latter, fresh evidence of the virtues of the Antonines.

With regard to this latter inscription, it is not beside the point to notice the prevalence of the names Aurelius (before Caracalla as a surname, after him as a praenomen) and Aelius, and their derivatives. In Asia Minor, moreover, as a whole they occur far more frequently than in any other region of the Empire. This may mean either that Asia Minor had at the period of the Antonines reached a condition to welcome Roman influence, or that it received a special share of the attention of a dynasty everywhere conspicuously alive to their responsibilities.

H. S. Cronin.
AN INSCRIBED BASIS FROM CYZICUS.

In the course of a visit to Cyzicus, made last December at the invitation of Mr. de Rustafjaell, Mr. Bosanquet and I had the opportunity of copying and taking impressions of two inscriptions from a marble pedestal (Fig. 1).

known to the peasants as 'Balik Tash' or 'Fish Stone' from the reliefs carved upon it.

The stone lies in a vineyard on the low ground of the isthmus in the central harbour of Panormus. Originally discovered by Mr. Tito
Carabella of Constantinople, it was seen in January 1880 by Lolling, who published\(^1\) such copies of the inscription as it was possible to obtain without cleaning away the lichen and carbonate of lime which covered many of the letters. These imperfect copies were recently discussed by Dr. Wilhelm\(^2\) who had enquired for the stone at Constantinople and failed to discover its whereabouts. Last summer it was re-excavated by Mr. de Rustafjaell; we succeeded in removing the incrustation and obtained more complete readings.

The pedestal is of greyish marble and cylindrical in shape measuring about 9ft. 9in. in circumference. Mr. de Rustafjaell gives the total height as 5ft. 9in.; during our visit the amount of water in the low-lying ground made it impossible to re-excavate, and we were consequently unable to see the whole monument. The top is badly damaged, but in one place the mouldings which surrounded it (torus, fillet, and cavetto) are still existent.

The sides are divided symmetrically by four vertical tridents and adorned with clumsy high reliefs representing four half-galleys, dolphins, tinnies,\(^3\) and smaller fish, of which latter, again, I cannot speak at first hand.

On opposite sides of the pedestal, close under the mouldings, are the two dedicatory inscriptions, the one (Fig. 2) in prose, the other (Fig. 3) in elegances. Both are carved on oblong panels with triangular ansae at either end, and below each is a trident, the lines of the epigram being broken by the prongs, while the trident beneath the prose inscription stops short before reaching it. This difference, together with the fact that, while the panel of the prose inscription is in relief, that of the epigram is defined merely by incised lines, makes it probable that the latter was not part of the original design.

The panel of the prose inscription measures 0.75 × 0.32 metres, the ansae increasing the length to 0.97. The approximate dimensions of the panel of the epigram are 0.65 (extreme length 0.75) × 0.15 m.

The letters of the prose inscription are 0.3 m. high in the first line, 0.25 in the second, and decrease gradually to 0.2 in the last line. Those of the epigram are smaller, averaging 0.13 m.; there is a decrease in height at l. 5.

The forms are those normally used in early Imperial times (ΑΙΟΚΩ).\(^4\)

\(^1\) Athen. Mitth. v. (1880), p. 390.
\(^3\) Identified as such by peasants, and exactly similar to representations on coins, Rev. Mus. Costal., Myrina, Pl. VII: 16.
AN INSCRIBED BASIS FROM CYZICUS.

A thank offering to Poseidon of the Isthmus (dedicated) after the restoration of the long-choked portion of the channels and of the lagoon at her own charges, and of the surrounding (quays) at the expense of herself and her son Rhoemetaces, King of Thrace, and in the name of his brothers, Polemo King of Pontus and Cotys, (by) Antonia Tryphaena, daughter and mother of kings, herself a queen.

It is not worth while to reproduce Lolling's imperfect copy. Wilhelm's conjectural restorations, τῆς Ἀμυνῆς ὑποκαταστρήσας and εὐρείτων, are proved correct.

The restoration of the dedication to Poseidon Isthmios appears certain. The epithet is hitherto unknown at Cyzicus, but obviously appropriate to the locality. Poseidon Amphaleus is probably to be restored in the dedicatory inscription of Bacchus cited below, and this may have been the title of the god as guardian of the outer harbour alluded to in the epigram. Ρωμη-τάλας(,) is an engraver's error, natural after the recurrence of καὶ.

Lolling's copy of the epigram, though in some points incorrect, preserves a good deal of the left side, which has since been almost entirely broken away. It runs as follows:

ΕΙΣΙ ἈΝΩΝ ΜΣΕΡΑ
ΛΑΛΙΝ ΕΝΚΥΣΙΚΟΣΕΙΝΑΛΙ
ΠΟΛΛΑΚ ΗΣΑΠΑΤΑΣΣΟΜΕΝΟΣΠΟΔΩΙ
ΠΙΟΣΟΤΕΔ ΗΝΗΣΙΟΝΕΚΑΙΝΟΤΟΜΕ
ΚΑΙΔΥΟΣΕΥΕΡΙ ΝΕΧΑΡΑΣΣΕΤΟΚΑΙΜΕΤΡΑΙΑΜΑ
ΕΥΡΟΜΕΝΗΠΩΝ ΥΟΗΚΕΝΑΓΑΛΜΑΘΕΩΝ
ΣΟΙΤΟΣΟΝΕΙΜΆ ΠΟΣΕΙΔΟΝΕΓΔΑΛΟΣΑΚΛΥΣΤΟΙ
ΣΤΗΣΟΜΑΙΕΥΕΡΙ ΠΩΝΕΝΓΥΟΣΑΜΦΟΤΕΡΟΙ

From a combination of the two we arrive at the following:

ΕΩΤΟΛΆΣΕΝ Α
Λάαν ἡς πατασσόμενοι τυου ἡ νύσσων ἐκαινωτόμε[τ]
Παλακ ἡ σα πατασσόμενο του [δή τι][μον]
Εἰσοτε δ ἡ γάρ τις δέκανθαθη
Καὶ βιβός εὐρείτων ἐχαράσσετο καὶ με Τρ[υ]βάμα
Εὐρομένη πώ|τι|μ βίκεν άγαλμα θείο
Σωπ τὸ σον ὕμα. Ποσειδῶν, ἤγου ὅ ἀλός αἰκλύστοι
Στροματα εὐρείτων ἐγγυος ἀμφοτέρον

The lacune are still too great to admit of a convincing restoration. If, however, the readings Λάαν and εὐρομένη can be relied on, the meaning may be that a stone, employed for instance as the threshold of a gate (πατασσό-μενον του), was discovered in the course of Tryphaena's reconstruction and by her orders carved into a statue and dedicated to Poseidon.

H.S.—VOL. XXII.
'Till Tryphaena re-formed the island, defined the bed of the channels and finding me, set me here, a statue dedicated to the god of the sea.

Do thou, Poseidon, (look to) thine own bulwark and I will vouch for the two channels of the surgeless sea.'

ὄψαυσι (l. 4) is a mis-spelling for ὀψώσει, possibly intentional, as Herodian commented on this spelling of the word, and it occurs again in an inscription from Smyrna, as well as in several manuscripts. There may be some play on the word ἰσσωρίζω which generally, except in the technical use (= ἱσσωρίζω), loses the sense of cutting entirely. There can hardly, I think, be a change of subject at ἱσσώ (l. 5): the Thesaurus gives an Ionic form ἱσσῶ for ἱσσόσι, but there may be nothing more than a slip in our inscription. ἱσσόσι (l. 7) is possibly used as a poetical equivalent of χώμα 'nose' (cf. the Bacchus inscription cited below) though there seems no exact parallel, the nearest being Suidas' unsatisfactory quotation from an unknown author (e. g. ἱσσόσι — ἱσσόσια μεγαλὰ ἱσσόσιε ἵνα τοῦ στήμα τοῦ ὄρκου ἓν ἐν ἱσσόσια ἱσσόσια ἱσσόσια θυρίσατο.) The word is regularly used of a rest of rocks: Suidas also gives ἱσσόσαρα (cf. the Homeric ἱσσόσαρα νότος). The meaning given by Hoyosch, ἱσσώσαρον, which might suit the epigram with the sense of 'enclosed harbour' seems to arise from a confusion with ἱσσόσια. We may suppose that there was a statue of Poseidon erected on the nose, and that this is addressed in the epigram, Ἀδοὺς ἱσσόσις, as I hope to show below, alludes to the land-locked water of the Θρώος.

As to the statue to which the base belonged, the antithesis in line 8 shows that it cannot have represented Poseidon. Mr. Bosanquet suggests that a statue of the eponymous founder of the city would be appropriate; he is frequently represented on coins and we have a record of a statue in C.I.G. 3667; but the dedication and the ornaments on the pedestal seem to me more suitable for a marine personage. It may have been one of the minor sea deities, possibly a Triton, which occurs on Cyzicene coins of this date; the upper surface of the monument is too much damaged to afford any clue, and the insignificance of a Triton gives a semi-humorous turn to his ambitious proposal to share the empire of Poseidon.

The queen Tryphaena who is mentioned in both the foregoing inscriptions as the restorer of the port of Cyzicus was till comparatively lately known only from coins. Her identity has since been established beyond doubt by several important inscriptions from Cyzicus which enable us to connect her with certain passages in the historians where she is not mentioned by name. She is now perhaps best known to English readers from Professor Ramsay's brilliant chapter in The Church in the Roman Empire (p. 375 ff.). Her vaunted kinship with more than one royal house is explained by genealogical trees published by Mommsen and M. Théodore Reimach. The former adds the stamma of her husband Cotys, whose ancestors have since been discussed briefly by T. Reimach and at some length by Mr. Crow.

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2. C.I.G. 3811; cf also 3235, 3239 also from Smyrna, which adopt the same spelling in ἰσσωρίζω: and J.H.S. vii. (1896), 144 (from Lemnis).
3. e.g. Lycothes. i. 399.
foot. Latyschev gives the stemma of the kings of the Bosporus. The earliest of these inscriptions, dating from Tiberius, tells us of her royal parentage and her close connection with the imperial cult at Cyzicus. She was the daughter of Polemo I, King of Pontus, and of Pythodora, grand-daughter of Mark Antony; the latter seems to have been a most capable woman, and, after the deaths of Polemo and her second husband Archelaus King of Cappadocia, continued to rule in person certain territories of Pontus. Tryphaena's connection through Antony with the house of the reigning Caesar doubtless made her a particularly acceptable priestess for the newly associated cults of Livia and Athenae Polias.

We have too a second inscription, dating, like that under discussion, from the early years of the reign of Caligula, and filled with extravagant adulation of the young monarch in whom centred for the time the hopes and affections of the Roman world; here Tryphaena appears as a widowed queen, taking official part, with her three royal sons, in the games of the 'New Aphrodite' Drusilla, the deified sister of their benefactor Caligula.

The history of the interval we know from Strabo, Dion, and Tacitus, none of whom mentions Tryphaena by name. She was married to Cotys king of Thrace, a loyal vassal of Rome, who was oppressed and finally murdered by his uncle and partner in the kingdom Rhescuporis. The widow appealed to Rome, and the murderer was banished, the kingdom being divided and placed under Roman supervision during the minority of Tryphaena's sons, who were meanwhile brought up at the court of Tiberius. Caligula soon after his accession appointed the three companions of his youth each to a vassal kingdom within the empire—Rhoeotaces, the eldest, to his father's Thracian dominions, Polemo to Pontus, the kingdom of his grandfather, and Cotys to the throne of Lesser Armenia.

It seems significant that Tryphaena, proud as she was of her royal ancestry and royal offspring, should omit all mention of the elevation of Cotys. We can only surmise that though her three sons were solemnly proclaimed at the same time, the two elder assumed their titles some months at least earlier than the younger. As the harbingers of Tryphaena appear to have been completed in the reign of Caligula, we may date our inscriptions between his accession (37) and the proclamation of the kings (38).

The reasons for Tryphaena's connection with Cyzicus are not at first sight obvious. That a similar connection between the powerful mercantile

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Footnotes:
3. Strabo ii. 3. 29 (p. 395).
5. Curtius. The second decree appears also in Dittenberger, Syl. 305.
6. Strabo xii. 3. 29.
8. In Dittenberger Syl. 385, Tryphaena is styled Basileus μη μήτρης, Basileus κα Θυγτήρ, and a similar formula seems to be the solution of two more lines in the fragmentary inscription restored as far as the name of Tryphaena by Dr. Mordtmann (Aeth. Min. vi. 50), Basileus Ανθίνιος, Tryphaena ΙΗΣ Βασίλεως Θυγγάτης καὶ Μήτρος.

K. 2.
town and the ephemeral princes of Thrace had existed in former times seems likely from Appian’s 1 account of another widow of a murdered Thracian kinglet, Polemocratia, who sent her son to be brought up out of harm’s way at Cyzicus. The Thracians and Cyzicenes had a certain amount of legendary connection, the hero Cyzicus himself being, according to some accounts, 2 a son or grandson of Eusorus, King of Thrace. This may have afforded a sentimental bond such as existed on equally slender grounds between Ilion and Rome; but we have seen that Tryphaena’s connection dates from before her marriage with the Thracian Cotys. The material advantages of the connection are more apparent. Cotys appears in history as a consistent ally of Rome, 3 Tryphaena, a descendant of Antony, and consequently a cousin of Caligula, showed an obsequious devotion to the Imperial house which is emphasised by the inscriptions, and evidenced by her officiating as priestess in the combined cult of Livia and Athene Polias, 4 and later in that of Drusilla. 5 This prominent philo-Roman tendency would make the position of the royal house precarious among the half savage and naturally independent Thracian tribes, and Cyzicus was both powerful and near enough to make it a convenient refuge. The Cyzicenes on their part benefited by the munificence of the widowed queen, and doubtless also by her influence with the Roman authorities. How great this influence was is attested in the curious Acts of Paul and Thekla, 6 discussed by Ramsay in his Church in the Roman Empire, 7 where ‘Queen Tryphaena’ secures the release of Thekla merely by her prestige as a relation of the imperial house. In his analysis Ramsay decides that the legend can supply several new facts for the history of Tryphaena, besides confirming our ideas of her important position in Asia, during the reigns of her kinsmen Caligula and Claudius.

The works of Tryphaena at Cyzicus appear to have been undertaken on a grand scale. Foreign labour was imported, the city was ‘restored’ (we have unfortunately no details) and the port, crippled by the blocking of the sycope during a war scare, 8 was opened once more to commerce in the peaceful times which followed the accession of the new emperor. 9

Further light is thrown on the extent of the harbour improvements by a votive inscription of one Bacchius, 10 who superintended the excavation of

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3. Tertius Ann. 3, 44.
6. Dittenberger sq. 366.
8. M. Th. Reinach (Rev. des Ét. Gr. vii. (1894) p. 50) suggests that the Thracian risings of Tiberius’ reign (23–26 A.D.) were the cause. The word used (συντειχισμός) shows that the passage was deliberately blocked, and subsequent neglect would account for the ‘sitting up’.
9. Ath. Mitt. xvi (1891); p. 141; Rev. des Ét. Gr. (1888), p. 8; Rh. vij. (1894) 45; Dittenberger, Syll. 2366.
the harbours and the lagoon and the canals and the rebuilding of the protecting moles. 1 (ὅρμη τῶν λιμένων καὶ τῆς λίμνης καὶ τῶν διορθώσεων καὶ τῆς ἐποικοδομίας τῶν προκείμενων χωμάτων). Here again we have a λίμνη and canals (almost certainly the εἰσέρετο of our inscription). Thus from two inscriptions we know that a λίμνη and canals were dredged, and the re-opening of the canals is mentioned in a third: all these inscriptions are of the same period.

In late authors 2 we hear of two harbours at Cyzicus, one of which (Panormus) is called the harbour of Cyzicus and had entrances on both sides. It was presumably natural, as the other is expressly called ὀ μὴ αὐτοῦ ὑπάρχον; ón.

Any one who has been on the site will, I think, be convinced with Judeich 3 that the topographical evidence contradicts the theory of Th. Reimach 4 (based chiefly on a passage in Sclay 5 mentioning the isthmus) that the Arcotomus was originally a peninsula. In support of the generally accepted testimony of Apollonius Rhodius 6, Strabo 7 and Pliiny, 8 the low-lying neck connecting the hills of the mainland with that on which Cyzicus once stood has every appearance of a recent formation. East and west it is bounded by low banks of sand, inside of which the whole isthmus is occupied by a reedy swamp sharply contrasting with the fertile slopes which rise behind the line of the southern walls. Its general extent and the nature of the isthmus are well shown in the map made by MM. Perrot and Guillaume in 1861 and published the following year in their 'Exploration archéologique de la Galatie,' &c. 9 At the time of our visit the swamp was partially submerged, there were small pools only a few yards from the basis itself, and the south-east corner of the isthmus was a large sheet of water; in Hamilton's time 10 the most outside the southern walls was also filled, even in May, so the land of the isthmus is apparently still forming.

We can, then, easily imagine in Classical times a lagoon (the λίμνη of the inscription), occupying the marsh-land of to-day, and containing sufficient depth of water for the accommodation of shipping. The importance of this harbour for commerce, if provided with communication east and west, as well as its extent, justifies us in considering it the harbour of Cyzicus. That such communication existed we have seen by inscriptions; Pococke 11 and Hamilton 12 also noted what seemed to them to be traces of canals on the east side, though,
owing to the shifting of the sandy banks, such appearances are notoriously deceptive. The remains of the moles however, if these may be connected with the entrances of the great harbour, afford more tangible evidence. Our basis stands at the north-west corner of a rectangular recess some 200 yards long, where the southern walls fall back about the centre of the isthmus. This recess MM. Perrot and Guillaume mark conjecturally as a 'port'; its level is that of the marsh, and the path leading from the north drops abruptly some fifteen or twenty feet immediately before reaching Tryphonas's monument. The inscriptions warrant us in supposing that this port stood in some immediate relation with the great harbour and the canals, otherwise their position is inappropriate. I suppose, then, that the port formed a northern extension of the λιμήν and was surrounded on the three sides which are formed by the city wall by quays for the disembarkation of merchandise; for this its central situation rendered it particularly convenient. It may be these quays, I would suggest, which are vaguely alluded to by the περιεχομένα of the inscription.

F. W. Hasluck.
SEMANTOGRAPHY OF THE GREEK PAPYRI.

The conclusions stated in the following pages are based upon the examination of the Greek documents of about three hundred papyri, the large majority belonging to the British Museum. For reference to authorities, I have principally used the following: Kenyon, Greek Papyri in the British Museum; Mahaffy, On the Elders Petrie Papyri, 1891, 1893; Grenfell, Hunt, and Hogarth, Fayum Towns and their Papyri; Grenfell and Hunt, Oxyrhynchus Papyri I and II, 1888, 1899. Also the facsimiles and lists published by Schow, Karabasek, Wessely, Thompson; Montfaucon (Book V. of the Pal. Graec.) Wilcken (Observationes ad Historiam Aegypti Pro. Rom. depromptae ex pap. Revol. ined. 1885); as well as other works by the authors above-named, viz., Kenyon, Class. Tests, &c.; Grenfell and Hunt, Grk. Papy. Ser. I. and II., Rev. Laws of Ptd. Phil.; and lastly the ostrakon-literature dealing with the same symbols, especially Wilcken’s many publications (esp. Griech. Ostraka, 1899); Revillout and Wilcken in Rev. Egypt.; Birch and Sayce in Proc. Soc. Bibl. Arch. To Dr. Kenyon I owe also the hearty expression of my indebtedness for very helpful counsel in the prosecution of these and other researches and the publication of their results. Further as an Editor of this Journal, he has read my manuscript, and as he has kindly given me the benefit of that reading privately, I have been enabled to reconsider certain of my statements, and diminish by so much the labours of subsequent criticism. To Mr. O. F. Hill also I am indebted for some important observations.

The general thesis which has to be maintained and illustrated herein is the following. The symbols or compendious representations of commonly recurring expressions are the results of a quite natural process, analogous to the process by which the epigraphic capitals were rounded into uncial, and these still more in the cursive hands. The cursive not gaining in its full alphabetic representation sufficient brevity to satisfy the scribe, to whom the repetition in extenso of obvious words sometimes became, no doubt, insufferable, was soon abbreviated by the omission of parts of words, an inclusion-mark being drawn over the letters which made up the

1 The lack of uniformity in the representation of the signs in the following pages is to be explained by the fact that printer’s types have been used wherever possible, while blocks have been put for the rest.

2 Apart from these, there is a small group of characters whose origin is older than the papyri. These in some cases are epigraphic forms retained, but others may have had a manuscript origin.
abbreviation, or an apostrophe (of which our own is a diminutive descendant) taking the place of those which were omitted. Next, in certain very common names (of money, measures, etc.), these parts of words were simplified in form, the barest outline or fragment remaining—a natural order of development, like that of the oldest alphabetic capital from the more complex hieroglyph. Succeeding generations adopted these forms in a mechanical way, and soon they appear as quite irrational symbols. But the process was applied only as the need was felt, so that we find some overlapping and rivalry of various forms, and but a small number of true symbols, probably not a hundred, even including the ordinary numerals and the signs or marks of reference, paragraphs, total, etc. Many papyri have no symbols at all, not even in dates and equally obvious places.

On the other hand the practice of natural abbreviation, by omission of the latter parts of words, is overwhelmingly more common than in any modern writing and printing. The Greek scribes of all the earlier papyri relied on the perspicacity of the reader's intelligence, and abbreviated so much that in some places little more than half the full number of letters are recorded. The mark of abbreviation—a horizontal, or a (normally) vertical stroke—and compendious scriptions of the end syllables (e.g. B.M. Pap. xev. (1) 31 et passim) of a common or recurring word were together almost sufficient for all the demands that were made, and in the end saved far more space and labour than elaborated systems of abbreviation, both shorthand and other, have done for modern printing or manuscript. As regards formal systems of abbreviation, it may be observed that any method of reducing labour and time in writing, to be of actual, as opposed to potential usefulness, must proceed quite naturally, only one step at a time, each step being in every way just that which hand and mind expect, in advance of the stage of abbreviation already reached. Having καὶ, it is easy to write Kappa with a flourish, while only the most rigid watchfulness at first will attain the habit of introducing an extraneous sign. Here the good sense of the ancient Greek-speaking people showed itself, and it is surprising to observe how little the later Greek copyists gained by the elaborate abbreviation and use of signs which they affected, how much more ornamental than useful were many of the compendia which later still were copied in printers' type, and how often they seem to choose quite the wrong groups (tested by the ancient practice) for the application of their abbreviations. Be that as it may, allowing for the general ancient tendency, we shall not expect to find any carefulness on the part of the scribes of the papyrus to introduce unmistakeable symbols, much less to invent them, and must be prepared to find the whole of a formula, made up of abbreviated words written in the cursive hand of

1 It is surprising that hundreds of common words have not been forced into abbreviated form in modern English. As for perspicuity, who could possibly mistake the meanings of: un, ir, on, etc., in any context? As regards economy, the more saving in type, time, and space would be enormous.

2 Cf. the habit of Medieval writers of latin notes, who supplied signs for word-endings where the ancients had left the notes abbreviated.
one generation, appearing as the symbol of the next. It will follow as a corollary, that there will be no borrowings from formal tachygraphy in the papyri. As a matter of knowledge gained by a laborious search through nearly the whole of the published papyri, and the study ad hoc of the hands themselves of nearly three hundred manuscripts, I can assert that there is hardly a single indubitable occurrence of a borrowed tachygraphic sign in use in ordinary Greek literary, or non-literary papyri, and, as I hope these pages will demonstrate, there is only a very small number of symbols which do occur, which cannot be traced to a cursive origin or, in some few cases, back to epigraphic characters.

Concerning one of those irreconcilable symbols there is an interesting and important observation to be made. The \(\mathfrak{p}\)-shaped drachma-symbol, one of the chief symbols of the papyri, appears in the oldest Petrie papyri. This fact is interesting to the student of symbols for its own sake, since it follows that if it had, like the rest, an alphabetic or an epigraphic origin, it must be older than all the papyri. But its general importance in palaeography is still greater, as it would confirm the more recent opinions of scholars (vide Thompson, Gk. and Let. Pal. p. 115; Kenyon, Pal. of Gk. Pap. p. 9) that Gk. cursive writing has a long history behind the earliest facts yet known to us from any manuscript. It is not that the symbol is merely puzzling, like the equally early \(\mathfrak{p}\)-symbol for 'holder of one hundred drachmas' in Pet. Pap. XI, for in such a case the explanation may lie in some fact of contemporary social history at first overlooked by the investigator. But the clear and bold outline, and its uncompromising contrast with the contemporary cursive (cp. Pet. Pap. XII and XIII fr. 2 of the reigns of the second and third Ptolemies) point to a matured development, possibly coeval with the use of the drachma itself, so carrying back our glance well into the classical period.

Another observation of general value, not only to palaeography, but even to archaeology, is that symbols are the safest depositories of the oldest forms. The numerals Stigma = 0, Sampi = 900, Sigma of the epigraphic shape = 200, Koppa = 90; the series formed of special use of Alpha, Beta, etc. = 1000, 2000, etc.; the curve, a degenerate Mu = 10,000: these keep their ancient forms and meanings through centuries of palaeographical change. The epigraphic Sigma, in that brief form \(\mathfrak{z}\), \(\mathfrak{z}\), which already appears even in the inscriptions themselves (at least in the Chalcidian alphabets of Euboea and her colonies) survives, as I shall endeavour to show, in the

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1 Concerning the nature of the abbreviation used in the 'Ameriaoi Holarion' of the British Museum, and two or three others like it, which stand apart from the ordinary literary papyri written in careful uncial, judgment may be at this stage wisely suspended. See Ollendorf, "Tachygraphische Spuren im Papyrus der aristotelischen Ameriaoi Holarion, in the Archiv für Semitographie" (July- Dec. 1901). In this learned contribution the "special pleading" for formal tachygraphy is undisguised. I attempt a less ex parte estimate in a forthcoming contribution. See note at end, p. 173.

2 For a doubtful exception, vide infra p. 145.

3 And also in Attic inscriptions from the fifth century B.C. onwards.
various similar forms for the fraction 'one-half' in the earliest of the Ptolemaic,\(^1\) and down to the latest of the Byzantine Papyri.\(^2\)

In the following pages, any numbers of papyri quoted, not specially distinguished by the name of the collection, always refer to the papyri of the British Museum.

**The Symbols of the Ptolemaic Non-Literary Papyri.**

1. Of the history of symbols in early Greek writing, the non-literary papyri of the Ptolemaic period furnish an interesting chapter. In these records, symbols are to be observed at all stages of condensation and petrifaction. Some are to be seen in a form which gives to hint of their original formation; others can be clearly traced from a simple ligatured cursive to a quite conventional symbol. In the case of

\[
\text{Σ} \quad \text{Π} \quad \text{Σ} \quad \text{π} \quad \text{Σ} \quad \text{L}
\]

we can here trace the life history of each symbol; in regard to

\[
\text{X} \quad \text{K} \quad \text{Q} \quad \text{Q}
\]

obvious inferences may be securely made; for

\[
\int \cdot \cdot \cdot \cdot
\]

reasonable conjectures may be submitted; while for

\[
\text{T} \quad \text{L} \quad \text{L} \quad \text{L} \quad \text{L} \quad \text{L} \quad \text{L}
\]

no conclusive explanation can be given, probably because our acquaintance with Greek handwriting does not go far enough back.

1. The symbols of Ptolemaic papyri are not, in origin, arbitrary, but are the results of abbreviation of words.

2. There is no trace in this period of borrowing from a system of tachygraphy.

It will follow from the establishment of this position, that explanations of the various symbols will consist in tracing them from their earliest

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\(^1\) In Pet. Pap. XXXIII (a) 24: early 3rd cent. B.C.

\(^2\) In B.M. Pap. COOCXIII, 3 (msc. VI-VII). So the '10,000' symbol which occurs among the Petrie symbols, occurs more than 8 centuries later in Oxyr. Pap. CXXVII recto (late sixth).
departures from the ordinary script, through its more cursive developments, to
the stage of the quite arbitrary symbol. Consequently, the distinction
between symbols, and the nearest similar formations of the common characters,
will be psychological, as well as formal. The enquiry to be made at each
stage is, How far had the scribe in mind, at the time of writing, the original
true form of the symbol, or, in the case of the composite symbols, the elements
composing it? This has no direct relation with his possible knowledge of
such origin. For illustration, the scribe who wrote in Brit. Mus. Pap.
CCXXII. 31 the large 2-shaped character for the number 1000, must almost
certainly have known that it was a circumflexed Alpha, yet if it is not,
according to his ordinary hand, a plain Alpha surmounted by a circumflex,
which he feels he is writing, then the character is already in one of the early
stages of a symbol; just as an Englishman in writing £ for 'pounds' is
writing a common symbol, although he may be well aware that it is L crossed
with two bars. One sign of such feeling is that the scribe deviates as little
as possible from the conventional form of the symbol-letter; and thus it
comes to pass often that an alphabetic letter used as a symbol appears as
quite another thing, when compared with the corresponding letters of the
manuscript in which it occurs.

In order to maintain the first-stated position that the symbols of Ptolemaic
papyri are not arbitrary, it will be necessary to examine in detail every symbol
occurring, or as many of them as are capable of explanation; and then to
show that these are sufficient for the purposes of the inductive argument.

The Metretes-symbol \[\text{\text{
\begin{center}
\end{center}
\end{equation}}\]. This is demonstrably a monogram for
Mu-Epsilon. The abbreviation which sometimes takes its place is printed by
the editors as two letters without comment, but for our present argument
there is to be observed a curious distinction between the monogram-symbol,
and the ordinary collocation. The difference may be studied in Brit. Mus.
Pap. XVII. (n.c. 162), where in lines 38, 46, et passim, Mu-Epsilon occurs as
a syllable in ordinary words, and it will be seen that in every case the right-
hand perpendicular curve of the Mu is present, as well as the bow of the
Epsilon; whereas in the Metretes-symbol (41 and 39) the Mu is reduced to
an undulating line; or, to put the same fact differently, the Epsilon is reduced to
two horizontal bars written against a cursive Mu, thus \[\text{\text{
\begin{center}
\end{center}
\end{equation}}\]. In line 58 there
occurs the symbol, in which we may trace the Mu, with its horizontal bar
made straight; in line 57 we have a mutilated form of the same, and finally,
in lines 51 and 54 occur, two of the familiar symbols, as variants of the
monogram (cp. Pap. XV. fr. 8: line 9), one in which the lower curve of the
Epsilon still lingers, and one of the ultra-conventional type. The circum-
stances that this MS. is an official document, that it is written by three hands,
each of which gives the same testimony, that it is clearly dated and in good
condition, add peculiar reliability to its witness. For the formation we may
compare that of τε(\text{
\begin{center}
\end{center}
\end{equation}}) \[\text{\text{
\begin{center}
\end{center}
\end{equation}}\] B. M. Pap. DCLXXV. 101 B.C. and that of
the symbol for κράματος, \[\text{\text{
\begin{center}
\end{center}
\end{equation}}\] (vid. p. 144 infra).
The common symbol \( \ddot{\alpha} \) = 'total'. Scholars have long recognised the identity of this symbol with the initial letter of γενεται (γενεται): B.M. Pap. XVIII. contains a pretty demonstration of the fact, as follows:

line 4: γενεται ολυμπος αρταβας νε
line 18: ολυμπος αρταβας νε
line 16: ολυμπος αρταβας λε

cp. ib. verso line 2: B. M. Papp. XXIX. 4; XXX. 7, 13, 15, 21; III. 36, 43; Fay. Pap. XIV. 5.

The group of symbols ο, ο, ο, ο: These prove another. Beginning with ο = 'the city' which we find in B.M. Papp. II. (A) and III. and Pet. Pap. II. no. XXVIII. passim, we see, on close examination, that the dot was in each case written as an Omikron, as distinguished from the diacritic punctum which is very rare in Greek cursive of this period; in a circumflexed Delta, B.M. Pap. I. 14, there is perhaps an instance. In the first instance, the symbol occurs almost isolated, owing to the mutilation of the papyrus, but there is little doubt of the reading (Kenyon). The top part of the curve has been scratched, and so flattened; the Omikron within it is reduced to a tiny cup still quite as large as the common Omikron of that shape. In the second (Pap. III. 37) the reading is more certain, and here the dot beneath the curve is actually in the MS. as large as that which represents the Omikron of the preceding word. This slight indication helps to fortify the reasonable assumption that we have in the curve of the symbol α. Pi, worn down from its angular shape by its frequent use as a symbol, exactly into the shape assumed by the Pi in ordinary writing in Roman, and occasionally earlier, cursive alphabets. As additional corroboration, there is the analogous later use of the Pi, with Omikron within it (= πενήμα Pap. CXXI 385; and = πονητής in the Bankes Homer). The symbol then is the time-worn initial of πόλις (or a case) with the second letter written subscript.

The symbol ο = πιέχεις is written over and enclosing the alphabetic numerals, which give the number of πιέχεις. It is only a variant use of Pi, its significance being given by its position. Its shape is seldom a perfect semicircle, more often resembling an angular cursive Pi of third cent. MSS. Cp. Pap. XV. 5, 7, 17, 18. I cannot find it in the Petrie Papyri, and it is also apparently absent from the Ostraka: cp. Wilcken Gr. Ostr. 1.818-9.

A similar explanation applies to the symbol for 'remainder': ο = περιεχομενον. This is sometimes identical in shape with the foregoing, though always standing by itself and detached from the numerals of the remainder.

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1 Wilcken mentions it, in his Dissertatio ad summos homines written in 1886. Dr. Kenyon gave it to me last year as the accepted opinion, so that it has survived a long period of criticism.

2 Once in this papyrus followed closely by με = μεγάλος (?); apparently the metropolis.

3 Cp. Fay. Pap. XVII. 1. Here, however, it is further distinguished by the ordinary horizontal inclusion-sign.
In other places it is a more fragmentary part of the semicircle, pitched obliquely towards the right, or even thrown right over into the vertical, in that reminding one of the variations of Sigma toward the end of the first cent. and at the beginning of the second (Kenyon, Pal. Greek Pap. pp. 44, 45). It need hardly be regarded as a variant, the increased carelessness of formation being in proportion to the greater frequency of employment, and to the more certain corrective of a familiar formula. Cp. Pap. XXX. 3, 24, 25. It is found in Roman papp. e.g. Fay. Pap. Cl. r. (iii.) 4; ib. v. (i.) 10. Professor Mahaffy gives it this value ('remainder') in the Petrie Papyri, with the remark that he does not know its origin (Part II. p. 39).

The origin of \( \wedge \) = \( \delta \rho \alpha \mu \rho \gamma \) is sufficiently obvious. It occurs, apparently, only in the Ptolemaic documents, where there is no instance, I think, of the common Roman equivalent, the horizontal line with an Omikron or dot under it. In B.M. Pap. XXIII, we may study the construction of the symbol (second cent. B.C.). The scribe of this MS. had in his mind an abbreviation as nearly like a third cent. B.C. ligatured cursive 1 Alpha-Rho (cp. Pal. Soc. II. 148) surmounted by the horizontal abbreviation-mark 2 as a symbol could well be; in line 48 it is somewhat obliterated, but the portions of letters would make up Alpha-Rho; in line 49 is a variant of the same; in line 71 the cursive is perfectly distinct, as it is in line 72. A curious variant occurs, an isolated example, in CCXVIII, fourth or third cent. B.C. (?) If anywhere the horizontal can be found unmistakeably attached to the Alpha, we have this very typical symbol-development: (\( \dot{\alpha} \)) - \( \wedge \) - \( \wedge \) - \( \wedge \).

Exactly similar is the formation of the symbol for Aroura, a simplified Alpha-Rho, \( \wedge \), written without the circumflex which distinguishes the Artabo-symbol. It occurs very rarely, in this particular form, (B.M. Pap. CCCIII. r. 5, 9, middle of second cent. B.C.), but its features may be seen in those of its descendents the two variant Roman Aroura-symbols. (See 1 The Revenue Papyri, of this century, has \( \ddot{\alpha} \), \( \ddot{\alpha} \), and \( \ddot{\alpha} \) as common abbreviations for Aritabo. The Petrie Papyri have a conventional form \( \wedge \).

2 This horizontal-mark, which is found in the oldest manuscript and onwards, probably indicates originally not so much the omission of the absent letters as the inclusion of all the letters which it covers in a compound with a special meaning. This would be necessitated by the habit of continuous writing, without division of words, etc. The reader is warned by an over-written horizontal to look for some special meaning in the individual letters, which otherwise being taken in conjunction with the letters of the context might accidentally make new meanings with them. This sign contributes to the formation of a system of expressing fractions, which is commonly employed, but it would seem to be of general rather than particular use, as fractions are sometimes expressed in quite another way, viz. by drawing a vertical stroke to stand directly over each member. In B.M. CCXIII. (second cent. B.C.) we have this marking for one-eight, one-sixteenth, and thirty-second, the one-eighth again in lines 6, 13, while (a less certain reading) CCCII. 6 has other fractions which appear as vertical strokes with a formless thickening at top and bottom. It is seen again in the common 'one-quarter' symbol (p. 142 infra) and probably, reduced in size, in the Roman forms of \( \ddot{\alpha} \)-

\( \ddot{\alpha} \) (CCXXIX. A.D. 108) lines 2, 3, 4, 5, CCXXII. (A.D. 147) line 7), one per cent, and two per cent. (CCXVII. 2).
It is exactly similar in shape to the cursive Alpha-Iota, which is freely used in the same period (e.g. CCCII. v., 12, 18), an identity inevitably resulting from neglect to form the loop of the Rho in this cursive syllable, ligatured, and of the third or second century B.C.

A very interesting Ptolemaic variant of this Arowa-symbol is found as a part of a composite symbol occurring Pet. Pap. XI., 13, 18, 21, and in O., 7, III., (in Professor Mahaffy's own collection). The word compound $\pi\Upsilon$ is a part of the personal description of persons mentioned in a document, and being associated in one of the documents just mentioned (XI.) with the names of soldiers, was put down at first by Professor Mahaffy (Part I. p. (35)) as an ideograph of a soldier's helmet preceded by the numeral Rho, and so making a symbol for ἀκατόνταρχος. But there is more than the simple fact in the observation, that this has also had to be cast aside along with other explanations of a non-alphabetic origin for symbols; and Mahaffy (in the palaeographical notes on Pt. I. in Part II. of the memoir), accepts Wilcken's explanation of the second portion of the collocation as merely the primitive form of the well-known sign for Arowa. The whole thus means 'hundred-acre men,' and W. cites from an unpublished document even εἰκοσιτεκτάρποι as strictly analogous. The same occurs Fay. Pap. XXIII. (i) 12: $\chi \alpha \rho \pi \rho \omega \nu \nu$

Cognate with the foregoing is the superscript hook $\chi$, signifying, with a Chi, the word χαλπως. In Pap. XV. where it occurs (fr. 13), the regular formation of the Alpha as an ordinary letter is of a kind not noticed in Sir E. Thompson's table of Greek Cursive Alphabets, viz. $\chi$, which does not even remotely suggest the Alpha of this hook, so that at least to this scribe (circa 131-0 B.C.) the hook was no longer alphabetic, but merely a convenient symbol. The variants are noteworthy: see CCCII. v., 12, 18, 21, 22 and CCCIII., 25, 26, 27.

The same angle-shaped Alpha forms the abbreviating hook in Tra(pesies) (Pap. III., 48); and in Cha(leus); its occurrence in the same line with χαλπως in Pap. XV. is a case of mutual corroboration.

There is a large group of symbols whose formation is clear at a glance, so obviously are they curiously written words or parts of words, which are yet consciously and habitually written as something different from the same characters in the context. Of this kind is the cursive word and in B.M. Pap. XV., fr. 6, line 8. In fr. 8, line 9, it is so extremely cursive, though unabbreviated, that it is only one step removed from a symbol.  

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1. Op. also Wilcken, Gr. Ostr. 1. p. 818 for $\chi \alpha \rho \pi \rho \omega \nu \nu$ (Alpha surmounted by Upsilon. W.'s own explanation) in the omissions. Revillout, Lettres sur les manuscrits Egyptiens, 1895, gives (pp. 175, 3) a slightly different conventional form $\chi$ which he thinks to be Alpha-Rho, with the over-written bar. It occurs naturally in Ptolemaic cursive. The somewhat injured example B.M. XV. (6), 3 is most likely W.'s.

2. In one place at least, Pap. XV., fr. 8, line 2 are is used not meaning and, but something like the adverb or adjectival of items in the context since it is worth eisdr, a meaning necessary to make the total given. But note that this is
The example in CCCIII. r. 5 is noteworthy not only for this word alone, but in the study of abbreviation in early papyri generally. The final Alpha is detached and over-written, though obviously it would have been easier to write it continuously. This is done in other short words, e.g. εἰς (in the Roman papyri, at least) where there is no abbreviation of the word. A decisive example of this tendency to economy in space merely is to be seen in μυχ = μυχ(α), μαρκ = μαρκ, and other words in CCCIII. v., B.C. 152 or 141, e.g. 11, 12, 13, 16, 18.

Apart from occurrences of very curvile and somewhat contorted forms of the word, δε is the general symbol. Here we must see a mutilated cursive Alpha-Nu surmounted by a bar, perhaps the common bracketing or abbreviating sign, but more probably a reminiscence of the superscript Alpha just explained. The single horizontal and the angular Alpha occur CCCIII. r. (lines 5 and 11), but it is not clear that the meaning in this place is δει (Kenyon, Celt. Gr. F. p. 10) though the signification of the components, viz. Alpha-Nu with a superscript Alpha, is beyond question. The general significance of a superscript final letter would lead one to deny the simple meaning to this collocation, were it not that, in addition to the case of δει above instance, there is the actual occurrence of the symbol, meaning certainly δει, elsewhere (e.g. of the rate of in Pap. CXIII. 5, etc.).

To this class of symbol-like collocations or compounds belongs the series 2. B: T. 2. etc. = 1,000, 2,000, 3,000, 4,000, etc., resp. This series well illustrates the passage of suitable cursive forms into new symbols, even when the ordinary contraction is sufficiently brief. Alpha with a circumflex is already a satisfactory symbol for 'one thousand' and it is ordinarily not the practice to link circumflexes to numerals, yet in this series the linking is invariable, and the whole character then begins to assume strange and capricious forms. B.M. Pap. XXIV. (lines 8 and 20) and CCCIII. v. (line 31) have examples of this circumflexed Alpha. We have the simple Alpha (of that peculiar form which has the projecting arm pointing upwards to the right (e.g. δι, 30 and CCCIII. v. passim) surmounted by a circumflex already an integral part of the symbol. Cp. Delta = 4,000 in B.M. Pap. L 14 resembling the figure 8 with a dot in the upper circle; a similar Delta in Pap. XV. fr. 6, without the dot; another Alpha, in fr. 5, line 8; Beta in Pap. XXIX. lines 3, 6; δι of verso 10, 7, Delta in Pap. XXIX. 4, ib. verso 3.

1. Malalas explains a repeated occurrence, all down a column, of the fully written word δει as equivalent to our δε (multiplied by) thus: αυτὰ δει των (615 x 41) = 6715 supports that meaning. Vind. fac. of Petrie Pap. II. XXX. Of course this is almost the same thing as 'at the rate of.'

2. Whiston cites and illustrates a number in the second part of his Observations on the historical and geographical importance of papyri...from the Greek on...in the notes of the same MS. (1888). But the instances seem to be drawn from Paris Papyri.

3. That is to say, for instance, the write of Pap. Par. no. 63 in writing δι, or the strike of γαι (for Gamma, circumflexed) is not writing these peculiar forms as he would write the same letters in the context, even if he afterwards intended to add a circumflex.
and another Alpha in fr. 6, line 8, which is certainly there an irrational symbol, with the usual meaning. Cp. also Pap. XV. fr. 6: line 8; ṭh. 9; CCOCIII. v. lines 10, 27. These instances are adduced to illustrate the use of a cursive ligatured form written in a fixed form with a regularity which marks it as a symbol, as contrasted with ordinary occurrences of the same letters cursive in the context.

The symbol for ‘talents,’ a horizontal resting upon a Lambda-shaped character, can immediately, on the analogy of the artaba-sign and its cognates, be resolved into the ligatured Tau-Alpha. The proof of this, however, is inferential, and not documentary, for those instances of its occurrence in Ptolemaic cursive, whenever they are not of the common form, are still more decidedly symbol-like; cp. Pap. XV. fr. 8, lines 2, 3, where the symbol is written by drawing the pen backwards and downwards from the right end of the horizontal to the left foot of the curve. The appearance of the symbol, and the presumption in favour of Tau-Alpha, tempts one to look for a sort of monogram, formed of capitals; but this cannot be defended by any analogous formation. On the other hand the simple collocation of the earliest known cursive Tau without a right hand member, and of the equally early Alpha (Thompson’s table of Gr. Cursive Alph. cols. 1 and 2) would produce such a symbol: \( \rightarrow \alpha = \rightarrow \kappa = \alpha = \kappa \).

Such, no doubt, was the process of the development, not only of this, but also of the Kappa-shaped symbol, \( \kappa \) for which Dr. Kenyon conjectures the meaning \( \kappa \epsilon \rho \alpha \pi \mu o \) (Brit. Mus. Pap. Cat. p. 164; on no. XXX. passim, q.e.). Accepting this conjecture as certain, we may see in the symbol (which is seldom as printed, a simple Kappa followed by a dash) a monogram-formation exactly analogous to the metretes-symbol, already proved by documentary evidence (supra p. 139). This is an even more simply and naturally-formed monogram than the metretes-symbol, both offering an irresistible temptation to the pen, toiling painfully behind the thought, in the tedious repetition of an almost superfluous sign; the Kappa has been written, and there stands the Epsilon half-made; what but the most rigid scrupulousness could restrain the hand from completing it by the simple addition of the middle bar? \(^1\)

It is to physico-psychological facts of the kind appealed to in such arguments as this, that we must look for guidance where demonstration fails; and often where demonstration is abundant. It may be only by such appeal that we can decide between two rival explanations. They are facts, however, which have behind them the whole history of alphabets, and if further digression were permissible, it would be interesting to illustrate them in detail, from e.g. the sematicographic condensation of the ordinary cursive letters.

The symbol for 900 is a horizontal curve resting upon a vertical stroke. It may be seen, among Ptolemaic papyri, in B.M. Papp. III. 43; XV. (8) 1 and 2. \(^2\) It becomes common in the Roman period. But it is important to notice that the vertical stroke is never doubled in these papyri, and is always long.

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\(^1\) The Kappa-shaped symbol, with the horizontal bar, is, as Mr. Hill reminds me, a not uncommon monogram of \( \times \) (= \( \tau \mu \)) in Imperial times.
drawn well down below the line, from the middle of the curve. It does not in any way suggest a Pi. Then again there is a variant, which appears to be even the normal form in the Petrie papyri, which makes the traditional explanation (viz. San) of the other member almost equally doubtful. This variant is conventionally printed \( \pi \) (Malhufty from Petr. Pap. Part II. of the Memoirs) and in hand-made facsimile \( \tau \) or \( \tau \), (from Pup. Par. 54 recto, Wilcken in Obscure, ad hist. Aeg.) Further the \( \pi \) or \( \pi \), upon which seems to have been based the traditional explanation \(^1\) (on the strength of Hdt. I, 139) that the symbol is compounded of San (the Dorian letter corresponding to the Ionic Sigma) and Pi, does not appear until the minuscule period: indeed, Dr. Gow in 1893 states (Comparison to Sch. Classics, p. 13) that no inscription or manuscript has it before about A.D. 900. He adds that its source is not known, and I conclude that there is no good authority even for its compound name, except the later general resemblance. I suspect that the addition of the second leg was the doing of some pedantic scribe or grammarian who decreed that the form must agree with the (supposed) origin indicated by the name. The probabilities too are against an ancient origin. Why should San (Sigma = 200), and Pi (80) ever have been chosen to represent 900? The arithmetic is meaningless, whereas the early arithmetic of the symbols is quite intelligent and consistent. I conclude then that Sanpi, the symbol as well as the name, is due to alterations of the original simpler \( \tau \) or \( \tau \). The latter, far from being a new letter in tenth century manuscripts, is to be classed among the few which come into the earliest papyri already formed. For the origin we must wait until we are in possession of ante-Ptolemaic documents, or some facts to be supplied by epigraphy. Meanwhile the persistence of this symbol down to almost the latest Greek Manuscripts is a fresh illustration of the rule stated above (p. 137) that symbols best preserve the oldest forms.

\[ \Sigma = 200 \] was at one time supposed, as Professor Malhufty says in the palaeographic notes in Part II. (pp. 30-41) of the Finders Petrie Memoir, to be a later introduction, for clearness' sake, of the capital to represent the number. But he points out that it is regular in the third cent. B.C. \(^2\) sometimes with the angles rounded, but not \( \zeta \). It may have been felt necessary to keep this epigraphic form, to avoid confusion with the rounded 'Stigma' (usually \( \zeta \)) for the numeral six.

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2. Dr. Kenyon suggests that the former of these forms may be simply an arbitrary variant of \( \pi \). Mr. Hill suggests that the latter is derived from the sign used for \( \pi \) in some early alphabets, and that, if this sign followed \( \pi \), in the alphabetical sequence, it would naturally be used to represent 900. As this completes the alphabetic representation of all the numerals, it seems to me extremely probable.

3. B. M. Pup. XXVIII, 8 has \( \pi \zeta \), which is edited as 290 dr.; this is however of the middle of the second cent. a.d.
The old Phoenician letter Koppa \( \varphi \), used for the numeral 90, is commonly shaped more like an English written 9, in these papyri (Mahaffy, *ibid.*).

The Phoenician \( \varphi \), which is said to survive in the digamma, and to be the numeral for 6, has in these papyri a better representative than the letter Sigma. Cp. Pet. Pap. XII. (reign of the second Ptolemy); lines 18, 20, 21, show most decided forms \( \Gamma \). Line 19 has \( \Theta \), which the editor reads \( \Delta \), but it may be the complete digamma—in that case a valuable example. Dr. Kenyon thinks it is Iota-Sigma, and so = 16. Sigma itself, he adds, is never found exactly in its traditional form, in the papyri, but regularly in a form which is indistinguishable from the ordinary Sigma. Thus it came about that the epigraphic Sigma was retained for ‘200.’ Digamma of the F-shape however does occur in the papyri, in the Sappho fragment in the Oxyrhynchus papyri, and in the Alcman fragment in the Paris papyrus.

The symbol for ‘one-half.’ The Ptolemaic form is \( \zeta \). In CCCCH. r. (B.C. 152 or 141), lines 3, 9, 12, 17, \( \psi \). CCCCIII. 71, 8, it is sharply angular and rectilinear, but in CCCCH. (118–111 B.C.) 11, 12, 21, 27, the variant has the upper member much curved, while the lower or horizontal is \( \zeta \) relatively longer. Its explanation is, I believe, involved in that of the following group.

The symbols \( \overline{1} \) or \( \overline{1} \) = \( \frac{1}{2} \) drachma, or 3 obols, \( \zeta = \frac{1}{4} \) obol, \( \zeta = \) ‘plus one-half’ (scil. of the half-obol, and so indicating in some contexts ‘quarter-obol’), are all, like the simple ‘one-half’ symbol, special variants of a common sigle, the letter Sigma in some form which I assume stood in anti-Ptolemaic Greek for ‘one-half.’ The well established morphological affinity between SEMI- and \( \gamma \mu \)† would alone give probability to the theory of such a common prototype, both of the word and its symbol. The word in its oldest form undoubtedly began with Sigma (cp. Sans. SAMI). Now Sigma on Ionion and Chalcidian inscriptions has, besides its four-membered and five-membered forms, the parent-forms of the later \( \Sigma \), also the following:

\[ \Sigma, \tau, \gamma, \gamma, (\zeta) \]

These are more than enough to account for the forms of the group in question which, I think, may prove to be some other signs also. The signs and symbols of these shapes are the most persistent of papyrus-symbols, and they are among the smaller class of those, of whose origin no explanation can be demonstrated from any of the ordinary forms of letters in any written

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1 Third cent. (n.c.) forms Pet. Pap. XXXIII (a), 24, and 32, which show both \( \zeta \) second n.c. and later.

2 Mahaffy in the Introduction to the second part of the Pet. Pap. gives this list for obols

\[ \zeta \equiv (9) \equiv (4) \equiv (4) \equiv (9) \equiv \]

3 Fourth cent. (n.c.) forms Pet. Pap. XXXIII (a) \( \zeta \) first n.c. and later.

4 Mahaffy in the Introduction to the second part of the Pet. Pap. gives this list for obols

\[ \zeta \equiv (9) \equiv (4) \equiv (4) \equiv (9) \equiv ; \]

5 For the \( \frac{1}{2} \) drachma symbol, Dr. Grueff has the same shape in the Index of the Revenues Papyrus.
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Greek yet recovered. But how are we to account for the uses of these signs some of which are quite certain? To begin with the "half-obol" symbol, M. Revillout, in *Lettres sur les monnaies Egyptiennes*, 1893, says pp. 226-7, that it is found on Attic inscriptions sometimes in the form given above, sometimes facing round the other way, and "indiquant soit la demi, soit la demi-obole." This is strong confirmation of my opinion that the simple original meaning of the signs is one half, and also of the third-century Sigma-like form. Similarly Revillout gives \( \varepsilon = \frac{1}{4} \) drachma and explains the 4-obol in reference to it, i.e., not as 3+1 obols, but as \( \frac{1}{4} \) dr. + obol. Similarly for 5 obols. He quotes p. 220 the same explanation from an ancient *Tabula de mensuris ac ponderibus antiquissima* published by Hultsch in his *Metrologicorum Scriptorum reliquiae*, Leipzig, 1864. In this ancient table ("rédigé par les anciens") whose provenance was also Egypt, this "\( \frac{1}{4} \) symbol" is described as "Pomaión στίγμα, \( \varepsilon \)." No doubt the writer, unaware of its existence in Ptolemaic times, was thinking of a late borrowing from the Romans in Egypt, but it is none the less a suggestive name. If we find the Roman system of notation with this \( S = \frac{1}{4} \) (cp. HS) as a very ancient and very persistent part of that system, this certainly supports the argument in favour of a similar explanation of the corresponding symbol with the same value in the Greek notation.

The soi-disant "\( \frac{1}{4} \)-obol" symbol, attested in respect of value, for the 3rd century B.C. (vide Mabafli II., p. 35), is the "one-half" Ptolemaic symbol in a special use. Its very various applications (vide *ibid.*), are illustrations of a practice which will be several times illustrated in other symbols, the practice of leaving the special sense of a symbol of general meaning to be indicated by the context. In *\( \chi / \) (Pet. Pap. XXXIII (a) 24, cp. Part II., p. 35), there is little room for ambiguity. I should read it as 5 dr. + a half-dr., + 1 \( \frac{1}{2} \) half-obols. Thus the same thing is done at each stage: dr. 5\( \frac{1}{2} \) comes to acquire the meaning 5 dr. + \( \frac{1}{2} \)-dr., and the form of "one-half" is thenceforth specially reserved for \( \frac{1}{2} \)-dr. So \( \chi / \) (ibid. 32), or 43 obols comes to mean \( \frac{1}{2} \) dr. + 1 ob. + \( \frac{1}{2} \) (ob), the variant of "\( \frac{1}{2} \)" being reserved for the new meaning. The general "one-half" symbol used at the end of this series, and thus having a value (though not a signification) of "one-quarter," might possibly have passed into this special fixed use, had it not been successfully rivalled by the ordinary cursive symbols, one for "\( \frac{1}{4} \)" written like other fractions having a unity-numerator, the other a Chi with a superscript Beta (= 2 chalci = \( \frac{1}{4} \) obol). The forms \( \varepsilon \) and \( \varepsilon \), which Revillout mentions (ibid. p. 227), do not occur, apparently, in any papyrus. He calls it the tétartémomion (τέταρτηςμόνιον, which appears to be the classical name), and specifies it as the \( \frac{1}{4} \)-obol of silver.

Concerning \( d = \frac{1}{4} \), an instance may be added in support of Kenyon's explanation (*Pal. Gr. Pap.*, p. 145, n. 2), viz. \( d = \omega = \Delta = \frac{1}{4} \), from Pap. XV., fr. 6, line 5, where the \( \frac{1}{4} \) surmounted by a long vertical stroke is clearly

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1 In the same work at pp. 172-3, R. incidentally gives a fresh illustration in \( \varepsilon = \frac{1}{4} \).
2 It is worthy of note that Dr. Grenfell gives in his index for the Revues Papyri the form \( \forall \) for this symbol.

4 2
to be distinguished from any form of Delta, most of all from the particular example of \(\alpha\), boldly triangular, which stands immediately next to it. In this same line occurs another instance, equally convincing. For the vertical itself, see p. 141, n. 2 above.

This circular form of the Delta, while it need hardly be treated as a symbol requiring explanation, illustrates very well the general tendency to slovenly writing, or deliberate simplification, exhibited by letters of all kinds, when used in formulas, as parts of symbols, or in any position where the context renders differentiation unnecessary: this same small circle stands, in fractions, commonly for \(\times\), being a simplified form of the cursive loop, for Beta.


The rest of the obol-series can now be easily explained. These belong to the class, other members of which occur, in which numerals, used without expression of the monies, measures, etc. which they enumerate, depending for particular signification originally upon their position in a formula or common context, come gradually to acquire at the same time a peculiar form and a special meaning. The "one-obol" horizontal would thus be at first an angular Alpha, the "two-obols" symbol the same doubled, the "4-obol" a collocation of the \(\frac{1}{4}\)-drachma symbol with the former of these, and the 5-obol similarly with the latter. As regards the omission of the word "obola," it has parallels, e.g. \(\sum \sum = 2000\), which in B.M. Pap. XV., fr. 8, line 1, stands for 2000 drachmas, in line 3 (\(\sim\)) \(\sum \sum = 5000\ drachmas\) 1. So frequently after "talents." Apparently against this explanation, at least of the "4-obol" symbol, is its occurrence in line 9 with the upper curve detached; but this is perhaps an accidental variation of no original significance.

This series is interesting from the fact that we have here the rare occurrence of a stroke or sign, worthy of being discussed as having a possible relation with a system of tachygraphy. We have actually the Alpha of the Greek tachygraphy of the Byzantine period 2 (the Ptolemaic Acropolis tachygraphic fragment beginning the vowels only at Iota), in the short horizontal stroke, representing one obol. Of course, if — means \(\delta \beta \nu \lambda \kappa \alpha\), then the resemblance to the tachygraphic Alpha can only be accidental. If, on the other hand, as I think, it represents the numeral Alpha, then we have perhaps here the origin of the tachygraphic sign itself, though it yet remains to be shown how and through what medium this Ptolemaic character persisted to the later Byzantine, when we first have its tachygraphic meaning attested. 3

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1 In \(\alpha\). 2 In Clxxi. (2) 6, a Roman (102 A.D.) tax-receipt.
2 The appearance of this symbol is very varied. In Ptolemaic papyri, it is often very like the Talent-symbol, with which Forshall, the early Brit. Mus. Editor actually confuses it in text of XV (12) reverse, and on reverse of XV (14) with \(\sum \sum =\alpha\)on (Ko"n, ad loc.).
3 Wessely, Ein system altgriechischer Tachygraphie Taf. 14 of Rainer Pap. Taf. XIII. Nr. 144, a tachygraphic papyrus of the V-VI cent.
4 After this it is common in later Greek tachygraphy.
It could not be through the Roman cursive form of Alpha, and there is nothing to show that there was such a Roman tachygraphic form, Dr. Githbauer's reconstructions for that period pointing to an oblique stroke, the other arm of the angular Ptolemaic Alpha. M. Revillet once again (ibid., p. 228), but this time I think unconsciously, perhaps suggests an explanation, by the remark that in the Attic inscriptions already alluded to, he has found the one stroke for one obol, and the two strokes for two obols, not always horizontal, but sometimes struck at an angle (conchó on simplemēn penché, p. 229). But is this the other arm of the angular Alpha, or a simple stroke marking one? The latter is the ordinary method for 1 to 4 on the older Attic and Peloponnesian inscriptions, and may very well have survived in this 1-obol symbol. A tendency in upright strokes to fall flat is to be observed in many letters and symbols in the papyri. The pros and cons seem equally balanced, and all one can say is that there is nothing against the following "genealogical tree";

\[
\begin{align*}
&/\,\backslash \quad \text{one} \quad \text{and} \quad \text{two} \quad \text{(units) in inscriptions.} \\
&/\,\backslash \quad \text{one obol} \quad \text{and} \quad \text{two obols} \quad \text{in papyri.} \\
& --- \quad \text{the same in both papyri and inscriptions.}
\end{align*}
\]

And this I think the more likely.

Of the remaining Ptolemaic symbols, the commonest is \(\perp\) = éros; and cases.

This symbol, while it is so frequently a mere right angle as to justify the conventional \(\perp\), is quite commonly in Ptol. MSS. of a different shape, beginning with a very prominent hook on the left side (vide Papp. XVIII, I, 18, XXXV, 11, 13, XXIV, 10, 25, XVII, 44, 39, 49, 19, XLI, 23, XXIII, 56), and having, instead of a clear right angle, a distinct hook at the junction of the vertical with the horizontal, so as to give the whole symbol a resemblance to a loosely-written 2 (vide Papp. XVIII, 44, 39, 19, XXIV, 10, 11, 25). In addition to these, certain other divergencies from the rectangular formation may be observed at XVII, 19, XVIII, 20, 18, XXXV, 13, XXIII, 56, 64, 82. The horizontal is originally only the connecting stroke (cp. the persistence with which the ligature is made, at XVIII, 1, 20, 18, XXIV, 11, XLI, 23, XXIII, 56, 82, 105, whenever the numeral follows the symbol as against the comparative neglect of it when it precedes).

But, as Dr. Kenyon observes, the papyri of the third century B.C. have

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1 Die drei Systeme der Griechischen Tachygraphie, Taf. 11.
2 I do not consider that the peculiar variant which Dr. Mabey notes as occurring all through Pet. Pap. XXXIII (vide Part II, 85) is important against it, as he points it out as exceptional, in the third cent. B.C. Of course, for what it is worth, it does favour the Alpha theory.
3 There is an example in a Roman (2nd cent.) pap. B.M. XXXXIX, 15, which, accidentally, illustrates a possible Epillon-stage. With such a form the development might have been

\[
\begin{align*}
&\text{(or ligatured)} \quad \text{or} \\
&\text{or} \\
&\text{or}
\end{align*}
\]

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not this backward hook; they are rigid right angles, rising high above the line, e.g. Pet. Pap. XIII, fr. 2 and 3. If we compare with these earliest forms such occurrences of the common, large initial epigraphic Epsilon as in B.M. CCCXII, recto 20 where it has a decidedly rectangular formation, and again the special uses of it for \( \varepsilon \) as in B.M. Pap. CCCXXXII, \( \varepsilon \), and again with the form \( \equiv \) Pal. Soc ii, pl. 144, and yet again \( \equiv \) (Aristotle Pap.), we have a hint which can hardly be overlooked that we have in this symbol simply the most characteristic fragment of an Epsilon \( \equiv \) used as an abbreviation for the whole word \( \varepsilon \). Fortunately, I have been able, by comparing notes with Mr. G. F. Hill, of the Department of Coins and Medals of the British Museum, to establish the explanation thus suggested, and I am much indebted to him for pointing out the following references. The symbol, it appears, is common on Alexandrian coins with the same meaning, and it was formerly thought to stand for \( \Lambda \) (see Berl. Blätt. iv. 143), but Mr. Head in his Historia Numorum, 1887, discarding this explanation, speaks of it as 'an Egyptian sign' (p. 718). Prof. Wilcken refers the symbol to a demotic origin (Griech. Ostr., p. 819) and Mr. R. S. Poole in the British Museum Catalogue of Coins of Alexandria (p. xi.) thus summarizes the case: 'Symbol \( \equiv \) for the year. The date, except on the earliest dated coins of Augustus, is universally preceded by the symbol \( \equiv \) for 'year', but \( \varepsilon \) occasionally takes its place. The symbol is of uncertain origin. It first appears on coins which I have attributed to Ptolemy IV, Philopator, struck in Cyprus, etc. (Cat. Ptol. pp. 62, 63). Under Ptolemy VIII., Euergetes II., it became almost universal for all dated coins, and except on some coins of Augustus, until the Reform of Diocletian. Probably the symbol is a conventional form of the Egyptian sign for year in the demotic character.' Mr. G. F. Hill, in his monograph on the coins of the Cilician Olba, Cornutis, Talassus (in the Numismatic Chronicle, vol. xix., pp. 181-207, 1889), produces evidence of forms which point us back to my explanation above given. On the coins struck by Ajax, son of Teucer, probably \( \alpha \rho \chi \iota \epsilon \rho \varepsilon \omega \varsigma \) of Olba in the earliest decades of the first century, occurs a rare form of Epsilon, viz. \( \equiv \), which Mr. Hill thinks occurs on no other coins. This is used, with a capital \( \tau \), for dating, the two letters being often made into a kind of monogram thus \( \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv \equiv 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diately suggests the papyrus _L_, viz. _τ_; and once at least, in No. 8, there is uncompromising severance of the two elements, leaving _B_ (= ἡρως θ); which shows how easily the simple angle could be adopted, in the hasty writing of manuscripts, as the symbol of the word. If, therefore, a Cilician Epallon of the form _L_ could lead to a symbol _τ_, would not an Epallon of the form _E_ easily give _L_? This, added to the testimony of occasional papyrus forms such as those above instanced, and to the probability that the ligatured Tau and following letters would make a return to the Epallon somewhat inconvenient, so that it would tend to be left _ττττ_, is sufficient, in my opinion, for the definite conclusion that we have found in _E_ the origin of the symbol.

The rival symbols _τ_ and _L_ or _τ_ for "drachma" are both thoroughly stereotyped symbols appearing equally early, and both very early, in Ptolemaic papyri, while the former is used in Attic inscriptions from the fifth cent. B.C. onwards. But the former is the regular symbol in the early Ptolemaic papyri (Pet. Papp. XVI. (2) 7, 8, XXXIII. (a) 24; and in 2nd cent. B.C., B.M. Papp. XXX. 2, 3; XXIX. 3, 4 et passim; XXV. 2, 3). Comparison of the second with the third century forms will show that the older type is squarer, that is, has the two members more nearly equal, the horizontal bar even the longer in some occurrences. This may be accidental, or it may be a clue to the origin, which is at present unknown. The comparatively rarer use of _L_, or _τ_ seems to suggest that these forms may be simply, the one a fragment of the regular form, and the other a modification of that fragment. Certainly the lower member is still in the papyri of second and third centuries B.C. horizontal, as distinguished from the Roman _τ_. B.M. Papp. XLI. 23, 24; B XXXIII, (3) 47, 59, 74, 77.

<, a symbol which occurs in the following context, τοις _ξ _ _λ _ _τ _ (quoted by Professor Mahaffy, Pet. Pap. Pt. II. p. 37) may be "some title for a regiment," but nothing else is known of it. It is generally explained as = δεκαταρχος or δεκαταρχία, on the analogy of _π_ = ἐκατοταρχία.

∧ placed between two numerals occurs apparently in only one B.M. Pap., viz., XV. (second B.C.) fr. 8 (lines 2, 10). Here its meaning is mysterious (Kenyon 2 ad loc.). In both instances it separates the two elements of _π_ = 310 without adding anything to that meaning, which is required to make

1 It is perhaps worth noting that the Phoenician letter Beth _B_ actually became _τ_, used as the sign of rough breathing, in Alexandrian grammar, and, at an earlier period, in some epigraphic alphabets; while, curiously enough, a fuller form ( _L_ of the drachma-symbols) viz. _E_ is noted (Mahaffy Part II pp. 39-40) on Pet. Pap. VIII. (1) as being found "where we should expect drachmae." _ξ_. Lastly, to add another element of perplexity, Plate XLVI in Part II of the Pet. Papp. has in line 15, the symbols _ξ_ and _τ_, which Mahaffy translates 2325x.

2 Subsequently, Dr. Kenyon writes: " _τ_ must indicate the object for which the money (10 dr. in L 2, 85 in L 8) is paid." This value for the sum of drachmas removes the chief difficulty, and increases the probability that the unknown symbol is simply = _π_ = "item."
up the total. No other symbol for 'drachmae' is used, so that it is just possible that $\tau \hat{\chi} \lambda = \chi \tau \lambda$. As to the exact form of the symbol, in one instance the upper member, in the other the lower, is the larger. It is not quite like the $\varpi = 2$ obols, nor some similar forms of $\alpha = talent$, for in the present symbol the convex side is upward in both members. It thus resembles very closely some forms of $\Lambda = a^2$. Cp. CCCCIIL, v. 11 (B.C. 152 or 141).

There remains only to draw the conclusion (1) that the symbols of Ptolemaic papyri are not in origin arbitrary, but are the results of abbreviation of words or parts of words. Of nearly 40 symbols examined, we have found six only which will not yield to explanation by reference to alphabetic or epigraphic forms; in quite twenty cases the actual process of development is demonstrable by documentary proofs; in five more, the inferential argument is very strong; in four or five more hardly less so; while in more than one case of recalcitrance, the symbol itself does not appear to palaeographical authorities to have an assignable meaning. It may then be fairly asserted that the position is maintained.

(2) The statement that there is no trace in this period of borrowings from tachygraphy is hardly more than a corollary of the foregoing conclusion. I am convinced that there is nothing here which can be called tachygraphic, except in so far as all symbols, ligatured characters, and even sometimes cursive writing, must partake of that quality.

The Roman Period.—Non-Literary.

The results, and the methods, as regards the papyri of this period are very similar. This is surprising, as there was certainly for this period the presumption that formal tachygraphy would be found to play at least a small part in the process of abbreviation. On the one hand, simple abbreviation was practised much more freely in the cursive writing of this period than is in any department the case with modern English, and on the other hand, there was in existence (so at least there seemed good reason for believing: vide my article, 'On Old Gk. Tachygraphy,’ Journal of Hellenic Studies, Vol. XXI, 1901, Part II), a system of tachygraphy by means of partly geometrical symbols, which should have supplied a certain number of its constituents to the general handwriting. But the more closely one investigates the *rationem formandi* of the symbols which occur in Ptolemaic and Roman MSS., the more is one convinced that these symbols generally were unconscious developments from cursive abbreviated words. Indeed the proportion of those which yield to analysis is so large as to make it improbable that the few which prove intractable can be arbitrary borrowings from other formations or systems.

*E.g., in the case of $\alpha$, vide Keynes B.M. Pap. Cat., p. 56.*
There may be exceptions among the Greek symbols of the magical papyri, but in that case the borrowings are not from Greek tachygraphy (there is one line of pure tachygraphy which will be discussed), and it is impossible to predicate securely anything concerning them, as it is also concerning the origin, rational or other, of the 'apparent gibberish' (Kenyon, Breit. Mus. Cat. Pap. 1893: Introd. to Mag. Papp.), which composing so large a part of the magical formulas. The many formulas moreover, containing symbols which are not Greek though found in the Gk. MSS., are beyond the scope of this monograph.

As regards the details of the analysis, we find in the first place a few traces of the alphabet of the early Ptolemaic period; more frequently new and non-Ptolemaic forms. Again, we have, as in Ptolemaic MSS., many symbols which have become fixed in their new irrational forms, petrified by the action of time and use; many on the other hand which can scarcely be counted as symbols at all, so conscious is the introduction of each constituent, sometimes partly mutilated or transformed: these however are the ancestors of future symbols; and again there are symbol-phrases, groups of characters, in themselves singly to be read as ordinary forms, but in the groupings barely distinguishable from symbols, such as \( \kappa \alpha \acute{\iota} \varepsilon \) = \( \kappa \alpha \iota \pi \alpha \delta \iota \omicron \nu \).

A distinctive feature of Roman non-literary MSS. is the increase in the number of monograms. They are found, naturally, most frequently in the magical papyri, but they are by no means confined thereto. They are not generally irrational, yet the regular crossing or interlacing of certain letters gives them an entirely new value, and the combination has more than one claim to be discussed as a symbol (vide infra, p. 167 sqq.)

What survivals of Ptolemaic symbols do we find in this period? They are: the angular Alpha (third cent. B.C.) in \( \tau \rho \chi (\rho o) \) (Pap. CXXXI 83, 91, 152, 224, and three others in same MS.); \( \pi \rho \delta (ib. 62) \); \( \chi \rho \mu \mu (\tau a) \) etc., (ib. 6, 173, 355, et passim); \( \varepsilon \iota = \varepsilon \iota \alpha (ib. 566, 567, 579, et passim) \); and other numerous instances of the symbol \( \iota \), representing a group of letters beginning with Alpha: \( \lambda \chi (\rho o) \), \( \kappa o v (\tau o) \), \( \kappa o \beta (\lambda e v o t e s) \), etc. (ib. passim); the same in composition discussed in another place (infra); the same Alpha reduced to a simple horizontal bar, notably in the \( \delta \alpha \iota \) symbol; \( \iota \) = 'drachmae' (Papp. CXIX, CXXXI passim); the symbol for 'talents' \( \Lambda \) = \( \acute{\iota} \iota \rho \) and cases, (CXXXI, 23) cp. ostraka of this period: B.M. No. 14,113 = Pal. Soc. 11, 1.

1 The expedient for instance is largely used in modern reporting, e.g. in phonography, where e.g. a crossed by \( \iota \) has the meaning 'notwithstanding'; top crossed by \( \alpha \) becomes 'temperance society.'

2 The Ptolemaic \( \iota \) = 'drachmae' does not survive; the Ptole. \( \iota \) or \( \Lambda \) now appears in the last shape, with the horizontal lowered and bent generally.
2, all first—second cent.); the whole series for obols, and for chalci; I or Π = total, or for concise re-statement; the whole of the numerals, including some fractions; together with some signs or marks of abbreviation, etc., viz., a superscript horizontal, a vertical undulating line, a straight line inclining to the right.¹

What new symbols first appear on papyri in this period? In the first place there is the whole group of distinctly magical symbols; then come certain symbols of weight and measure, numeration and coinage, namely 1

or \( \gamma = \delta \rho \varepsilon \varphi \rho \sigma \alpha(\iota) \) and cases; \( \gamma \) or \( S = \delta \rho \chi \mu \alpha \); \( \chi \), \( \chi \), and \( \gamma \), with debateable meanings; some fractions; \( \gamma = 1 \), etc. = (τυρον) \( \alpha \rho \tau \alpha \beta \alpha \);

\( \alpha \rho \tau \alpha \beta \alpha \); a superscript horizontal = \( \nu \) over final letters; \( \zeta = \delta \iota \iota \);²

\( \chi \), denarius; a number of monograms; and a sign \( \gamma \) of varied application, to be discussed with other debateable signs; together with certain marks made by the scribe, chiefly marginal, some of which are paragraph-marks, or marks of reference, while some must remain unexplained.

Perhaps the most striking feature of the sematology of the Roman period is the prominence of that sign or mark, which appears generally as an undulating line written vertically, its bows turned the same way as that of an \( S \), but varying, under the influence of haste and carelessness, from the vertical almost to the horizontal position, and from the rounded \( S \)-shape to the almost straight line. Its significations are very varied; it is used as the simple mark of general abbreviation commonly;³ joined to a horizontal it means 'one-half,' e.g. B.M. Pap. CXXXI. 76, 41, 55; Fay. Pap. LIV, 13; and in 22, 23, of the same, it means cases of \( \alpha i \tau o \); in any other places it is the loose equivalent of the old \( \iota = d r a c h m a \); even the strongly characteristic Ptolemaic right-angled 'year' symbol gives place to it, e.g. in B.M. Pap. CLXXXII, b, 1, CCCLXXX.; Fay. Pap. XXVI. 7, etc. The document on the recto of the Aristotle papyrus, from which illustrations have just been taken, furnishes many examples of the confusion of form, which has fallen upon the large group of symbols.

¹ The sweeping curve of the Roman and Byzantine periods, a semicircle with its convex side to the right, is not also Ptolemaic.

² Wessely (Röm. Sprach. p. 8) mentions etymology, style, figures and fractions, in cursive texts of Berlin and St. Petersburg; but he gives no details.

³ And has also been suggested as a meaning (vide Brid., Mus. Pap. Cat. Vol. II. Index of Symb.).

⁴ An interesting and rather extreme example of this use is \( \Delta \gamma = 80 \), and \( \gamma \gamma = 70 \), in CCXXV 18; cp. variants CCCXXXIX 23 (rising high above the line). Cp. also \( \zeta = b a \xi \gamma \). Papp. CCLXXXIX (1) 12, 19; CCXC, 20, 22.

⁵ Only incidentally does it mean \( \mu \nu \nu \beta \sigma \alpha \) (so Edd. of Fay. Pap. pp. 151 and 347). Vide supra, pp. 146 sqq.
of which the sign is an element. Compare line 55 with 63; 76 with 65; 38 with 28; 28 with 41; and again the common sign for drachmae in line 34 with the figure of S laid flat (for the same) in line 55. Here, as in Roman uses of the sign on papyrus generally, there is neither consistent distinction when the meaning varies, nor clear uniformity when the meaning is constant. Again and again the Editors have had a difficult task to decide whether the undulation, the zig-zag, the crescent, or the double-bow shape has the best right to represent a certain written form.

What we have in the MSS. is a flourish or curved line, written very negligently or fancifully by the scribe, the meaning being securely conveyed by the formula, a formula being the almost invariable context. An illustration of this quite natural and inevitable confusion is to be seen in the occurrence of two symbols, which are conventionally printed \( \delta \rho \alpha \beta \eta \) (rare), and \( \gamma \) = \( \delta \rho \alpha \beta \eta \) (rare). (Kenyon, Pol. of Gr. Pap. 1890, Appendix IV.) These are identical in appearance with the common drachma-symbols: their use for "artaba" is probably a transference, accidental or very occasional (cp. Pap. XXIII (3), line 77, where exactly the same "alp"—Kenyon—is made in an earlier MS.). It would obviously not be convenient to use the same printer's type for all the symbols. \( \gamma \) and \( \gamma \) ("artaba"), \( \gamma \), \( \beta \), \( \gamma \) ("drachmai"), \( \gamma \) = "half," \( \gamma \) = "tenth," and marking abbreviation, but these all tend to run so much into one another that nothing but the context avail to differentiate them. And the prevailing degenerate form for them all is in appearance indistinguishable from the \( \gamma \)-stroke.

Often similar in appearance to the last-mentioned is the simple oblique bar = \( \gamma (\varepsilon \tau \alpha) \), which marks the introduction of a group of symbols. It is normally straight, and inclined to the right, but has variants inclined at all degrees, to the quite horizontal, and bent and twisted variously. The occurrences are too common to be worth quoting, but a characteristic result of the free use of signs may be seen in CCCXXXIII A.D. 166 where

stands for \( \gamma \) (Kenyon, Text, Gr. Pap. in B.M., vol. II., p. 199). In some cases part of the formula becomes welded to this abbreviation-sign, forming a virtual symbol, a second abbreviation-mark, viz. the horizontal superscript (originally the mark of inclusion) is sometimes found.

Pap. CXXXI. 532, 23, 562, 22, CXXI. 439, 20, CXIX. 8, show variants of such a combination for a\( \epsilon \rho \circ \) (case) &c., the particular case, like the general meaning, being determined by the presence and the case of the article. The value of the sign indeed is often merely addendum quid. Some confirmation of this opinion as regards the a\( \epsilon \rho \circ \)-symbol may be seen in the more precise contraction of later MSS., in which the sign was felt to be

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1 That is, the printer's types of these shapes.
2 Cp. the same stroke again in an unusual abbreviated form in the sign \( \varepsilon \tau \alpha \rho \gamma \). Cp. CCCXXV (a) and (b) where (a) line 5 has the sign for "year" absolutely indistinguishable from the sign of abbreviation in (b) line 1.
too indefinite, and the latter of the two abbreviation-strokes was replaced by a syllable giving the full case ending-τοῦ, -τῷ, &c., resulting in τοῦτο &c., the bar of which was mistakenly supposed to signify τῶ. Sometimes e.g. CXXXI. r. 22 the same component elements are written detached from one another. In the Aristotle papyrus (e.g. col. IX. 8) a single stroke is found, as also in the Demosthenes scholia of it. Dr. Wessely has found it, in the fuller form (with horizontal), common in the Hermopolis Magna papyri of Vienna.

An even more convincing pair of the same class is that which consists of the same abbreviation-sign joined to the first two or three letters of χάλκου and ἀργυρίου with the meanings 'copper drachmai' and 'silver drachmai' (cp. on τυρών ἄρτοιζη pp. 84, 85 inf.) respectively. The vertical sign in the latter is certainly not different from that which helps to form αὐτός and cases, in many of its occurrences (e.g. CXXXI. 23); and the mode of joining to the superscript vertical is the same. Cp. CXXXI. 6, 74, 173, 177, 178, 179, et passim. The ligature-formation is a characteristic feature of this symbol; the sign always or commonly having a distinct shape when written alone (cp. δ. col. 8 where the extreme right-hand col. of numerals exhibits both). In the symbol for copper 'drachmai' (e.g. ὤ. 28, 191, 196, 200, 213, et passim) the ligature-formation exists, but not quite the same; the Chi is written so that the straighter of the two cross-bars, struck from below upwards to the left, is carried on into a cursive looped, or else into an archaic angular Alpha, this into the horizontal sign of abbreviation, and this again into the descending sign in question. The formation of this pair of symbols is thus quite rational and consistent, and it may be added, in defence of the assumption that the meaning came eventually to depend upon the context, that they are quite free from ambiguity—perhaps owing to the doubling of the sign of abbreviation (cp. for the single horizontal over a similar group of letters ὤ. 187, 192 195, ὤ. 26; common in this MS.).

It may be convenient to epitomize these results:

<table>
<thead>
<tr>
<th>λ'</th>
<th>τῶ + addendum quid</th>
<th>τῷ αὐτῷ</th>
</tr>
</thead>
<tbody>
<tr>
<td>τὸ</td>
<td>= τοῖς αὐτῶι; τοῦ</td>
<td>αὐτῶι;</td>
</tr>
<tr>
<td>αργυρίου</td>
<td>= νομισματα</td>
<td>drachmai</td>
</tr>
<tr>
<td>χάλκου</td>
<td>= νομ. οἱ drachmai</td>
<td></td>
</tr>
<tr>
<td>διακ</td>
<td>IMF</td>
<td>IMF</td>
</tr>
</tbody>
</table>

1 The same demand for definiteness in later days is seen in mediæval commentaries of Notae Thracianæ. In these we get careful restorations of case-signs and general word-endings where the earlier notarii had been satisfied to trust to memory and the context. The increased exactness is in all these cases in inverse ratio to freshness and spontaneity, and easy familiarity with the language to be written.

2 See his interesting study of the symbol in Archiv für Philologie, Berlin, January, 1902.

3 CIX, 4.
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The rest of the series is:

- + addendum quid
- X
- addendum quid
- used alone before numerals
- used alone before smaller fractions
- used alone with a numeral giving a regnal year.

- 2 obols + \( \frac{1}{2} \) (ob)
- 3 χοίνικες
- ἄρα drachmae
- drachmae
- one-half (and so \( \frac{1}{2} \)-obol
- ἤμισος
- ετος

As regards the latter members of the series, there are some remarks to be made. In CXIX. 10 and perhaps XCIX. (1) 21 there is the sign with the signification '\( \frac{1}{2} \)', but it is reversed (\( \ddagger \)), as compared with e.g. CIX. B. 74, 75, 84. Examination shows that the ligature is responsible for such variations, just as the ligature is responsible for the common position. It is, in fact, convenience in forming the ligature which everywhere decides, within certain limits, the form of a sign, and sometimes a whole symbol. Cp. Fay. Papp. XLI. 8; LIII. 6; LVI. 7; with LIV. 13, where different variants of this sign are used for the half-obol.

Side by side with this sign for 'one-half' is often the simple crescent curve resting in the line on one end of its convex side as conventionally printed, and this no doubt is the direct descendant of the acute-angled Ptolemaic 'one-half' symbol. But certainly it is also of exactly the same form as the curve of the series under discussion. Cp. CIX. B. fr. 2, line 74 (second cent.). The formula however saves it from ambiguity, its immediate context being (1) a whole number which it follows (whereas the similar drachmae-sign regularly precedes the number), or (2) part of a compound fraction at the head of which it stands. The latter case would sometimes offer room for ambiguity, viz. when parts of the drachma had to be expressed, were it not that the latter are never represented by fractions, but by 'stereotyped' symbols for obols and choleis. The fact that fractions higher in value than one-half (except the exact \( \frac{1}{2} \) and the exact \( \frac{3}{2} \)) can only be expressed in Greek with the help of the one-half symbol standing first, has given great security to the use of a very slight mark for the latter; one might almost say

1 Xάρινες vide p. 158 infras.
2 CXIX. 5, cp. \( \chi \gamma \lambda \xi \) = λαξιάδια.
3 CCLXXXVIII, 4 et seq.; CCLXXXXIX, 4, 16, et seq.
4 Grenfell and Hunt print it (Fay. Papp. XI, 15, p. 347, etc.) as a plain right angle.
5 Which in Ptolemaic papyri has a well-marked rounded variant.
6 These are not now in the Roman papyri and have been explained under Ptolemaic (p. 146 sqq. supra).
7 In a few places there is used a method of expressing numerator and denominator. See par. on fractions inf. p. 160 sqq.
that for this, as for almost all the 'addendum quid' signs just discussed, any scratch will do. Certainly it is impossible to read the non-literary papyri by tables of alphabets and of symbols however elaborate. Only perfect familiarity with the formulas, recurrent phrases, and the probable intent of the scribe in the wording of the rest can unlock the secret of the scribbled hands, as careless or as hasty then as now. But in the matter of symbols there is the additional tendency to abbreviation which has been alluded to above (p. 136) which leads away from a multiplication of distinct signs or symbols for particular words. However, that might be, the fact remains that we have in this large group the repeated application of the same curve or flourish, whose commonest and simplest use is to mark abbreviation, in about a dozen different significations determined almost wholly by the formula.

To conclude this group with a consideration of \( \frac{\alpha}{\beta} \). The establishment of the meaning I have given it is more difficult, as the Editor for the Brit. Mus. Trustees (Kenyon, p. 152) expresses a contrary opinion. Against his earlier reading as 'copper-drachmae' which he does not now maintain may be set certain palaeographical facts. In the first place, CIX. B fr. 4, col. 2, line 124, has an erasure of this symbol, with the symbol for \( \pi \varepsilon\rho\alpha \), which occurs in the Paris papyrus and in B.M. Pap. CXIII. 9 e, written over it, in its place on the same spot. It is a clear case of deliberate substitution: they are not then variants. But the fact that 'metra' takes the place of the symbol in question, not once but several times in these same columns, is an argument against the signification 'drachmae,' and in favour of 'choenices.' Again, the meaning 'copper-drachmae' already belongs to another symbol, shown in the above illustration. Concerning the signification in that case there is no difference of opinion. That meaning is consequently impossible for the symbol in question. Dr. Kenyon, however, does not think that anything satisfactory can be made of the meaning 'choenices.' He quotes a more probable explanation: 'Wilcken has suggested that the numbers attached to this symbol are reference numbers to a tax-register, showing the places from which the names which follow are taken. The symbols \( \frac{\alpha}{\beta} \) and \( \gamma \) would then indicate sections of the register, the former standing for \( \chi\pi\alpha\kappa\sigma\) the name of a district in Thebes (see Pap. CXIX.) and the latter for some other district (he suggests '\( \alpha\gamma\eta\nu\alpha\)\). I think this is an ingenious suggestion.'

Touching the employment of the simple undulating flourish alone and detached, to signify 'drachmae,' we observe that it is, first, somewhat rarer, secondly, it stands side by side with the Ptolemaic form whose conventional

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1 Privately communicated, May 1901.
2 That is to say, in this particular context. For a Ch=choenices certainly occurs, cp. Oxyrh. Pap. CCLXXXVII, 7, 9.
3 A slip, I think, for \( \frac{\alpha}{\beta} \).
4 Its variants boldly formed however occur early. Cp. CCLI, late 1st. cent.
5 The common Ptolemaic \( \chi \) is not Roman.
representatives are < and 3 and is probably the result of confusion with the same form made loosely.

The same sign, used for ("year"), is well attested for this period. Cp. Brit. Mus. Pap. CLXXXII, b. 1, where it occurs twice, once to mark abbreviation, once for the year. The Editor (Cat., p. 62, n.) notes that the two forms are the same, and prints both S-shaped. Cp. also CCCXXIII, 7; CXCVII, 3; Oxyrh. Papp. CCCCCXXVII, iv. 6; XXXIV, ii. 15. The ordinary Roman drachma-symbol \( \frac{\alpha}{\kappa} \) presents no ambiguity. It is clearly the same as the Ptolemaic symbol of the same shape.

The safest place in which to look for normal forms, free from the confusion of neighbouring signs and cursive, is in a document like CLXXXI. A.D. 64, where clearly divided columns give no room for ambiguity. Studying this, and comparing it for exactly the same arrangement of the drachmae-symbols, with CCXCI. late second cent., CCLIV. verso, second cent., CLVI. early third, which together present nearly 150 examples, we may be convinced that the normal is the simple \( \frac{\alpha}{\kappa} \), without other addition. Curious divergencies and variations are frequent, but the majority of quite normal examples is overwhelming. There is, however, an apparent variant of great importance. It consists of the normal symbol \( \frac{\alpha}{\kappa} \) followed by a long straight bar, inclining generally a little to the right. Its occurrences with the symbol are perhaps as numerous as those of the symbol without it, but the occasions of its introduction are interesting. It may be studied in CCXCVI. 7 (A.D. 160); CCXXXIX. (A.D. 164); 8, 9, CCCLII. (A.D. 220), 5, 6, 7, 8, where the symbol is used first with and then without the upright in close succession, each concerned with the statement of the same monetary values. This method of \textit{duplicate statement} is not confined to money sums, but is found with artabae, metretae (CLI.), etc. The usual arrangement is as follows. First the sum is stated in words at length. A contracted form of the measure or coin—artabe, drachma, etc.—and the fractional symbols are permitted here, but the principal numbers are written in full. Then an upright bar is drawn to introduce the \textit{duplicate statement} all in symbols. For example, CCCXL. 3, and CCXXII. 6, 7, respectively \( \frac{\alpha}{\kappa} \), respectively \( \frac{\alpha}{\kappa} \), and

\[ \frac{\alpha}{\kappa} \text{\ K\ C\ L\ X\ X\ X} \]  
(Cp. CLXX.; CCCXLVII., col. 2, lines 9, 11, 12, 14, 15; CCCXIX., 9).

It is clear that the bar belongs not to the symbol next to it, but to the whole group. It is a variant use of the common ‘total’ symbol. This ‘total’ symbol is identical in shape, and as an additional suggestion that they are the same in origin, there are occasional variants of each to be found which are also identical. In CCCXXX. (A.D. 164), 6, 7, there is the form \( \frac{\alpha}{\kappa} \).
in a variant of $\langle$... In third century MSS, this upright bar exhibits the same tendency to fall down into the horizontal, as observed with similar signs. In CCCXLIX, the horizontal is regular; and here it sometimes stands for drachmae to the exclusion of the symbol. It may fairly be concluded that the bar in the drachmae-formula is used with the same intent and feeling as the acknowledged 'total'-symbol, viz. to introduce a concise restatement. Cp. CCCCLXXVII, 6; CCCXXXIII, 28; CCCXLII, 9; CCCXLIII, 8, all second and third century, where the use is clear.

The sign of a shape $\{\}$ already found in Ptolemaic papyri and also in Roman papyri with various meanings, is used for 'deduct' or 'less.' Fay. Pap. CI, r. (iii.), 1 1/6 v. (i.) 10 and so often. In B.M. Pap. CCLXVII, 1, 300 (first or second century) it is a large right angle, like the $\theta\rho\varphi\alpha\nu\sigma$-symbol. It is at present unexplained.

A star-shaped symbol for 'denarius' occurs in the Fay. Pap. e.g. CV, i., 11, etc. and Oxyrh. Pap. LXXXV, ii, 17; iv, 17. This is not native to the papyri, being the Roman sign for the Roman coin, borrowed directly from the Roman notation (Vale Marquardt, Privatleben der Römer, p. 101). It is $X=10$ crossed by a horizontal.

We come now to the fraction-symbols. Exclusive of the ordinary numerals, the symbols for fractions do not form a large class. But apart from the symbols proper, there are found, for the expression of fractions, some interesting applications of the common methods of numeration. For one, see B.M. Pap. CCLXV, where there occur fractions with numerators (other than unity) and denominators both expressed, the denominator being written above the other. Dr. Kenyon (Brit. Mus. Pap. Cat., Vol. II, p. 259) says that this method is not otherwise known in papyri, though it appears to be regularly used by Diophantus.²

The examination of the few symbols which are used for the most common fractions, alone belongs properly to this monograph, keeping within the limits first above set. Is there inter-relation between the common symbols for one-quarter, one-half, three-quarters? The first and second have been discussed in the Ptolemaic section, pp. 146 sqq. as well as incidentally among Roman symbols. Adopting Kenyon's opinion (Pal. Gr. Pap., 1889, p. 156, n. 1) for the last, we have the explanation of the series, which may be briefly stated thus: the 'one-quarter' symbol is a degenerate Delta distinguished by the fraction-making (p. 141 above, note) vertical stroke; the 'one-half' symbol is the Ptolemaic angular 'one-half' rounded out a little in Roman Greek; and the 'three-quarters' is the final result of writing the two in close succession (CXXIX, 2, second century, CClX. (i.), 56, 57, CIIX., A, 18, 25), that is $\langle\epsilon\rangle = \epsilon = \gamma = \gamma$ The more cursive variations, e.g. CCLXVII, col. 18, line 298, are still not inconsistent with such an origin.

The symbol for one-eighth $\downarrow$ is doubtless an Eta of that peculiar form.

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1. CCCCLXXVIII, 6 offers an exception.
SEMANTOGRAM OF THE GREEK PAPYRI.

which is common in MSS. 50-150 A.D., but it is clearly used as a symbol, as may be seen by a comparison with the forms of the letter around it, which never attract it out of its distinctive shape as a numeral. Cp. CXIX., 32 (where $\zeta$ occurs).

The occurrence of $\beta=\frac{3}{5}$ in CCX (A.D. 85); 7, CCLVI r. (early first century), 16, CLXXV, 7, is a return to the original formation of the symbol, after the corruption of $\beta$ into o, in many examples. Cp. $\chi=\chi^\delta=2$ chalcs and corruption of Delta into the same form in $\omega^\delta=4$ chalcs. Revillout, Lettres sur les Monumens Egyptiens, p. 172, prints this symbol $\Delta$, but gives the same explanation of it. He adds $\delta$, to which he gives the value $\frac{1}{3}$ of $\frac{3}{5}$ or $\frac{3}{10}$. Perhaps this is a mistake for $\frac{1}{2}$ of $2$.

The ordinary numerals Gamma, Epsilon, etc., with an over-written vertical, are used for $\frac{1}{3}$, $\frac{1}{2}$, etc. There are, however, several Roman varieties of the over-written mark. Cp. Fay. Pap. LXXXII, 16. Note the symbol for $\frac{1}{3}$, Fay. Pap. LXXXVI, 2, resulting from the close collocation and subsequent combination of the $\frac{1}{3}$ symbol and the Gamma $=\frac{1}{4}$.

The symbols of the formula ‘one per cent.’ and ‘two per cent.’ are questionable. The appearance of the sign in CCCLVII, 2, might suggest, for explanation, a reference to the vertical over-written stroke found in Ptolemaic fractions (cp. p. 146 n. above) since these ‘percentages’ are the fractions $\frac{1}{5}$ of $\frac{1}{10}$.

But the form of the sign in the same formula in CCCLV d. (second century) 2, 3, raises a doubt, since there there is the more familiar undulating vertical crossed by a horizontal bar (Kenyon, loc. cit. note).

As in Ptolemaic so we find in Roman papyri the character Sampi as a numeral = 900 (CXCHL, 20), CXCIV, 93 etc.) and Koppa = 90 (CXCHL, 54, CXCV, 10). Note the form, q-shaped, in Oxy. Pap. XI, III, recto ii. 23.

The symbol $\lambda\kappa$ = (at least in some places) viva, has been treated under the head of its Ptolemaic occurrences (p. 142 supra) and again (infra, pp. 166 sq.) in the consideration of the horizontal bar = Nu.

Rho surmounted by a small Chi occurs (= $\epsilon k\alpha\nu\tau o\nu$) in Roman papyri. Vide: Fay. Pap. XXXVIII, 1; CXXXII, 4. Once a symbol $\kappa\gamma$ replaces it in the same formula B.M. Pap. CCCXLIII, 1, op. Cat. II, p. 172. Have we here a reminiscence of the curious symbol of the Pto. Papyri (espro, p. 187) ?

While, as already stated, the Ptolemaic right-angle for ‘year’ survives in Roman papyri, with no noteworthy change of form; a chapter might be written

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on the very compendious formulæ, equivalent to compound symbols, which are formed in such papyri as B.M. CCLX., by the juxtaposition of numerals and this symbol, e.g., ἐπὶ τῷ ἢ ὀλ. = ἐπικριθείς τῷ θ ἢ τεται καὶ ἐν τιπθαραγικέως τῷ ἢ τεται, (ep. col. 5, lines 63–70). But such a section could do no more than repeat the conclusions of the Editor, and the difficulty lies in the interpretation of the formula rather than in the decipherment of the symbols. In the MS. just quoted, in particular, these symbols, numeral and 'year'-symbol, alike, are, though somewhat rubbed, clear enough and of the normal forms, so that, without passing beyond the limits laid down for this monograph, one would hardly be justified in devoting space to their discussion.

The 2-shaped cursive form which in Ptol. MSS. is α = 1000 (sc. dactylae) recurs in CIX B fr. 2 line 45, CXIX. 6, 9, 13, 17, 20, 40, 42, 48, in a scribbled ἃπτα. Wileken thinks that it is not a symbol, and it may be pointed out that there is in the Roman symbol a closer resemblance to that word cursorily written than in the Ptol.; the Ommicron is in some cases quite distinguishable, though, as it is not always found, the circle may be nothing more than an occasional flourish (ep. CXIX. 56, where the ordinary cursive word is found in the same context).

Side by side with it, 2 = 1000, B = 2000, &c. survive in Roman papyri, though in CXCVI. (second century) 27, 35, 36, 40, they are found with an addition, a hooked horizontal interlaced z-wise with the hook which was once the circumflex.

The Aroura-group. The normal type of this is no doubt better seen in the form (CXII in almost every line, CXCVI, 4, 5, 7, 9, 10, CXIII, 1, 33, 35, 37 et passim—all first century) than in (CXIX. 1, 2, 3, et passim, CXXI. r. 88, 95, 100, et passim, CCLXVII. 3, 16, 22, CIX. A. fr. 2 lines 18, 23, 25, 51, 52, et passim, Fay. Pap. XXIII. (a) 7, 9. For although the former can hardly be a direct descendant of the Ptolemaic symbol 5, so different is the general appearance, yet the same elements are perhaps to be seen, viz. Alpha-Rho, transformed however by the adoption of an Alpha of later date, which now appears mutilated, as the initial hook in both these Roman symbols. The absence from one of a final hook to the Rho-stroke would then favour its claim to be the more normal form. The horizontal bar, marking abbreviation, appears in each, but in one a ligature binds it to the tail of the Rho, so disguising both elements. This tendency to write the Rho-tail and the ligature all as one stroke is illustrated in CXIX. 1, 2, 3, where in 3 especially the whole appearance is almost that of a copy-book capital E, scil. E joined to a following horizontal; and the progress of the mutilation is confirmed from the example in line 56 of the same papyrus, which has already (second century) lost the initial hook. A final Byzantine form which appears to be quite regular in CXIII. 8 c. (seventh century) is an
uncompromising. Straight vertical with a bold loop joining it at half-way, where the horizontal starts; cf. below p. 172 sq. Further, the simpler, the presumably normal sign which is found in MSS. which are earlier, without exception I think, than those which show the more degenerate, that is, the rounded and ligatured form; certainly the earliest (Pap. CXXCV) of these first century papyri has the simpler form of the symbol, the ligature appearing first in CXXXI (78-79 A.D.).

The symbols which are found in the familiar collocation πυροῦ ἄρταβας demand a detailed investigation, as several considerations render it complicated. In the first place the two distinct symbols which originally formed the constituent parts are used inconsistently and confusedly; the whole composite symbol is found sometimes for the πυροῦ, sometimes for the ἄρταβας; sometimes the original formation seems lost to sight and new strokes are introduced; and to add to these difficulties of application, there is the confusion of the form of this symbol, with the Ptolemaic 'plets' in the MSS. and some overlapping of the variants in the printed lists. It will hardly be profitable to attempt an analysis of all the minor discrepancies to which these difficulties have given rise. It is better to go back to the MS. forms and endeavour to trace their development. To begin with the π, which has a history of its own, apart from the part it plays in the composite symbol. If π = ἄρταβας (Fay. Pap. LXXXV. 39) is analogous to π = οὐλη (CCLIX. 77, 89, 90, 99 &c.) and π = ὅμοιος (CCLIV. v. 17, 27, 43, 44, 45, et passim), explanation is simple: it is a mutilated Alpha surmounted by a lengthened abbreviation-mark. This explanation receives confirmation from the fact that e.g. in CCCXLVI a and b) this abbreviation is found just where an abbreviation as distinct from a symbol would naturally occur, viz. in the cursive statement of an amount which commonly precedes the duplicate statement in symbols. Compare these parallels and note the variants: B.M.

Papp. CCCXLV. πυροῦ ἄρταβας προκοῦσα. In another place, CCCCLXIX. b. 5, we have ὅμοιος ἄρταβας προκοῦσα π ἀ γ where the distinct π has passed over to the symbol side. As this papyrus is late second century (Kenyon, Cat. II. p. 86), the use here of the abbreviation may be regarded as typical of what I think is the transition stage; in which we see the simple cursive π as of earlier Roman MSS. used among the symbols, but without having lost its distinctive form. A little later, at the beginning of the third century, it has amalgamated with part of the mark which in various shapes introduces it, and thus we have a symbol of the type of CCCV, where the simple π is still very consciously written, though the vertical already crosses

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1 In CXXCVII vol. 4, line 82 it apparently used for ἄρταβας.
2 ἀρταβας, a kind of trench or pulse.
3 The πυροῦ ordinarily not being represented among the symbols.
4 The is dated 150 A.D. so that the use here an anticipation of what became general later.

M 2
it, at its left-hand tip. At the next stage it is the horizontal bar in the familiar plain cross ('plus'-shaped) but still reminiscent of the preceding, the thick dot, like an Omikron, being still appended in some cases to the right-hand tip of the horizontal. In other MSS. the dot has disappeared, the 'plus'-cross is uncompromising and wholly detached, while a new stroke, again various in shape, is used to introduce the symbols. The successive stages are illustrated in the following (Brit. Mus. Papp.).

| CCCXLVI. (a) | 0 | πυροφ άρταβας πρακτον | η |  |
| ibid. | 8 |  |
| CCCCLXIX. (b) | 5 | ηρισ άρταβας τρις | γ | γ |
| CCCXV. | 18 | πυροφ άρταβας πρακτον | η | η |
| ibid. | 18 |  |
| CLXXX. | 3 | εικοσι πεντα | κς | κς |
| CCCLI. | 11 | τρις | γ | γ |

The other elements in the compound it is not so simple a matter to explain. Δ is the conventional (printer's) form of a symbol which Wileken (Jahrb. d. Verr. v. Altertumsfreunden in Rheinland, LXXXVI, p. 237) explains as properly equivalent to πυροφ, but used loosely for πυροφ άρταβας etc. There is in favour of this explanation, the analogy of 'copper-drachmae' and 'silver-drachmae' which similarly give a curtained form of the word which represents the material, and use it loosely for the expression of the principal current measure or weight of it. (Cf. pp. 156 sqq. supra). But an objection at once occurs: What of the resemblance to the 'ometrites'-symbol? The reply is, that the similarity is occasional and accidental. The full form of the metretes-symbol, as shown above, is a rough monogram form of Mu-Epsilon, so that an upper arm, representing the top of the Epsilon, and making the third horizontal on the right, is essential to it, though it is occasionally neglected. The Roman-symbol has never this upper horizontal and may be considered on its own merits. The early Roman examples are, I think, to be referred to a normal type illustrated in COLLVI d. (A.D. 11) which consists of the horizontal arthabo-symbol already explained, drawn through the vertical of a symbol ΐ, or Τ, signifying properly πυροφ. The last-named is formed of a very curiously written Pi-Omikron, or Pi-Upsilon, having an apparent Omikron or Upsilon reduced to the merest thickening or curl at the end of the descending stroke of the Pi. The second century.

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1 Cp. XV (8) 9 which is indexed in the R.M. Cat. (Knuyin, 1888) as above, with the 'metretes'-symbol in the same index.
2 The latter would be more in accordance with the regular principle of abbreviation, but the apparent occurrence of Omikron makes the former worthy of consideration.
3 A curious Ptolemaic example is worth note in this connexion, viz. in CUXVII, 4. Here the Πι-Omikron composite is already crossed by a horizontal midway. This cannot represent the 'arabas,' for which a separate symbol is written. The date is third cent. B.C. (1) or latest second cent. It must be noted that Ε = πυροφ, and = αρταβας is found also in the Ptolemaic period, on the ostraka, e.g. B. M. No. 25888.
variants are sometimes unmistakeably of this same type: those e.g. in CLIX. B. fr. 1 (15, 30, 32, 59, passim) having as their variation only the omission of any mark to represent the Omikron, or Upsilon, and occasionally a carrying-round of the lower hook into a loop joining the horizontal (e.g. 69). In CCCXV (150 A.D.) the variation has affected the other member, so that the whole appears as a simple vertical, struck through the left-hand tip of the artabe-abbreviation, this vertical having, attached to its tip, a stroke which is in some cases like a simple ligature (cp. 10, 13, 18), in others a second horizontal, written by a separate stroke of the pen (cp. ib. 15). This additional stroke is in many cases the mark which introduces a group of symbols commonly repeating a value already expressed in words, the συνάτι-stroke. Before the end of the century, the composite symbol has taken the form of a plain cross, ‘plus’-shaped, (cp. CCCXLVI, a and b A.D. 194) which now, and in the third century, is preceded or introduced by new additional signs of various forms. In CCCXLVI, just referred to, it is a vertical stroke, almost straight, with a very slight hook at the top on the left and at the bottom on the right; in CCCLI (A.D. 218) it is a horizontal undulating —-shaped (line 11) or a ragged stroke somewhat similar (line 12). In all of these there is perhaps something reminiscent of an original παταβες-symbol, now absorbed into the vertical of the cross, but in CLXXX (A.D. 228) it is a plain detached horizontal (8, 13) or a similar stroke, often ligatured to the vertical. This additional preceding stroke, introductory to a group of symbols, has been the cause, as already explained, of considerable confusion, both in the MSS. and (consequently) in the Editions. Such an example as CLXXX, 12, shows its normal use with artabe-symbol very clearly πυρον αρταβας ητακοντα διαμποργιον, ας contrasted with the simple ‘artabas’ alone, the + alone or followed by the o, as in B.M. Pap. CCCXXII where many variants enable one to estimate to some extent the probable limits of this variation. Finally, to anticipate a little, we have in fourth century papyri, strange forms such as and (XCIX (i) col. 2, 3, 4, and fresh confusion such as (CXXV (i) 1, et. alq.) Other illustrations may be seen in CXXIII, CLXX, and CXXIV, all first century, CCLIV, second century, CLXXXVIII, third century.

Pap. CCCXLVI, 40, has a sign exactly resembling one form of the Artabe-symbol, a horizontal line with a small circle written beneath it. This sign here indicates that what follows is the ‘net’ total (Kenyon, B.M. Pap. Cat. II, 234). It is hard to imagine what the circle (or dot) could be. The horizontal however is not strange as a variant of $\frac{1}{2}$: there is a general tendency of vertical or nearly vertical strokes to take a more horizontal position; and the very stroke in this position, signifying ‘gross’ total, occurs, without the subscript, in this same papyrus, passim.
The Roman forms of the Talent-symbol. These are, ordinarily \( \pi \) (Oxy.
Pap. XLIX, 18; CCXLII, 28 etc.), and \( \lambda \) (id. CCXXXVII, iv, 14, etc.)

The latter is a more cursive development of the former, itself at a similar
stage in relation to the Ptolemaic two-membered form. Still more
degenerate forms may be seen at id. LXXXIV, 17; and perhaps LIV, 18.

\( \pi \) (= συμβόλιον, a tax the nature of which is undetermined), is hardly
a symbol, though noted by the Editors of Fay. Towns and their Papyri,
p. 347, among the symbols. It is a Sigma of the second century, with
common over-written sign.

It would be better to defer judgement on the small, faint and very
cursive writing of XCIX, a mutilated and very fragmentary fourth century
papyrus, which shows symbols, apparently for νομίσματα and κατάστα, which
are quite unfamiliar.

\( \lambda \) = \( \delta \)\( \zeta \). The earlier explanation = \( \kappa \)\( \alpha \)\( \iota \) seemed very probable
\( \kappa \)\( \alpha \)\( \iota \) is written in such a way that the omission of the final iota actually leaves
this 'symbol.' Cp. line 45 with 46; and 54 with 59. Dr. Kenyon now accepts
Dr. Wileken’s explanation above given, which he thinks gives better
readings.

\( \wedge \) A symbol or sign thus printed in the Cat. of Brit. Mus. papyri is
unexplained. The Editor suggests the meaning \( \pi \) (for \( \pi \)\( \rho \)\( \sigma \)\( \sigma \)\( \alpha \)\( \gamma \)\( \alpha \)\( \rho \)\( \omikron \)\( \nu \)\( \upsilon \)). Curiously, a somewhat similar but double angle of this kind is also unexplained
among Ptolemaic symbols. \( \text{Vide supra} \) p. 151.

The short horizontal over the final letter of a word, and especially of a
line (XLVI., 140, 146, 150, 155, et passim) has sometimes the value Nu. It
quite commonly indicates other letters, but not other single letters, except
\( \delta \) = \( \delta \)\( \zeta \). I cannot produce one, and there is not one in Kenyon’s 1898 Index
of Abbreviations (Cat. Gk. Pap. Brit. Mus., pp. 258–5) and the 1898 Catalogue
has only \( \tau \) = \( \tau \)\( \omicron \) (CCCXXV, 6) which proves on examination to be hardly a
case in point, the addition being merely a prolongation of the cross-bar of the
Tau. In the case of \( \alpha \)\( \upsilon \) the horizontal = Alpha drawn above the Nu is
undeniable, but then the Nu is much mutilated, so as to give the whole value
and appearance of a symbol, and the Ptolemaic angular Alpha is replaced by
a single bar apparently only when the latter is immediately followed by and
joined to the vertical flourish which signifies 'drachmae.' Moreover this
occurs in a common formula ’\( \psi \)\( \omicron \)\( \upsilon \)’ drachmae x.’

A similar sign for a single final letter over-written is the sometimes cup-
shaped angle representing Upsilon. See CCCXXV, 1, where it occurs twice
in the genitive ending Omikron-Upsilon, in each instance resembling a large
modern 'tirk.'

Quite alike often are the symbols which consist of a double horizontal,
viz. for 'two-obols,' for 'Aroupa,' and not infrequently for 'talents.' The
'talents'-symbol is generally easier to distinguish, but it is often loosely
written both in Ptolemaic and Roman ¹ papyri; and the "two-obol" symbol tends constantly to the same shape in Roman MSS. (for extreme form CXXIX., 46); the similar "Aoruras", which is rare, is Ptolemaic only. But here again it must be observed that the meaning is commonly kept clear by the context alone.

Obol and Chalei symbols. Concerning these there is little to add to the account given of them in the Ptolemaic section, and earlier in this. Dr. Grenfell and Hunt, in indexing the Fayum Papyri, give (p. 347) three symbols each = ἡμῖν ἀλλαθεν. Of these the first and third, as I have elsewhere explained, are properly 'one-half' signs; the middle one, printed as 6-shaped, is properly directly connected not with 'obols' but with 'chalei', being a roughly-written cursive Delta, surmounted by a vertical stroke = 4 chalei. Thus in practice, though not as regards intrinsic meaning, all three are rightly described as symbols for the half-obol. These instances from the Fayum papyri are all of Roman date. All the obol series recur in the period (Fay, Papp. XLI, 11, 17; XLIV, 10, 11, 13; IXXXVII, 1, 10, 13, etc.).

A rare sign is a kind of rough breathing-mark (XLI, VI, 9, 60, fourth century). A species of diaeresis-sign, consisting in one MS. (id. passim) of a dot followed by a tiny horizontal may be a variant for the rough breathing in some places; ibid. 165, ἡφαί and ἱεσ 164, 175, 230, 265, 299, 304, CXXI, 224, 927; but cannot in others; ibid. 147, 201, 266, 269, 610, as it is found (only over Upsilon and Iota) in places where there is neither breathing nor diaeresis required, and where it seems to be a merely fanciful addition to the vowel. The sign is moreover omitted from most of the Iotas and Uplons even of this MS. a magical document, and in very few papyri does it occur at all. In Pap. CX, a horoscope of the second century, it is used occasionally over every initial Upsilon and Iota, regardless of diaeresis and of aspirate. In CCCXXXII a bar replaces the two dots.

The two signs last mentioned, like others next to be quoted, hardly belong to the science of symbols. Such marks as e.g. a 2-shaped curve in XCIX. (i), col. 4, ibid. 19, 23, seem due to the momentary freedom of the pen.

With better right perhaps has another class a proper place here, viz. monograms. These are formed, like the ornamental monograms of modern and mediæval times, by the crossing or interlacing of two or more letters. The letters, however, in ordinary papyrus-use are nearly always the first two or three letters of a single word. They are of the nature of symbols, the more so as the type of letter employed is rigidly observed, and is often quite different from the ordinary forms of the MS. The following is a fairly exhaustive list, almost confined to magical papyri: ἔ = ἔργα, ἐ = ἐργάθευμα, ἀ = ἄσιλα, and cases (which remain rigidly triangular whatever be the shape

¹ For the latter, see Fay. Papp. XXI, 1 (a) 8, 10, LXXXVII, 1, 10, 13.
² Sir E. M. Thompson remarks that the άσιλα are not found in early Gr. MSS. before the 7th cent. and did not become usual until the 12th cent. Gr. and Lat. Pal. pp. 71, 73.
³ Exceptions are to be seen in the rare arrangement e.g. Χ = ξέροσκεττα (Ory. Pap. LIIV, 1); and Χ = ξέροσκεττα (ibid. LXXII, 11); the normal has the middle letter of the σχατ written over it. Up. Genev. Pap. No. 55, etc.
of the cursive Delta around it), \( \nu \upalpha \rho \upomicron \nu \upomicron \upsilon \eta \nu \upsilon \), or \( \nu \kappa \eta \theta \iota \rho \omicron \omicron \). \( \eta \) = \( \nu \omicron \rho \alpha \gamma \mu \alpha \mu \), \( \theta \) = \( \nu \rho \delta \omicron \nu \), sometimes \( \chi \) = \( \chi \epsilon \mu \alpha \zeta \tau \nu \gamma \). \( \chi \) = \( \chi \rho \imath \sigma \omicron \alpha \zeta \nu \) or \( \chi \rho \sigma \theta \omicron \alpha \zeta \nu \), \( \chi \) = \( \chi \rho \iota \epsilon \omicron \chi \rho \sigma \theta \omicron \alpha \zeta \nu \). \( \nu \) = \( \nu \pi \lambda \alpha \nu \). Except the last three, these are almost all magical. Another exception is \( \nu \) = \( \iota \kappa \alpha \tau \omicron \tau \rho \chi \iota \alpha \). CLXXVIII. b, a copy of a deed of A.D. 145. Of this kind (the Iota, however, not far removed from the simple subscript) is the Delta-Iota which occurs in a regular form as e.g. CXIX., 4, 15, 36, 44, \&c. More doubtful is \( \chi \) (XLVI., 200, 217, 455), which should mean \( \lambda \alpha \beta \omicron \). In Oxy. Pap. XLIII. recto, i., 1, it means \( \lambda \iota \tau \rho \alpha \), and so often (Edd. Index in Vol. I. p. 263). Grenfell and Hunt index a similar symbol (Fay. Pap. I, 5) as \( \upsilon \tau \epsilon \rho \).\( ? \). Merely superscript or subscript letters are not included.

There remains the large class of magical symbols. But of these only four or five can be positively classed as Greek (see Kenyon Pal. of Gk. Papp. Append. IV.). Of this small number the symbol for \( \delta \nu \omicron \mu \alpha \) is common. It appears generally as a small square (sometimes two squares for the plural) with or without a dot in the centre. As to its origin, I can only produce, for what it may be worth, a late example from the fourth century pap. CXXII.

There a hint of its true formation may perhaps be seen in 6, 43, and 46; the construction is a roughly shaped Nu ? surrounded by a horizontal bar, and containing a dot = Omikron. This would be quite on the principle of the monogram plus ordinary abbreviation. Still, little can be inferred from such premises, especially as the writing of other "mona"-symbols in the MS. e.g. lines 55, 59, 60 is quite different, and negligent too.

The symbols for \( \dot{\eta} \alpha \omicron \omicron \omicron \omicron \), for \( \sigma \epsilon \lambda \eta \iota \eta \), and for \( \sigma \kappa \upsilon \pi \tau \rho \omicron \omicron \) (or "Ermus") are conventional graphic representatives of the objects named. The monogram formations which occur have already been given. It has been a labour of considerable magnitude to examine in detail the remaining symbols, arranged in elaborate figures and formulae which bulk so largely in Greek magical papyri. My only regret is that the result, as far as proven Greek symbols are concerned, is very meagre. The most important is a single tiny line of tachygraphy which occurs Brit. Mus. Pap. CXXI. col. 14, line 27 (third century). For explanations vide Wessely, Ein Syst. altgr. Tachygr. pp. 9–10; Foat, on old Gk. Tachygr. in Journal of Hellenic Studies, Vol. XXI. 1901, Pt. II. It follows a cryptogram, and seems to complete one of the ordinary formulas (\( \lambda \alpha \beta \omicron \chi \rho \sigma \iota \tau \omicron \iota \gamma \iota \iota \iota \omicron \), &c.) of instruction for the preparation of a spell; the first half being written in cryptogram, and the latter half fantastically varied by use of tachygraphy; though there seems no reason for the presence of either. The existence of a similar script in the Leipzig Tachygraphic fragments (cp. Fr. 21, lines 5; Fr. 22, lines 9, 10) confirms, to some extent, the tachygraphic portion; but in any event, it is a direct intro-

\footnote{CXXI, 927 has a cup-shaped dot which may be part of a conscious Omikron.}
duction of a writing quite foreign to the hand of the MS., and leaves no traces among the symbols of its context.

Then there is the mystic line, explained as a cryptogram, via.

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\text{Αβγδεζηθικ}
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which has been shown by Wessely (Ein Synt...p. 9) to be in the Greek language. There are anagrams or palindromes, and special dispositions of letters with secret meanings, but not involving symbols. On the other hand, a veritable medley of characters, in which Greek uncial, Coptic hieroglyphics, and hieroglyphics are mingled with fantastic drawings of whose meaning no hint can be gained. These apparent jumbles are frequent, sometimes made more mysterious by arrangement in rough geometrical figures, in pyramids, &c., arrangements which may add something or may add nothing to the meaning. Among them are a few which may be profitably discussed. Thus (in Brit. Mus. Pap. XLVI, CXXI, in spells and formulas, passim; &c.—see Cat.),

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\text{Αλφάδεζηθικ}
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which I have gathered together and arranged in this order, may very well be the letters of the Greek alphabet, or fantastic substitutes. So γ, ι, ο, &c., may be ancient forms of numerals (Cp. Ann. Brit. School at Athens 1899–1900, No. VI, on Plate 11, unbaked clay tablets found at Knossos) units being the upright lines as in Egyptian, tens the horizontal, hundreds simple circles, and circles with crosses in them thousands.

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\text{Γ}
\]

may be a Coptic letter.

Such a spell as CXXI, 196 \[\Delta\Gamma\Delta\varepsilon\zeta\], etc., which is to be written \[\text{ἐν χαρτη καθαρω} \] and applied '\[\text{ἐν τω πιστω ἐν ἡ πλαγη} \]' (sc. of a scorpion), may be consistently in Greek throughout, so that we should read the formula: \[\delta \delta \varepsilon \varepsilon \sigma \theta \delta \delta \varepsilon \varepsilon \sigma \sigma \sigma \sigma \] (or \[\text{Q = 90} \]). But there are great risks attaching to such interpretations arising from the possible presence of quite foreign, but accidentally similar characters, permissible and indeed to be expected in documents of this kind.

On the boundary line between symbols and ordinary cursive are such phrases as \[\kappa \alpha \text{i παίδων} \], already illustrated, a recurring addition to the formulas for labourers, or of beasts employed in accounts of works, an addition naturally of the commonest kind which often (e.g., CXXI, 71, 76, 82) bears only a general resemblance to the fully written words. \[\kappa \alpha \iota \] is naturally specially subject to this mutilation, repeatedly occurring as a m-shaped Kappa-Iota. In some instances the third of the three strokes is followed by the common vertical undulation. This at least is one possible explanation, and the third
stroke would then be the ligature, which is freely used in this class of cursive: cp., e.g., Ηωνο = ποτον (ibid. 6; cp. CCCXV, II) where the ligature between Omega and Tau is drawn as a curve exactly repeating the first two curves of the Omega. But another explanation is equally defensible. I prefer to regard the vertical undulation as an iota, written loosely as in several other cursive, e.g., in δ = & δ = ι, of which the small papyrus last quoted gives examples.

Thus a kind of compensation for the mutilation or curtailment of cursive phrases is to be seen in the influence of ligature, which introduces oblique strokes and curves for the sake of a continuous script in which the pen is lifted as seldom as possible.

Byzantine Symbols.

Byzantine palaeography has practically to deal with non-literary manuscripts, so far as papyri are concerned (Kenyon Pal. of Gr. Pap. 1899, pp. 112, 114). Their sematology adds very little to what has already been said, and very few new symbols to the general list.

In general, the same characteristics of the symbols appear, as already demonstrated of the Ptolemaic and Roman periods, and the same methods yield similar results. So that it would seem that an invented and consciously developed system of symbol writing does not find its way into ordinary Greek writing until the papyrus has given place to vellum.

S is the conventional shape of the printer's type used for a symbol which is seldom truly S-shaped. Cp. CXIII, 5 (c), lines 3, 5; CXIII, 7, lines 2 et seq. The true S-shape has however, occasionally appeared much earlier, cp. CCII, 3, (late first cent.) CCVI b. (second cent.) passim where it stands for drachmas. When written proportionately with other letters, it is the perpendicular flourish, undulation, or zig-zag of Roman papyri, in an extremely broken-down form, which is sometimes as diminutive as an ordinary cedilla (in modern French) which it then very closely resembles.

In its strange variants it is easily confused with some ordinary strokes of the writing which is now sometimes very cursive, e.g. with Epsilon-Iota (CCXXXVI, 2; CCCIII, 27) with Alpha-Iota (ibid. 5).

Of such a form exactly is this stroke, with the meaning 'and' in CCXLIX, 10 (cp. Oxy. Pap. CXXVII, 4) and with the meaning 'one-half' in CCCXXXVIII, 8, 22, 23.

Used as the simple sign of abbreviation the common vertical undulating stroke retains its use and form (ibid. 3; CXIII, 7, line 2) to the end of the papyrus period. Another form of it, however, seems to rival it, viz. the straight oblique inclined to the right, and struck just beneath the final letter of the unabbreviated part. In e.g., CXIII, 7, this is so bold a sign that its numerous occurrences give to the page the appearance of a heavy sloping hand. In CCXLIII, 22; CXLI, 25; CCCIII, 6, this appears doubled; to

3 It is used apparently with a plain numeral CCXLIX, 22.
mark a numeral used adverbially. Combined somewhat fanciful with the ordinary flourishing of letters of the period it gives symbol-like effects, e.g. 

\[ \pi\theta\sigma\varsigma (1) \] (CXIII, 8, [a]).

The same tendency to write recurring groupings of letters as phrase-symbols is to be noticed in this period also, but the prevailing elegance of the style of the period produces in such phrasing graceful intertwined effects which are often delightful to the eye, e.g. CXIII, 7, line 2:

\[ \varepsilon\epsilon\chi\theta\tau\alpha. \]

They are capable of becoming obscure, without losing their prettiness e.g. ibid. 3 e sqq. \[ \varepsilon\varsigma \tau = \varsigma\nu\rho\delta^\varphi \] ibid. 9 (a) \[ \varepsilon\tau = \alpha \tau \] or to take a formula, one ibid. 8 (a) 21:

\[ \varepsilon\varepsilon \tau \alpha \tau \tau = \nu\omicron\lambda\omicron\omicron\mu\omicron\sigma\tau\alpha \xi \theta, \kappa\epsilon\rho\alpha\tau \iota \varsigma \varsigma. \]

or 69 dr. 3 1/2 keratia.

The 'one-half' and the 'one-quarter' symbols \( \varepsilon \) and \( \iota \) (CXIII, 5, (c) line 33) have been borrowed from some system of tachygraphy. The Kappa and the Epsilon of this shape are found in later tachygraphy, not however in that of the Rainer papyri of this period (cp. Wessely, Ein Syst. altgr. Tach. Taf. 1, No. 9, row 11). As moreover, the symbol is quite as reasonably to be derived from a half-formed cursive Kappa, its claim to be tachygraphic may be doubted.

In B.M. Pap. CCCXIII, 3, 2, the statement in duplicate has \( \varepsilon \) in the place of \( \pi\alpha\rho\delta \). This, being of the sixth-seventh century, may possibly be a borrowing from the same system of tachygraphy as set forth in the Rainer tachygraphic wax-tablets. Unfortunately no example of \( \pi\alpha\rho\delta \) does not occur, though in the fragment numbered 3 by Wessely (Ein Syst. altgr. Tachygraphie Taf. II) the sign \( \varepsilon \) = \( \alpha\pi\delta \) occurs. The inversion of the letters would, it would seem, be \( \varepsilon \) or \( \iota \) but it would be consistent with the general methods of the system if \( \varepsilon \) should mean \( \pi\alpha\rho\delta \) (Cp. \( \varepsilon \) = \( \alpha \tau \chi \) and the circle of the Rho disappearing in \( \alpha\rho\delta \) Taf.). The actual occurrences of \( \pi\alpha\rho\delta \), etc. Taf. III, no. 10, however are inconsistent with it, so that having at hand the simple abbreviating stroke, I should prefer to adopt it as the explanation.

\[ \pi\alpha\rho\delta \omicron, CCCXIII, 2, 3, (sixth or seventh century) and an interesting variant occurs CXIII, 9, fr. e. \]

So many monogram-formations of this kind

\[ ^\dagger \] CCCXXVIII for instance, one of the Abinaeus papyri, has not the data (8, 22, 23),
occur (ep. ἵπτ = πρόσ where also a single stroke represents the Πι) that it would be, I fear, only a far-fetched explanation which would introduce
tachygraphy.

The arousa-symbol | has lost its upper hook and is a straight, vertical
bar with a bellied loop which generally is carried back to touch the bar; there
is still the horizontal, regularly connected to the following numeral. Cp.
p. 162 above.

The arrowa-symbol. Allusion has been made (p. 165 supra) to some
widely variant forms in the fourth century papyri. To them we must add
CCXXXVI, 4, where a new but quite possibly accidental hook appears,1 the
form being otherwise quite normal, the small circle even being in its oldest
position (cp. CCCXXXVIII nearly 40 occurrences). But CCXLIX, of the
same (Abinaeus) group, has at line 1, two strange variants of |.

There are no other occurrences, I think, to confirm them. In later examples
too the small circle or dot takes new positions, while two and even three
circles are found e.g. Oxy. Pap. CXXVII, (late sixth century).

Λ = τὰλαχθα, found in the Abinaeus group (CCCXXXVII. 14) is quite
new and unexplained. It may be the old 'year' symbol transferred to this
meaning, or may be a borrowing from tachygraphy. The sixth century
tachygraphic fragments already quoted show + = α', and Λ as the first of a
series, which is almost certainly τα, τε, τη, &c. The difficulty of the date is
a grave one, for it would rather be likely that the tachygraphic symbols were
themseles adaptations of the older symbols, there being nothing to confirm
the sixth century Rainer-forms for earlier centuries.

There is the 'Sign of the Cross' now commonly found in even commercial
and legal documents. It is variously shaped, its vertical being sometimes
hooked, now on the left (CXIII, 4, line 18) now on the right-hand (ibid 28).
For the plain form, see CCCCLXXXIII, line 1. In CCCCLXIII, it is drawn in
the margin against the text Ο κυριω τον θεον φυλαξί (sic) σαι (sic)...ερρωσθαι
σαι αυ ου κω, but often the context is quite secular, legal or commercial.

In CCLIII 1-20 a. Χι with the oblique line, already seen, drawn through
it, represents Sextarii.

Χωγ, which occurs oftener alone, but sometimes with ζ, Χωγζ (CCCCLXXXIII, (i) seventh century is more a cryptogram than a symbol.
Wessely suggests Χωγος ηυν γραφη for the first three letters, but Kenyon
thinks this unlikely, as the letters are not in the same hand as the rest. He
thinks it more probable that it is of the same form as ζ, which is explained to
mean αυιν (thus 1 + 40 + 8 + 50 = 99 or 90). Other explanations are Χρηστος
Μαρια Γαβριηλ, and Χρηστων Μαρια γεννη.

* In the document just quoted (line 8) and again in CXIII, 6 (a) line 10,
a large six-pointed star-shaped character (a Χι with a line across it) is found
as an abbreviation of χατειν.

1 And may be due only to a kind of attraction to such forms with ordinary ligatures as in
CCXLI, 20.
NOTE ON THE SYMBOLS OF LITERARY PAPYRI.

It is in deference to the general practice that the distinction between literary and non-literary has been preserved in this treatment of the symbols. For in the sematography the division is hardly useful, as if we except those manuscripts (notably the 'Adelphos' Hodrovius, the British Museum medical manuscript, and the astronomical treatise of Eudoxus in the Louvre) which, though literary as regards the nature of their contents, are not written in a book-hand at all (Kenyon, Pal. of Gk. Pap. p. 66), we might fairly say that the literary papyri do not use symbols. So great, however, is the palaeographic and general importance of the literary papyri, and most of all, as it happens, of this papyrus above mentioned which uses abbreviations the most freely, that it seems better to defer these for separate consideration. Somewhat different questions are involved and Dr. Githammer has, in a series of articles in the Archiv für Semantographie, 1901, expounded a system of tachygraphic abbreviation which he claims to trace in the 'Adelphos' Hodrovius, and believes to be directly related with formal tachygraphy then current in Greece. An opportunity having now been offered me to discuss the matter at length in the same Archiv, 1 I omit from these pages what might seem an inadequate treatment, the more readily because I think it has not properly a place at all here. For after a careful examination of the original papyrus form, I am convinced that the genuine symbols peculiar to Greek literary papyri (for list of symbols and sigla see Kenyon, Palaeography of Gk. Papry, Appendix IV) are reducible to three, viz. ];= ;= Dr, and if any non-literary papyri yet unexamined should as I anticipate contain these three also, then this tiny list will vanish altogether. As regards their origin, I reluctantly accept them as arbitrary (perhaps related with the tachygraphic ];= y); they would thus stand almost alone as pure symbols of arbitrary origin found in old Greek.2

F. W. G. Foat.

1 In the May number 1902. Dr. Kenyon, the first editor of the papyrus, has kindly read the manuscript of this article, and expresses his agreement with the general conclusion thereof.

2 Apart of course, from pure continuous tachygraphy.

19
CYZICUS.

[PLATE XI.]

WHilst travelling in Asia Minor in 1900 I paid a cursory visit to the peninsula of Cyzicus on the Propontis, in ancient Mysia, and had the opportunity of examining the site of the ancient city, and the canal that has been the subject of considerable controversy in bygone ages, and about which the facts are still only partly ascertained. As the site appeared to promise results of peculiar interest, I applied for a concession to excavate it. I had the good fortune to obtain an Imperial Tari'd in February, and began tentative operations in May.

From the Admiralty Chart it will be seen that Cyzicus lies on the 39° long. east of Greenwich, and 40°22' N. lat. and within easy reach of Constantinople. To Panderma there is practically a daily service of steamers, which leave Constantinople at sunset and arrive at about four o'clock the next morning. At Panderma a sailing-skiff takes one in about an hour across the bay to Yeni-Keui, the landing stage immediately outside the walls of the city.

The country has suffered from recurrent earthquakes, and with the blocking up and final destruction of the canal, which took place probably in the eleventh century, the city of Cyzicus seems to have lost all significance as a commercial centre; by degrees it became merely a rich quarry from which to draw material, first for the construction of Byzantine Churches, and after the Turkish conquest, for Mussulman mosques and the extensive arsenal at Constantinople. Panderma, Artace, and other neighbouring towns helped themselves also to the ready hewn marble and granite columns and blocks scattered about the surface, and to the stone of the formidable city walls, which, loosened by earthquakes, offered the finest building material imaginable ready for shipment.

Blocks of marble and columns which were not broken up by the earthquakes, but were too cumbersome to move, were reduced on the spot to the requisite sizes, thus increasing the already large quantity of accumulated débris. Owing to the absence of roads and the broken nature of the ground, the whole place became overgrown with a thick brushwood during the centuries of profound ignorance, fanaticism, and barbarism that followed. All sculptures and archaeological treasures not immediately on the surface thus became buried under layers of soil and débris, and the deposits of silt from the mountain streams; so that they lie to-day some six feet underground.

The greater part of the material for the history of ancient Cyzicus has been collected by Marquardt in the excellent little work Cyzicus und sein Gebiet, which, though published so long ago as 1836, still remains the text
book on the subject. From time to time the site has been visited by travellers or archaeologists who have published notes, such as Pocecke, Sestini, Leake, Hamilton, and Texier, but these are for the most part very slight; the most considerable attempt to study Cyzicus on the spot being that of Perrot and Guillaume (Exploration de la Galatie, &c. pp. 69-90). Besides these sources of information, there are the Greek inscriptions, of which, from the days of Cyric of Ancus down towards, an increasing supply has been forthcoming, to be scattered through the pages of some twenty or more publications and periodicals.

In this paper I shall merely record my personal impressions of the present condition of Cyzicus and the neighbouring country, formed on the spot and assisted by a few small tentative excavations and various recent excursions in the district round. My notes also include a series of inscriptions which were either discovered by or pointed out to me by the villagers, and of which I was unable to bring home squeezes: the inscriptions form the subject of separate papers following this. I am indebted to Mr. Titus Carabella of Constantinople for much information which he kindly placed at my disposal.

The rough plan shown on Plate XI. was sketched on the spot with the aid of a compass and an aneroid: it will be found to differ in some details from the plan published by Perrot and Guillaume (op. cit., Pl. III.), which I had not with me at the time, but which is stated (ibid. p. 72) to have been drawn up in two days.

As will be seen, both from the Admiralty Chart and from the panoramic view, Fig. 1, Cyzicus is now a peninsula, united to the mainland by a narrow neck of swampy land about one mile wide and three quarters of a mile long. The peninsula is very mountainous, and rises boldly out of the sea to the height of 2,620 feet at its highest point, sloping gradually from the main ridge, which stretches from east to west towards the coast-line. It is sparsely populated, and with the exception of one or two comparatively modern villages in the interior, the country is void of human life. The higher levels are barren of vegetation, whereas the southern coast-line is very fertile and well watered. Along this a few old Greek settlements are still to be found, such as Heraclæa, Rhodiæ, and Goniæ, on the west coast; the town of Artace, now Artaki or Erêk, on the south, and Peramnus on the east. At the last-named place many ancient customs are still in vogue, and wrestling and other Olympic games take place annually, about Easter. The other villages are recent settlements. Mihanía is said to be a nick-name derived from the Greek Mi-Hania— Not Caudians. According to local legend, the first settlers emigrated from Candia two centuries ago, but fearing further persecution denied the fact, saying, 'We are not Caudians,' and from this arose the name which is applied to the village to-day.

Erman-Kêui, the name of another modern settlement, means 'Arme-

\[1\] Their stay at the site was limited to parts of three days (Perrot, Voyage en Asie Mine. Kapoun. pp. 92 foll.)

\[2\] In the plan, for Demir Kapoun read Demir Kapou.
nian village. The first settlers came from Persia about 150 years ago, having been driven out from their own country. They seem now to be fairly prosperous.

Yapidji-Keui lies inland, about an hour's travel from the coast, at an altitude of 950 feet above sea-level. It was founded by seven families of Slavs, massacred and builders by trade, who came over from Macedonia some time during the eighteenth century. There are now 200 families in the village, which is comparatively well built. The Government, they say, has repeatedly offered them land elsewhere, but they prefer to live in the hills, which have so far afforded them a safe shelter.

Yeni-Keui, the village on the coast near the eastern wall of Cyzico, is an offshoot of Yapidji-Keui, and consists of less than fifty families. They are poor, and ignorant in proportion, and have no land beyond that on which the village is built. They depend mainly on the granite quarries for a livelihood. During the German Emperor's visit to Constantinople, when a few streets were paved, there was a temporary boom in the quarries, which are plentiful on the peninsula, though most of them are now closed. Another source of income to the villagers is also gradually disappearing through the wanton destruction of the ruins at Cyzicus, the cartage of the building material from the site, and its shipment to Pandenera and Constantinople.

Hamanli lies just above, and to the north of the site of Cyzicus, in a picturesque spot, 275 feet
above sea level. It is the oldest of the recent settlements, having received its Firman from Sultan Bayazid II, at the end of the fifteenth century. The inhabitants, who are purely Mussulman, were granted a considerable amount of land by the charter, and the country for miles around, both on the peninsula and the main-land, belongs to them. They are, however, indolent and ignorant, and notwithstanding their wealth in landed property, and other privileges, seem to lack comfort and prosperity as compared with the people of Yapidji-Keni and Ermeni-Keni. I was told of a curious custom affecting the water rights of the village of Yapidji-Keni. Although the small mountain stream has its source some little distance above the village, the inhabitants are not entitled to use the water more than one day a week for irrigation. For the other six days the water belongs to Hamamli in virtue of its prior rights.

Artace, the modern Erdek, is half Greek, the remainder being made up of Turks and Tcherkes (Circassian) emigrants from the Caucasus. The town was originally a Milesian colony, and is mentioned by Herodotus (iv. 3 and vi. 33) as having been destroyed during the Ionian revolt. It seems never to have recovered from this catastrophe, and by the second century A.D. was merely a suburb of Cyzicus. To-day the place preserves little appearance of its ancient importance; it is in a filthy and unwholesome state, refuse is thrown out in the streets, and the sewers are exposed. I was forced to leave the hotel on account of the bad smells from all quarters. The town has a Caimakan (Vice-Governor) and is the see of a Greek Metropolitan, who still retains his title, derived from the ancient metropolis of Cyzicus, considered to be one of the most important ones in the Orthodox Church.

Opposite the site of Cyzicus, on the main-land, stretches a ridge of mountains, the Adrastea, rising 1,150 feet above sea level, and immediately to the west, in a saddle of the same ridge, lies Adivinik, whence one gets a splendid view of the whole peninsula. It was from here that Sultan Bayazid the Second, in making his victorious descent from Brousse, when he reduced Karaman and the whole of Asia Minor to an Ottoman Province in 1486, obtained his first view of the Sea of Marmora and the ruined Cyzicus, and is said by the inhabitants of Hamamli to have wept at the sight of the once magnificent city, which at that time resembled a Cyclopean cemetery of granite and marble monuments.

The ancient Panormus, the modern Panderma, lies to the south east of Cyzicus on the main-land. Its population consists of Turks, Greeks, Armenians, and a few Jews. It also has a Caimakan.

The populations of all the non-Greek villages and towns speak both Turkish and Greek. The official language, however, is Turkish. All the local authorities profess in true Oriental fashion great affability, friendship, and willingness to help in the work of exploration, and are no doubt perfectly sincere in their own peculiar way. Labour is plentiful and cheap, and can be had from any of the surrounding villages at from one shilling to one shilling and fourpence per day.

The local Turkish name for the ruins of Cyzicus is Bal-Kis. As to the
origin of this name, various conjectures have been offered; some have connected it with the Arabic name for the Queen of Sheba, who, according to Texier, in other parts also of Asia Minor is similarly associated by local tradition with ancient remains. Another explanation (quoted by Leake) is that Bal-in Turkish stands for 'honey' and Kiz for 'girl.' A certain king, so the story runs, had a beautiful daughter, as sweet as honey, who at her death was buried among the ruins of Cyzicus. Perhaps the most plausible explanation of the name is that of Leake (Journal of a Tour in Asia Minor, p. 271), who considers it to be a Turkish corruption of the two Greek words ραλαια Κοτσιος: Leake quotes other examples of this process; probably the most familiar (which however Leake does not give) is the formation of the word Stamboul.

According to Strabo the island was 500 stadia in circumference, and the city was built on the southern slope of the spur of the Bear Hill (άγκτον ὄρος) which formed the Aeropolis; at a date which is not quite certain, but which was comparatively late in its history, the town was enclosed within granite walls of solid masonry which can still be traced (as shown on the Plan) in nearly their entire circuit; these are more particularly clear on the southern side, which was contiguous to the ancient inner harbour, now an immense marsh overgrown with reeds.

Pliny says that by nature Cyzicus was a peninsula, but to secure themselves against enemies the inhabitants cut a canal through the isthmus. This I have no doubt is true as regards the time of Alexander, but not of the very earliest period of the city's history, when Cyzicus must have been an island separated from the mainland by a shallow passage which silted up by the action of natural elements, a process which must have been already well advanced before the Macedonian conquest, and is still going on at the present day. The bottom of the marshy swamp between the two shores of the isthmus is still about three feet below sea level.

The climate is mild, the sea breeze moderating the temperature along the coast. The hottest summer days are never unbearably, neither is the winter cold. The site to-day is one big garden, rich in vegetation, which includes mulberry trees, olives, vines, Valona oak, walnut, arbutus, laurusinus, myrtle, bay, ilex, honeysuckle, arum, ranunculus, cherry, plane, and hundreds of other species; the ruins and mounds of debris are overgrown with brushwood; but, owing to the scarcity of fresh water, there are no habitable houses within the boundaries of the ancient walls; the nearest are a small cluster of sheds and huts for the culture of silkworms, recently built on a hillside in a south-western direction from the amphitheatre. Agriculture is profitable, but land is scarce. The patches of land that have been cleared among the ruins are used for vineyards, and for the cultivation of mulberry, olive, and other fruit trees. The soil, which is very fertile, is derived from the decomposition of the granite rocks surrounding the city. The disintegration of the granite produces alumina, and owing to the large proportion of felspar, the soil is enriched.

There is also a great variety of wild flowers, particularly the Styx...
officinalis and the modern Iris (Cýzicus amaranus), of which an unguent was made, called Oleum Iriinum, famed for its perfume and power of healing (Pliny, H. N. xiii. 1). Round about Cýzicus, Artace, and for a considerable distance along the north-west coast, more than twenty-one different kinds of grapes were known, some of which are under cultivation at the present day, the wine being exported to Constantinople and elsewhere.

The fauna comprises a great variety of small birds, while storks are numerous and live on reptiles. There are many snakes on the peninsula, some measuring from six to eight feet having been seen by the local guardians of the vineyards (Bekdjas). Hedgehogs and tortoises are very common, and rabbits and weasels are found occasionally. The bear has been seen on the peninsula; wolves are known to exist, and jackals are numerous.

The peninsula is also rich in minerals; good marketable granite and marble of a great variety of colours, asbestos, antimony, etc., are plentiful, and are easy to work and ship, but there is absolutely no enterprise. It was from Cýzicus that the marble was shipped to Halicarnassus for the Mausoleum. According to Böck it was probably also from here that the material for the stela of Planodius was obtained; Ptolemy of Egypt is supposed to have got the building materials for the Temple of Hercules from the same place, while Constantine the Great built two arches at Constantinople of stone from Cýzicus (Marquartt, Cýzicus, p. 34).

While speaking of the natural wealth of the country, we may also mention that of the sea, which was famed in olden times, and is still today, for the quantity and variety of its fish, including porpoises, tunny-fish, sardines, etc., and turtles, lobsters, and oysters. On the last named: Pliny (H. N. xxxii. 62) bestows an enthusiastic panegyric, which reads strangely like a modern advertisement, and ends with the statement that 'for sweetness and tenderness they cannot be surpassed by any oysters.'

Of the earliest period of Cýzicene history, very few remains are now traceable above ground. The Cyclopean walls of Artace, where the Argonauts landed on their way to Colchis, are still standing 20 feet wide and in a fair state of preservation on a small peninsula, the modern St. Simeon; and in the immediate vicinity, to the north of Artace, is an ancient well, which bears the local name of the ‘Well of the Argonauts.’ No other well of note or antiquity is known to exist in the neighbourhood. Another site associated in legend with the Argonauts is Mount Dindymene, on the summit of which, 2430 feet above sea level, they are said to have built a temple to the mother of the gods: ruins may still be traced here, but await investigation.

It is somewhat remarkable, as Perrot has pointed out (Bib. Arch., xxx. p. 106), that of all the many inscriptions which have as yet come from Cýzicus, only a very few can be assigned to a period before the Roman epoch, and none before the third century B.C. This is probably due to the fact that the city was in continuous occupation down to the year 1063, when it was destroyed by an earthquake. The destruction must have been sudden and complete, for the earthquake not only overwhelmed the city, its approaches,
and nearly all of its inhabitants, but it also cut off the supply of fresh water, thereby making the place impossible for habitation. Under the combined effects of natural elements, time, and the vandalism that followed, the accumulation of one layer upon another of silt and debris, and the growth of thick and luxurious brushwood, the city became hidden, and its site was almost lost and forgotten by the world at large. Such is its condition at the present day.

In the panoramic view, Fig. 1, Cyzicus, like the surrounding country, appears to be an extensive garden covering the slopes and spurs of a number of hillsides, but a closer examination, made in walking over the ground itself, discloses the positions of former buildings, the remains of which are distinctly discernible. Some of them rise to a height of from 20 to 40 feet above the average level of the site. In all of them more or less brick, marble, and granite masonry will be found clustered together.

Long stretches of the walls can likewise be seen, and although the upper structure has been removed, the remains can be traced in the direction indicated in Pl. XI, until the next portion of the wall is met with, and in such a manner an almost complete chain may be followed round the city. It is only at two places on the western side of the city that all traces of a connection become indistinct—namely, below the amphitheatre after crossing the River Kleite towards the Temple of Hadrian, and again for a short distance between the easternmost tower at the port of Clytus and the extreme end of the southern wall. These places are marked on the Plan 'Probable city wall.'

This part of the wall was perhaps destroyed in the time of the Romans, when peace and tranquility prevailed in the country, and the city spread westward where the Temple of Hadrian and other public buildings were erected. There are indications of several large buildings and a Roman cemetery in this neighbourhood. A splendid sarcophagus of the Roman period was unearthed some three years ago, and probably others may be found. No excavations whatever have been made here. The sarcophagus referred to remains in the ground with only the lid and the upper edges visible. Its contents were removed by the peasants who found it. The body, which I have recently had cleared, is without moulding or ornamentation of any kind; but the lid, which is roof-shaped, has at each end a pediment surmounted by acroteria; the central one over the apex is carved with a palmette; the two side ones, which are of exaggerated size, have the surface covered with a fine acanthus ornament. The tympanum of each pediment is deeply recessed, bordered on each side with a row of dentils, and filled with an elaborate acanthus design, also very finely treated.

In the portion of the northern wall, diagonally facing the entrance to the amphitheatre, are the remains of the only city gate still intact. It is about 20 feet high by 10 wide.

On the foundations of the extreme north-western angle of the apex of the wall stands a square, tower-shaped block of masonry, 20 feet high. The position is a commanding one, and served as a good landmark in mapping out the plan of the place.
Within the walls in this angle I found a cubic block of marble measuring 3 feet across all sides. It had apparently rolled down from the wall, and bears an inscription given in the succeeding article (p. 193, No. 2). The peasants had already commenced to chip off its sides, and from the circle drawn on one of the surfaces it seems to be intended in the future for a mortar. Quite close by, outside the eastern wall, a marble slab 4 feet long and 2 feet wide, with inscription on both sides, was found four years ago. The spot where it was found is in the bend of the wall, as will be seen on Pl. XL., where it takes an obtuse angle inwards; here the ground is honeycombed with ancient tombs. This inscription, which I saw in the village of Yeni-Kenli, had been already prepared for publication by Mr. Cecil Smith with the rest of my series given below, when we learnt that it is to be issued by Dr. Wiegand in the forthcoming number of the *Athenische Mittheilungen*.

The southern wall was built of granite blocks, and had a number of towers. It can be traced across the whole isthmus, and from its solid structure appears to have been one of the main defences of the city. In many places it is more than 15 feet wide and often 30 feet high. I have endeavoured to trace the whole of its direction from sea to sea, and have reproduced the result on the Plan. It will be seen that it surrounds the inner harbour (Panormos) with two granite breakwaters. The eastern one I examined to its extreme end in the marsh. The other is no doubt built of similar material, and can be distinctly traced from the Acropolis with the naked eye. This harbour was probably the most spacious and important of all the harbours at Cyzicus.

Inside this southern wall are the ruins of some very large and important buildings of the city. A marshy ditch runs parallel with the wall, and quite close to it (see the dotted line on the Plan). According to Hamilton and Dr. Macris this should be the former canal, but there are grave reasons to doubt the accuracy of this theory. It is more likely a most partly filled in.

An eastern harbour, now land-locked and overgrown with reeds, and one not mentioned by any of the classical or other authorities on Cyzicus, but probably constructed soon after the siege of the city by Mithridates, is traceable outside the city walls. It is duly protected by an extension of the southern wall towards the sea, and a hill, with traces of masonry on it, on the east side. It seems to have been constructed on what is, geologically speaking, a comparatively recent land formation.

In the middle of the eastern half of the southern wall is a big square tower, called in Turkish 'Demir Kapou' by the natives, meaning Iron Gate. It was probably at this spot that a bridge spanned the sandhill just outside the wall. The hill in question must have been created by the action of wind and water throwing the sand up on the beach, the mound being artificially increased when the cutting was made for the construction of the moat and city walls. It stretches a considerable distance across the isthmus, and was most likely met by a mole pushed out from the main-land towards the natural sea passage, the junction of the two being effected by another bridge. (See dotted lines on Plan.)
At the extreme eastern end of this portion of the wall will be found the foundations of a large structure in brick and granite, which can be traced for a considerable distance into the sea. When the sea is calm several rows of regularly cut granite blocks can be seen, the uppermost about 3 feet below the surface.

Having carefully taken the directions by compass of these foundations, I can only conclude that it was intended for a breakwater to protect the entrance of the channel leading into the eastern harbour. The extension of the southern wall ends suddenly a short distance from the water’s edge, and although the beach is now completely covered with sand, it is not improbable that an entrance from the south existed here between the breakwater and the extreme end of the wall in question. I therefore venture to suggest the existence and position of such an entrance, indicated by dotted lines on the Plan.

The southern and south-western slopes of the hillsides of the peninsula, beginning at the city and extending a couple of miles to the north-east of Ermeni-Kouli, are now one mass of decomposed granite, which becomes detached under the influence of changes in temperature, and is then carried down and deposited in the sea by the torrents and mountain streams, the frequent earthquakes, no doubt, aiding the process. The sand is then driven along the coast by the action of the wind and waves and the current from the Bosporus, united with that of the Rhynoicus and other rivers, until it reaches the low-lying isthmus, where it is piled up in small sand ridges along the beach. The wind blows with the steadiness of trade winds from the east-north-east the whole year round, and as the above-mentioned process must have continued for innumerable ages, it may easily be conceived that the low-lying swampy isthmus of to-day is of comparatively recent creation. Not very long before the beginning of our era, what is now a lagoon and a marshy isthmus was a clear sheet of water dividing the island from the mainland.

In studying this question on the spot, one arrives at the conclusion that when the natural channel began siltting up and choking the eastern passage, the Cypicenes, unable to cope with the accumulating sand, were forced to devise means whereby a channel could be kept clear for their shipping. It was then that the eastern harbour with its breakwater and canal must have been constructed. The natural passage on the western side is partly open, even at the present day, where the low-lying beach, owing to the absence of westerly winds, is perfectly clear of sand ridges.

On a further examination of the harbour in question, I noticed that a cutting had been made in the city wall about half way down the western side of the harbour. Immediately inside the wall the configuration of the ground resembles a wide ditch, without a break all the way westward until it reaches the eastern wall of the inner harbour called Panormos. At this particular spot, one is somewhat baffled by the wall and a heap of débris across the probable canal; on the other hand, this heap may have been created by an accumulation of bricks, masonry, and other stones from the clearances made
for the vineyards on both sides of the wall. This solution will perhaps be found a correct one. A few days' work ought to decide the matter.

Once the existence of the canal as leading into the inner harbour is established, its further direction can be followed through the marsh, distinctly through the aqueduct, and finally westwards into the sea through the passage across the beach. (The course is marked on the Plan in dotted lines.) In

Fig. 2.

this way the existence of a complete and protected channel, connecting both bays, is established.

The aqueduct, to which a reference has been made, is of Roman
construction, and supplied the city with water from the main-land. It was built on a chain of low granite arches, now 7 feet above water, with a 15 feet base. From the effects of repeated earthquakes, natural decay, and other causes, nothing but a disconnected line of masonry now remains. The ruins answer the purpose of a short and tolerably dry crossing for pedestrians to and from the peninsula. Fig. 2 gives a characteristic piece of the aqueduct, showing one of the arches.

On the peninsula there can also be seen traces of a system of water conduits, which supplied the city with water from the interior, both from the east and west, by means of red earthen pipes, 5 feet long and 2 1/2 feet in diameter. The western conduit was the more important one. Traces of a dam to divert a stream from its course into a tunnel cut through the hill can still be seen some distance inland. This tunnel was connected with the pipes by a set of conduits hewn out of the rocks. Earthquakes and time have destroyed these also, but some of the pipes are in a perfect state of preservation, and are used in various ways by the natives. I saved two from destruction by bringing them down to Yeni-Keui. Their weight is about seven hundredweight each.

The "Balik Tash" monument, on which Mr. Hasluck has contributed a paper in this number of the Journal (pp. 126 f.), was excavated by me in the north-western corner of the central harbour of Panormos, near the wall and the entrance to the city. At the bottom of the space excavated were found two blocks of granite and a large number of bones. The presence of the
CYZICUS.

bones, which are presumably sacrificial, would seem to indicate that the altar is nearly in its original position; a fact which seems to be confirmed by the existence of the granite foundation blocks. During the excavation, a stream of water rushed in when we reached a depth of three feet below the surface, necessitating constant baling. The monument is now covered up again with soil, this being the safest method of securing it against destruction.

Along the western beach of the isthmus no traces whatever can be seen of any constructions. There are no signs either of the mole or bridges, and the ground is only sufficiently raised to separate the marsh from the sea. There is, however, a break in this through which the water oozes out from the marsh into the sea, and this is possibly the former westward passage already mentioned. The westward mole must likewise have been built along

this elevation of ground. The western harbour, called Chytry, is also a big swamp overgrown with reeds. There are traces of a granite breakwater, partly submerged, as will be seen on the Plan.

Along the other side of the harbour stretch the extreme western defences of the city. There are two granite towers of the Greek Period, nearly twenty feet high, called in Turkish "Bal-kiz Capan" (the Gate of Cyzicus). They are 90 yards apart, and are here connected by a granite wall, of which the lower course of masonry still remains intact. Turner speaks of two octagon towers protecting the entrance of the city; these are, however, six-sided.

Fig. 3 shows a view of the westernmost tower, as seen from the city, and Fig. 4 a characteristic part of the wall; adjoining the point here shown are the ruins of the substructure of Hadrian's temple which has formed the
subject of a paper by Mr. Théodore Reinach in the *Bulletin de Corr. Hellén.*, 1896, pp. 517–545. It is situated in a direction north-east of the two towers, and is the largest ruin at Cyzicus, covering several acres of ground; it is thickly overgrown with brushwood, and rises out of the surrounding vineyards like a flat hill. A rude shelter, built of a few poles and branches, for the guardian of the vineyards (Bekdji), stands on the summit, and affords a commanding view of the neighbourhood. (Fig. 5.)

The whole is thickly overgrown with brushwood, among which a regular network of arches can be traced. These must have been the supports of the flooring. There are also a number of well-preserved vaults inhabited by thousands of bats. The roof of one of them, some 50 feet long, was literally lined with these small animals. Judging from the pieces of fluted marble columns lying about, the columns must have been at least 6 feet in diameter, and if, as Aristides says, they were made of a single piece, each must have weighed hundreds of tons.

Cyzicus was certainly favoured by nature, for besides her many other advantages she had very fine marble quarries close at hand; one at Proconnesus; and another with every facility for shipping near Artae; at the modern St. Simeon, four miles westward on the coast, where pink, white, greyish-blue, and green marble can be had in unlimited quantities. The wonderful and glowing descriptions of the Temple as given by Aristides, Dio Cassins, and Xiphilinus, have been discredited by Hamilton, but with these facts before us, one is tempted to believe the Temple to have been one of the most magnificent buildings in the world.
On the north side of the Temple is a clear open space, perhaps the site of the Agora, supposed to have been 400 yards long by 100 yards wide, and surrounded by a portico.

The amphitheatre is situated in the valley on both sides of the sloping hills, outside the north-east walls of the city. Its elliptical shape may be traced from six or seven of the pilasters and arches still remaining here and there. The small mountain stream Kleite runs through the middle of the arena, along its longer axis, which measures about 150 yards. Higher up the valley there are signs of a dam to divert the course of the stream into a canal cut through the rocks when the arena was not required for a naumachia. (See Plan.) On a closer examination of the massive ruins a great number of the butt-ends of marble columns, blocks, and slabs will be found built into

Fig. 7.

the buttresses and archways, and some with inscriptions are discernible in the facings of the southernmost ones. From this it may be inferred that the amphitheatre was constructed with the remnants of former Greek buildings destroyed by the earthquake during the reign of Hadrian.

The two views (Figs. 6 and 7) will serve to illustrate what remains of the amphitheatre to-day.

Fig. 6 is a photograph taken a short distance below the city gate, looking up the valley through the ruins; and Fig. 7 represents two of the pilasters with inscriptions from the northern hillside.

Tombs of the Graeco-Roman period have also been found on the slope of the hillside near the city gate, outside the wall.

A large semicircular building will be seen at the foot of the Acropolis
within the walls. It has the appearance of a Greek construction, facing due south. It measures about 100 yards in diameter and 40 feet high. Like all the other ruins, it is overgrown with heavy brushwood, which made exploration difficult. Inside the building several large marble blocks were found in making the ascent, and seats were discovered high up in the north-western part of the ruin. The site is marked on the Plan.

Near the inner harbour is another ruin built principally of brick, and some of the arches are in a fairly good state of preservation. Judging from its central position, we may suggest that this was possibly the Prytanæum.

The large mass of ruins west of the building last described has the appearance of a temple of Greek construction. It is about 100 yards in length and about 60 wide. The materials used in its construction were marble and granite; very few bricks are to be found. The whole, however, is covered with a thick growth of brushwood. Near it, on the north side, upside down, and three parts buried in the ground, was found the marble slab, bearing the important Philætaires inscription which is given below (p. 163, No. 3). A steep vaulted passage about 50 feet long was found under one of the heaps of ruins near the theatre; this was built of granite.

The other mounds and masses of ruins present externally no particular feature of interest, and no attempt to excavate any of them has yet been made. Whatever they contain is therefore hidden from view by the thick brushwood. Those examined and marked in the Plan belong apparently to the Græco-Roman period; the ruins that can be seen are mostly of marble and granite.

There are a great number of richly sculptured fragments of marble and parts of figures and columns scattered throughout the site, many of them showing excellent workmanship; these are almost invariably discovered by the natives near some heap of ruins whilst enlarging the area under cultivation. In one of the heaps near the theatre, I found a chiselled marble cornice with coloured foliage, and a column with an inscription split in half.
lengthwise (p. 201, No. 4); and the life-sized head of a bull in relief (Fig. 8) in a heap of ruins near the inner harbour; this appears to have formed part of some architectural member, and may be compared with the bulls' heads on the 'temple des Cornes' at Delos (Bull. Corr. Hellén. viii. p. 17), and the bull's head capital from Salamis in the British Museum, Cat. Sculp. No. 1510, Pl. 27.

Robert de Rustafjaell.
INSCRIPTIONS FROM CYZICUS.

1. On a slab of marble, ht. 10 1/2 in., x 10 in., found within the walls during the tentative excavation. It is broken on the lower edge, but the other edges are fairly complete. The greater part is occupied with a relief representing Hermes and a goddess who is presumably Andeiris (Fig. 1). Both figures face the spectator: on the left Hermes (apparently beardless), wearing short girt chiton, chlamys, and petasos, stands at rest with caduceus along left arm, and right hand resting on hip; on right is Andeiris, a draped woman. Unfortunately this figure is broken away diagonally from the left shoulder to the right breast, and the surface is injured throughout. It is consequently impossible accurately to distinguish the details.

The face and attitude generally seem to suggest an attempt to render a stiff and formal, if not an archaic effect, such as would be suitable for the representation of a xomion. The hair is arranged in a mass around the forehead, suggesting the spiral curls of archaic art, and falls in two single tresses on each shoulder: from the top of the head rises a modius-shaped
object which, as will presently be shown, is probably a walled crown. On
the right is part of some object, perhaps a fruit or the top of a distaff held
in the left hand.

This figure is represented on a scale considerably larger than that of
Hermes; and as her breast is but little above the level of the knees of her
companion, it is natural to infer (on the assumption that the ground level
was the same for both figures) that Andesias was represented as a half or
three-quarter figure rising from the ground. Immediately above the group
is the inscription, and over it again a slight raised moulding.

ΛΟΝΘΩΙΑΙΝΔΕΙΡΕΙΔΙ
ΠΕΡΓΑΜΟΥ
Λον τηρό 'Ανδειρείδι
Περγάμου.

The form of the inscription makes it tolerably certain that this is a
dedication, in which case we should expect the name of the dedicant in the
first word. Of this word only the three final letters -νων are certain; pro-
ceeding them must have been either three or four letters, which are now
illegible. Names ending in -νων are extremely infrequent; in fact the only
one which readily suggests itself is Εὐκαλόν which occurs as the name of a
woman on Attic stele (C.I.L. i. 988, 3707, 3708). This name would suit
very well the spacing and appearance of the illegible letters; and we may
therefore provisionally restore the name as Εὐκάλον.

The divinity here mentioned is apparently identical with the 'Ανδειρεύη
represented on an inscribed relief in the Louvre1 (C.I.G. iv.6836). This relief,
of which the provenance is unknown, was formerly in the Cluysen collection,
and may therefore have been acquired in the Troy.2 In Dubois' Catalogue
No. 143 it is thus described: 'white marble relief, representing a bust of
Cybele in full face. The goddess holds in her hands two objects somewhat
difficult to identify, which roughly resemble a shuttle and a ball. Above
the field . . . is engraved ΆΝΔΙΡΗΝΗ, and under the bust

ΓΑΥΚΙΝΑΜΝΟΦΩΝΤΟΞΕΩΙ | ΑΓΝΗΙΕΥΧΗΝ.

Ht. 33 cent. Width 23 cent.3

The dimensions, it will be noticed, are almost exactly the same as
those of the Cyzicus marble: and the 'bust of Cybele' in both cases appears
to be the same.

By kind permission of M. Michon we are enabled to give here (Fig. 2) a
reproduction of the Louvre example. It will be seen that the style of this
work is much coarser and apparently later, but that the type of the goddess
is so similar to that of Fig. 1 that both would appear to have been copied from
a common original. The object in the left hand appears to be a pomegranate,

1 Salle de Milet, No. 2877; Catalogue Sommeil de Sculpture, No. 2877 (Clara, Musée de
Sculpture, ed. Reimuck, p. 44, No. 3.
2 Possibly at Cyzicus itself; cf. C.I.G. 3668, a marble from the same collection, which seems
certainly assignable to this provenance.
that in the right a bird; both these objects, as well as the walled crown, were probably reproduced also in the Eukolon relief, and are characteristic of the great nature-goddess of Asia Minor, who unites in her artistic type the attributes of more than one of the female divinities of Greece. Assuming that Eukolon is a correct restoration, the dedicant in each case—as is not unnatural—is a woman.

![Image of a stone relief]

**Fig. 2.**

Andeira or Andoirene is the μύηρα θεών Ανδόηρην of Strabo 614 (cf. Steph. Byz. s.s. Ανδόηρα). Andeira was a town in the Troad, the exact site of which does not appear to be yet identified; it possessed a mine of ironstone, a cavern extending a long distance underground, and a shrine of Andoirene. That this local cult should have found votaries at Cyzicus is only natural.
when we remember that this city from early times was the chief centre of the Cybele worship in Northern Asia Minor. Among the many forms of her name, Παλαιά (C.I.G. 3657), so called from the neighbouring town of Plakia, affords the best parallel to that of our inscription; while in the sanctuary of Andeiris with the Pergamene mother of the gods we have a parallel in C.I.G. 6835, a relief representing Cybele between two lions, inscribed Μήτερα θεών Περγαμικών Νεισηφόροι [τιν] ίδεν προστάτην. The Andeiris shrine was probably one of those temples or altars of the Idaean Mother which, Strabo says (1, 38), 'are to be seen near Cyzicus.'

The type of the goddess here shown is obviously allied to that of Persephone, in her return from Hades; probably the cavern of Andeiris was associated with her cult as a Cthonian deity. If, as is probable, she was a vegetation goddess, the presence of Hermes here, as the wind god who draws the vegetation from the ground, is appropriate enough: in the Hymn to Demeter, l. 377, and in many works of art, it is Hermes who conducts the car of Persephone on her return to the upper world (Forster, Raub u. Rückkehr der Pers, p. 259 ff.). In any case, the fact that Hermes is omitted from the Glykina relief shows that his association with Andeiris is merely subjective.

The final word of our inscription presents some difficulty. It is scarcely conceivable that Περγαμοὺ can represent the patronymic of Andeiris, and in any case we should expect the definite article; on the other hand, if the reference is to a cult imported from Pergamon, allied say to the Demeter Karpophoros established there (Perg. Inschr. 291) we should expect τῶν Περγαμικῶν, or ἐκ Περγαμοῦ: or, on the analogy of C.I.G. 6835 already quoted, it might be Περγαμεύ. But perhaps in an inscription of late date such as this we must not expect accuracy of phrasing.

2. On a cubic block of marble from the angle of the wall, found within the city walls. Measures 3 ft. on each side; letters from ¼ in. to 1 in. high, here given in 1 scale.

ΚΡΗΟΕΩΣΣ
ΤΟΥΕΣΤΙΑΙΟΥ

From the form of the inscription and the shape of the block on which it is cut, this is probably a statue base. According to Perrot the walls are attributable to the first half of the fourth century B.C. (cf. Rev. Arch. xxx, p. 94): if therefore this block was built into the wall in antiquity, it must have belonged to a late restoration, made after the statue to which it refers had been removed or destroyed. Hestiaios is a not uncommon name in Cyzicene inscriptions.

3. A marble stele found by de R. in the inner harbour, near the supposed site of a temple. When first seen it was in an inverted position, covered to

the extent of about one-third of its height with soil; to this fortunate circumstance is due the preservation of the first twenty lines or so of the inscription, the remainder, which was exposed, having become almost entirely illegible. The stele is at present slightly under five feet in height on its l. side, which must be nearly complete; from the lower left angle it is broken away obliquely to a point nearly half way up the r. side. The width at the bottom must have been about 22 in., whence it tapered upwards to a width of 20 m. at the top, below which a square moulding projects slightly all round. The letters are carefully cut, those of the heading being \( \frac{3}{4} \) in., while the rest average \( \frac{1}{2} \) in. in height. It is noticeable that care is taken to end each line with a word; the spaces left at the r. edge of the lines are consequently very irregular in width. The facsimile here given is a reproduction in \( \frac{3}{4} \) scale of the original.

This inscription records a list of the free gifts conferred on the people of Cyzicus during a series of years by Philetairos, son of Attalos. This personage can be no other than the founder of the Pergamene dynasty, for two
ΤΑΔΕΕΩΜΙΚΕΝΦΙΛΕΤΑΙΡΟΣ
ΑΤΤΑΛΟΥΔΩΡΕΑΝΤΩΝΙΔΗΜΩ!

ΞΙΓΟΡΓΙΓΙΔΟΥΤΟΥΑΓΟΛΛΩΝΙΟ
ΤΑΡΧΕΛΕΙΑΓΩΝΑΣΑΡΓΥΡΙΟΥ
ΤΑΛΑΝΤΑΛΛΕΞΑΝΔΡΕΙΑΕΙΚΩΣΙΝ
ΚΑΙΕΙΣΦΥΛΑΚΗΝΤΗΣΧΩΡΑΣΙΠΠΟΥΣ
ΠΕΝΤΗΚΟΝΤΑ
ΕΠΙΒΟΥΦΑΝΤΙΔΟΥΤΠΟΛΕΜΗΘΕΙΣΗΣ
ΤΗΣΧΩΡΑΣΑΤΕΛΕΙΑΝΤΗΣΛΕΙΑΣ
ΚΑΙΤΩΝΛΟΙΡΩΝΝΑΠΕΣΚΕΤΑΣΑΝ
ΚΑΙΒΩΡΩΝΝΑΓΟΡΑΣΑΝΤΕΣ
ΕΚΤΗΣΑΥΤΟΤΕΞΗΓΑΓΟΝΤΟ
ΞΙΓΟΙΝΙΚΟΣΦΥΛΑΚΗΝΤΗΣΧΩΡΑΣ
ΚΑΙΤΑΝΑΛΛΩΜΑΤΑΤΑΕΙΣΤΑΥΤΗΝΠΙΝΟΜΕΝΑ
ΕΠΙΓΟΣΕΙΩΝΟΣΕΙΣΕΛΑΙΟΝΚΙΝΥΑΓΩΙ
ΤΩΝΝΑΝΑΡΓΥΡΙΟΥΤΑΛΑΝΤΑΛΛΕΞΑΝΔΡΕΙΑ
ΕΙΚΟΣΙΝΕΣ
ΕΠΙΔΙΟΜΕΔΟΝΤΟΣΕΝΤΩΝΙΠΟΛΕΜΩΙ
ΤΞΙΓΡΟΣΤΟΥΣΩΓΑΛΑΤΑΣΕΓ
ΓΥΡΩΝΝΙΕΔΙΜΝΟΥΣ
ΟΝΝΙΕΔΙΜΝΟΥΣ
ΙΡΕΤΙΚΟΝΩ
ΑΤΛΕΚΕΥΗΣ
ΙΟΙΣΟΣΤΗ
Δ
ΣΚ

No. 2.
reasons: firstly, because the only other Philetairos known to history was the son of Attalos I, and would certainly have been entitled Φίληταίρως Ἄτταλως; and secondly, because the founder was the only Philetairos who was ever in a position to grant privileges concerning his country (τῆς αὐτοῦ), such as are involved in the entry under lines 8–12. Moreover the character of the writing is more suited to the first half of the third century B.C. than to any later date: there is still a tendency to write the Ω, Ω, and Ω in smaller size above the lower level of the line; both Μ and Σ have occasionally the long limbs sloping; and the Ρ has the second vertical limb short.

It is thus of considerable historical importance, for it not only adds something to the scanty knowledge we possess regarding the founder of the Pergamene dynasty, but it gives fresh landmarks for the history of Cyzicus, and contains what is probably the earliest mention yet known of the Galatian incursions into Asia Minor.

We learn here for the first time the name of the founder’s father. The introduction into the Pergamene pedigree of yet another Attalos adds a new difficulty to the identification of some of its members. In order to perceive this clearly it is necessary to recall once more the Pergamene stemma, as it now stands:

```
     Attalos
      /     \                   /
    Philetairos  Eumenes     Attalos
        |       |                |
          |       |                |
      EUMENES I.  (adopted by Philetairos)  ATTALOS I.
          |       |                |
          |       |                |
      EUMENES II.  ATTALOS II.  Philetairos  Athenaeus
```

Thus in Perg. Insocr. 10-12 a chariot race is celebrated, which had been won at Olympia by a certain Attalos, in consequence of which φίλημα δ’ εἰς Φιλήταιρον ἰδίσμοι ἦλθε καὶ οἴκους Περγάμου Ἀλεωί τ[ε]λεχομένα στεφάνωι. It is just conceivable that the Attalos referred to might be the father of Philetairos; but that would imply that the monument was erected after the dynasty was established at Pergamum, that is, comparatively late in the son’s life; moreover there is no evidence to show that the father of Philetairos was a personage of sufficient importance to enter for the Olympic chariot race; so that Frankel is doubtless right in identifying the Attalos in question as the younger brother of Philetairos.

It is probable that the Pergamene dynasts were not particularly proud of their founder’s origin; his mother according to Carystius (apud Athen.

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1 As for instance in Dittenberger’s, 295, 299.
2 It is noticeable that the characters of this set of inscriptions, which must be before 263 B.C., are almost identical with those of our inscriptions.
xiii. p. 577b), was a Paphlagonian flute player and hetaira named Boa; and the chances are that Attalus of Tarsus, πολέμιον οδόν έχον μεγάλης ηκίσκον την λέον as Strabo says (xii. p. 543), was a wholly insignificant person.

Similarly again in Perg. Inschr. 13, the Eumenes son of Attalus referred to in I. 46 as the leader of a military revolution against Eumenes I the (adopted) son of Philetairos, is supposed by Fränkel to be a son (otherwise unknown) of Philetairos’ second brother Attalus. We now see however that the revolutionary leader in question might conceivably be the father of Eumenes I. It is always possible that the elder Eumenes may have thought himself slighted when the succession passed to his son instead of to himself and have attempted to oust the heir; at any rate, so long as we do not know whether Attalus I had a brother Eumenes, this alternative is at least worthy of consideration. Fränkel, ibid. p. 13 regarding the inscriptions as affording a glimpse into the ‘schwierigen und dürftigen Anfänge des pergamenischen Reiches.’ But this conclusion is hardly borne out by the evidence of our inscription; if the predecessor of Eumenes I was in a position to extend a helping hand to far afield as Cyzicus, it is natural to infer that his tenure of power at Pergamon was already fairly secure; and it seems more reasonable to suppose that the difficulties of Eumenes I arose from some internal cause such as that just suggested.

From the time when Philetairos felt himself secure in the independent control of Pergamon and the treasure of Lysimachus, he seems to have embarked on a policy of ingratiation and conciliation with the important cities of Northern Asia Minor. An example of this is, as Fränkel has well pointed out, the Pergamene decree relating to the boundary-dispute between Pitane and Myisileme (Perg. Inschr. no. 245, frag. C. l. 44) δοῦτον [κατά τετάρτα Πιτανών καὶ Φιλεταίρου τεταρτά τεσσάρα ήπτα] it is possible that the sum in question was only an item in a long category, similar to ours, of benefits conferred on the people of Pitane. In our inscription we see the beginning of that close relationship between Cyzicus and the Pergamene dynasty which was to culminate in the marriage of Attalus I. with the daughter of a Cyzicene citizen.

Philetairos was placed in occupation of the fortress of Pergamon in 283 B.C. and died in 263. Our inscription therefore must fall between these two dates, for it would scarcely have been set up after the benefactor’s death, except at the instance of one of his successors; and in that case the fact would have been noted in the preamble. It is a pity that so much of the inscription is lost, and that the statements of fact are not sufficiently definite to enable us to determine the date still more precisely. If we knew a little more of the history of Cyzicus during the second quarter of the third century B.C., we should probably be able to date the events referred to absolutely. The part of the inscription which is preserved deals with five different years, arranged (as we are justified in presuming) in chronological order, though not necessarily in continuous succession. In the first and third entry, Philetairos provides a φυλακή της χώρας; in the second, the country is engaged in a successful war, apparently at a distance, as it
entailed a return through Pergamene territory. In the fifth, Cyzicus finds itself involved in a struggle with the Galatians, and is evidently hard pressed for supplies, as the Pergamene present takes in this year the form of provisions of corn.

It is noticeable that on this occasion Philetairos does not send military aid to Cyzicus. Against the vast army of Galatians who under Leonnurius and Lutarios numbered some ten thousand armed men, it was probably impossible for the Cyzicenes, even supposing Philetairos had himself been in a condition to send assistance, to hope to make headway. Their natural course would be to retire to their peninsula and sever it from connection with the mainland. In thus doing they cut themselves off from their main sources of corn supply; but they also found an efficient safeguard against the Galatians, who, as we know, were both ill provided with, and unaccustomed to, marine transport; the Galatians could neither cross the water to Cyzicus nor prevent the corn-ships of Philetairos from reaching the town.

Let us now see how far these statements fit in with the known historical facts.

The struggle between Antiochos I. on the one hand, and Nikomedes I. and Antigonus Gonatas on the other, seems to have been fought out especially on the coasts of Asia Minor and the Hellespont.¹ In the peace which was declared in B.C. 279, Nikomedes was not included; for this reason, and being moreover threatened with an insurrection under Zipoites, he called in the help of the Galatians, who, having reduced the Thracian coast, crossed over to Asia Minor in B.C. 278. They first discharged their contract with Nikomedes, and then proceeded in business-like fashion to divide up into three groups, each taking a special part of Asia Minor for purposes of plunder.² One detachment (probably the Trokimi) overran the shores of the Hellespont, and reached as far as Ilium; this raid is presumably referred to in the inscription from Erythrae,³ in honour of the strategi, παραλώεις δέ φοίζων καὶ κατύπων περιστάτων, and alluding to the collecting and despatch of the necessary money [τοῖς τερπέοις Ευερησίοις Βαρηκόμοις. How far Cyzicus suffered in the general pillage, we are not with any certainty informed; there is at any rate no direct mention of the town having been sacked; on the other hand, for the reason above given, it would seem from our inscription that Cyzicus itself escaped from falling into the Galatians' hands. Probably, as above suggested, the citizens would secure their retreat by destroying the dykes or bridges and letting through the sea, thus converting Cyzicus into a temporary island. In the third century A.D. a similar thing may very likely have occurred on the occasion of the Gothic invasion; possibly the 'flood of the Rhyniaceus' which, according to Zosimus i. 35, on that occasion saved the city is a misunderstanding of what was really due to the action of the Cyzicenes themselves.

In the quarrel between Nikomedes and Antiochos there can be little

¹ Siedentopf, Gesch. der gr. und röm. Staaten, ii, pp. 76 f.; ² Siedentopf, Gesch. der kleinz. Gauke, p. 11; ³ Dittenberger, 210; Michel, 503.
doubt as to which side would naturally enlist the sympathies of Cyzicus. It was part of Philetairos' policy to cultivate the friendship of Antiochos, whose near relative Antiochus was married to the younger brother of the Pergamene dynasty: and it is unlikely that Philetairos would have assisted Cyzicus at this juncture if that city had been hostile to his ally.

On the whole, I think we are justified in claiming a strong probability for the date 285–275 B.C. as covering the years mentioned in the text before us; we may even suggest that the military events recorded in the first three years were connected with the closing episodes of the struggle between Nikomedes and Antiochos; and that the year of Poseidon (I. 15) marks the year 279/278 B.C., when, peace having been apparently secured, the Cyzicenes were once more at liberty to turn their attention to domestic affairs. It must however be noted that in the first entry provision is made both for a φιλακή τῆς χώρας and for celebrating the games. As these games are not more distinctly specified, they were presumably the national games, which at a later period at any rate were Olympia, and as Aristides says, were celebrated every fourth year at the end of June, determining the reckoning of Olympiads for Cyzicus. We know further from the same source that the Olympia were celebrated at Cyzicus in A.D. 171. If we could assume that the series had continued unbroken for so many centuries, that would bring the celebration mentioned in our first entry to the year 281 B.C. The next celebration should have taken place in the year of the Galatian invasion, supposing, that is, that the years of our inscription form a continuous series.

The eponymous magistrate, as usual at Cyzicus, is the hipparch; the title is mentioned in the first entry, and left to be understood after the remaining names. The name of Phoinix (I. 13) recurs in a Cyzicene inscription published by Mordtmann in Anth. Mitth. x. p. 201; it is a stele with a relief, dedicated to Hercules by certain strategi and phylarchs. Michel assigns it to the second century B.C. without stating any reasons; Mr. Hasluck, however, who has kindly examined the original, is of opinion that the inscription may be earlier; the sculpture is of inferior character and gives little clue to date, but in general character suggests a reminiscence of the Amazon frieze of the Mausoleum. The lettering is rather irregular, but all the forms are of a good period; the characteristic letters indeed exactly resemble those of our inscription. I think therefore that we are justified in identifying the Phoinix of both inscriptions as the same hipparch: it is even tempting to suggest that the dedication by the strategi and phylarchs may have been a thank offering to Hercules Δυσκακος having reference to the φιλακή τῆς χώρας of our l. 13.

In I. 15 the eponymous hipparch is Poseidon. It is of course just possible that this may be the name of an ordinary individual; only two probable that the second at least would be distinguished by his patronymic. Possibly the insertion of the patronymic of Gorgippidas in I. 3 may be due to some such cause.
instances however of its occurrence are known to Pape-Benseler, viz. an inscription given in C.I.G. ii, addenda, 1957, g. where Julianus Poseidon may be Poseidoni[us] or some similar name; and a vase-painter who certainly never existed, in Canino vus. 1614. It is more likely that Poseidon is here the god: in many Greek states, whenever it happened that for any reason no one could be found to undertake the burden of magistracy, it was not unusual to let this devolve upon the god: examples of this are found in inscriptions from Antandros, Iasos, Miletus, Priene, and Magnesia; sometimes, as in the last quoted, (Kern. Insehr. von Meth., 90), the year is still further identified by the addition of the name of the preceding eponymus, Στειφωνορούντος τοῦ θεοῦ τοῦ μετὰ Φρύγορ[α]: but in our inscription this is for obvious reasons unnecessary.

To the list of twenty-three hippocasts of Cyzicus given by Mordtmann in Ath. Mitth. x, pp. 202—8, we must now add:

28. ἐπὶ Γοργυπτιδου τοῦ Λατύλλου.
29. ἐπὶ Βουφαντιδου.
30. ἐπὶ Φοίνικος (also in Ath. Mitth. x, 201).
31. ἐπὶ Ποσειδώνου.
32. ἐπὶ Διομέδουσ.
33. A further inscription, referred to below. (p. 207) has ... χίω Κυαν[δος] which appears to be the name of yet another hipparch.

L. 5. τιμάστη 'Αλεξάνδρεια. One cannot help feeling that there is a certain grim humour in this description of the Lysimachian talents which Philetaires had appropriated. In the inscriptions of the third and second century B.C. the money reckoning is often stated in terms of the standard of Alexander; when used alone, the word 'Αλεξάνδρεια implies the drachma; this appears to be the first instance yet noted of its employment in terms of talents. It is uncertain whether the line as given above is complete; perhaps as the εφελκυστικῶν is attached to εἰχον, we may supply εἴκοσι (as in l. 17), for which there is room on the stone.

L. 6. The mention of ἐπιτών reminds one of the epitaph on Arkesilas given in Diog. Laert. 4, 6, 30: Πέργαμος ὅθεν ὅπλος κλεινὴ μάχη ἀλλὰ καὶ ἐπίτων.

L. 8. foll. The sense appears to be somewhat as follows: the country having been plunged in war, he allowed exemption of duty on plunder and on

1 See Fabricius in Skizzenberichte der Berl. Acad., 1894, p. 90. Dr. Wilhelm very kindly supplied these references. Probably the τος Κάλαμος Καλαρού τηρήτη in Berl. Ber. 1874, p. 1. No. IV., is a further Cyzicene instance of a similar process.
2 See Pauly-Wissowa, v, pp. 1397—8, s. v., 'Αλεξάνδρεια.
the rest of what they carried off, and on the cattle which they purchased and exported out of his country. For arrangements of this kind, see the treaties between Hermias and Erythrae, and between Hierapytna and Priansos (Michel 12 and 16). In l. 10 we might possibly restore άποσκευάζων as in Michel p. 17, l. 7.

L. 15. The reading of the final word is unfortunately quite uncertain; συναγωγή and συνοικείων appear usually to apply to the calling together of a society or orans,8 but it seems unusual in the connection shown here, though it is difficult to suggest any other restoration.

L. 20-27 are almost hopelessly illegible on the impression, but it is very likely that an examination of the original will elicit a good deal more than is here read.

4. On a marble column split in half longitudinally, found to the eastward of the Theatre in June 1900: right edge of the inscription complete. Ht. about 2 ft. The letters vary in height from 1½ in. to 1¾ in.

L. 1. Νέρα|μαν/τι. L. 2. Τρα|μάλαν/νός?

5. On a long narrow marble slab near the ruins of a temple (? at the inner harbour, the slab has been broken in two and one half laid on the other, the upper surface hollowed to form a trough. The total length of the complete slab was 4 ft., the height about 8 in.

Ο δήμος
Λυσσάγοραν Σείμων, φίλοι Απολλαδόρον,
άνθρωφοι φίλοπατρίν και ἀγάθον ἐν πάντι,
καὶ ἐγκονιστὰ πάσης ἀρετῆς ἑνεκα.

6. Marble stele broken transversely in two but fairly complete; found near the port of Panormos within the walls; the upper part has a sunk panel nearly square, in which is a figure of a boy facing the spectator, holding in his r. hand some object, perhaps a bunch of grapes (?), over a dog which is seated on 1, looking up at him. He appears to wear a mantle hanging at the back and across his body from his l. shoulder; the style is coarse and careless. Ht. 9 in., width 8 in. Below the panel is inscribed

Ἐπαφροίδειτε χαίρε.

7. Marble tablet found by Mr. de Rustafjaell during a tentative excavation near the Theatre. On the surface of the marble a square panel is sunk, within which the inscription is engraved. The upper edge of the marble is chipped, but very little seems lost. Ht. 15½ in., width 14 in.; the panel is 10 in. high by 10½ in. wide.

8 See e.g. Dittenberger, 683, l. 21, 734, l. 92, etc.
8. A slab of marble built into the fountain at Yeni-kui; the letters were entirely filled in with cement, which had to be picked out in order to allow of the impression being taken. Ht. 16½ in., width 4 ft. 7½ in.

ΥΠΟΜΝΗΜΑ
ΠΛΩΤΙΑΣ ΕΠΙΓΟΝΗΣ ΟΚΑΤΕΣΚΕΥΑΣΕΝΑΥΤΗ
ΟΙΑΠΟΙΩΝΗΣ ΠΛΩΤΙΟΣ ΒΑΣΣΟΣ

Τιμόνημα
Πλωτίας Έπιγόνης, ο οκατεσκεύασεν αὐτῇ
ὁ πατρόνης Πλώτιος Βάσσος.


9. A slab of marble found outside the eastern walls. Broken at the upper corners and on the lower edge. Ht. 22⅔ in., width 12½ in. Letters 2 in. high.

The suggested restoration of ll. 1–2 is due to Prof. E. Gardner. Some verb like βλαστήσαιει is presumably omitted. The idea is not uncommonly found in Greek and Latin epitaphs, see A. B. Cook in J. H. S., xx, p. 13, who quotes instances. 'Αληθάργητος (if that is the correct restoration), seems to be used here in much the same sense as ἀληθορητος, though in other instances (e.g., U. L. G. 2804 and Macarius 837) it is usually taken as meaning 'unforgetting' rather than 'unforgotten.'
10. On a marble stele at Cossack-Keni, said to have been brought from Gonen (from copy by de R.)

ΥΠΟΜΝΗΜΑ

ΑΥΡ ΠΕΡΙΓΕΝΟΥΣ ΤΟΥ ΜΕΝΕΣΤΡΑΤΟΥ Ο ΚΑΤΕΣΚΕΥΑΣΕΝ ΕΛΥΤΩ ΖΩΝ
ΚΑΙ ΤΩ ΥΨ ΠΕΡΙΓΕΝΕΙ ΚΑΙ ΤΟΙΣ ΕΚΓΟΝΟΙΣ ΤΟΙΣ ΕΚ ΤΟΥ ΥΟΥ ΠΕΡΙΓΕΝΟΥΣ
ΚΑΙ ΤΩ ΘΡΕΠΤΩ

'Υπομνημα.

Αὐρ. Περιγένους τοῦ Μενεστράτου, ὁ κατεσκεύασεν ίαυτῷ ζών,
καὶ τῷ ὑψ. Περιγένει, καὶ τοῖς ἐκγόνοις τοῖς ἐκ τοῦ ὑοῦ Περιγένους,
καὶ τῷ θρεπτῷ.

11. Fragment of marble found near the apex of the north wall. Height of inscribed surface 5 ½ in. by 4 in. wide.

12. Lower part of a slab of marble, a portion of the right and lower edges complete; found near the apex of the north wall. Height 10½ ins. by 10 ins. wide.

13. On a marble stele, found in the north-eastern angle of the city wall. Height 3 ft. 1 in. by 1 ft. 7¼ ins. The upper part is broken away.
ΤΑΝΙ ΤΡ
ΠΛΟΤΙΟΣ ΦΙΡΜΟΣ ΟΙΝΟΦΥ
ΜΒΙΤΕΛΛΙΟΣ ΣΕΡΔΩΝ
ΠΑΙΛΙΟΣ ΒΟΛΟΥΣΤΙΟΣ ΔΙΟΓΕΝΗΣ
ΤΙ ΚΛ ΚΑΡΠΟΦΟΡΟΣ ΆΙΟΣ ΛΟΥΚΙΟΣ
ΓΚΕΣΣΙΟΣΣΩΤΡ ΑΣΚΛΗΠΙΑΔΗΣ ΠΡΩΤΟΣ
ΚΙΟΥΛΙΟΣΛΑΛΟΣ ΙΑΡΟΣ ΜΡΟΔΡΟΥ
ΤΙ ΚΛΕΠΙΚΤΟΣ ΔΑΦΝΟΣΒΕΝΟΥΣ
ΠΛΟΤΙΟΣ ΕΡΜΕΙΑΣ ΕΠΑΦΡΟΔΙΤΩΝ
ΤΙ ΚΛ ΦΛΑΒΙΑΝΟΣ ΜΕΝΕΛΑΟΣ ΓΛΑΥΚΟΣ
ΣΕΣ ΦΟΥΛΠΛΩ ΜΕΝΑΝΔΡΟΣ ΜΑΡΚΟΥΣ
Π ΚΑΣΣΙΟΣ ΜΥΡΙΟΣ ΆΡΕΜΩΝ ΒΕΙΣΩΝ
ΒΕΙΤΥΧΟΣ Β ΧΡΑΤΟΝΕΙΚΩΣ
ΙΟΣΕΝΟΣ ΑΡΙΖΩΤΙΧΟΣ Β ΠΡΥ
ΑΣΚΛΗΠΙΑΔΗΣ ΔΙ ΆΚΙΝΔΥΝΟΣ ΦΟΙΒΟΣ
ΆΚΙΝΔΥΝΟΣ ΑΣ ΕΣΤΙΑΙΟΣ ΓΕΛΟΠΟΣ
ΠΕΡΙΕΡΝΑΣ ΠΟΠΙΛΙΟΣ ΣΥΝΠΟΙΗΣ
ΚΑΡΠΟΣ ΘΚΛΑΤΑ ΑΛΟΣΑΝ ΑΜ ΦΥΛΗ
ΜΥΣΤΑΙ ΑΛΥΠΟΣΑΡΙΣΤΑΙΝΕΤΟΣ
ΔΙΟΦΑΝΤΟΣ ΒΦΙΛΑ
ΑΣΚΛΗΠΙΟΔΟΤΟΣΕΛΕΥ
ΑΡΙΣΤΟΜΑΧΟΣ ΓΑΜΟΥΦΙΛ ΆΛΕΞΑΝΔΡΟΣ ΔΕΙΟΥ
ΑΡΕΜΩΝ Β ΦΙΛΑ
ΓΠΑΚΟΝΙΟΣ ΜΑΡΚΕΛΛ
ΛΙΟΥΛΕΡΜΑΣΦΙΛΑ
ΤΙ ΚΛ ΡΟΥΦΟΟΣΦΙΣΙΗΦΙΛ ΤΟΛ ΜΑΣΙΜΟΣ
ΕΡΜΟΓΕΝΗΣΟΝΗΣΙΜΟΥΦΙΛ ΒΑΛΕΡΙΟΣΓΡΕΙΣΚΟΣ
ΑΡΧΕΣ ΡΑΤΟΞΑΝΤΙΠΑΡΟΦΙΛ ΤΟΛ ΄ΕΡΤΥΛΛΟΣ
ΠΑΦΡΟΔΕΙΤΟΣ Β ΘΕΙΒΑΣΦΙ
ΠΑΙΛ ΚΟΡΝΗΛΙΑΝΟΔΙΟΝΥΣΙΟΦΙ
ΜΟΓ
ΓΑΙΟΣ ΣΑΛΟΥΣΤΙΟΥ ΣΕΣΣΕΡΒΕΙΛΙΟΡΟΦΙ
ΓΒΕΙΒΙΟΣ ΕΛΕΦΟΡΙΩΝ
ΙΟΥΛΙΑΝΟΣ Σ ΡΑΤΟΝΕΙΚΟΥ
ΛΕΥΚΙΟΣ ΜΗΝΟΔΟΤΟΥ
ΠΙΟΥΛΙΟΣ ΔΗΜΗΤΡΙΟΣ
ΟΝΗΣΙΜΟΣ ΜΥΡΙΟΥ
ΚΑΣΣΙΟΣ ΟΝΗΣΙΜΟΣ

No. 13.
One of the ordinary prytany-lists of which so large a number has already been found at Cyzicus: unfortunately the preamble, usually the most interesting feature, is here wanting. Judging from the general character of the names, it probably belongs to the time of Hadrian. The titles of officials which are given in an abbreviated form are not always easy to distinguish from the names of patronymics, which are also frequently abbreviated: of those already known we have here ἀνωφόρος [αἰξ., 3. ἀρχιχώρης] l. 15, πρω- [ταναρχής] l. 15, δ[άκονος or δ[ε]φ[ερνής] l. 16, φιλότειμος ll. 21-23; and two which are new, συνταραχής l. 18, and νε. φίλ. in l. 23; in the ptytanay-list of
which Mr. de Rustafjaell sent home an impression, but which is shortly to appear edited by Dr. Wiegand in the *Arch. Mitt.*; the form *πε[/νο] occurs after a name: perhaps our entry should be read as *νεο[χόρον] φιλ[/τειμα]. Possibly *Πρωτ.* in l. 7 may be the abbreviated form of a title, but it is not one previously known. *Συνοπτικά* presumably implies merely an assistant. L. 19 *κανά τὰ δέκαντα τῷ φολό* is an unusual formula to find in these lists; the reading is not certain, but it can hardly be anything different.

14. On a small cubical block of pink St. Simeon marble found near the theatre; damaged by fire, and both upper angles wanting. On the upper surface is an oblong sinking. Ht. 6\(\frac{3}{4}\) in. by 5\(\frac{1}{4}\) in. wide.

\[\text{Συνοπτικά} \text{ Πρωτ.} \text{ Εύχθην} \]


Among Mr. de Rustafjaell’s papers there are also two of fragmentary inscriptions which are in very bad condition and which it is hardly safe to publish from a single not very good impression. The first (No. 15) is part of a triangular stele found to westward of the Theatre, which appears to be a list of tribesmen, perhaps a prytany-list, as among the names comes in larger characters the word ... *ΕΙΣ* which is evidently the end of the name of the tribe: the lettering of this is good and may even belong to the middle of the third century B.C., in which case it is the earliest list of the kind which has yet come from Cyzicus. The other (No. 16) is part of a stele found in the eastern harbour; on the narrow side seems to have been the preamble, as it has l. 7 *νραματεστιν* (ex. l. 8 *βολαχ*), and l. 13 part of the name of an eponymous hippoclē *ἐπι τιναπλωκνα* *Κωνος* (ex. 8). Of the large side only a word or two here and there, apparently names, can be deciphered. In this case also the lettering seems to be of a good period.

Cecil Smith.

R. de Rustafjaell.
A Proto-Attic Vase: Upper Portions and Handle.
SEALINGS FROM ZAKRO.
GREEK LYRIC METRE.

I.

πόθεν ἐπαυσάτους θεαφόροις ἔχως
ματαλούς δόνας;
τὰ δὲ ἐπιθεώρα δυσφάτον ἐξαιρέος
μελοτυπεῖς ὀροῦ τ' ὀρθοῖς ἐν νομίς:
πόθεν ἄροι ἔχως θεαπειας ὀδοὺ
κακορρήμονας;

These wild and passionate throes,
Whence rush they on thee thronging?
Such terrors wherefore shape in harsh and awful song
And shrill withal! What is it guides thy boding lips
On their ill-uttering path?

That, after all that has been written on the subject, I imagine to be still the question in the bosom of most readers when they are confronted with a piece of Lyric metre at all complicated. Those who are fortunate enough to have an ear for rhythm, and thus the capability of understanding, are still left, it seems to me, to hear a piece of metre as an un instructed person hears a piece of music: though he may experience to a considerable degree a sense of vague and general satisfaction, he will lack the understanding of a musical adept. But a musician, hearing a sonata, follows what is being done; observes the themes of which the composition is constructed; notes the treatment of them, how they are developed, varied, and combined; perceives their ethical significance, and feels intelligent artistic pleasure. For all that I can see, the books on lyric metre do not put a student in the position to do this. My knowledge of them is imperfect, and if I am doing an injustice I shall be very ready to repair it; but from all that I am able to infer, they do not yet advance the student much beyond the condition of a person who has learnt his notes and keys and bars: they do not show him how a piece of metre is constructed; do not teach him, in the language of musicians, Form.

Put away all a priori theories, and scan the metres with your ear: scan every piece of metre that you come across; observe what rhythmical phrases are commonly combined together; on what occasions they are used, and by what characters.

With one preliminary warning: lyrics, as they are printed in editions,
are divided as their various editors divide them. In Pindar and Bacchylides they have now, for the most part, been divided rightly; but our texts of the Tragedians are still full of wrong divisions, owing to respect for the divisions in the manuscripts. Disregard the manuscripts entirely. Different manuscripts divide the same metres in quite different ways; even the same manuscript is often inconsistent, not maintaining the same principles in its divisions; and these divisions themselves are often meant to indicate no more than what in Music you would call the *phrasing* and in Metre the *cænus*. One tendency which misleads the scribes habitually into error is to place in the same line words which belong grammatically together. Treat each stanza as though it were continuous, unless you have reason to suppose it not so,—for example, when you come to an *hiatus*; but if you find *hiatus* is avoided both in strophe and antistrophe, you may generally suppose the metre is continuous.

And observe also where any break after a syllable coincides in corresponding stanzas; as for instance in these lines, Soph. *Af.* 693-706:

| εφεξ’ ἐρωτί | περικραχής δ’ ἀνεπτάμην | ἄῳ ἄῳ | Πᾶν | Πᾶν |
| εὐσεβὴν ἀιδόν | ἄχος ἀπ’ ὀρμάτων’ Ἀρης | ἄῳ | ὰὐ | ἄδ |

I venture to think that there is no one who will not be astonished to discover with what care such corresponding breaks are studied; they always indicate the phrasing, and before the end of this paper we shall see that their significance is often most important.

This is the method I have followed through the whole material of Greek lyric; and the main results I now proceed to give as principles of structure. For me these principles, when once discovered, have illuminated so much darkness that it would surprise me now to find a piece of choric metre which remained obscure. Prof. Blass gives up the metre of Bacchylides xv on Deianira:* 'σατὰ δάκτυλον ut videtur, certe magna ex parte; sed est maxima numerorum obscuritas.' I can honestly say that I find it quite intelligible; it contains dactylic phrases, but it belongs to a much-neglected class I shall not speak of in this paper but mean to deal with in my next—

*παντοκρ.*

I shall adopt from Dr. Christ the plan of placing dots beneath accented syllables and hyphens after syllables of extra length, as in *Ar. Vesp.* 275 *ἐδρ.’

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1 Just, of course, as printers tend to do: for example, the first verse of Campion’s song 'Kind are her answers, But her performance keeps no day; Breaks time as dances, From their own music they stay' should continue: *All her free favours And smooth words win g my hopes in vain; but it is printed*.

2 In his Preface (ed. 2 p. lxviii) Prof. Blass describes this poem truly as a *lamentatio lugubris*, and asks how that could be in honour of Apollo. A possible answer is suggested by a note of Wernstorff’s on *Himerius* Ed. xiii. 6 and 7, p. 218: 'Videtur Sophista hic loco, ut in *Orest.* xiv. 18, absum Flaviani ut comparasse sum reddi Apollinis ad Hyperboreos ac descriptisse cum laetitiam Delphorum ob del sui presentiam, tum *luctum*, eorum ob dei absum: porto autem tietissime fluvium Alpheum, cuina diecessum simulif coram Elenus.'
Greek Lyric Metre.

εφλέγ—μπροστά, where for φλέγ in music there would be a dotted crotchet; and I shall borrow a few simple terms from Music, giving explanations of them. Let no one be afraid, in anticipation of imposing hieratic language; we shall have no use for the terminology of the grammarians, or for those blessed words 'choric,' 'logaesthetic,' which proceed so comfortably from the lips of Dr. Schmidt. No one with an ear need be afraid at all: though if he knows the rudiments of music he will apprehend perhaps more vividly; and I would ask him constantly to keep analogies of Music in his mind; for it appears to me that the principles of Form in modern music are the very principles then followed in Greek lyric metre.

The elements in rhythmical construction are not feet, but—to adopt the terminology of music—phrases. These are phrases, for example:

--- - - - - - - Glyconic
- - - - - - - Amarasontic

You may, if it pleases you, divide such phrases into feet, as the old grammarians were so fond of doing; all you will have achieved however will amount to just as little as if you had cut up a phrase of music into bars; it is only as a whole that such a phrase becomes an organism and conveys an intelligible idea. It might be called a figure or Motiv, the shortest coherent element in music, which Sir Hubert Parry in the Dictionary of Music describes thus: "A Figure is any short succession of notes, either as melody or a group of chords, which produces a single, complete, and distinct impression. The term is the exact counterpart of the German Motiv, which is thus defined in Reissmann's continuation of Mendel's Lexicon: "Motiv, Gedanke, in der Musik, das kleinere Glied eines solchen, aus dem dieser sich organischem entwickelt." It is in fact the shortest complete idea in music; and in subdividing musical works into sections, periods, phrases, the units are the figures, and any subdivision below them will leave only expressionless single notes, as unmeaning as the separate letters of a word.

Of such rhythmical elements, phrases, motives, figures—or whatever you may choose to call them—there existed a variety in Greek; and they would be recognised in a moment by an educated hearer. What is important is that each brought with it an association; it suggested certain characters,—of gods, or heroes, or of nations; certain subjects; certain shades or regions of emotion. No one who knows anything of Greek feeling for appropriate form will find it difficult to believe that their rhythms too were used appropriately; and he would not be incredulous if this artistic feeling should appear to have guided sensitive metricians into the most delicate subtleties of touch.

Our first business therefore, if we mean to appreciate what is being done in choric metre, is to have learnt the various elements or phrases which lay to a composer's hand to use, and when they are introduced, to recognise them; the second is to know the associations which these various phrases carried with them.

If only they had had our system of musical notation they would never have been bewildering to us—or to themselves.
The broadest distinction of character in rhythms is between the Dorian and the non-Dorian. The non-Dorian may for the present purpose be classed together under the general names Ionie, Asiatic, Eastern, including Lydian, Phrygian etc.; Anacreon's belong of course to this division. All such are markedly different in spirit and associations from the rhythms which the Dorians made their own; these are so few and simple and so easy to be learnt that they may as well be stated here:

1. the *euphöion* – – – – – – – –, a dactylic phrase in *tempo staccato*, beginning with or without the *anacrusis*.

2. the *epitrite*, most commonly in this arrangement – – – –, the movement in which Latin ‘trochaics’ naturally went.

3. (formed by combining 2 and 1) the *dactylo-epitrite* – – – – –, e.g. the beginning of the 4th Pythian, σάμερον μὲν χρή σε παρ’ ἀνδρὶ φίλῳ.

Then there are two figures used to end a period:

4. – – – – – –, e.g. Aesch., Pers. 869, Ar. Rhes. 825 ἡγηνεί φιώτημα, Eur. Oed. 371.

5. – – – – – –, e.g. Aesch., Pers. 873, Soph. Trach. 525 προσμένουν ἀκαίταν, Ar. Rhes. 874 sqq., and Eur. Andr. 761:

   οὕτω
κλείσαντα τῶν ὁμάθων
ἀνδρὶν ἀφαίρειται χρόνον: ἂν ἄρετὰ
cαι βασιλεῖς θάρησι.

The same figures are combined in the Stesichorean verses of Ar. Pux 775 = 790:

Μοῦσα σὺ μὲν πολέμους ἀπωσαμένα μετ’ ἐμοῦ
tοῦ φίλου χρέουσον
κλείσαντα θέλω το ἀγάμους ἀνδρὸν τε δαίτας
cαι βασιλεῖς μακάρων τοι γὰρ τάδ’ ἐξ ἄρχης μέλει.

Dorian metre moves in strongly-marked 4 time. To convey the nature of it in a single word, I should describe it as *Handelian*—in his square processionals and martial songs.

It was the expression of the Dorian temper, rigorous, energetic, masculine, severe: the appropriate vehicle for their ideals, ἄρετὰ, ἀνδρέα, αὐτόποι: appropriate of course also to the Dorian heroes, Hercules, the Dioscuri, Helen. Wordsworth's ode to Duty, 'Stern Daughter of the voice of God,' or Tennyson's upon the Death of Wellington could not have been written by a Greek except in Dorian metre; to write of ἄρετά or ἀνδρέα in Anacreontic would have been absurd and ludicrous. Dorian is the proper metre, as in the passage from the *Andromache* just quoted, in Med. 624, and in this fragment of Euripides (893)

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* The scholiasts are not correctly treated by Bergk on Stesichorus 35 and 50 p. 220.
* * Dorian metre in burlesque, as Eur., Oed. 367 sqq., Ar. Rhes. 814 sqq., would have just the same effect as the delightful Handelian burlesques of Sullivan: in *Princess Ida* for example, 'This helmet, I suppose, Was made to ward off blows.'
Accordingly the moral verses attributed to the Sages are in Dorian; and this continued to be the metre used in philosophic verse, as in the fragments of Cercidas on Diogenes and σοφία (Bergk: Poetae Lyrici, Genii II p. 513), and in Aristotle's hymn to Ἀρετή (θ', p. 360):

Ἀρετή, πολύμοιχε γένει βροτείον,
θάρραμα κάλλιστον δίκαιον,
σίδα πέρι, παρθένε, μορφάς
καὶ θανεῖν ζηλοτος ἐν Ἐλλάδι πάτρου
καὶ πόνον θλῆναι μαλεροῦς ἀκάματας-
τοῖον ἢ πέραν βάλλεις
καρπὸν ίσαθάνατον ἔχοντες τε κρείσσον
καὶ γανέων μαλακαντητίσων ὅπως
σεν ἔνεγα ὦν Αἴδη Ἡρακλῆς Ἀδάκα τε κούρου
πολλ' ἀνέτπατον ἔργον,
σάν ἀφρονείτες νύμφας.

12 soic de pòthos Ἀρχέλος Αῖας τ'Aídha dámou ἥλιον,
σάς δ' ἐνεκί ποίον μορφάς καὶ Ἀταριός ἐντροφὸς ἀείλιον χρίσαν
τούγαρ ἰδίμοις ἔργοις, ἀθάνατον τε μίν αὐξήσατε Μοῦσαι,
Μνημονεύονοι θύγατρες, Διὸς ξενίου σέβας ἄξων,
σαν φίλοις τε γέρας βεβαιον.

The enkypion belonged especially to the Dioscuri (Ath. 184 f, Schol. Pind. P. ii. 127 Bocekh), and was therefore used in speaking of them; as by Pind. O. iii. 1

**enkypion**

Τυκαρίδαι τε ϕιλόξενοι ἀσεῖν καλλιτεχνίκον θ' Ἐλένη,


Wilmannsitz: Meddellendorf "in σοφίας εἰς ἄδημαντον (κ. 9, σοφίως τ' ἄδημαντον) : us in Democ.

1470 the MSS. give κείνας for ἀθάνατον, in Ath. 690 A the MSS. give λαξιοῦν ἀστραγαλόν ἐν' ἄδημαν,

1496 The reading of σ. 12 (enkypion repeated) is due to the same scholar; the MSS. have 'Αθῆνα βροτα.

The active ἄδημα is in 0.C. 184.

The reading of the MSS. and of the Ablins

too is στροφής; I have corrected this and the

non 4. 7. 8 the words according to their

grammatical construction.

The antistrophos is restored by transposition.
the opening is enplotion for the Tyndarids in the antistrophos. Stesichorus used it in his palinode on Helen,

οὐκ ἐστὶν ἐτυμὸς λόγος οὗτος
οὐδὲ ἔβας ἐν ναυσὶν εὐθέλμως επίριτη
οὐδὲ ἱκεὶ πέργαμα Τροίας.

An Epyale 10 corresponded to a coda. It was constructed, as a rule, out of the same rhythmical elements or phrases as the stropho, contained the same material, but arranged in a different and subtler combination. Since therefore it contains, as a rule, allusions to the material of the strophe, it often contributes towards making certain what the rhythmical elements of the strophe really are: conversely, we can often determine the metre of the epode from the strophe. Here is a very simple case from the epode of the Doric chorus which describes the fight between Hercules and Achelous, Soph. Trach. 497; it should be divided thus:

ἡν δὲ ἀμφότεροι ἐκλάμακες ήν δὲ μετά—
των δλόετα πλημματα καὶ στόρος ἀμφαίν
ὁ δὲ εὐχύτε όφρα επίριτη
tηλανγεί παρι ἄχθυν
ὁστο τόν ἄαν
προσμένου ἀκοίταν.

The first line is the normal dactylo-epitrite, but the MS. makes a complete line of the grammatical clause ἡν δὲ ἀμφότεροι ἐκλάμακες. The same thing is done by Nauck in a moral fragment (not necessarily Tragic) p. 867:

ὁ χρυσός, βλαστημά χθόνος, οὐκ ἐρώτα βροτοι-σι φλέγειν,
pάντων κρατιστεοιν, πολέμως δὲ Ἁρεως
κρείσσον ἄτων δύναμιν, <τὰ> πάντα 12 δέλεγεις:
ἐπὶ γάρ Ὀρφείας μέν ἄδαι
εἷςτε δεδρίαι καὶ ἤθων ἄνοιγτα γένη,
σοι δὲ καὶ χθόνι πάσα καὶ πότες καὶ ὁ παμμῆστερ Ἁρης— — — — 12

Besides other incorrect divisions, Nauck prints ὁ χρυσός, βλαστημά χθόνος, as though it were a separate line.

When Dorian metre is used by Orientalis there is always a reason to be looked for. Thus the Chorus in Iph. 801 is about the sack of Troy by

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10 Epyale belong properly to Dorian metres, and are usual with pasos. All the purely Dorian odes of Pindar, except P. xil and N. ix, have epodes; all the rest that have none (Θ. Ι, iv, ιτι, P. vii, N. ii, iv, Ι. vii) are in more or less varied Lydian or Ionic rhythms; so are the only three complete odes of Bacchylides that have not, iv, vi, or vii. The strophe of Il., which tells the story of the Persians and the Lydian Cossus, are in Lydian or Ionic, but the epode is in Dorian because it is addressed to Heres of Sicily; and we are prepared this by a Dorian phrase (enplotion) in the 2nd and 3rd lines of the strophe.

11 Or ἀμφότεροι?

12 Or <τά> ταῦτα. The reading of the 2nd line is uncertain, but as I have written it, Ταῦτα is metre.

13 E.g., ἀναίθα καὶ λατρεῖα: the metre is incomplete without this ending.
Telamon and Heracles; that in Hes. 889, a lament for the later fall of Troy, is partly in Doric for the Greeks:

891 ταῖον 'Ελλάδος νέφος ἀμφὶ σε κρύπτει
911 κέλευσμα δ᾽ ἦν κατ᾽ ἄστυ 'Τροι—
as τὸν, ὃ
παίδευ 'Ελλάδος ποτὲ δὴ ποτὲ τὰν
'Ιλιάδα σκοπιάν
πέραυτε ἥξεσ᾽ ὅκουσ';
925 εροδὲ τὰν τῶν Διοσκοῦρων 'Ελένην κάσιν Ἅδ—
αῖον τε βοῦταν . . .

If the Chorus in the Persae of Aeschylus use Dorian metre for their long descriptive geographical account 855 sqq. it is because that was the metre which had been used by Stesichorus for such recitals; that is the reason it was used by Philoxenus also in his portentous catalogue. Another piece of Stesichorean Doric is a fragment of Aeschylus from the Ηρακλείδαι describing the expedition of Heracles against Geryon; the Chorus use the metre of Stesichorus in his Γερονηθῆς; Aesch. fr. 74

έκειθεν
δρυμον δρόμωρον βοῦς ἡλασ᾽ ἀντ᾽ ἐσχατίνων
γαλα, ἀκελαιον περάνεο εἰς ἑτὰ χρυσηλάτων
βοτήρως τ᾽ ἄδεικους κατέκα δεισιστη τριπτυχον
τρία δορή πάλιντα χερσίν,
τρία δ᾽ ἄικε προτεινον τριες τ᾽ ἐπισθείσιν λόφους
στείχειν ἵππου "Ἀρεί βλαν, 

So much for Dorian. To take one opposite example, metres appropriate to Dionysus were Glyconic, as Aesch. fr. 355, Soph. fr. 174, Eur. fr. 586, Pind. fr. 153; and Ionic a μινόρ as Βασείας 64 sqq., Ar. Ran. 325 sqq.; for a κόμος, the Anacreontic. — — — — — — as in Cyp. 491 sqq.

A stanza might be constructed entirely in one rhythm, as the 4th Pythian is in Dorian metre purely; or it might be made of two or more combined; or the briefest phrase even of a different metre might be introduced in passing, when it was appropriate to the sense: as in Soph. Trach. 953

εἴδ᾽ ἀνεμοφόσσα τις
γένοιτ᾽ ἐποιηστε ἐπιστοιχίσ ἀφρ
ἡμεῖς μ᾽ ἀποκείσειν εκ τόπων ὡς
τὸν Ζηρός ἀλκίμων ἔχον
μὴ ταρβαλέα θάνοιμοι μοῦνοι εἰς ἰδίοντος ἄφαρ

14 κατασκευής αρμίον MS.; I give the correction of Wall, cf. Pind. I. ii. 16: διὸ "Ἀρεί
στείχοι βλαν would be as good, cf. Pind. P. iv. 8; but διὸ μ᾽ ἅσκι "Ἀρεί βλαν would be a glyconic
line quite foreign to the metre. In the previous
line τρία διὰ τῆς σάφεις πρωτεύων awaits corre-
tion; I cannot seem Wecklin's τρία διὰ λαμί
σάφεις πρωτεύων.
At e. 4 this has lapsed insensibly into Dorian epitrite for describing Heracles, and abandons it again immediately.

Thus any phrase or figure carrying with it an association could be used precisely as modern music uses a *Leit-motiv* or "guiding theme"; for explanation of which term I quote again Sir Hubert Parry: "Leit-motiv," he says, "consist of figures or short passages of melody of marked character which illustrate, or as it were label, certain personages, situations, or abstract ideas which occur prominently in the course of a story or drama of which the music is the counterpart; and when the situations recur, or the personages come forward in the course of the action, or even when the personage or idea is implied or referred to, the figure which constitutes the leit-motif is heard."

Metricianally accomplishment was shown in passing from one rhythm to another while keeping the movement going all the time. So far as I discover, there were three devices which enabled you to manage these transitions: (1) by *link*; (2) by *echo*; (3) by *overlapping*.

A connecting *link* or *copula* is a syllable interposed between the lines in order to enable the movement to be carried on without a rest. It is so designed that rhythmically it could belong to either line; but while it is common to them both, you are to feel that it is intermediate between them; so for the instruction of the ear it is made to consist usually, on the first occurrence, of a single separate word. But when the ear has thus been made to understand the phrases which the movement is constructed of, it does not need that explanation any longer, and succeeding strophes do not think it necessary to observe the separation of the link.—This is only one application of a general principle. The first strophe states the metre plainly; afterwards, when the metre is firmly established in the ear, it can be trusted to accept the liberty of an equivalent variation. This will seem a matter of course to those who know anything of music. Examples of what I mean by *links* are marked off here by dotted lines:

Aesch. Cho. 379

| τοῦτο διαμερέον | καὶ ποτ’ ἄν ἀμφιλαφής |
| ἰκεῖθ’ ἀπέρ τ' ἐβέλος | Ζεῦ | Ζεῦ ἐπὶ χειρὰ βαλοῖ | φεῦ |
| Ζεῦ κάτωθεν ἱλλᾶν | φεῦ κάρεια δαίμονι | πιστὰ γένοιτο χώρα. |

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20 "Or of metre either I might almost say; only that Bergk in New. vi. 7 p. 279 laid down exactly the opposite for Pindar,—that his metre gets more strict as it proceeds; *i.e.* prima strophæ vocabuli sibi officiunt, sed ante posta decem praeter lege subeunt." It would be strange indeed if it were so, but it is simply not the fact.

21 I have no doubt that the readings given here are right so far as metre is concerned. In the invisit strophæ *I take it to mean an enumeration as in the strophæ: "visits the heads, and that will be a pledge" (or "and let that be a pledge.")
Soph. El. 480 = 495
= 495

μήποτε μήποτ' ἡμίν

μήποτε μήποτ' ἡμίν

αὕρεγός τεῦχον τέρας

αὕρεγός τεῦχον τέρας

τοῖς ἄρσεσι καὶ συναρσίσιν ὅτοι

τοῖς ἄρσεσι καὶ συναρσίσιν ὅτοι

μαντίδαι βρατόν

μαντίδαι βρατόν

οὐκ εἰσίν ἐν δεινῶν ἐνεργοῖς

οὐκ εἰσίν ἐν δεινῶν ἐνεργοῖς

οὐδ' ἐν θεοφάνεις

οὐδ' ἐν θεοφάνεις

Eur. Hér. 732 = 763

κακομοιροφαίταις ὑπασιν,

κακομοιροφαίταις ὑπασιν,

ὡς ᾠρείς ἀμφιτρότων

ὣς ᾠρείς ἀμφιτρότων

ἢ Ἡρμηνία ἔχασαν ἑορτῷ

ἢ Ἡρμηνία ἔχασαν ἑορτῷ

Μουσάκων δ' ἀκταιάν ἐκδη—

Μουσάκων δ' ἀκταιάν ἐκδη—

παντὸς τελεσί πειραμάτων ἀρ

παντὸς τελεσί πειραμάτων ἀρ

χάς ἐπ' ὀπλήρων τε μᾶς ἧσαναν.

χάς ἐπ' ὀπλήρων τε μᾶς ἧσαναν.

In the following passage we have a rapid triplet as a link:

Eur. Andr. 136 = 142

γυμνὶ δ' οὐσ' ἐπὶ ξέναις

γυμνὶ δ' οὐσ' ἐπὶ ξέναις

δρομὶς ἐπ' ἀλλωτρίας

δρομὶς ἐπ' ἀλλωτρίας

πόλεοι: ἐνθ' οὐ φίλον τιν' εἰσφαγὰ

πόλεοι: ἐνθ' οὐ φίλον τιν' εἰσφαγὰ

ἐκποτοῦν ἐκμὴν φόβοι δ'

ἐκποτοῦν ἐκμὴν φόβοι δ'

ὑγχιὰν ἀγοραν' οὔμενα

ὑγχιὰν ἀγοραν' οὔμενα

Echos is the ending of a line repeated as the beginning of the next. Thus in the following stanzas there is a constant reiteration of the figure — — which serves to begin lines 4 and 8:

Bacchylid, iv

'Ετεὶ Συρακοσίαν φίλει,

'Ετεὶ Συρακοσίαν φίλει,

πόλιν ὁ χρυσοκώμας Ἀπόλλων

πόλιν ὁ χρυσοκώμας Ἀπόλλων

ἀστυβεμένος θ' Ἰέρωνα γεραίρει

ἀστυβεμένος θ' Ἰέρωνα γεραίρει

τρίτων γὰρ πάρ ὀμφαλῶν ὑψιῦν ὁθονὸς

τρίτων γὰρ πάρ ὀμφαλῶν ὑψιῦν ὁθονὸς

Πυθικοὺς αἰείται ὁκ

Πυθικοὺς αἰείται ὁκ

ὑποδόν ἀρετὴ σὺν ἑπτὼν

ὑποδόν ἀρετὴ σὺν ἑπτὼν

ἀδειον τ' ὂλυμπιονίκας

ἀδειον τ' ὂλυμπιονίκας

8 ἀδειον τ' ὂλυμπιονίκας

8 ἀδειον τ' ὂλυμπιονίκας

φίλοιν ἐντα παντοδαποῖν

φίλοιν ἐντα παντοδαποῖν

λαγχώνειν ἐπὶ μοῖραις ἐαθλῶν; 15

λαγχώνειν ἐπὶ μοῖραις ἐαθλῶν; 15

11 οὐδὲ is the vulgate, but metre requires οὖν or οὖρ, and in cod. οὖν has been made from οὐδὲ. The same correction is to be made in Tract. 410 ὁ οὐσίδικος οὐχ' ἐν οὐδὲ ὁμίοι 

15 This being mutilated, I have taken the first half from one strophe and the second from the other. In c. 18 πάνων οὐ is rightly restored by Prof. Blaauw.
In continuance by echo this particular figure - - does great service. When existing by itself it is called bacchiae, and used for short moments of violent excitement; here we see this bacchiae changing to glyconic, Eur. Supp. 1015.

It is very common to echo a figure immediately before the conclusion of a stanza: thus in the Dorian of Pind. I. 1,

εἰς οὖς πόλλοις ὃμφοτερήν
τοι χαρίτων
σὺν θεοῖς ζεῦξοι τέλος,

and this little offspring - - - is duly mentioned at the beginning of the epode.

Not only the ending, however, may be echoed, but some other portion of a previous line; in this pretty little glyconic stanza from the 2nd Nemean for instance:

ἐν ἔσολοι Πέλοποι πτυχαῖς ὄκτῳ στεφάνοις ἐμικεθεὶς ἤθη
ἐπὶ δὲ ἐν Νεμέας, τὰ δὲ οἱ-

κοι μάσσοι ύμιθμοῦ
Δίος ἄγοντ' τὸν ὁ πολιταὶ κομάζετε Τιμοθῆ-

μον σὺν εὐκλεί νοστῷ

ἀδυμελεῖ 8'

9 ἐξάρχεστε φωνᾶ.

ἀδυμελεῖ is an echo of the - - - which has been heard in the interior of all the lines preceding.

Soph. Aj. 221 will lead us a little further:

1 οἶμαι ἐδή—καποὶ ἢβρος ἄθενος ἄγγελλαν
2 ἄτλατον ὁδὲ φευκτὰν
3 τῶν μεγάλων Δαναῶν ὑπὸ κλῆσομέναν
4 τὰν ὅ μέγας μόθος ἀζεῖς,
5 οἴμοι φόβοι—μαι τί προσάρτων περίφαστον ἀνήρ
6 θανεῖται παραπλάκτων χερὶ συγκατακταῖς
7 κελαμίνοις ξίφεσιν βοτα καὶ
8 βοτήρας ἰπποφώμας.

θανεῖται in v. 6 and κελαμίνοις in v. 7 echo the endings of the lines preceding them. The movement of ἄγγελλαν in v. 1 is repeated in v. 3 and twice echoed in v. 4. The second time it occurs in v. 4 it is extended to
GREEK LYRIC METRE.

—οιμ—: this is taken up in the next line and continues to v. 7; from which a return is made to the rhythm of the opening lines: σὺν βοτά καὶ
βοτήμασι ἱππωνόμασι = ἄγρετλαν | ἄπλατον σωμὶ δυεκτᾶν.

The way by which the return is made from one rhythm to another in v. 7 is an example of the last and subtlest form of shift. I call it overlapping. You expect the rhythm to continue κελαίνοις ξίφεσιν καὶ, but ξίφεσιν affords an opportunity of continuing with anaesthetic (or daeциlic) movement, ξίφεσιν βοτά καὶ: so that what you get is a line of which the first part is in one rhythm and the last part in another, while the middle part is common to them both:

κελαίνοις ξίφεσιν βοτά καὶ

This device of overlapping enabled a metrician sometimes to get even a continuous contrapuntal effect of rhythm. The following from the Promethus Vinclus is a very skilfully composed example; where the Ocean Maidens are compassionating Prometheus in mournful Anacreontic measures. The chief subject is

—οιμοι—: a well-known rhythm, e.g.

Ar. Nub. 940 νῦν δείξετο τῷ πισυνῷ τοῖς περιδεξίασιν
950 λόγοις καὶ φροντίσει καὶ γνωριμίαις μεριμναῖς.
Cratinus fr. 172: ἀνδρας σοφοὺς χρὴ τὸ παρόν πρόγευμα καλῶς
eis δύναμιν τίθεσθαι.

But here, by repeating the first section thus,

—οιμοι—: it is so contrived that another Anacreontic phrase (2) —οιμ— is heard moving underneath against it:

130 μοῖραν φοβηθῆς 
=150 Λεύσαρι Προμηθεῖ 

1 γαρ ἢ τάξις 
θεοὺς φοβερὰ 

1 διὰ ἐρυθὴς βοσσῶς 
θαῖς ἀμίλλαις 

2 περίγους 
προσέβα 

3 νόμισ 
παραπερα 

4 πέτρας 
προσαναυμόμενον

13 See the schol. on v. 130. 15 Probably εἰσοδος or εἰσεύθενα: then the
23 The first section presently is numbered (1), metre is continuous throughout.
the second (2).
In setting this to music we should now design one melody for (1) and a
different, but of course harmonious, melody for (2) ; whether the Greeks
attained to counterpoint in metre and yet failed to think of counterpoint in
melody I cannot say.

It will be observed how carefully the common elements are marked off
by separation of the words. So it is in the fragment (Anacr. 56) quoted by
the schol.:

οὐδ’ αὖ μ’ ἐάσεσθι μεθύωντι ἀείκαν ἀπεδιδεῖν

where the second part is Ionic a míares. Here is another fragment of that
fine metrician, Anacreon fr. 19 :

ἀρθεῖς ἄπτετ’ ἀπὸ Λευκάδος
πέτρης ἐς τολίῳ κύμα κολυμβῶ μεθύων ἔροι.

This begins with a glyconic, and you expect it to continue so, πέτρης ἐς
τολίῳ — ; instead of which it shifts, through the common element ἐς,
to choriambic.

In subtility of artistic workmanship no one is the superior of Sophocles :
his is an elaborate piece of contrapuntal writing, based on the same subject
as P. F. 130 — — — — — — — — — — — — — ; the former half of this
number 1, the latter 5. The second subject, introduced immediately to
move against this, is glyconic, numbered 2 and 3,

ὅδικαίον ἄδικοις φρένας
παραστάτα ἐπὶ λόβῳ.

22 At 4 we get a new figure which is repeated
at the close : in the anastrophe it is indicated
by cæsura; and I think there would have been
a cæsura in the strophe too, if it had not been
that κραστοβορος is one long word: δίστα, that
would have been unmetrical, but κραστοβορος
does not spell the movement. Other cases in
passages to be quoted presently are κραστοβορος
in Agam. 707, δήμολουs in Isechyl. viii. 2.—

When anaplectic dimeters and tamblic trimeters
have not the usual cæsura, it will be found
that a long word is the condition of the rime,
as Agam. 781 τῷ δοξάργαντι ἐκκοιτάζων. 784 καὶ ἐγχώροντα ὅμως ἄγαλμα
πρῶτον Βασιλέως, Soph. fr. 309 πέρικον ἐς
κλεινων Ἀθηναίων πάγοις (spittles movement).
GREEK LYRIC METRE.

At 7 the ending — o — is taken up with choriambic movement; while at 8 we begin to hear a sound of three consecutive long syllables, which recur on several occasions; Antig. 781 = 791:

1. Ἐρος ἀνίκατε μάχαν
   σὺ καὶ δεκαίων ἁδίκων
2. φρένας δὲ ἐν κτίμασι πίπτεις
3. ἐν λωβῇ
4. δὲ ἐν μάλακαις παρείαις
5. νεάνιδος ἐφυγείως
6. ἐν καὶ τὸς νείκος ἀνδρῶν
7. ἐσομαιρὸν ἐγείρε ταράζας
8. φοιτάς ὁ ἐπερπόμων ἐν θάρσοις
9. ἐν ἀναργύρῳ βλεφάρων
10. ἰμέρος εἰδέλετρον
11. καὶ σ' οὕτ' ὀδυνάτων
12. φύσιμων οὐδεῖς
13. νύφας τῶν μεγάλων οὗ τι παρεδρός
14. οὐδ' ἀμέριον σὲ γ' ἀνθρώπων
15. ο δ' ἐγὼν μέρισθων
16. βεσμών, ἄρας γὰρ ἐμπείζεις θεῖος Ἀφροδίτη
17. λεύκοις ἢ ἐνδιάφοροι κατημάριρες με.

Those who may care to pursue this method of analysis and wish for a good field to practise in will find it in the lyrics of Antigone which follow, in El. 1058 and in Ajax 693: except that Ant. 850 = 869 are both, I think, corrupted and should be

Ἰῳ δύστατος, οὐ
βροτότατον οὐτ' ἐν νεκροῖς,
μέτοικος οὐ ξώστιν, οὐ θανότατιν.

There is a very beautiful example of transition in a passage of admirable metre which will serve at the same time to illustrate nearly all the principles I have advanced; Læcch. Agam. 686 = 702:

1. τίς ποτ' ἀνόμαξεν ὁδὴ
to τὸν ἄνθρωπον
2. (μὴ τις ὄντις οὐχ ὄρθον προνοιαὶ
to πεπραγμένην
3. γλώσσαι ἐν τῷ κυρώ
to τῶν δορυμέδρον ἀμφιφελῆ θῆνος
4. τιν' ἕνεκ' ἐκ τοῦ κυρών;)

22 ὑπὲρ τοῦτον Dindorf: the MS. is τῶν μεγάλων παρείβοι ἐν ἀρχαι, a variation without parallel in choriambic metre, and the contrary of the sense. Sophocles is alluding to the proverb ἄριστος ἐν ἀρχαι βραχύς, used by Paul, Sil. J.P. v, 193 in his clever answer to Agathina.
5 δοὺς ἔκφατος τίοντας,
6 ὑμέναιον, ὡς τὸ τέρρετρον
7 γὰρ ὁ ἄφροισι ν ἀλείνων.
8 μεταμυχώνοντας ἤ ἡμῶν
9 Πρώμοι πόλεις γεραιά
10 πολύθρηνον,
11 μέγα τοι στένει κεκλήσκον—
12 σα Πάρων τῶν αἰνελεκτρον
13 τάμπροσθ' ἢ πολύθρηνον αἴων
14 ἀμφι πολιτάν
15 μέλειον άλο' ἀνατλάσσα.

Here we have three metres: 

\textit{trochaic} with syncopation, 1-3; \textit{Ionic a minore} or \textit{Anacreontic}, 4-6 and 8-12; \textit{glycogenic} 6-7 and 13-15. These corresponding stanzas are constructed with such artifice,—there are so many antithetic meanings woven in so close a texture,—that I give a rendering designed to bring them out, endeavouring also to suggest something of the metrical effect; though not of course by use of the same metres, which in English has rarely that result:

Who named her all so shrewdly?
—Was’t One beyond our ken,
By glimpse of Order fated
His happy lips who moved?
This Helen, so rudely
Still warred about by men,
This bride with iron mated,—
Sure Hell knew she proved!
When lightly from the silken-tissued
Veils before her bower emerging
Forth to Eastward sail she issued,
Breeze of earth-born Zephyrus urging—
Forth to Eastward sail
Men swarming after, hot in quest,
Fierce myriad-hunters, all address
With shields, that barrier-like pursued
Fast on a sightless trail, of oars
Reached upon Simois’ leafy shores,
Full cry, in bloody feud!
Revenge will surely render
That smiting well-repaired;
Will make this dear alliance
Be all too dear for Troy!
Of high Zeus Home-defender
And friendly Table shared
Repays that prime defiance
On all that uttered joy;

\textit{stenosyllabic} with enjambement, 7-8; \textit{lyre} with enjambement, 9-10; \textit{lyre} with enjambement, 11-12; \textit{trochaic} with enjambement, 13-14; \textit{lyre} with enjambement, 15-16.
GREEK LYRIC METRE.

So loudly once in gay carousel
  Bride with Hymen-song would honour,—
Kinsmen, when the time of spousal
  Bade them heap their praise upon her—
Ah but at this time,
Though late the lesson, learned grown
With age-long suffering of her own
  Sons' blood so lamentably shed,
That ancient City loud, I ween,
Laments, with practice-perfect Threne,
  'O Paris, evil-weal!'

The rhythmical elements are three, and to appreciate their dramatic significance we must consider strophe and antistrophe together. The opening trochaics in both cases are for the expression of their own stern moral and religious views, and this metre they continue till they come to painting Helen, when they shift by means of a link—a syllable kept studiously separate on the first occurrence—

γλῶσσαι ἐν τῷ χαρόνω
τὰν ἄργιλαμβρὸν ἀμφιφαίνηθ' θ'

to Ἀναρχοντίκη, θ — — θ — — — —. \( \text{\textsuperscript{24}} \)
That is appropriate both for τὸ ἄβρωτον and τὸ ἄβρωτονεθὺς: in the strophe it describes the sumptuous delicate luxurious Helen flying Eastward with her Asiatic lover; and is equally fitting in the antistrophe for the Asiatic banquetters and for their threne. But it will be observed that this rhythm is interrupted for a moment at v. 6: you expect it to continue ἐλέανας ἐλανθρὸς ἑτο, but it shifts, by overlapping, to glyconic:

ἐλέανας ἐλανθρὸς ἐλέπτολες ἔμεναιον ὑπὸ τῶν ἐπὶ ἑπέρπετυν
ἐκ τῶν ἄβρωτομων γαμβροτίζων ἀείειν

the break in each case being marked by the division of the words. The purpose of this transition becomes fully apparent in the antistrophe; for this glyconic was the metre of the refrain in wedding-songs:

'Tήμην ὅ 'Τέμναι 'Τήμην,
'Tήμην 'Τέμναι ὅ. \( \text{\textsuperscript{25}} \)

Thus in Eur. I.A. 1036 sqq. where the marriage of Peleus and Thetis is described, this is the natural conclusion of the stanzas:

1055 πεντάκοντα κόρας Νήρεως
γάμον ἐχορευσαν

= 1076 Νήρεων ἔθεσαν πρότασ
Πηλέως θ ἐμεναίοντιν.

\( \text{\textsuperscript{24}} \) Transition to this metre is always, I believe, prepared by θ — — preceding; therefore the corrupt verses Soph. O.T. 1210=1219 have yet to be restored correctly.

Our transition to this metre here might well have been accentuated both by melody and orchestration,—wood-wind at this point, since the ὑμέναιος was accompanied by flutes, whereas Anacreon was άριδων ἀρτιστάλων, φιλοδόξιστον (Critius in Ath. 600 ε). It is just as though a phrase were introduced from some familiar Wedding-march. Then the ending δεῖδεν enables the Anacreontic to be resumed at once without further preparation, and the change of metre sharply points the contrast in the sense, between the joyful ὑμέναιος, then and the melancholy θρήσος now.20

Surely this is very beautiful.

The Θησεύς of Bacchylides opens with this prelude,

\begin{align*}
\text{xvii. } 1 & \quad 1 \quad \text{βασιλεὺς τάν} & \quad \text{iērān} & \quad \text{Ἀθανάτις} \\
= 16 & \quad \text{νέων ἡλθεν} & \quad \text{δολεῖσαν} & \quad \text{ἀμείψας} \\
\quad & \quad \text{τῶν ἄβροβισι άναξ} & \quad \text{Ἰωνόν} & \quad \text{κάρυξ} & \quad \text{ποιεῖν Τιτθίλαια} & \quad \text{κελευθός}.
\end{align*}

At 2 it lapses into a modification of glebic; but the prelude is Ionic a minor, and this movement continues to the break at iērān. The meaning is apparent; for this metre more than any other meant Ionic; and he is speaking of the ἄβροβισι Ἰωνόν.

The 7th Olympian of Pindar, for Diogoras of Rhodes, is in Doric rhythm with a slight exception. This is that famous ode which the Rhodians inscribed in golden letters in the temple of the Lindian Athena:

Φύλαξ ὡς εἰς τὸν ἄφνειος ἀπὸ χειρὸς ἡλῶν
ἐνυφὸς ἀμπελών κακλάξισιαν ὀρόσων
σωριτεῖται


The only variation from pure Dorian here is the prelude—singular and remarkable—to the first line and the last. Each time, in the opening strophe, it is separated from the remainder of the line, which is the normal da.floaty-
epitrite, such as begins, for instance, the 4th Pythian. But the prefix ἰ — is Ionic στιχον: and not only that, but it continues further in Ionic rhythm, φιλάν ὁ ν η τιν ἄφει, ἰ — — That is often used in Ionic στιχον (with the effect of rallentando) to conclude a period, as in Aesch. Supp. 1032 = 1040, P. F. 421 = 430, Ar. Vesp. 290 = 308; it occurs often in Ar. Bacch. 320 sqq., and is among the Asiatic rhythms of the Persae:

952 ἰάνων ἦτο ἀπήφρα
981 ἰάνων παύφρακτον Ἄρης ἕτεραλκής

And in Ar. Thesm. 101, where Agathon with his Chorus comes on singing, this is among his soft and delicate Asiatic phrases:

107 ΑΡ. ἄγεν νὶν ὀλβίζε Μοῦσα
116 ΧΟ. ἑπομαὶ ἐν ἐν ὀλβίζεσσα σεμοῦν
123 σεβομαὶ Λατό τὰ ἀναστά

When therefore I was first attending to the metre of the 7th Olympian, the effect it suggested to my ear was an Asiatic phrase, merged presently, by overlapping, into Dorian:

φιλαν ὃς ἐν τις ἀφεῖς ἀπκροχος ἔλθων

If you were to make two melodic figures, each to serve as a Leit-motiv, you might say, this shall be the Asiatic:

and this the Dorian:

Then you could combine the two, the one blending into the other, in this way:

Now if this is the true account,—if we have really an Ionic rhythm here, there should, according to the principle laid down before, be some allusion to that rhythm in the epode. We turn, then, to the epode, and we find that it proceeds in Dorian metre till we come to the last line but one, describing Rhodes and her inhabitants:

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There is our Ionic plainly, ἂς ἕκαστον ἀλλά με κολύει αἶδος, the second phrase repeating what we opened with, ἓξι καὶ τὰς ὅφη. And this Ionic comes in momentarily, for Ἀσία; while in the next line we return to Dorian epitrites for Ἀργος. The meaning is apparent when you think of Rhodes; the connexion of it with the mainland was particularly close, but it was colonized by Argives; and the metre indicates this double character. Thus the first line symbolizes Dorian with a tinge of Ἀσιαῖ, or Ἀσιαῖ over-whelmed beneath subduing Dorian.

Aristotle is a good authority, and he tells us that Sappho wrote an answer to Alcaeus: Alcaeus having said θέλω τε ἡ ἐστίν, ἄλλα με κολύει αἶδος, she replied

ἀς ἕκαστον ἀλλά με κολύει αἶδος.

Bergk thought 27 that this line of Alcaeus was in the same metre and belonged to the same poem as another fragment quoted by Hephæstion, so that it should run:

ὅτοι δείκτης ἐμφάσεις καὶ ἱματιάς ἀλλά με κολύει αἶδος

the open syllables in κολύει αἶδος coalescing. Be that as it may, there is no reason to doubt, and no one doubts, that the first line, an address to Sappho, was written by Alcaeus; and the metre is remarkable. Hephæstion calls it a τρίμετρον ἀκταλίκιον περιτευον συλλαβή τῇ τετάρτῃ, καλνόμενον δὲ 'Ἀλκαίον διδάκτακαλλαξον. Those who like may make it so: 'What is it? A learned man Could give it a learned name: Let him name it who can, The beauty would be the same.' What we see is that it begins as an Alcaic but, its ending is the Sapphic, and the two metres are welded in the closest way:

27 Opinions on the question are well summarised by Prof. H. W. Smyth Greek Mētis Poetis (1900) p. 239. I quote a portion of Bergk's note Poëtæ Lyrici Graeci III p. 90: 'Cum Aristotelēs, fīde et quār alius dignus, testificatur postρiām haec rescriptis Alceassen, appareat necessitātām, quās huc lūrē carmina intercedi, manifestum fuisse: utque non dubitavi Alcæum versum quem Aristotelēs ascriptum δείκνυται ἄλλα με κολύει αἶδος: praeterea versus eodem locātum quem Zerni in Hephæstion lūsisse, καὶ μελλόμενα Ξέρων, quæque conservānum sit utrum Sapphonem in progresa atrophæ Alceænam nominati compellere. Animadversionum dignī sīm etiam numeri utrinque carmine: Alceus ad Sappphonem scribens Sapphonem utitur versu ad hexameter, anversa sexit, ut numeri lectorum proprius gravitate temperaret, ac videtur hoc metrum, quod novum in hoc usum carmine adhibuit. Sappho Alceæ inscribens præter solitudinem Alceæam atrophæ, cuinās indole ἀναφέρει, idibile existimavit, ποίημα tōikos, quām carmine adhibuit. Hec ignorat singularis air, quia in numeris propinuæs, consilium utrinque carmine aggricis illustrat Aristotelēs testimonium posuissent confirmat.' The same argument weighs strongly in my mind; though the significance of the metres I interpret differently.
A poetess from whom the language of metre was not hid could easily dispense with any more; this little Valentine would tell its story quite intelligibly by itself: 'The Form, the Form alone is eloquent!'

As for Sappho's answer in Alcaics, there is no evidence that she used this metre elsewhere. If you were a woman and desired, while uttering a reproof in words, to acknowledge and return a compliment, would you write in your own proper metre or in his? For Sappho writes in his.

W. Headlam.
PHENEUS AND THE PHANEATIKÉ.

At three o'clock on the afternoon of July 6th, 1901, I stood at the extreme edge of the col between Mount Skipieza and Mount Saita, staring with a mixture of incredulity, irritation, and interest at the scene before me. Where I had expected to see the lake of Pheneus, a blue expanse of twenty-five square miles of water, there lay a fertile stretching plain, for the most part a blaze of golden corn, while here and there a white point of light showed where a fistmella'd harvester was at his peaceful toil. Nearer, the corn gave place to an ugly foreground of sun-cracked clay, while just at my feet, stretching from side to side of the narrowing valley, lay a mere ribbon of slate-coloured water—all that is left of the lake of Pheneus to-day.

I knew that such changes in its condition had been noted by travellers from Pausanias downwards, but this last and I believe final disappearance of the historic lake seems to have passed without notice in Athens and elsewhere. Believing that a short account of this singular natural feature of the Peloponnese and of the changes to which it has been subjected would not be wanting in geographical and historical interest, I made such survey and enquiries as were possible on the spot and have since collected what I could find written on the subject. The story of the lake or plain will be more readily intelligible by a brief description of the neighbourhood, which the accompanying sketch-map (Fig. 1) will make clear.

I.

The plain itself, its limits sharply defined by the surrounding mountains, is shaped and orientated somewhat like a miniature African continent. From N. to S. it measures about 7½ miles; from E. to W. rather less—the measurement being taken at such a point as to include its western arm or bay.

The eastern barrier of the lake is a great southern spur of Mt. Kyllene which, stretching southward under the ancient names first of Saapia, then of Geronction, then of Scithis, i.e. the mountain containing the S.W. Katrothi to which the mound or causeway of Hesakies led. This seems in itself probable, and if Saapia, like the other mountains' names of the district, e.g. Zoria and Skipieza, is a Solar word, it would hardly be a corruption of Scithis.

1 From a supposed similarity of names, Lake (Travekia in Mexico, iii. 142, 151) and most subsequent writers identify the ancient Scithis with the modern Saita and consequently the ancient Oryxiz with the modern Skipieza. Curtius (Peloponnese, i. p. 187) transposes these identifications, thinking that Oryxiz must mean the 'mountain of the canal,'
Stymphalus. The pass to Stymphalus lies between Geronteion and Sciathis. This great outwork of Kyllene in its southern portion is to-day called Skipezia. Facing it on the S.W. side of the lake rises the mass of Saita, and due south of the lake, and consequently between Skipezia and Saita, is the steep track from Orchomenus by which Pausanias reached the Pheneatike.

![Map of the District of Lake Phonia](image)

**Fig. 1.—Sketch-Mat of the District of Lake Phonia.**

N.W. of the lake and overhanging ancient Pheneus and modern Phonia is Mt. Dourdouhana, which forms part of the chain called in antiquity Penteleion. Between this and Saita lies the pass to Lykouria and Kleitor. Only at its northern angle is there any real break in the circle of the
hills. Here, two streams formerly entered the lake side by side. Their present junction is to the S. of ancient Pheneus. Of these the Phoinikito Potami, called in antiquity the Aroantos or Olbios,\footnote{Possibly Olbios may have been the name of the Zarouchla tributary. The Aroantos of Strabo (Geographica, viii. 880) may be only a blunder for Aroantos.} rises at the modern Karya,\footnote{The ancient Caryae is at the south of the lake. See below.} which lies ten miles to the N.E. of the lake, and flows thence in a uniformly S.W. direction to Pheneus. The other, a smaller stream, winds down to the plain between the two spurs of Krathis now named after the villages of Phenia and Zarouchla respectively. The only other stream of any volume is the fine cataract that comes down the gorge of Ouoza, the ancient Caryae or Caphyae, to the extreme south of the lake.

It will be seen from this enumeration that no other than a subterranean outlet is possible for the waters, and of these singular natural features of Arcadia there are two striking examples on the S.W. and S.E. of the lake, at points roughly corresponding; if the parallel of a miniature African continent be remembered, to the mouths of the Niger and Zambesi. In antiquity such an outlet was called, generally, ἐραςτήριον; locally, ἐραυθήριον. Its modern name is καταβόθρα. Of these Katavothrae Leake\footnote{Leake, Travels in the Morea, vol. iii. p. 163.} gives the most comprehensive list, and Philipsson\footnote{A. Philipsson, Peloponnesus, vol. ii. p. 460 sqq.} the most scientific account. They seem to be confined to the limestone area, and may take the form either of a porous layer through which the water percolates imperceptibly, or of a more or less open chasm into which it descends in a stream or cataract. In most cases the streams thus lost to sight have no recognisable outlet, and we must suppose that they disappear to feed the complex underground system of drainage and storage which belongs to the natural economy of the earth. Such outlets are unfortunately liable to various forms of obstruction. In the first place they may be choked by ἀλβρίς—trees, carcasses, and the like—carried thither in time of flood or storm. Not very successful efforts have been made to obviate this danger by placing gates or gratings of iron at the entrance. These have sometimes caused the very disasters they were designed to obviate, by arresting matter at the mouth of the channel, which might if left to itself have found its way safely through the underground outlet. Again, obstructions caused by a subsidence or other seismic movement have occurred, but such of these as have been observed have been of very temporary effect. Lastly, the most insidious and disastrous obstruction is that caused by the gradual deepening of alluvial deposit at the opening.

Of the two Katavothrae at Pheneus the S.W. is the more important. It is the main outlet of the waters, and the goal of the ancient canal and embankment, discussed below. But from its now indisputable connection with the source of the Ladon it is of fatal interest in the forgotten history of Olympia, now sleeping quietly in the sun forty miles away in Elis, but for centuries at the mercy of this terrible and unsuspected foe. As a rule the S.E. Katavothra formed as now the exit of the stream which descends from
Guiza. Its course underground is uncertain, but it may possibly be connected with Lake Stymphalus. Its position makes this probable, and I learn\(^{40}\) now that in 1899, when the Pheneus lake was fast falling, the lake of Stymphalus was remarkably full. I should imagine that on those occasions when the lake has emptied without doing damage in the Alpheios valley the main body of the waters have made their escape through this outlet—otherwise we must suppose that the alluvial deposit in Elis is now so deep that the waters even in flood-time do not rise above it.

Before turning to the history of the Pheneatiké there remains one

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**FIG. 2.**—THE OLD WATER-LINE OF LAKE PHONIA
(Running to the left from the point marked ←).

most interesting feature to discuss. Travellers from Pausanias onward have noticed the existence of a sharply-defined line passing at an even level round the contours of the hills, at a height which has been very variously estimated.\(^{41}\) This phenomenon, which is very striking when seen from a nearer point of view, is just visible in Fig. 2, reproduced from a photograph taken during the last subsidence of the lake and kindly lent by Professor Ernest Gardner.\(^{42}\) The most natural explanation is that the line is, what

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\(^{40}\) From Mr. J. H. Hopkins who visited the Pheneatiké at this date.

\(^{41}\) Partly no doubt from the fluctuating level of the lake from which it has been salted.

\(^{42}\) I am also indebted to him for the other photograph (Fig. 8) which gives a general view of the lake, recalling something of the charm of this Arcadian Switzerland. The women in the foreground are digging gypsum.
Pausanias took it to be, the trace of an old water level. Leake* thinks it to be too high for this, and suggests that it is due to the process of evaporation, adding that he has seen similar phenomena elsewhere. It is rather singular that Leake should bring forward this objection of too great altitude, as (1) he estimates the height of the marks at 50 feet above the plain, an estimate so erroneously low that it looks like a misprint for metres, and (2) he quotes with apparent belief a rumour that the water did on one occasion reach the height of 300 feet. Neither of these statements seems to be compatible with his view that the marks are too high to be a water level. A second objection to the theory that the line is a water level, also noticed by Leake, seems to me to be more cogent. So sharply cut is the line that looking up at it one's natural impression is that the lake must have remained at that level and no other for ages together, to produce such clear, solitary, and lasting trace of its presence. Now it will be seen from the passages referred to below that the record of the lake where it exists suggests a directly opposite conclusion, viz. that its normal state is that of rising or falling.6

* Leake, Travels in the Muses, vol. iii. p. 156.
6 Other possible indications of this are the absence of fish in the lake and of any kind of aquatic tradition among the inhabitants.
It seems to me that the line as we see it shows the level to which for innumerable alternations the water rose before sinking. In what manner precisely that limit was fixed it is difficult to determine. Mr. J. H. Hopkinson has suggested to me that there may exist or have existed a second and higher channel (Fig. 4) communicating with the Laios from the level of the lines which would thus become a new limit, and acquire as the ages passed the sharp definition otherwise inexplicable in a fluctuating lake. Professor Ernest Gardner supposes that the subterranean passage does not continuously descend but rises in its course to the level of the lines (Fig. 5) forming a natural syphon which would prevent the waters of the lake from rising above the highest part of the hidden channel. But this, though it would fix an upward limit to the lake, and so account for the definition of the lines, obviously would not suit the conditions observed and recorded in history, and indeed existing at the present time. We must therefore suppose that at some time anterior to the first records of the lake, the course of the channel which had produced the lines was modified, possibly by seismic disturbance, to its present condition, which from the absence of water in the lake bed must be one of continuous descent to the source of the Ladon. But another explanation was devised by W. G. Clark (Peloponnesus, p. 518) who thought that the line merely showed the junction of two geological strata, but this seems to me impossible owing to its length and absolutely even level. Phillipson also, who writes with geological knowledge, is quite clear as to the line being a water-line. Clark is right however in saying that the lines do not appear at the north end of the lake.
The natural features of the Phenestikê being such as I have described, it seems probable that alternations between lake and plain have existed from a period long before the dawn of history.

Mythologic indications may be noticed first. Curtius conjectures, in a manner more familiar in the middle of the nineteenth than the beginning of the twentieth century, that the legend of Herakles descending from Pheneus to savage Ellis is a natural myth, and that we may recover in this story a lost record of some early outburst of the lake attended with the same fatal consequence for Olympia that we know to have followed in later history. But the association of the sojourn of Herakles in Pheneus with his descent upon Ellis rests on very slight foundation—the fact that Pausanias saw the reputed tomb of Iphikles, brother to Herakles and his comrade-in-arms, on this Elean expedition, at or near Pheneus. Further, in the story of his sojourn in the Phenestikê, Herakles plays the rôle of a Prometheus, the contriving friend of man, taming savage nature for his good, rather than that of a malignant natural foe. Indeed, his causeway or canal was meant to obviate the very catastrophe of which Curtius rather unkindly accuses him. There are, however, other interesting indications in the mythology of the district. The cults, as Pausanias enumerates them, seem peculiarly fitted to its singular character. Poseidon is a deity proper for a horse-feeding plain or a stretching sea, Demeter for peaceful cornland or for that underworld whose chasms yawn on either side the lake, Hermes for a folk more than any other at the mercy of the change and chance of life.

The ancient citadel of Pheneus at the northern end of the lake is mentioned once by Homer, in the Catalogue, and once by Virgil, where Evander recalls the sojourn of Anchises and Priam at his Arcadian home. The citadel stood, as we learn from Pausanias, on what one still naturally speaks of as a peninsula jutting out from the N.W. angle of the plain. So inadequately does this insignificant conical hill fit the description of Pausanias, who speaks of it as precipitous on every side and requiring little artificial fortification, that as early as 1806 Dodwell tried to identify it as the real citadel, a height, bearing the omnipresent name of Ellis, which rises above the modern village of Phoinia. The remains here, however, appear to be of the least conclusive character, and it is scarcely probable that the acropolis in the ordinary sense of the word would be so far from and above the town.

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* Pausanias, viii. 14.
* Burrian, Geographie von Griechenland, ii. p. 199.
* He would not be less appropriate in his Arcadian character of the rômes hies. See next footnote.
* II. ii. 605. οἰ θεά τοῦ ἑλληνικοῦ καὶ ὀρχυ-
  
understand. Homer's epithet means well,
proper. According to Leake, though it does not seem to be noticed by other travellers, the modern village occupied the ancient site till recent times. This occupation may in a measure account for the discrepancy between the account of Pausanias and the site as it is to-day. All traces of the lower town described by Pausanias as lying at the foot of the hill have disappeared. The stadium one would suppose lay in the valley of the Aroianus. There is hardly room for it elsewhere. 15

It may seem strange that in the brilliant and crowded pageant of Greek history no event of importance either in peace or war is associated with what on the map of Greece appears as one of its most striking features. The natural battlegrounds of the Peloponnesus, however, lie to the south, and spacious arenas as the lake bed seems, a commander might well hesitate to risk his force in the tortuous defiles which form its communication with the outer world. 16

Again, these and its liability to periodic devastation may have made and kept it a small and isolated community in times of peace.

The earliest direct reference to the peculiar features of the lake seems to be a sentence in the writings of Theophrastus, 16 the pupil, friend, and heir of Aristotle. From his remark that the various forms of vegetation at Pheneus, when destroyed by inundation, renew themselves on the same spots where they had formerly grown, we gather that in his day the alternations between lake and plain were fairly frequent. Eratosthenes, a Greek geographer of the next century quoted by Strabo, 16 was aware that the S.W. Katavotis was connected with the source of the Laidon, and attributes in set terms the destruction of the site of Olympia 17 to the waters of the lake escaping by that channel.

A comparison of the references by writers about the beginning of our era makes it seem likely that at that period the lake was full. Diodorus Siculus says that in former times the Aroianus was lost in a subterranean

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15 As the name Pheneus is somewhat loosely used by several writers, I append a list of the localities which have at one time or other borne the name.

(a) The whole district of lake or plain with the hamlets on the enclosing mountains. This was called "Pheneus" or "Pheneus" or "Pheneus" in antiquity, and is to-day the Sphas, Pheneus.

(b) The citadel on the central hill jutting out into the lake at its southern angle. This was the acropolis described by Pausanias. It was inhabited until the eighteenth-century inundations.

(c) The district near the lake bed at the foot of this hill. This was the area described by Pausanias. Close to it is the modern village Pheneus, which is, I believe, to bear in future the official name Pheneus.

(d) The modern village of Pheneus. This, with the adjacent hamlet of Bika, overlooks the ancient citadel from the southern slope of Mt. Mountianus.

16 Polybius, Histor. lib. vi. 11, mentions the failure of an Achæan army to hold the pass between Stymphalus and Oedonassos in 221 B.C., and (iv. 76) gives an account of the successful passage of a Macedonian force in 228 B.C. through the same pass in the middle of the winter.

17 Strabo, Geography, viii. 339.

18 This connection cannot be disputed. The necessity for an outlet of so considerable a stream as is inferred at the Katavotis, the respective positions of this and of the Laidon, spring, lying six miles apart, with a fall of about 50 feet between the two, and the correspondence between the diminution of the lake and the increase of the stream make this connection clear. Cf. L. Ross, Relics . . . of the Greeks, p. 107. Cf. also Fries, Pausanias, iv. p. 263.
channel, as if in his day it flowed into the lake. Plutarch \(\text{18}\) rallies Apollo for his injustice in sending a plague of waters on the Pheneus of his day, for the theft of the sacred tripod a thousand years before. Aelian \(\text{19}\) also alludes to it as a lake. All these scanty references may well refer to one and the same inundation. Pliny \(\text{20}\) implies nothing as to the condition in his time, but mentions alternations previous to his day. He attributes them all, probably erroneously, to seismic disturbance.

Pausanias \(\text{21}\) gives us a fairly detailed and doubtless an accurate picture of the empty plain as he saw it, though he was unaware that the lake had existed so recently as the passages cited above would seem to show. \(\text{22}\) The canal of Herakles was, he says, 50 stades in length. The actual distance between Pheneus and the S.W. Kataothra is about 3½ miles, so that if the measurement given is accurate we must suppose its inception to have been some little way up the Arcadian Valley. It was in his time 30 feet in height, where unbroken, and seems to have been not so much an artificial channel excavated in the plain, as a huge mound crossing the lake bed in a general direction from N.E. to S.W., and designed in the first instance to prevent an irruption of the waters into the E. and S. parts of the plain, and also to serve as a road or causeway. It no longer fulfilled its purpose in the time of Pausanias, being partly ruined, probably by the inundation mentioned above. Such causeways though of a ruder type and on a smaller scale are not infrequently found in Arcadia. One, which is, I think, ancient, crosses the northern plain of Orchomenus; another, which is of uncertain date, separates the plains of Tegea and Pallantium. \(\text{23}\)

From the day when Pausanias turned his horse's head to Pallen to the visit of Leake and Dodwell in 1806 the little valley has been without an historian. \(\text{24}\) We do not know what catastrophes there attended the great earthquakes of the sixth century, nor under what circumstances that deep, even layer of earth was deposited on the banks of the Alpheios, part of which, never since disturbed, yet stretches from the Hippodrome to the Leonidaion at Olympia.

There exist, however, a few scanty indications of the condition of the lake towards the eighteenth century. The earliest maps of Greece afford more of the allegorical glory of Venice and Amsterdam than the interior

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\(\text{18}\) Plutarch, De serva numinis virtute, xii.
\(\text{19}\) Aelian, No nat. anim., iii. 35.
\(\text{20}\) Pliny, Nat. Hist., xxxi. 54.
\(\text{21}\) Pausanias, viii. 14, 1-8.
\(\text{22}\) I am not surprised that this should be the case when I remember my utter failure to extract local information worth the name about the last disappearances of the lake, which cannot have happened more than three to four years before my visit. But cf. the table at the end of this paper.
\(\text{23}\) Pausanias, viii. 44, 5. F. Leake, Pausanias, iv. p. 419.
\(\text{24}\) I should imagine that the Pheneitike when since its barrier of mountains is passed is much to-day what it has always been. The good Hesychius of Hagios Georgios showed me with pride a dusty collection of the visiting cards of chance travellers—scarcely one for a decade of years. I can call to mind no other part of Europe where life has gone on through the centuries with seeming so little change, so little interruption from the outside world.
features of the countries they represent, but two, a Dutch \(^9\) and a German \(^8\) map, published respectively in 1690 and 1720, certainly show the lake as a lake with the Lake directly issuing from it. That the Venetians had fortified ancient Pheneus is probable, not only from the remains on the site but also from the numerous Venetian coins (Obv. Lion of S. Mark, Rev. Christ King) found in the neighbourhood.\(^{22}\)

Bobbay,\(^{28}\) Neumann-Partsch,\(^{26}\) Curtius,\(^{20}\) and others all give records, derived probably from local tradition, of a very deep inundation early in the eighteenth century, in which an older monastery of Hagia Georgia, 300 \(^{23}\) feet above the level of the plain, is said to have been submerged. It is possible however that this inundation has been greatly exaggerated.\(^{25}\) The altitude of the present monastery, and indeed of modern Pheneia, would it is true seem to bear out the story, but Greek monasteries from both religious and political tradition are more often than not perched on almost inaccessible heights, and Pheneia may have been placed where it is to escape malarial exhalation from the lake rather than the lake itself.\(^{22}\) If the figures are correct, it is not easy to estimate the danger afforded by a huge leaky cistern, containing the vast volume of water implied in this measurement poised high above the Peloponnese.

When we come to the last century the record is fairly continuous. Lenke\(^{24}\) and Dodwell\(^{26}\) who visited Pheneus in 1806 found a swampy plain still traversed, as when Pausanias saw it, by a partially ruined causeway. Gell,\(^{27}\) who must have been there shortly after, speaks of this as 'a road conducted along a magnificent mound,' and gives a very interesting view of the lake (which is here reproduced, Fig. 6) under these circumstances. This however gives the impression that the causeway led to the extreme S. of the lake rather than to the S.W., Kalavothra, which I do not think can ever have been the case.

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\(^9\) *The Peloponnesia*, G. and J. Yalk, Amsterdam, 1890.

\(^{10}\) Id. M. Scudder, Augsburg, 1739. Both these are in the British Museum. My faith in maps as contemporary evidence has however been shaken. The largest and most expensive of modern guides to Greece, published with all the resources of easy communication and travel at its command, gives to its 1803 edition a brilliant blue lake of some 33 square miles in extent where no lake exists at all. Nineteen maps of Greece are here color.


\(^{22}\) La Pollina de Bobbey, *Recherches geographiques sur les sites de la Morée*, p. 135.


\(^{26}\) Neumann and Partsch, loc. cit. give the depth of the waters as 252 metras.

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\(^{23}\) One weak point of the story is that the present monastery of Hagia Georgia is obviously older than the date assigned to the inundation. The situation of this monastery is surely one of the most beautiful in Greece. A curred bastion of Mt. Othos reaches out nearly to the lake, rising out of an undulating mass of plane-trees, cypresses, and poplars, broken here and there by the scattered fields of the monastery, the irregular red-tiled roofs of which nestle high above under the very crest of the spur.

\(^{24}\) *A. Moschopoulos*, *Geografinia ev Tenea*, p. 147.


What happened in the valley, after these visits early in the century, seems to have been briefly this. Either Drama Ali, the last bey of Corinth, or an inferior Turkish pasha who kept up some kind of fortress at Mousa on the E. side of the lake, placed iron gates or gratings over the mouths of the Katavothrae for the obvious purpose of preventing their obstruction. When the Pheneatiko was evacuated by the Turks, these gates were recklessly destroyed by the Greek peasantry in an outburst of undiscriminating hate for their former masters. The result was that shortly after the War of Independence the Katavothrae began to close and the lake began to rise.

It was still rising when the French map was made in 1829. Boblaye gives the height of the lake above the sea level as 753 metres, its depth being about 50 metres.

During this time the Ladon stream was dry. The water continued to rise till Jan. 1st, 1834, when the S.W. Katavothra suddenly opened, the Ladon became again a raging torrent, and part of the site of ancient Olympia was again flooded. This reappearance of their old pastures coincided with the arrival of the newly chosen king of Greece, and was hailed by the inhabitants as a happy omen of the new era. The prosperity of Pheneus

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*Note:* Text continues beyond the visible page.

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*Footnotes:

38 Neumann and Parisch, p. 352.

37 This seems on the face of it more likely than the local tradition to the effect that the placing of these gates was a final act of malice.

was short-lived. Clark \(^{39}\) was told that the malice of the people of Lykourgia was the cause of the next rise of the lake. If this is true we have history repeating itself, for the control of the water supply seems to have been a fruitful cause of ill-feeling between the communities of S. Arcadia in classical times. But whatever the cause, the inhabitants in 1838 saw the waters again encroaching on the scene of their recent toil, and from that time forward all travellers describe it as a lake.\(^{20}\) In the last inundation it seems to have reached its highest level about the year 1886. The last published account of the lake based on personal knowledge is that of Mr. Frazer,\(^{40}\) who visited the Pheneatiké in the autumn of 1895, and devotes to the lake and its surroundings some of those passages of graceful and informing description admired by all readers of his Commentary.

The lake was sinking then and must have sunk rapidly since, for at the time of my visit,\(^{41}\) in July of this year, all that remained of it was a strip of slate-coloured water, perhaps 200 yards across, at the extreme southern end of the bed. A cairn on the level just below Guiza mentioned by Gell still exists, and at this point the water marks, if such they are, are extraordinarily clear. I put them at 150 feet above the plain, which accords fairly well with what other travellers have estimated. Either the remains of the causeway must have been hidden in the thickly standing harvest, or else the very ordinary trodden earthen track, along which I rode, but little above the level of the plain, must be all that is left of it. Certainly there is no conspicuous mound crossing the plain to-day where Leake and Dodwell would lead one to expect it.

Appended on the following page is a list of such fluctuations of the lake as have already been recorded, with the authorities for them. Exact reference to these has already been made in the footnotes.

\(^{39} a\) Peloponnese, p. 316.

\(^{40} a\) Most of these have been already cited, but cf. also:

F. Abichhoven, Itineraire descriptif de l'Attique, p. 290 sqq.

W. Visscher, Brünnungen... aus Griechenland, p. 494 sqq.

G. P. Welcker, Tagebuch eines griechischen

\(^{41} a\) J. G. Frazer, Prometheus's description of Greece, iv. 220 sqq.
### TABLE OF RECORDED FLUCTUATIONS OF THE LAKE.

<table>
<thead>
<tr>
<th>Date</th>
<th>Condition of Lake</th>
<th>Authorities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before the Christian Era</td>
<td>Unrecorded alternations</td>
<td>[Indications in Theophrastus and Eratosthenes]</td>
</tr>
<tr>
<td>At some period between 1 and 150 A.D.</td>
<td>Full.</td>
<td>Dioscorus of Sidon. Plutarch. Aelian.</td>
</tr>
<tr>
<td>Cir. 175</td>
<td>Empty.</td>
<td>Pausanias.</td>
</tr>
<tr>
<td>Between ancient and modern times</td>
<td>Unrecorded alternations</td>
<td>[Indications:—The great earthquakes of 522, 561. The abnormal inundations of Olympia.]</td>
</tr>
<tr>
<td>Jan. 1st, 1834</td>
<td>Sudden fall.</td>
<td>Bohlaye, Aldenhoven, Welcker, Bendl. Curtius, Vinther, Clark, Burnias, Neumann and Parroch, Phillippeau, Mellin. Frasier. These authors write in varying degree of faith, but from a consensus of their remarks these dates may be relied on.</td>
</tr>
<tr>
<td>1834-1838</td>
<td>Empty.</td>
<td>Frasier.</td>
</tr>
<tr>
<td>1838-1850</td>
<td>Rising.</td>
<td>Local information communicated to the author.</td>
</tr>
<tr>
<td>1850-1885</td>
<td>Falling</td>
<td></td>
</tr>
<tr>
<td>1901 July-August</td>
<td>Empty.</td>
<td></td>
</tr>
</tbody>
</table>

*4* I learn this from my friend Mr. Christo Lasaropoulos of Livadi near Ohomousos, who since this paper was written was so kind as to send me further particulars. The last disappearance of the lake was, as before, due to natural causes, but steps are said to have been taken to keep the Kaliantheme permanently open.

**John H. Baker-Penoyre**
ANTIOCHUS III AND HIS TITLE 'GREAT-KING.'

It is not generally realized that to speak of Antiochus III—the Antiochus who makes a figure in Roman History—as Antiochus the Great is strictly speaking incorrect, although, as a popular form of speech, it goes back to the time of Polybius,1 and is even found on some monuments.2 Other monuments give us the form which is obviously the more correct, the official, form. The Seleucid kings had, it is well known, official surnames. We find them on their coins or in inscriptions along with their title Βασιλεύς. The three elements of their designation have their regular order—title, personal name, surname, e.g. Ἡσσαλεύς Σέλεους Φιλοπάτωρ. But in the case of Antiochus III the inscriptions of most authority, which give his designation in full, have not Βασιλεύς Ἀντίοχος Μέγας but Βασιλεύς μέγας Ἀντίοχος.3 That is to say, Μέγας is not really a surname at all; but Antiochus III is distinguished by a modification of his title: he is not simply 'King' but 'Great-King.' The popular form is especially misleading to us who have the way of calling kings the Great to imply vaguely some sort of personal pre-eminence, as when we speak of Alfred the Great, Frederick the Great, &c. The title 'Great-King' has quite a definite significance.

Long before, when the leading civilization of Asia was that on the Euphrates or Tigris, the paramount sovereign there used as one of his chief titles that of Great-King (ṣarru rabû),4 and occasionally the title 'King of kings' (ṣarrû šarrûni) or 'Lord of kings.'5 These titles carried with them the definite connotation of holding the chief power in that group of lands which centered in Babylon, just as Emperor or Augustus in a later age meant the Emperor of Rome. And just as in the West the barbarian conqueror adopted the Roman tradition and became Emperor Augustus,6 so in the East in the sixth century B.C. the Persian dynasty which conquered the Babylonian Empire took over the two titles of 'Great-King' and 'King of kings.'7 Among the Greeks before Alexander, as every one knows, Ἀ βασιλεύς ἡ μέγας

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1 Ir. 2, 7.
2 E.g. C.I.G. No. 4458.
3 Michel, Nos. 107, 1229, 1397. Βασιλεύς Ἀντίοχος Μέγας, so far as I know, never occurs. Where the Βασιλεύς is omitted, we find Ἀντίοχος Μέγας, as in C.I.G. No. 4458. This is natural, since something is wanted to distinguish him from other kings of the same, and his title being omitted, the distinctive part of it is used in place of a surname.
4 E.g. Inscription of Sennacherib, Schrader, Keilinschriften. Bibliothek ii, p. 89.
5 Tiele, Babylonisch-amyrchische Geschichte, p. 403.
6 Bryce, Holy Roman Empire, Appendix, Note C.
7 Spiegel, Die altgriechischen Keilinschriften.
always meant the Achaemenian king. The other title, 'King of kings,' was also not unknown to the Greeks. A rescript of Darius Hystaspis to a certain Gadatas in Asia Minor begins: Βασιλεύς Βασιλεών Δαρείου ὁ Τοτίστης Γατάτα δούλω τάδε λέγει.  

Now it is a remarkable thing that during the Macedonian supremacy these titles are in abeyance. No Seleucid, so far as I know, is styled 'King of kings' even in Babylonian documents. The ruler is plain King (σαρρό). The most fulsome document is that put up by the Babylonian priests for Antiochus I which begins: 'I am Antiochus, the Great-King, the Mighty King, the King of the armies, the King of Babylon, the King of the lands (σερ ματατί), the restorer of Isagil and Iaia, the princely son of Seleucus, the Macedonian King, the King of Babylon.' It will be noticed that even here, among the various titles, that of 'King of kings' does not appear. In Greek documents, which, of course, are better evidence for the usage of the court than those drawn up by Orientals, we also fail to find the Seleucid king described as βασιλεύς βασιλεών. He is only occasionally βασιλεύς μέγας. These exceptional cases are noteworthy. One is that of Antiochus III. The other is that of Antiochus VII (Sidetes) who is called βασιλεύς μέγας in an inscription of Delos. Antiochus III, we know, got his title from his restoration of the Empire in the East. When Antiochus VII mounted the throne (B.C. 138) Iran and Babylonia had been conquered by the Parthian. It was his great achievement to reconquer them for the last time for the house of Seleucus. In both cases where Seleucid kings have the title βασιλεύς μέγας it is where there is a special reason for emphasizing the Eastern dominion.

This is borne out by other instances of the use of the title outside the house of Seleucus.

(1) In the inscription put up in honour of Ptolemy III Euergetes (246–222) by an Egyptian official at Adulis, Ptolemy is called βασιλεύς μέγας. What was this Ptolemy's chief title to fame? His conquest of the East as far as Bactria.

(2) The title is adopted by the Arsacid kings—according to Mr. Percy Gardner's classification, by the first king who established himself in Parthia (about 248); according to the more recent view of Mr. Wroth, by a king in the earlier part of the second century. In any case, it was the ambition of the Parthian kings to represent themselves as the successors of the Achaemenians, the paramount Kings of the Nearer East.

(3) The title is found on the coins of Eucratides (190–160), whose realm was Further Iran, but who could as legitimately represent himself as the

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8 Hal. t. 158 sq.
9 Michel, Recueil d'Inscriptions Grecques, No. 32 = Hicks and Hill, No. 29.
11 Keil'schrift. Bibliothek iii., p. 130.
12 Michel, No. 1158.
13 Cf. Justin xxxviii, 10, 6 (of Antiochus vii).
14 'Trium paedis, victor omni Babylonian occupante, magnum haberi simul,' where we see the same popular perversion of the title as in the case of Antiochus III.
15 C.I.G. No. 5187 = Michel No. 1226.
successor of the Achaemenians as the German ruler of the Middle Ages could represent himself as the successor of the Caesars.

The rebel satrap Timarchus (about 162–160) calls himself βασιλεὺς μέγας. His realm was Babylonia and Media.

The other title, 'King of kings,' βασιλεὺς βασιλεῶν, although eschewed by the Greek kings, was revived in the East. It ultimately replaces that of βασιλεὺς μέγας upon the Parthian coins. It was adopted by Tigranes of Armenia, whose conquest of the Seleucid kingdom (in 83) gave him a claim to inherit the Seleucid pretensions to the Empire of the East. Of course, after this time the imperial style became fashionable at the Eastern courts and was affected by kings who could not possibly represent themselves as the paramount Kings of the East. Pharmaces II of Pontus (63–47) combines both the titles we have been considering and calls himself on the coins βασιλεὺς βασιλεῶν μέγας Φαρμάκης. Even the king of the petty mountain state, Commagene, is βασιλεὺς μέγας Αντίοχος. But these kings had at any rate the excuse that they reckoned Achaemenian and Seleucid kings among their ancestors, and reigned over what had once been part of those ancestors' realm. There was less justification in the case of the degenerate Ptolemy (Ptolemy Anétos, 81–58), who appears by inscriptions to have been called on occasion βασιλεὺς μέγας. But this improper use of the imperial titles we again find a parallel in the West—the use of the titles Imperator, Augustus, and Basileus (which then meant Eastern Roman Emperor) by the English kings in the tenth century.

We also find persons writing without official authority applying the traditional Oriental titles to the Greek kings. The Pseudo-Aristes calls Ptolemy II βασιλεὺς μέγας. In the Phoenician inscriptions put up by private individuals in Cyprus under Ptolemy II we find the King called 'Lord of Kings' (adon mi'laకим). But this naturally proves nothing for the usage of the court.

Why did Seleucids and Ptolemies adhere to the plain title of βασιλεὺς? To understand this, we have again to note that βασιλεὺς had in their case a special implication. When Antigonus first called himself King in 306, there was in theory no division of the Macedonian realm. Antigonus assumed the title as being King of the Macedonians, the heir of Alexander. So in the case of his rivals, when they followed suit, it was to the Macedonian kingship that

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10 Its first appearance in the Parthian series is on coins which were assigned by Mr. Gardner to Mithridates I (174–159), but which Mr. Wroth gives to Mithridates II (123–88). It is found on coins of the Indian rajah Maru in 120.

11 The coins on which Tigranes uses it are those struck in Syria.

12 Inscription of Nimrud Dag, Michel, No. 785.

13 Of Justin xxviii, 7, 1: Inscription of Nimrud Dag.

14 Strock, Dynastie des Ptolemäer, Nos. 164 and 155.

15 Freeman, History of the Norman Conquest, vol. 1, p. 516 f.

16 § 29. In other passages § 25, § 41 the plain Basileos is found.

17 C. J. Semit. Ph. 1. Tom. 6, p. 112.

18 Of course the general sense of basileos continued common, but in the case of the great Macedonian houses (those of Antigonus, Seleucus, &c.), it had in the first instance been adopted as implying succession to the Macedonian throne.
they laid claim. Demetrius, the son of Antigonus refused to recognize the royalty of the other kings. Of course, in practice, each king had ultimately to acquiesce in a certain territorial sphere, but βασιλεύς nevertheless meant Macedonian King, and such expressions as βασιλεύς τῆς Συρίας, τῆς Αἰγύπτου, &c., are merely convenient popular descriptions, never officially used. 'The Empire of Alexander we have still, in spite of its divisions, to regard as a single whole. . . . The divisions had followed each other in such quick succession, that they were unable to form stable territories with fixed frontiers and clearly marked characteristics. . . . Each one of the new kings held himself entitled to increase his share according to his power and opportunity, or even to advance a claim to the whole.' Yet again, we find a parallel in the Roman Empire. In the Middle Ages, when there was an Eastern, as well as a Western, Emperor, each in theory regarded the other as a usurper, whilst in practice they might enter into friendly relations.

To be βασιλεύς therefore was to be a Macedonian, an Hellenic, king; to be βασιλεύς μέγας was to be an Oriental one, the successor of the Babylonians and Persians. The plain title was the prouder. Just so to-day King Edward sets his title of Britanniarum Rex before that of Indiae Imperator.

E. R. BEVAN.

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22 Plutarch, Dem. 25.
24 My thanks are due to Mr. G. F. Hill and Mr. Wroth for their help in verifying the numismatic data, adduced in this article, and to Mr. R. G. Thompson for similar help in respect of the cuneiform inscriptions.
THE CULTS OF OLBIA.

PART I.

The object of the present essay is to bring together whatever fragments of evidence we possess which may throw light upon the cults of Olbia, the colony founded by the Milesians at the mouth of the Borysthenes about 647 B.C. But by way of preface it may be worth while briefly to indicate the claims that Olbia has to be the subject of special study. All the Greek settlements on the North coast of the Euxine must have had in common many traits which marked them off from Greek colonies elsewhere, but Olbia, while in many respects it may be regarded as a typical city of the locality, was also undoubtedly possessed of an individuality of its own. Though not actually the most northerly of all Greek settlements, which distinction belongs

\[ \text{FIG. 1.—Map of the District round Olbia. (After Latyshev.)} \]

\[ \text{[Image of a map showing the area around Olbia]} \]

\[ ^1 \text{So Enesidem (Hieron.). Cp. Busolt, Gr. Greek ii, p. 483, note 1. Holm (History of Greece, English trans., i. 296), says:} \]

\[ ^2 \text{The dates of the founding of the eastern colonies [of Miletus] require fresh investigation. The date above given may however be considered as approximately correct. See Strabo, vii. 396.} \]
to Tanais, at the mouth of the river of the same name, yet Olbia so far outstripped Tanais in importance that it may fairly be regarded as the most northerly point where Greek civilization attained to an imposing height. That such a height was reached at Olbia is clear from the narrative of Herodotus, as well as from the other sources within our reach. Greek civilization under a northern sky must have meant something quite different from what it did in the Southern Mediterranean: can we at this distance of time find out in what this difference consisted, and obtain an idea of the citizens of Olbia at all approaching in vividness that which we possess of the inhabitants of the Greek islands or of Sicily? Probably this is an ideal which cannot be realised, but the problem is interesting enough to attract attempts at solution. Beloch's theory* that true Greek colonisation was impossible in a district where the olive and vine either did not exist or flourished only in sheltered places, and that nothing but bitter want or desire of commercial gain could make Greeks go so far from their southern home, is surely untenable, at least in the extreme form in which he states it. It is true that Herodotus* mentions the extreme rigour of the winter, but he also* speaks with enthusiasm of the beauty and productiveness of the Borysthenes, and its basin. From Herodotus, of course, we get a description of the material value of the soil, rather than of the scenic loveliness of the river, but from a modern traveller we may take a sentence or two to illustrate the beauty as well as the commercial importance of the Borysthenes:

"After having spread out to the breadth of nearly a league, it [the Borysthenes] parts into a multitude of channels that wind through forests of oaks, alders, poplars, and aspens, whose vigorous growth bespeaks the richness of a virgin soil. The groups of islands capriciously breaking the surface of the waters have a melancholy beauty and a primitive character scarcely to be seen except in those vast wildernesses where man has left no traces of his presence."**

The last sentence almost of necessity calls up the Thousand Islands, and in natural sequence, Quebec and the other Canadian settlements even further north, where so many Frenchmen spent their lives, and became the founders of colonial families. If Frenchmen, who are proverbially unwilling colonists, settled in Quebec, surely it cannot be thought impossible that Milesians and other Greeks should have made their homes in Olbia, which, though in almost the same latitude as Quebec, has a less rigorous climate, (compare the "forests of oak and poplar" with the stunted growth of trees and bushes on the lower St. Lawrence), and could be reached by a coasting voyage, instead of by a journey across the open Atlantic. Must not allowance be made for the adventurous element in the character of the Greek, which made the unlikeliness of the new lands to his distant home only an additional attraction? Doubtless the typical Athenian would not have stayed contentedly in

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* Gr. Geogr. I. 196, 3.
** Travels of Maucler de Brel, p. 56, quoted by Rawlinson, on Herod. iv. 58.
* iv. 28.
* iv. 53.
The Cults of Olbia.

Olbia, any more than the typical Parisian in Quebec, but we cannot predicate Athenian tastes of all Greeks. Beloch's further statement of the backwardness of the cities on the north coast of the Euxine in art and literature may also be found to require modification. Herodotus' description of the palace of Scyles at Olbia, surrounded by sphinxes and griffins in white marble, certainly does not suggest an indifference to the art of sculpture; and the discovery among the ruins of Olbia of a base which may possibly have belonged to a statue by Praxiteles points in the same direction. References may also be made to Xenophon's mention of the books carried to the north coast of the Euxine in Greek ships; though, perhaps, if the artistic status of the whole district is called in question, it may be sufficient to refer to the discoveries made in the tombs at Kertsch, on the site of the ancient Panticapaenum; and to the extraordinarily beautiful series of coins issued by that city.

This may suffice to show that Olbia was a Greek city with characteristics distinct enough to entitle it to be the subject of investigation in many lines of research; the present discussion will be confined to its cults, to the consideration of which we will now proceed.

The materials at hand for a study of the cults of Olbia may be classed under four heads: (1) inscriptions, (2) coins, (3) works of art, etc., which have been dug up near the site of the ancient Olbia or in the district, (4) references in literature. All these materials, however, while comparatively speaking abundant for the later period of the city's history—the period after its destruction by the Geatas, circa 65-60 B.C., and its subsequent rebuilding—are extremely scanty for the earlier times, when a knowledge of the cults would be of such value in the study of Greek religion in general, and of its aspect in the various colonies in particular.

The first question to be discussed is the relation if any, between the religion of the first settlers at Olbia and that of their Scythian neighbours. Did they from the beginning adapt the deities and legends of Sarmatia to the needs of Greek civic worship, or did they set out from Miletus under the special auspices of Apollo, and derive their religion mainly from that of the mother city, while, with the eclecticism inherent in Greek religion, they domesticated in their own town the gods of states with which they had frequent intercourse? Any attempt at the solution of this problem must rely upon a detailed examination of the separate cults, so far as any record of them has come down to us; but one of the cults is so important to this enquiry that a determination of its origin must be attempted even at this preliminary stage.

The cult of Achilles Pontarches was ancient and widespread over the whole district of the North Euxine. an Eros of Praxitales at Parion in the Propontis. The letters of this inscription are of the fourth century B.C. Op. Lat. iv. 32, a marble base from Chersonesus, inscribed Hekagrapheis. from Chersonesus, inscribed Hekagrapheis, with Latyshev's note.

* Herod. iv, 78.

* Xenophon, Anab. vii. 5, 14.
sanctuary of this worship, but at Olbia also Achilles held a most important place. We have a witness to the existence of this cult on the Euxine as early as the end of the seventh or the beginning of the sixth century B.C. in Alcaeus 8.\—\'Αχιλλεως ὁ γὰς Σκύθωνς μέθειν. His worship at Lenke was familiar to Pindar.\—

ἐν δ' Ἔδεινυ πελάγει φαευνόν Ἀχιλλεύς
νᾶσον (ἔξει).\—

What was the origin of this early localisation of Achilles on the Black Sea?\—

Koehler 11 thinks that the early Milesian settlers found the cult of Achilles already firmly established among the natives of the land where they settled, and that they adopted it from them. It is difficult to see what can be adduced in support of this theory, and a good many points may be advanced in opposition.

In the first place Herodotus 12 says that the only gods worshipped by the Scythians are Hestia first of all, then Zeus and the Earth, then Apollo and Aphrodite Ourania, and Herakles and Ares.

Surely Herodotus would not have omitted to mention Achilles, if he had been a prominent object of worship, especially as he does mention Herakles. The fact that he does not speak of a cult of Achilles at Olbia is not of course germane to the argument; he makes no attempt (unluckily for us) to describe the Greek colonies on the Euxine, which he could assume were familiar to his public; but he gives a very full description of Scythian manners and customs, and one which is generally accepted as being correct in essentials. We owe the charming little picture he has given us of Olbia 13 to its connection with the fate of the Scythian king Scyles, and the references to its cults, though very valuable as far as they go, are merely incidental.

In the second place, is it reasonable to credit the Scythians and other barbarian tribes on the North shores of the Euxine with an intimate acquaintance with the exploits of Achilles, or with a desire to erect him into a deity? Such a theory seems entirely out of harmony with all we know of the character and religion of these nations. Even if we suppose the Scythians to have deified a native hero of their own, whom the Greeks identified with Achilles, (a theory which is not very tenable, for the history of Achilles was peculiarly distinctive), we should not have advanced far in support of Koehler's theory, for why should the Greeks have forthwith adopted the cult unless Achilles and the Black Sea had been already closely associated in their minds? We must remember that we have not here to deal with an almost immediate amalgamation of the Greek settlers with the natives, such as took place in Magna Graecia; we see from Herodotus' account, nearly 150 years after the founding of Olbia, how alien the customs of the Scythians

8 Bergk, Lyric Schr. 48, B, quoted by 1827. (Mémoires de l'Acad. Imp. des Sciences,
Eunath, ed. Diompr. Pers. 208.)

10 Nys, p. 49.

11 Nys, sur les âges et la cause commune
à Achilles dans le Pont Euxin. St. Pétersbourg.

12 iv. 59.

13 iv. 78, 79.
were felt to be by the Greeks. Another indication of race-feeling is supplied by the vase-paintings found on the north Euxine. Here Scythia (if we are to call them by this name) of purely Russian type occur, taming horses, or in company with the griffins with which Greek fancy peopled the steppes to the north. The conjunction of these with the purely Greek figures in the mythological scenes on these vases seems to indicate a complete race-separation. The fact that Herodotus mentions that Scylus married a Greek wife at Olbia tends to confirm this view; for if intermarriage had been very common, it would hardly have been worth while to refer to it.

As far as we can tell, Arctinus, the Milesian poet, in his epic the 'Æthiopis', was the earliest Greek author to place the home of Achilles after death on the island of Leuke. Now Arctinus is usually assigned to the eighth century B.C., which is earlier than the accepted dates for the founding of the Milesian colonies on the Black Sea. Accepting for the moment both these dates, we may none the less conjecture that by the end of the eighth century B.C. Milesian adventurers were already making trial of the Euxine, where the almost complete absence of islands would render Leuke a grateful memory to the Greek sailor, and a prominent feature in his seastories. Here was material ready to Arctinus' hand, just as the 'still- vexed Bermoothes' of some sailor's yarn furnished a stage-setting for Shakespeare more than 2,400 years later. But it is not even necessary to suppose as much as this; if Milesians were already beginning to make voyages eastward, a Milesian poet would be very likely to set the abode of Achilles in the dimly-known Euxine. The Isles of the Blest and Elysium were already interchangeable terms, and it was not unnatural for a patriotic poet, to whom it may have been already clear that the expansion of his native state was to take place eastward, to place a Blessed Isle in the eastern sea, and thus put the colonisation of his city under the protection of a tutelary deity. The name Leuke rather suggests the fairy tale; later travellers have explained it by the flocks of sea-birds on its shores; but this scarcely seems enough to warrant the name; whereas if the island Leuke already existed in story, an identification with the island off the mouth of the Ister was almost inevitable, as there are practically no others in the Black Sea.

It is not, however, certain that the date of Arctinus is as early as the eighth century B.C. If his date can be set later, the eastward trend of his story is easy of explanation. Holm assigns the founding of Sinope to the eighth century, apparently following the statement of Eusichus that Trapezus, a colony of Sinope, was founded in Olymp. 6, 1. (756 B.C.). This date Beloch considers too early; he gives 630 B.C. as the date of the founding of Sinope. In any case the beginnings of Milesian adventure in the Euxine may be almost certainly assigned to the lifetime of Arctinus. Mr. D. B.

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Monro regards the fact that a Milesian poet is the first to make Leuke the abode of Achilles as significant of the important part played by Miletus in diffusing Greek religious ideas through the Black Sea region. The choice of Leuke serves to connect the "Aethiopis" with the time when the Ionian trading cities, of which Miletus was the chief, had begun to adopt the new religious practices that grew up, after the Homeric age, in honour of the national heroes. Welcker takes a similar view and quotes Berahardy (ii. 153): 'The apotheosis of the hero at Leuke betrays the Milesian poet.'

It is worth while to notice here the significance of the companion assigned to Achilles at Leuke, variously named as Medea, Iphigenia, and Helen. The last is apparently the latest in date of the tales, and has no importance here; it must have arisen in an age that had begun to criticise the Homeric stories, and to feel that the noblest of heroes and the fairest of women must be united after death, even though they had been separated in life. The oldest story seems to be that in which Medea becomes the wife of Achilles, according to the scholiast on Apollonius Rhodius, Arg. iv. 814, 2. Ἀχιλλεὺς ἔτσι τῷ Ἑλυσίῳ πείδειν παραγενόμενος ἔγραψε Ἡρακλῆι πρῶτος Ἰθακην κράτησε μεθ' ἔνεργον Ἑλευθερίαν. Ithaca is usually placed about 560 B.C. It must be noted that Elysium and not Leuke is here made the hero's abode, so that unless we may suppose that Achilles' part of Elysium was already localised at Leuke, we cannot press the argument too far; but it is tempting to conjecture that Achilles and Medea were placed side by side as the two semi-divine personages most closely connected with the Euxine. Colonisation in the Euxine had by this time been in progress for almost a hundred years, and Achilles was already its tutelary deity. The country of Medea and the Golden Fleece was supposed to lie to the far East, so, as the Black Sea was gradually opened up, the Argonautic myths inevitably attached themselves to its shores, for no other sea lay in this direction. The story of the voyage of the Argo was already familiar to the author of the Odyssey—

οἰ ποιησμένοις παρεπτωχεῖ ἡμῖν Ἄργους πάντα μέλλουσα, παρ' Αἰγίταις πλέουσαν,

but here the direction is westward, if east and west can be said to exist in fairy-land.

It is more difficult to assign a date to the story of Achilles' connection at Leuke with Iphigeneia—the most satisfactory bride for him from the modern point of view. The tale was elaborated by Lycophron, but so late an author has little value in the present enquiry. The 'Cypris' (776 B.C. circa) seems to be the source of the story that Artemis carried away Iphigeneia to the Tauri, leaving a hind to be sacrificed at Aulis in her stead (Ptolemy, περὶ τῶν Κυπρίων, p. 475, ap. Gaisford, Heracles). "Ἀρτεμις δὲ αὕτην ἐξαπλάσας καὶ ἀθάνατον τοιούτου ἐλαφὸν δὲ ἀντὶ τηρικοῦ μάρτυρος παριστάνοι τοῦ βασιλέως." The story of the substitution was, however, either...
unknown to or ignored by Aeschylus, Sophocles, and Pindar; perhaps it was considered as an unauthorized version of the myth, to which Euripides, perceiving its dramatic value, first gave wide currency. But we have no proof that the story of Iphigenia's marriage to Achilles after death, and their abode at Leuke, was known to Euripides, unless the words of Achilles to Iphigenia—

*Aγαμέμνονος παῖ, μακαρίων μὲ τις θεῶν ἔμελλε θῆσει, ἐλ τύγχανε σῶν γάμων.*

are to be regarded as an instance of dramatic irony, the final fulfilment of his wish being known to all the spectators. This interpretation is probably far-fetched, but the connection between the two is such a natural one that it is difficult not to suppose that it was already familiar at this date.

The cult of Achilles at Olbia will have to be discussed later, with such details as the materials at hand allow; the object of the preceding pages is to make it seem probable that the mythical connection of Achilles with the Euxine was purely Greek in its origin, and may even be traced with considerable probability to Miletus, and to the earliest period of Milesian enterprise in the Black Sea, and that it owed nothing to the barbarian dwellers along the sea-shore.

The same theory as to the independence of the religion of Olbia of ideas borrowed from the Scythians seems to be borne out by Herodotus. He says that the Scythians had no shrines or images of their gods except of Ares. Moreover, as the 'temple' of Ares was merely of brushwood and his 'image' (τὸ ἄγαλμα) an ancient sword, it seems scarcely necessary to make even this exception. It is hardly conceivable that a religion of this stamp could have had appreciable influence on the cults of pure Greeks, such as the early settlers at Olbia.

It is perhaps already clear that an attempt will be made to present Olbia as a purely Greek city, very little influenced by the barbarous inhabitants of the land, and deriving such foreign elements as appear in its worship rather from its commerce with Asiatic cities than from its neighbours on the European mainland. There are two passages, however, which must be taken into account here.—Herodotus' reference (iv, 17) to the Ἠλλήνες Σκύθαι, whom he places in the district just inland from Olbia; and the mention in the Protegenes decree of the Μιξάλληνες, who to the number of 1500 had deserted to the enemy. With regard to the former, it seems best to suppose with Stein (ad loc.) that they were Scythians who had adopted Greek customs from their trade with the Greek commercial city. Note that Herodotus distinctly places them outside the town, and at a distance from it, and that he makes no mention of any mixed element within the city itself. Ditten-
berger in his note on the Μιξάλαρες of the Protogenes decree, considers that both in this place and in Herodotus a mixed race is meant. Certainly the Μιξάλαρες must be regarded as such (the name would hardly be possible otherwise) but the date of the Protogenes decree is probably at least 200 years later than Herodotus' visit to Olbia, and the city was already rapidly declining. But even in the decree they are described as τῶν τῆς παραστορικής εἰκονεματος, and nothing leads us to suppose that they were found inside the city, or that they had any share in its government. The names found in the inscriptions are purely Greek, up to the time of the destruction of the city by the Getae. It is interesting here to notice that Dio Chrysostom, after describing the miserable state of the Greeks after the destruction of their cities by the Getae, ascribes the rebuilding of Olbia by its former citizens to the invitation of the Scythians, who felt the loss of a market for their products. After the taking of the city, merchants no longer came to Olbia, ὅτε οὐκ ἔχαστε ὁμοφώσις τῶν ὑποδεχομένων οὐδὲ αὐτῶν Σκύθων αξιοῦσιν οὐδὲ ἐπεταμένων ἐμπόριον αὐτῶν κατασκευᾶσαι τοῖς Ἑλληνικοῖς τρόποις. Thia at least shows that the Greek language and Greek customs had not diffused themselves over the surrounding peoples, and indirectly supports the converse proposition that the Greeks of Olbia were little influenced by their Scythian neighbours. The relation between the Greeks and the barbarians may be plausibly conjectured to have been not unlike that of the English to the natives in the early days of the settlements in India, before they had any real territorial jurisdiction, and were still in some degree subject to the neighbouring native prince. The Scythian husbandmen, οι οὐκ ἐπὶ στῆσας στέρμου τῶν σπερίων ἀλλ' ἐπὶ πρήση, brought their grain for sale to Olbia, just as the Hindu peasant brought his rice or indigo to the factories of the East India Company. So it is as the most northerly outpost of Greek civilization and religion that Olbia will be considered in the present essay.

Apollo.

Ex diis insignis Apollo πρωτάτης.—Boeceh, C.I.G. ii. p. 87.

From this statement of Boeckh's, which seems justified by the evidence that has come down to us, Apollo would claim the first place in a consideration of the cults of Olbia. It is true that the series of dedicatory inscriptions to Apollo Prostates, given by Latyschev (i. 50–74; iv. 15, 16), belongs to the later period of the city (none is earlier than the second or third centuries A.D.), but there are two other inscriptions to Apollo of a much earlier period. One (Lat. i. 98) is assigned to the fourth century B.C.; it is fragmentary.
Latyschev fills it out as

κύος Ὀ[λυμπολύτης (?)
Λ[π][ο][λ][λ][ο][μ][ε][ν][ι][τ][ό][ρ][ο][ς] [ι]

There seems no doubt here as to the occurrence of the name Apollo; whether Ὕμρος is the title to be supplied is of course a matter for conjecture, but it occurs in Pantikapaean inscriptions of the fourth century B.C. and in a Phanagorian one of the third century B.C. 35

The other early Olbian inscription referring to Apollo is the dedication to Apollo Delphinios (Lat. i. 106) assigned to the third century B.C.

The evidence of coins indicates clearly the importance of the cult of Apollo at Olbia; from the fourth century B.C. down we have examples of coins bearing his head, probably more in number than those of any other single deity. The Berlin collection, for example, which contains 146 Olbian coins, has over thirty which show representations of Apollo. The origin of the special cult of Apollo at Olbia may be traced back to Miletus, where Apollo was the chief deity, and the natural patron of the numerous colonies sent out; and its persistence at Olbia may have been due to Apollo's connection with the myth of the Hyperboreans, and to the feeling that he was a fitting tutelary deity for the most northerly Greek colony. Both of these points; the derivation of the cult from Miletus, and the relation of Apollo to the North, will be discussed below, in the more detailed examination of the worship of Apollo at Olbia under its different aspects.

The want of early evidence for the cult of Apollo Prostates at Olbia makes the testimony of some Olbian coins of the first century A.D. of the highest value. When in these Olbian Imperial coins we find a type of Apollo which seems clearly that of an archaic statue, we are justified in treating it as at least presumptive evidence of the existence of an early cult. One of these coins is described in the Catalogue of the Berlin Museum, 36—

**Obverse.**

*ΟΛΙΒΙΟΠΟ... Youthful head, right, probably Apollo.

*ΑΕ 5.*

**Reverse.**

*ΚΑΤΥΔ... Naked Apollo standing facing, seemingly with modius or walled-crown, vase in right, large bow with arrow in left.*

![Image of coins](image)

**Fig. 2—Bronze Coin of Olbia in the Berlin Museum.**

See Fig. 2. A similar coin from the Moscow collection is given by B. Pick 37 the reverse of which is described as follows:—

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35 Lat. ii. 8, 10, 12, 348. 
37 *Thasische Münzbilder,* Jahrbuch d. Deutschen Arch. Inst. iii. (1898), Pl. v, 31.
ΔΑΔΟΣΚΑΤΥ. Naked Apollo with calathus standing facing, in his outstretched right a round-shaped object, in the left bow and arrow.

The first point of extraordinary interest about these two coins is the presence of the calathus on the head of the god, making it clear that he is here depicted in his character as civic deity. The die-cutter was not in the least likely to have added this unusual attribute, unless he was copying from a well-known statue, of which the calathus was one of the distinguishing marks, without which the type on the coin would not be recognizable as a reproduction of the statue. The presence of the calathus Pick thinks alone sufficient to indicate the great antiquity of the original; but, more than this, he regards the figure on the coins as clearly archaic, and thinks it resembles very closely the archaic statuette of Apollo from Naxos; but he considers it older than the statuette because of the presence of the calathus. He would assign the date of the statue to the beginning, or at any rate the middle, of the sixth century B.C., i.e., within the first century of the city's existence; and in any case regards it as certainly earlier than the Didymaean Apollo of Canachus in the mother-city Miletus. The round object in the right hand Pick explains as perhaps a pomegranate or an ointment-box—the same attribute which appears in the Naxos statuette; and as a bow appears on the coins in the left hand, he thinks one should also be placed in the left hand of the statuette, especially as the inscription upon it has the epithet ἑκιβαλος. The fact that earlier Olbian coins show merely a head of Apollo has of course no bearing on the question of the antiquity of the statue depicted on these Imperial coins; as in the period of best art the die-cutters never merely imitated a statue in their coin-types.

It should be said that Pick only suggests the possibility of identifying this coin-type with Apollo Προστάτης, but, granting his premises as to the archaic character of the original of the coin-type, the identification seems almost inevitable. There is certainly a difficulty in accounting for the preservation of the statue in the destruction of Olbia by the Getae; but we do not know how complete this destruction was; moreover, if there were really a cult-statue of Apollo Προστάτης it would certainly have been reproduced by numerous statuettes. These, of course, might easily have escaped, and any one of them could have furnished a type for the die-cutter,—the calathus being almost sufficient of itself to point the reference to the statue.

The series of dedicatory inscriptions to Apollo Prostates given by Latyschev, is assigned by him to the second and third centuries A.D., i.e., somewhat later than the date assigned by Pick to the coins discussed above. These offerings were all made by the στρατηγοὶ (= praetors) and from the number of inscriptions that remain it has been supposed that the gifts were

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40 Through the courtesy of Dr. H. Dressel of the Berlin Museum, I have obtained casts of coin 124 (as well as of others referred to below). From the cast it appears even more clearly than from the illustration given by Pick, that the head-dress is undoubtedly the calathus.
41 See Bouchier's Lexicon, l. i. 452.
42 F. Gardner, Types of Greek Coins, p. 68, et seq.
43 Lat. l. 50-74, l. e. 15, 16.
made yearly. The last lines of No. 50 may be quoted to illustrate the usual formula with which they conclude:

ἀνέθηκαν φίλην ἀργυρίῳ ὑπὲρ τῆς πόλεως εὐστάθειας καὶ τῆς εαυτοῦ ὑγείας.

Other articles presented were a golden necklace, a silver Nike, a golden Nike on a silver base, &e. In No. 58 instead of the usual gifts, the praetors repaired the roof and wall of the temple of Apollo:


Below this last inscription is an epigram addressing Apollo as τοξότη Φωιή, apparently commemorating some victory. No. 61 similarly refers to the repairing of the temple:

ἀνέθηκαν Νείκην χρύσου ὑπὲρ τῆς πόλεως καὶ τῆς εαυτοῦ ὑγείας.


These inscriptions make it impossible to doubt that Apollo Προστάτης was the city-deity of Olbia in the later period; and from the permanence of Greek state-cults, as well as from the evidence of the coins given above, it seems reasonable to believe that the earliest colonists brought with them from Miletus this cult, of special appropriateness for those who were going to found a city in a new land. For the title Προστάτης is of kindred meaning to that of Ἀγαπεῖος, given to Apollo as the protector of those who went in and out of the house. In this aspect Apollo was represented by a conical block of stone standing before the door. (On a coin given in figure 3, referred to below, Apollo appears with his left elbow resting upon a pillar). Is it too much to conjecture that the early colonists of Olbia brought with them a small column of this kind as their representation of Apollo, which served as the cult image until the production of the statue postulated by Pick as the original of the standing figure in the coin? 

Hesychius, under προστάτιρος, explains the word by the custom of placing a statue (or pillar) of Apollo before the house door, ὅτι πρὸ τῶν θυρῶν ἔρυται. Whether this derivation will stand or not, there can be no

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63 It may be noted here that it is from the last two words of this inscription that the title, otherwise unknown, of Apollo Ἰππορεός has been evolved. Boschh Λ.Ο. 2072, reads the last eight letters of the inscription as ΤΥΠΟΡΟΥ. Latyschew, in his comments on this inscription, points out that the dedication is to Apollo Προστάτης, and adds, 'Iam igni valere jubeamus necesse est Assulianum illum Ἰππορεόν, quia Kosteros dixit in omnibus lioebos εἰς κομητασσει τοῦ οὐλίσσις ἱστομεν.'

64 For references to stones or representations of deities, see Frazier's note on Paus. v. 16, 3; and for Apollo in particular, Astroph. ΕΔ. ο. 875. These representations not infrequently occur on coins, e.g. coin of Ambrakia: Held, Hand. Num., p. 279, fig. 131; and coin of Mégara, Inhof-Busser and Gardner, Misc. Comm. on Coins, J.H.S. vi. (1888) p. 55. Also Evans, Muse. Treu. and Pillar Cult. J.H.S. xxi. (1901) p. 173, fig. 49.

65 No. 185 in Berlin Catalogus.

doubt that the titles of 'Ἀγνεός and Προστάτης' present the god under substantially the same aspect. Compare the Delphic oracle quoted by Demothenes 43 περὶ ἤγεις θύειν καὶ εὐχεθαι Διὶ ὑστάτῳ. Ἡρακλεῖ, Ἀπόλλωνι προστάτηρι, περὶ τῶν ἄγαθων ἀρχαία. Ἀπόλλωνι ἄγαθει, Δαστὶ, Ἀρτέμιδι, καὶ κατ' ἄγαθος κρατήρας ἑστιάων, 47 and again in the oracle from Dodona quoted in the same passage occur the words 'Ἀπόλλωνι ἀποτροπαιὸς βοῶν ὥστε. It is worth while to notice the correspondence between περὶ ἤγεις in the oracle and ἡ περὶ τῶν ἔσωτος ἤγεις in the dedicatory inscriptions of the priests to Apollo Prostastes, quoted above.

The actual title of Prostastes occurs in Soph. Track, 209:—

ἐν ὕστερον ἐνων ἄναγχα τῶν εὐφαρέτεραυ Ἀπόλλων προστάταιν.

In the Electra, l. 637 Clytemnestra invokes Apollo as Ψυϊβε Προστάτης, a name given also to Artemis in Aesch. Septem, 449 προστάτηριας Ἀρτέμιδος εὐνοιαίσι. Paus. i. 44, 2 mentions a temple of Apollo under this title at Megara (cp. the name Προστάσια applied to Demeter, Paus. ii. 11. 3). At Athens offerings were made to Apollo Προστάτηρι and Artemis Βούλαια before the meeting of the ecclesia. 48 Notice also the reference to Artemis in an inscription from Chersonesus 49 ὁ διὰ παντὸς Χερσονασιτόν προσταταύτου Παρθένου. Priller-Robert 50 may be quoted here: 'nicht selten ist Apollo Agiens aber auch ein Symbol der städtischen Ansiedlung.' Such we may conjecture Apollo Prostastes to have been at Olbia; and we may accept the crude representation of the god wearing the calathus upon the Imperial coin as the only representation of him as the tutelary deity of Olbia that has come down to us. The fragmentary early inscription which may be to Apollo Ἰατρός has been already quoted. It cannot be pressed as evidence that this cult actually existed at Olbia, but it is likely enough that it did, for we have inscriptions from Panticapaenum and Phanagoria (referred to above), where Apollo is given this title. 51 The name Apollo Ἰατρός occurs on two coins, one described by von Sallet 52 and another by Lambros, 53 given by Pick. 54 These have been assigned to Asia Minor, but Pick thinks they belong to Apollonia on the Black Sea, together with some other coins which he gives, 55 and this attribution is now accepted by all numismatists. Von Sallet's coin has a laureate head of Apollo as obverse type. The reverse is thus described:—

Naked Apollo standing facing and looking left, right leaning on a long branch, in lowered left a bow and arrow.

The coin given by Lambros is similar, but with full inscription. Pick says that the material of these two coins is like that of the coins of Mesembria, near Apollonia. The other three coins with which he compares these two, and which he thinks certainly belong to Apollonia, all have an anchor as the obverse type, and a standing figure of Apollo as the reverse.

One of these may be quoted, which Pick dates in the first half of the second century B.C. On the obverse is an anchor. The reverse is described as follows:

Naked Apollo, standing facing, a bough in his outstretched right, in his lowered left a bow and two arrows, right perhaps leaning on pillar.

Now we know that when Lucullus sacked Apollonia in 72 B.C. he took away a colossal statue of Apollo, the work of Calamis, and placed it at Rome.²⁶ No coins of Apollonia with this Apollo-type are certainly known, though on Imperial coins a temple often appears, with a standing naked Apollo as cult-statue inside. As the three anchor coins belong to the first half of the second century B.C. and as the archaic Apollo-type could not belong to that period, Pick thinks that the figure represented may very likely be that of the colossal statue by Calamis. The existence of a cult of Apollo Ἐπαρός at Apollonia has been recently proved by an inscription of the early Roman period,²⁷ κύσια τῷ πολε μετὰ τῷ ἐκτόσιον Ἀπόλλωνι Ἐπαρός. The laurel bough is regarded as the attribute of Apollo under this aspect; this cannot certainly be proved; however, it occurs in all five of the coins mentioned above; and at Panticapaeum, Though no full length figure of the god occurs on coins, a relief has been found in which Apollo has a long laurel branch.²⁸ This relief is assigned by Reimach to the period of Calamis; it is of importance here because the name Ἐπαρός occurs often at Panticapaeum than anywhere else.

To return to Olibia: No. 135 in the Berlin catalogue has the following obverse type:—

Standing Apollo facing, looking left, in right hand bough (?), left resting on pillar.

The reverse type is a lyre. The coin was referred to above (p. 255), and is shown in Fig. 3. This, or a very similar coin, is given by Pick.²⁹ That the object in the right hand is a bough seems pretty certain, from the way it is held; the pillar would seem to be the attribute of Apollo Prostates, or Agyieus; such a blending of attributes is not uncommon.

²⁶ Strabo, 7, 6, 7; Pliny, N.H. 34, 39.; Hume 2, 57-79, Pl. xvii.
²⁷ Dumont, Mélanges de Arch. p. 135, no. 111, d 7.
²⁸ Mommsen, Mélanges, Fend. Pelt.
²⁹ Die Antiken Minare, Nord-Griechenlands.

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Certainly it is impossible to state positively that a cult of Apollo Ἰηρός existed at Olbia, from the dubious evidence of a coin and a fragmentary inscription, but doubtful as they are, one may fairly make the most of them, considering the prevalence of the cult on the north shores of the Black Sea.

The name of Apollo Delphinios occurs in an inscription given by Latyschev I, 106, and assigned by him to the third century B.C.:

"Ἀγρότας καὶ Ποσίδεως οἱ ἄδελφοι τὸν πατέρα Διονύσιον [Ἀπόλλωνι] Δελφίνιου ἱερόσαμον."

This is all the definite evidence that exists as to the cult of Apollo Delphinios at Olbia. A fish-type (the identification of which is discussed below under Demeter), occurs very commonly on Olbian coins as a reverse type, but frequently with deities other than Apollo on the obverse; and as it has usually an eagle standing upon it and pecking at it, it seems scarcely possible to take it as a symbol of Apollo Delphinios. However, it appears by itself on some coins, also in coin No. 73 of the Berlin collection, with Apollo as the obverse type; and it may possibly have been the attribute of the god under this aspect, though a commercial explanation seems more probable. The cult was widespread. Strabo (iv. 179) in speaking of the cult of Apollo Delphinios at Massilia, says: τούτο μὲν κοίνων Ἡσυχίων ἀπάντατο, and Plutarch de sollertia omn. 284 A. says: καὶ μὴν Ἀρτεμίδος ἡ Δίκτυων ταῖς Ἀπόλλωνοι ἱεραί καὶ βασιλεῖ παρά πολλοῖς Ἐλλήνων εἰσί. The name appears in several inscriptions; two may be mentioned here, both belonging to the third century B.C. like the Olbian one, and both from Knossos in Crete, C.I.G. 2554, and Camer. Del. 121. A month Delphinios, probably corresponding to the Attic Anthesterion, is known at Aegina, Cret, and Thera.

As Delphinios, Apollo was the god who gave fair weather to the mariner, and was therefore likely to be a special object of worship at Olbia, whose wealth and prosperity depended on maritime trade. The title may be compared with that of Ἠπιβαρύνος, under which name Apollo had a temple at Troezen and Ἕμιδασίος, to whom the Argonauts set up an altar, according to Apoll. Rhod. i. 402.

For the existence at Olbia of representations of the griffin, a creature specially attached to the cult of Apollo, we have evidence much earlier than

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69 Schol. on Pindar, Nem. 4, 81.
any of the coins or inscriptions cited above, namely, from Herodotus himself, who, in describing the palace of Scelea at Olbia (iv. 79) says: τὴν περὶ λευκοὶ λίθου σφίγγας τῇ καὶ γρύπτες ἑσπασαν. Griffins occur constantly in vase-paintings found in the North Euxine district; the most famous of these is the well-known vase of Xenophantos already referred to, where the bodies of the griffins are blue and the horns and part of the wings gilded. This was found near Panticapaeum in 1836. The griffins on the coins of Panticapaeum are of course familiar. Mr. A. J. Evans traces back the connection of griffins and the sun-god to the Egyptian solar cycle. He gives Mycenaean gems and cylinders upon which a pair of griffins appear as heraldic supporters of the sacred column—the divine pyramidal stone which, as we have seen, persists as an emblem of Apollo in his character of Agyieus down to a late date.

Hesiod was the first to treat of griffins, according to the scholiast on Aesch. Prom. 808 (οἱ γρύπτες) περὶ ὧν Ἡσίωδος προτός ἐπερατευσατο, but we do not know in what poem. As he also wrote about the Hyperboreans, it is possible that even as early as this griffins were supposed to live in the north. We know more of the poem of Aristaeas of Proconnesus (early sixth century B.C.) from Herodotus iv. 13–15, a passage of great importance in this connection. Herodotus speaks of the poem as τα ἐπω ταύτα ταύτα τοῦ Ἐλλήνου Ἀριμασπέα καλείται. According to Suidas the Arimaspean was a hexameter poem in three books. Dürbach says that the Arimaspians apparently belonged to a Scythian myth, and Aristaeas seems to have had the idea of identifying the griffins already known in Greece, with the fabulous animals from whom in the story the Arimaspians stole the gold. But if we follow Mr. Evans in tracing back the connection of the griffins and the sun-god to the very earliest times, we must surely explain the localisation of the griffins in the North Euxine district by the myth of Apollo and the Hyperboreans, which will be referred to below. Sun myths are at present discredited, but the immemorial connection of Apollo and the Hyperboreans (Σάμον τανδρον... Ἀπόκλαυκος θεραπτειν) can hardly be explained in any other way. Dim accounts of a land where for a part of the year the sun never set must have reached Hellas as a very early period, and the griffins, familiar as the attendants of Apollo in the representations of the god in art, were localised in the unknown land of marvels. Then came Aristaeas, an early Marco Polo, whom we may believe really to have travelled over the countries he described. But the griffins already had their home there, and Aristaeas could not have ousted them even if he had wished to forgo such a picturesque feature of his poem. What he apparently did was to tell the story in the form henceforth accepted as the authorized version. (Note, by the way, the connection of Aristaeas with Apollo as shown by Herodotus' story of his appearance at Metapontum, and injunction to the inhabitants to set up an altar to Apollo and a statue to himself.)
of the griffins and Arimaspians has ever since possessed a strange fascination; beside Aeschylus' lines (Prom. 803 et seq.): —

οξυστώμων γάρ Ζηνος ἄκρογεις κύνας
Ὑφίστασ φυλάξαι, τόν τε μονόστα στρατόν
'Αρίμασπα μητρόβας, οἱ χρυσόρρητοι
οίλυθεν ὀψαλτόν οὐγάλ νεκρόν Μιλτιάδος πόρον

set Milton (Par. Lond. ii. 948): —

'As when a gryphon through the wilderness
With winged course o'er hill or moory dale
Pursues the Arimaspian, who by stealth
Has from his waking custody purloined
The guarded gold.'

The monuments representing these legends of griffins and Arimaspians are not earlier than the fifth century B.C., but, as already seen, griffins had been familiar as a motive in art for many centuries, borrowed from the East. From Attic tetradrachms we know that the temple statue of Apollo at Delphi had a griffin on each side. 88

Ctesias, who identifies the Griffs with the gold-digging ants of India, mentioned by Herod. iii. 102, gives the most exact description of them,—

τρέπτες, ὄρια τετραμεδά, μέγεθος ὑποικ βίκος, σκόλη καὶ ὄμηχες πλάτερ αἰλέων, τὰ ἐν τῷ ἄλλῳ συμματα πτερα μέλανα, ἐμιθρα ἔτο τὰ ἐν τῷ στήθει, 66

and Pausanias 76 contributes a further touch,—ἡγην ἐκαὶ ἀλλα ἱκουσα, τοιες ἓμεθε στήματα ὑποια καὶ τοσι παράδειγμα εἶναι.

Sphinxes are found as companions of the griffins from the time of the Mycenaean signets, and they too are undoubtedly of Eastern origin. They were associated with the worship of Dionysus as well as with that of Apollo, and it may have been as creatures of the Bacchic cycle that they appeared round the palace of Sceles at Olbia, as Herodotus tells of his initiation in the Bacchic mysteries, which finally led to his death.

It is hardly possible here to make more than a bare reference to the close connection of Apollo and the Hyperboreans-which seems to go back far beyond any period for which we can have anything like historical evidence. It cannot be wholly omitted, however, if there is any basis for the conjecture already made,—that the permanence of the cult of Apollo at Olbia was in part due to a feeling that the god of the north was the fitting deity for the most northerly Greek state,—a feeling which artists did their best to perpetuate; note especially the constant occurrence of the griffin in works of art found in this neighbourhood. There is no doubt that in very early times the Greeks knew something of lands to the far north,—the earliest reference in literature is of course Odysse 84-86.

They are κ' ἀντινος ἄμφρ ἔστη ἐξηματο μικροῖς,
τῶν μὲν Βοιωνίων, τῶν έδραμα μῆλα νομέων
ἐγγύς ἀμφρ νυκτός τε καὶ ἡματοι εἰσι κελευθον.

86 Ctes. Herod. iii. 110.
88 Odysse, Ilios, 49, ed. Bkh.
76 vili. 2, 7.
The Cults of Olbia.

Herodotus' account of the offerings sent by the Hyperboreans to Delos is of the highest interest in this connection, as Delos was from very early times the centre of the Ionian worship of Apollo, and we have here a proof of very ancient intercourse between the North and the Aegean. The route as described by Herodotus should be carefully noticed. Prof. Ridgeway says: "The only avenue between Greece and upper Europe in early days was that which starting at Dodona led up through Epirus to the head of the Adriatic." So the Black Sea would appear to have been unknown to the Greeks until the period when Miletus began colonizing on its shores. May we see in this connection of the "arterial highway," as Professor Ridgeway calls it, with the service of Apollo the origin, or at any rate an early and striking instance, of his function as god of journeys and streets? Notice here also the existence of the city Apollonia on the Adriatic, not far from Dodona, and perhaps a station on the route of the Hyperboreans. Olum was the earliest post to deal with the subject of the Hyperboreans, as we know from both Herodotus and Pausanias. Herodotus says,—οὖτε δὲ τὰ Ωλόμη καὶ τῶν ἄλλων τῶν παλαιότερων χώρων ἀποιητεῖ ἐκ λυκίων ἐλθον τῶν ἀκαθόμων ἐκ Δήλου. Here again we have Lycia, another of the early localities connected with the cult of Apollo, brought into close intercourse with Delos and the North. Pausanias says, quoting a hymn, —Ωλόμη Θ' ὧν γένετο πρώτος Ποιητοὶ προφήτας. We may compare him with Aristaeus, who seems also to have combined the characters of poet, traveller, and priest of Apollo, and observe again the connection of travel with the cult of Apollo—Apollo "Ἀρχηγός"—a feature prominent later in the work of the Delphic oracle in forwarding colonisation.

Achilles speaks of swans bringing the new-born Apollo to the land of the Hyperboreans. Swans were among the creatures attached to the worship of Apollo. Pindar's reference to the Hyperboreans as the "benchmen of Apollo" has already been quoted, but there is also a reference to the periodical sojourn of the god in the North in Pyth. iv. 5.

οὐκ ἄποδαμον Ἀπόλλωνος τυχόντος

Later poets need not be quoted; all that is aimed at here is to indicate the likelihood of the cult of Apollo at Olbia growing stronger as the centuries went by, and his ancient connection with the surrounding lands was made constantly more evident alike by literature and art.

71 iv. 33-35.
72 Early Age of Greece, i. p. 388.
73 vii. 21, 3.
74 ποτα, 7.
75 See, references in Pauly-Wissowa, s.c., 2, 2, p. 44, to cults of Apollo under this title.
76 Quoted by Hume. See Bergk, P.G. iii. p. 140.
77 Compare Cil., Pont. i., 60, 73, quoting from Plato, Phaed. 85 b. "Haec commixtum orta est cuncta, qui non sine causa Apollinidi disti sunt, sed quod ab excavatione hanc vi demum, qua proles sibi insana licebat semum cani et vulpam aexitur, et ob similis hominis et ductus esse facendum." Also see Pfeiler-Bochet, Gr. Myth. i. p. 243.
Demeter.

Demeter must be placed next in order to Apollo, as she has some claim to be regarded as the special city-goddess. Her head is a frequent type upon the coins, and it seems necessary to identify the Tyche type of this city with Demeter, on account of the ears of barley on the walled crown. For the apparent existence at Olbia of Apollo and Demeter side by side as civic deities, we might compare the position of Athene and Poseidon-Erechtheus at Athens. That Apollo and Demeter did have some such association at Olbia is made probable by the fact that their heads appear upon coins which have similar reverse types. But Apollo would seem to have held the more important position of the two, as his title of Ἴπποστάτης would go far to show; it is also significant that while there are many Olbian inscriptions referring to Apollo, not one has yet been found bearing the name of Demeter, and there are only three in the whole North Euxine district, all from Panticapaeum. Of course, in a place where the remains are as fragmentary as is the case at Olbia, the absence of inscriptions cannot be regarded as conclusive, but still it seems curious that none has been found, if Demeter held a place of such importance. Against the absence of the inscriptions may be set the fact of the constant appearance of Demeter in the vases–paintings that come from this district; it is perhaps not too much to say that Demeter-myths have furnished more subjects for the artists than any others. Also Herodotus speaks of the existence of a temple of Demeter opposite Olbia; which would be conclusive evidence if there were not a variant reading of Μυρός for Δήμητρας; as it is, the passage can only be quoted as a possible support to the view of the importance of Demeter's cult at Olbia at this early period. In any case, there would undoubtedly have been a temple to Demeter there, whether she held the position of chief goddess of the city or not; as her worship was general among all Ionian states.

For the significance of the worship of Demeter "als altellonische Göttin und als Göttin der Civilisation," Preller-Robert may be quoted:

"Die hohe Bedeutung der Demeter für das attische Staatsleben [zeigt sich] deutlich darin, dass sie mit Zeus und Apollon zusammen Schwürgöttin ist, sowohl bei politischen Verträgen als im Eid der Beamten und Richter."

This is worth noting here, in view of the apparent association of Apollo and Demeter at Olbia as civic deities.

The Olbian coins bearing heads of Demeter give rise to questions of considerable difficulty. Head, under Olbia, says that the principal type on
the gold and silver money is the head of Demeter. This seems somewhat misleading. The Berlin catalogue only gives one gold coin of Olbia 65 (excluding the late coin of Pharnabazus, No. 146); this has a head of Demeter. Out of the seven silver coins described (31–37), only two have heads of Demeter (including No. 37 with the head of Demeter-Tyche). The British Museum catalogue only describes one silver coin (No. 1), and it has Demeter as type. Von Sallet, in describing No. 31 of the Berlin catalogue, says that No. 1 in the British Museum (see fig. 4 below) is an example of the same coin in bad silver, and that a very good example is given in Zettelsch. f. Num. X. Taf. iii. The head on this latter coin is very much more beautiful than that in the British Museum example. Du Koezone, who describes about 160 Olbian coins, only gives nine which bear heads of Demeter, three of which are silver and six copper. 68 Pick, in his first volume, which has already been so often quoted, gives five plates of Olbian coins, in which presumably examples of every known type are given, but unluckily the letterpress describing the plates has not yet been published, so that the number of existing examples of each coin is not indicated, nor have we the editor's aid in vexed questions of identification. One hundred and eight coins are represented in Pick's plates, of which about seventeen can be quite certainly assigned to Demeter, excluding those of which the identification is more or less doubtful. Two of these coins are gold (the only gold ones in the collection, leaving out three very late ones) and four silver; the rest are all copper. So the statement of Head, which could be made more emphatic with regard to the gold coins, on which Demeter seems to be the only type in the earlier period, appears to require modification with regard to the silver ones, as well as the addition that the head of Demeter is frequently found on copper coins.

Before considering the various types of Demeter which appear upon the coins, it will be best to attempt to determine the significance of the wheat-car which appears as a reverse type on many, and the grain of wheat which is seen on others (the wheat-car also occurs as a counter-mark). But these emblems frequently occur with a fish-type (to give it this general though unscientific name), and the discussion of the two cannot be kept apart. If the fish-type represents a sturgeon or a sterlet, so very common in the rivers of South Russia, it may fairly be considered a commercial emblem, and the wheat-car can fall into the same category; if on the other hand it represents a dolphin, the commercial significance is scarcely possible. Lenormant 67 regards it as a sterlet, type de la mouille saisissant le poisson sterlet, and says that it is imitated from the coins of Sinoe; it is certainly impossible to look at the coins in question, dating from 415 B.C., 68 without being struck with the close resemblance to the type on the Olbian coins. They are probably earlier than the Olbian coins, the type of which may therefore have been borrowed from them; we shall notice below under Helios another possible instance of an Olbian coin with a type borrowed from Sinoe.

65 No. 30, Taf. ii. 12. Similar to Pick’s example, Pl. iv. 18, though not the same coin.
66 Le Musée dans l’Antiquité, i. p. 158.
67 H. M. Cat. Pontus, P. 95 et sqq., Pl. xxi.
68 Musée du Prince Kotschoubey, t. p. 64, 65.
In the British Museum catalogue both these types are described as dolphins. Some of the types on Olbian coins undoubtedly are dolphins, e.g. the reverse type of Pick's example, Pl. ix. 24, which has probably a head of Poseidon on the obverse; but there are other coins, notably Pick, Pl. ix. 3, where the long snout, the position of the eye, and the straightness of the fish seem to indicate a sturgeon rather than a dolphin. Where the fish is curved, it would seem safer to identify it as a dolphin, especially as the dorsal fin near the head, which is a characteristic of the dolphin but not of the sturgeon, seems to be clearly shown on most of the Olbian coins of this type. Perhaps it is impossible now to decide which type the Olbian die-cutters intended to represent. Would it be hazardous to conjecture that the general pattern of the type—the sea-eagle upon the fish—was borrowed from Sinope, and that the idea of the original wavered between the emblematic dolphin and the purely commercial sturgeon? There undoubtedly is a good deal of difference in type between these fish-like creatures, which this hypothesis seems to explain. When we find an ear or grain of corn and a fish-type on the same coin, and further remember that grain and dried fish were two of the main exports of Olbia, it is difficult not to think that the commercial explanation is the true one. The dolphin is not the most obvious emblem of Apollo, and it does not seem at all certain that it would have been chosen to accompany the wheat-ear if it had been intended to symbolise Apollo and Demeter together as civic deities. The obverse type of these coins is sometimes Apollo, sometimes Demeter.

To come to the coins themselves. The first coin (after the copper ones in Plate VIII) given by Pick (Pl. IX. 1, gold) does not show the wheat-ear in the hair of the goddess very clearly, but this is only because the coin is struck unevenly, and little room is left on the top of the head for them to appear. The reverse shows the eagle and fish-type, and above the eagle is a wheat-ear. The heads on No. 2 (silver) and No. 3 (copper) more distinctly indicate Demeter, as in each case the two wheat-ears in the hair, above the forehead, are clearly shown. Both these coins, and also 4, 5, 6 (which have Demeter on the obverse), have the eagle on the fish, in varying attitudes, as reverse type. Of these coins von Sallet in the Berlin catalogue, under No.

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84 If the dorsal fin is really the decisive feature, perhaps it may help to decide the question of the fish-shaped coins of Olbia in favour of Mr. G. F. Hill's alternative explanation—that they are degenerate representations of pigs of bacon, as a pig of metal was sometimes called &agr;igis (e.g. Frank scrofus), (Handbook of Gr. and Rom. Coins, p. 5). The most marked characteristic of these fish-shaped pieces is the dorsal fin just behind the head.

85 Note that von Sallet describes the head of a fish, which appears with a grain of corn as the reverse type of No. 83 in the Berlin catalogue, as a sturgeon's. Apollo's head is on the obverse of this coin, which is the same as Pick, Pl. ix. 14, and is of very style.

86 The tumuli on the altar from Ocytium described by Mr. Hadnot in J.R.S. xxi. (1901), p. 125, were recognised as such by peasants on the spot; it would be interesting to know if a South Russian peasant would identify the Olbian coin-type as a sturgeon. The fish on Pick's Pl. ix. 3, also ix. 22, is not at all like the typical dolphin that appears, e.g. on coins of Tarentum. (See Gardner's Types of Greek Coins, Pl. i. 22, etc.)

87 Similar to No. 1 in the Brit. Mus. Cat., given in fig. 3, where the fish seems to resemble the sturgeon rather than the dolphin.
The heads on the pieces with this reverse type are sometimes certainly Demeter with light wreath, sometimes Apollo, laureate (perhaps). Distinction is difficult on account of careless workmanship. The heads on 7 and 8 are more doubtful. The next that is clearly Demeter is 15. This has a fish-type on the reverse, as have also 17, 18, 19. Both the wheat-ear and the fish-type appear on 16. The head on 30 is very similar to some of those which are clearly Demeter, but in this case the reverse type is a bow in-case and an axe. In Plate X, we have more of the coins with the eagle and fish as reverse type, of which 12 and 13 appear to be probably Demeter. The other coins are of more doubtful attribution.

Next comes the series of coins with the turreted female head on the obverse, and the kneeling archer on the reverse. The wheat-ears in the coin given in fig. 5 seem to make the identification as Demeter-Tyche certain, though there is apparently no other example of the walled crown on the head of Demeter. It belongs, of course, commonly to Cybele, and frequently to Aphrodite and Anaitis. Artemis has it on the late imperial coins of Gerasa in the Syrian Decapolis, and at Chersonessa. The British Museum has an example of these Olbian coins (No. 17), which is described as 'Head of the City, left, wearing a mural crown and necklace.' The heads of the Tyche of the City, or City-goddess, are of course too common on coins to need illustration, but the identification with Demeter seems to be

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38 8th, Pl. x. 1-4. Pl. x. 1 in No. 119 in the Berlin catalogue, and is given in the accompanying figure 5. Is the choice of the archer as reverse type significant of local feeling, like the bow and battle-axe on the Borytheneus series?

38 Especially in Cyprus, see Farnell, Or. Coins, ii. p. 791.

It may be noted that the coin given by Pick (Plate XI. 1) with the turreted female head on the obverse, has the reverse type of the eagle (on the fish?) very similar to the type on the coins which undoubtedly have Demeter on the obverse. The last Olbian coin in Pick’s examples, a silver piece of King Inasmeus, has also a Tyche head on the reverse type.

The number and variety of these coins seem to make clear Demeter’s importance at Olbia—second only to Apollo; a position easily understood considering that the staple trade of Olbia was the exportation of grain.

**Cybele.**

The cult of Cybele may be taken next, not because we have evidence to prove that it was of special importance at Olbia, but because it has already been referred to twice under Demeter.

We have only one inscription referring to this cult at Olbia, given by Latyschev, and it is of Roman date:

[ἡ δείσα ...] Καισαρίου συνένυμ
[θεὸς τοῦ Σοκράτους θεού,
[Σοκράτος Φίλινος τῆς εαυτοῦ γυναῖκα
Μητρὶ θεῶν ἱερεσμένη.

There is, however, an inscription from Panticapaeum of the third century B.C. which may be quoted here as evidence, if any is needed, that the cult of the Great Mother existed in this district in the earlier period:

Βασιλείαν Παισισίδου τοῦ Σπαρτικοῦ Ἑστιαία Μηνοδώρου θεοῦ ἱερεῖ ἱερομένη ἱερεῖς Μητρὶ Φρωγίας.

The reading of Μητρὶς for Δήμητρις in Herod. iv. 53. has been already spoken of under Demeter; and, if accepted, would of course give very much higher antiquity for the cult. None of the Olbian inscriptions containing the name of a deity go back anything like so far as the date of Herodotus’ visit to Olbia, so that he is our most ancient authority for anything concerning the cults of the city.

Pick gives one coin which bears a head of Cybele; a reproduction is given in fig. 6. It is apparently rare, as there is no example in the Berlin collection, and De Keel’s only quotes one, which seems to be the same as that given by Pick:

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The two kinds of mural crowns should of course be carefully distinguished, that belonging to the Tyche type, and the much rarer one with the veil, worn by Cybele. A reference to the accompanying figures will make this clear. See also De Keel’s on this point (loc. cit. p. 68). He sets the date of these Olbian coins at 250-200 B.C., just at the time when the personification of the Tyche of the City was becoming common throughout the Greek world.
Cybele is, however, a frequent type on the coins of the North Euxine district of Imperial date. Several examples are given by Pick (Plate XVIII.) where full figures of the goddess occur; note especially No. 14, a coin of Istrus, where the lions beneath her throne are very distinct. De Koehne 105 mentions the finding of a colossal seated statue of Cybele at Panticapaeum, which so exactly corresponds to the type on the coin that it would seem almost certain that the latter is a copy of the statue. The Athenian statue of the Mother of the Gods by Phidias 106 seems not to have worn the mural crown. Arrian 107 does not mention it among the other attributes, and the numerous Attic votive reliefs, which must have had this statue as their type, do not show it. 108 The cult of Cybele in its various aspects approached so closely to that of other female deities that a distinction is often difficult. She was looked upon as the foundress of states and cities, whose walls she wears as a crown like the Syrian Astarte, hence her name 'mater turrita' or 'turrigera.' 109

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105 loc. cit. p. 67.
106 By Phidias according to Paus. l. 8. 5. and Arrian; according to Pliny (N.H. 36. 17.), by Agorantius. It represented the goddess with a cymbal in her hand, and lions under her chair.
107 Periph., p. 9.
108 Stephani, Heraldt., p. 67.
NOTES ON HELLENISM IN BACTRIA AND INDIA

How far can the kingdoms in Bactria and India, ruled by kings with Greek names, be called Hellenistic, and how far were they simply native? These pages were put together with this question in view; they have no claim to be more than an attempt to get certain problems stated, to which some day some further answer may be given by the spade. The series of these kings stretches from the revolt of Diodotos, about 250 B.C., to the final merger of Indo-Greek rule in that of the Indo-Syths in 26 B.C. The period is bisected by the conquest of Bactria by the Yue-tehe, which probably took some little while to complete, but with respect to which our information centres on the year 128 B.C. By the time of Augustus, a number of merchants were sailing directly from the Red Sea to India, a rare event under the Ptolemies; and this traffic increased later, when in the reign of Yaro was made that discovery, or rediscovery, of the monsoons which is associated with the name of Hippalos. To arrive, therefore, at any ideas about the kingdoms of Alexander’s successors beyond Parthia, it is necessary to distinguish as carefully as possible the information with regard to India, and the traces of western influence on things Indian, which can be dated later than (say) the Christian era, (and which belong rather to the history of Rome), from information which can be, or may be, dated prior to 26 B.C., or I might almost say prior to 100 B.C. (the time between these two dates being for my purpose a blank); and only to make use of the former sources when they clearly refer to something that falls within the period under consideration. The general result appears to be, that one meets with more of the Iranian and less of the Greek than one expected.

I.

Greek life, if it existed anywhere, must be looked for in the towns-Bactria and the adjoining provinces were full of them; the thousand cities of Bactria passed into a proverb.¹ The first envoys of the Han emperors were

¹ I follow the history as given in Prof. P. Gardner’s, The Voice of the Greek and Scythic Kings of Bactria and India, in the British Museum, 1896 (cited as P.O.). For other recent accounts of the history proper, as far as it can be deduced, I may refer to van Bureschmidt, Onchiatico India, 1895; M. E. Bourn in the Grande Encyclopédie, a.v., ‘Bactriana’; and W. Tomaschek in Pauly-Wissowa, a.v., ‘Baktriana.’

¹ Under Eukratides, Apollodorus ap. Strabo 15, 636—this might refer to the Punjab.

¹ Under Diuketes, Justin 41, 1, 41, 2—this cannot refer to the Punjab.
struck by the great number that they saw. Every Greek ruler in the East seems to have founded one or more. Omitting those of Alexander and Antiochos I, we know of one foundation of Euthydemus, one of Eukratides, one at least of Demetrios. But as at the outset we are met by the fact that the only four towns of which history or legend has anything to tell (with the possible exception of Alexandria of the Caucasus) are native ones, it will hardly do to assume that a Greek foundation in the far East was a city with a municipal life and government, a polis, in the same sense as a foundation in Syria, or even in Parthia. However, as city goddesses appear on some of the coins, this may have been the case in some instances.

Justin, wise after the event, speaks of Alexander's towns as settled by the most unruly elements of the army, which is improbable; but as to the manner of settlement little is known. Certainly Alexander, in conformity with his general policy, would encourage the settlers to take native wives: so that the only period, during which it is probable that the country could have been settled as Syria, for instance, was settled, is during the rule of Seleucus's son Antiochos in the eastern provinces. If free Greek or Macedonian women then went out, (as to which we know nothing), Greek language and customs might persevere for several generations, as in the Branchidæa town; failing this, the settlements would tend to orientalise themselves very quickly, and the people would soon become indistinguishable from natives.

It will be convenient to group a good deal of what I have to say round those cities of which alone more is known than the names. These are Bactra, Sacala-Euthymedesia, Taxila, and Eul-cus, the "royal city" of To-yumm.

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Footnotes:
1 Eukratides kレス (see W. Tomassich in Pontic, 1, Wisscnnm art. Baktria); Eukratides' towns in Arachosia, I omit.
2 E.g. coins of Philoxena, Hippotraitos, Arsa, Zeolus, and a coin of Pumolos, published by Mr. V. A. Smith, J. A. S. B. 1898, p. 132. This coin proves nothing as to whether the burgesses were Greek, native, or both. There is nothing that corresponds in the Seleucid city settlements, unless it be at Taxila.
3 Justin, 12, 5, derived from the result of the Greeks after Alexander's death, Arrian 4, 4, says mercenaries, and satraps who volunteered, and time-expired Macedonians (of Alexander's choice). Curtius 7, 7, 27 (of the same town) captivi, quos liberavit. The captivi would be from Cyrene. As Cyrene seems to have remained an unexplored province, Curtius's version, which would help to explain this, may be correct. Dioscorides 37, 38, (of the cities near Alexandria of the Caucasus), bears out Arrian. The reference in Dioscorides to mercenaries who volunteered is of importance. Curtius 7, 3, 28 seems to imply that volunteers settled in Alexandria of the Caucasus. The names are not all in agreement, and, so far as they go, do not agree with the great number of Greeks settled in Bactra and Sagalassos, who rose on Alexander's death. There must have been a later importation of Greek settlers;岁父ζεντζζε, says Curtius, 9, 7, 1.
4 The Branchidæa town, settled with Greek men and women under peculiar circumstances, became bilingual about six generations (Curtius, 7, 5, 20). The Bactrians, settled at the same time in Bactra by Dionysus (Herod. 4, 204), are not again heard of. Some remarks on the orientation of the new towns in Droysen, Historien, III. 69. Farg, 28, 17, in Syria de guerre au, loc. cit., is special pleading.
5 A considerable legend has grown up round Alexandria of the Caucasus, seemingly based on nothing but the one well known reference to 'Alexandria, the capital of the Yana country' in the Mahabharata, which may not refer to this Alexandria at all; the Egyptian capital is also a candidate, though a much unlikely one (S. Levi, *Le Boudhisme et les Grecs*, Rev. de *Histoire des Religions*, vol. 22 (1891); cf. the Phalasian graffite on wheel and tripod found by Prof. Petrie, J.E.A.S. 1898, p. 875.)
1. Bactra the Royal, mother of cities, traditionally one of the oldest inhabited sites in the world, must from its associations have been the natural capital. Alexander no doubt intended it to be the capital of the province; if it was he who renamed it Alexandria. Under the corrupted form of Lan-chi it became, at least for a time, the capital of the Yue-tehe after their conquest of Bactra. But for the Chinese we should not have known of the perseverance of the Alexander-name; the native name not only again prevailed, but, in the mouths of the western world, was applied even to the Tibetan invaders.

After Alexander, it is heard of as standing a celebrated siege: von Gutschmidt's conjecture, that this was a siege of Euthydemos by Antiochus III, seems in the present state of our knowledge the only possible one. If so, it may be supposed that the town was the capital of Euthydemos's dynasty; and this is perhaps supported by a figure of Artemis radiate on one of Euthydemos's coins, which may refer to the celebrated statue of Anaitis at Bactra, described in the Avesta. Now Eukratides, the usurer, founded a town Eukratideia, which, being near the old capital, and bearing his name, may well have been intended as the capital of the new dynasty; but his son and murderer, Heliokles, must have returned to Bactra, as it was the capital when the Yue-tehe arrived. Possibly something may be deduced from this.

It is clear that to accomplish the very considerable conquests made by Euthydemos and Demetrios, this dynasty must have been favourably regarded by the native Bactrians, as indeed may be gathered from Polybius. Now without believing all the details of Justin's story of the death of Eukratides, it is, I think, safe to infer this much, that in some way the usurer, for all his power, was looked on as a traitor to Bactra, and as such slain by

and why not Bactra-Alexandria? The legend makes this town a centre of Greek life in the East, the birthplace of Menander, and the last town ruled by a Greek king (Hermias=Yum-nam-too ruling in Yung-ken=Yunnak: Greek town). All that is known about it is that it was twice founded by Alexander.

As to this, M. Specht, "Les Indo-Scythes et l'Époque du Règne de Kanishka" in J. d. Asr. 8, vol. 10, pp. 159-161. It may be the real meaning of I lay, 6, 25 (25). It would probably be a worldwide hypothesis that Alexander intended the capital of each satrapy (anyhow in the East) to bear his own name. Hence he founded no Alexandrias beyond the Indus; for he intended to establish there no satrapies, but protected native rulers. Macedonian fondness for renaming places. Strabo 11, 518.


9 Converse instance of the double name in the case of Merx, Gr. Antiocheia: the Chinese preserved the native name in the form Mu-lu, (for Motu).

10 s. g. the "Bactrians" of the Periplo. Sometimes the Greek and Kuswan rule is even confused together, as Amm. Marc. 23, 6, 55. Perhaps even in Justin: 2, 13, the Scyths founded the Parthian and Bactrian kingdoms—this must refer to the Yue-tehe. Tommaseck (Pauly-Wissowa, Baktrien) says com- pendiously, that when classical writers from 140 b.c. to 560 A.D. say Bactrians they mean Tochari (Yue-tehe), Polyb. 29, 68, 5: "Graec. Iranus", p. 57.

11 She wears a golden crown with eight rays and a hundred stars, and is clothed with the skin of thirty bears of the sheen of silver and gold. Her statue set up in Bactra, Clem. Alex. Probr. p. 57. The description, a lengthy one, is in the Alka, Yass. §§ 129--129, see Darmesteter's trans. of the "Zemid-Avesta," in Sacred Books of the East, vol. 2, p. 88; also p. 53 for M. Halky's suggestion that this description was taken from a consecrated type of statuary. Polyb. 19, 49: no troops of Euthydemos are mentioned except the Bactrian horse.
NOTES ON HELLENISM IN BACTRIA AND INDIA. 271

Heliokles; and as Heliokles was associated in the kingdom, and Eukratides appears to have been returning from India, Heliokles must have been governing in Bactria. Heliokles further returned to the native capital, associated with the prosperous reign of Euthydemos, and the stronghold of Zoroastrianism. It is possible therefore that Heliokles, whose subsequent reign seems to have been a long one, in this matter represented native opinion. Now Eukratides probably came from the west; at least this appears to be a fair inference from the facts that he boasted his Greek or Macedonian descent, that his mother was royal and bore a name usually associated with the Seleukids, and that he appears to have introduced the Seleukid cult of the Dioscuri-Cabiri. The usurper might in any case desire a new capital; but the professor of a new cult would dislike the stronghold of Zoroastrianism, while the Greek might be revolted by the peculiar and unpleasant custom of a city which reared dogs, locally known as 'undertakers,' who were trained to devour the dying, a custom that even Alexander had failed to abolish. The point of this argument is, that if Eukratides represented some sort of a reaction, it can only have been a reaction towards Hellenism and away from Iran; and if this view be at all well founded, then his new city of Eukratideia must have been less of an oriental town than its neighbours, and, being new built, would be the place, if its site were ever located, where Greek architectural remains might be expected, if the Bactrians ever produced such architecture. It would seem, in fact, to be the most likely place to test the theory, still held by some writers, that India learnt its Greekised architecture of the Gandhara type from Bactria.

2. Sagala-Euthymedeia. Sagala, capital of the Cathaean, had been taken and razed by Alexander. But as the town appears in Ptolemy with a Greek name attached, for which Euthymedia was an obvious conjecture, such conjecture was long since made and has been universally accepted, and the town in consequence has been associated with Demetrius's conquests in India, and treated as renamed by him after his father. It is, however, not easy to see where the difficult MS. reading Euthymedeia came from, if it be not correct. There is nothing whatever to associate this town either with Demetrius, or

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13 Taken together, these particulars may carry some weight; in particular, it is difficult to see where else a royal Laoide can have come from; unless indeed it were from some dynasty in Amochia or Aira, concerning which great provinces our knowledge is a blank, but which are treated as separate kingdoms in the Annals of the elder Han (if indeed Amochia be Rechin, as M. Diodor supposes). The coins, indeed, know nothing of such dynasties; but they would leave us equally ignorant of Ta-yuan. As to the connection of Eukratides's coin-type with the Syrian Calatia, Babylon, Both de Sylvis, xxi. — Schefkos II, 184-226, &c. — had taken the Dacca of a type.

14 Oneckrison ap. Strabo, 11, 517, Zerquarzal. The town was fair without, but within full of man's homes.

15 It is conceivable that, if Taegus were recovered, it would be found that Eukratides's offence against Bactria was religious. Alexander's edit. against the dogs nearly brought on a revolt: Porphy. de cabit. 1, 21. — Onesikritos (St. 11, 517) says Alexander stopped the custom, with which a rhetorical passage in Plutarch agrees. But the version that he tried to must be correct, as van Gutschmidt takes it; Zoroastrianism was excessively loathsome of customs.

16 Sagala δ ναυ Euthymedeia, see p. 273. Its site does not appear to have been identified; see J. W. Moffatt, 'Ancient India; its invasion by Alexander the Great,' p. 98, note 9. Lahore is one conjecture.
with Euthydemus, whose coins do not appear to have been found further east than the Indus at Attock.\(^9\) On the contrary, all the legendary associations of the name are with Menander, whose capital it traditionally was. Unfortunately the elaborate description given in the 'Questions of King Milinda' is of no value as a help to the understanding of what a Graeco-Indian town was; for the author has frankly set to work to draw an ideal Indian great city as a residence for his hero. All it proves is that Sagala was important enough for the description not to appear absurdity; and, as it was not the residence of the viceroy of the Punjab under the Mauryas, its importance may have been brought about by the Greek rather than by the Indian kings; with this would agree the conjecture of General Sir A. Cunningham, based upon the coin-finds, that during the later period of Greek rule in India, when Greek and Saka kings occupied the Punjab side by side, Sagala, and not Taxila, was the capital of the former.\(^29\)

As Sagala went down to fame in India as Menander's capital, this may be the place to notice the Menander tradition. We can say this much with a good deal of probability, that in some way or other he greatly struck the imagination of the East. It is a commonplace that in such a case the hero in Asia appropriates to himself the deeds of other men; much becomes attributed to an Alexander or a Timour that he never performed. Now it was long since noticed that Plutarch's story of the division of Menander's remains among eight towns was a duplication of, or taken from, the similar Buddha story; and an attempt has recently been made to show that the conversations between Nagasena and Milinda recorded in the 'Milinda' were in fact originally attributed to, or are based on conversations attributed to, the sage (who may not have been a contemporary of Menander\(^31\)) and an older king, Nanda or Ananta.\(^22\) If this should be established, the double attribution to Menander becomes very strong evidence indeed of a considerable impression made by him upon his contemporaries, an impression that was hardly likely to be due to an interest in philosophy, but was more probably to be accounted for by simple conquest, very possibly

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\(^9\) P.G. xxii, as to Euthydemus. P.G. xxv, 'The coins of Demetrius came in almost all cases from Bactria.'


\(^35\) 'A historical basis for the questions of Menander' from the Thibetan, by Dr. Waddell, J.R.I.A.S. 1897, p. 227, 'Chinese translations of the Milinda-Panha', by J. Takakusu, J.R.I.A.S. 1896, p. 16. The form 'Ananta' known to the Lamas; the Chinese translation—date given as between A.D. 217–429—gives Nanda; query, Nanda of Magadha? Thibetan sources make Nagasena and Nanda contemporary.—Criticism by Count Goblet d'Alviella, Bull. de l'Acad. Royale de Belgique, 1897, vol. 33, p. 688 a, to the effect that Prof. Rhys Davids makes the Fa-hien back to 1st cent. A.D., i.e. prior to the Chinese visit. I do not find that he takes it further back than its citation by Buddhagosa as of conclusive authority, about 439 A.D. D'Alviella however does not deal with that part of Dr. Waddell's article which attempts to show, by tables, that the rainfalls mentioned in the "Milinda" do not suit the Punjab at all; and no criticism can carry much conviction which does not first dispose of this definite matter of the rains.
stimulated by some accession of Greek force driven southward from beyond the Hindu-Kush. As to the contents of the 'Milinda,' they may or may not give us any information about the historical Menander. The trade references are more likely to belong to the writer's period. The birthplace may be a genuine tradition; if so, all that is proved is that it was not Alexandria of the Caucasus. The thing that one would like to believe in, as a mention of a Greek ruling caste, is the connubium of 500 Yonakas. But with the date of this work as uncertain as it is, it would be absurd to press this.

Whether the real Menander turned Buddhist or not, there is no question that tradition connects him with Buddhism; a sufficiently natural policy for a stranger, and one probably already adopted by Agathokles, and more strongly later by the Kusân Kanishka. This may perhaps suggest an explanation of the name Euthymedria. Professor Rhys Davids has conjectured that the inscription διάκρατος on the coins of some of the kings may have been placed there to please Buddhist subjects, even if it does not (as he thinks it does not) refer to the Buddhist Dharma. The wheel on one of Menander's coins has also been claimed as a Buddhist emblem. It is worth tracing the word διάκρατος a little further. So far as I have been able to ascertain, it does not occur on Seleucid coins. On the Parthian, it appears first with Mithradates I. He made conquests in India, or anyhow in White India, that were apparently not held. Among the Bactrians, the first to use it is Agathokles, who issued coins with Buddhist symbols, and who appears to have ruled over a further portion of India than any predecessor. Later, the word becomes common among Parthians, Greeks, and (in its Indian form) Sakas; but if in three of the earliest instances, Agathokles, Mithradates I., and Menander, the use of the word coincides with an extension of rule over some part of Buddhist India; in one case, Agathokles, with a Buddhist symbolism; and in one Menander, with a Buddhist tradition; it appears to me quite possible that the term refers to, and that the kings in question claimed, not merely the...
ordinary righteousness of kings, but the Buddhist uprightness. It may also be remembered that in the case of Menander the tradition preserved by Plutarch speaks of the fairness of his rule. If then Euthymoeides be translated ‘the town of the Upright Ruler,’ a reasonable sense for the MS. reading can be obtained without resorting to conjecture, and the only association of this place known to us is preserved. It does not follow that the town was ever called Euthymoeides; the word may be merely a paraphrase of some native term.

3. Taxila. This city is the most interesting of those we meet with. According to one theory, the name means ‘the rock of Takshaka,’ king of the serpents, and brings the name into connection with that aboriginal race who, as the Nagas or serpent folk, play so large a part in Buddhist art and legend, and who were, traditionally, the means of preserving the true Buddhism of the Greater Vehicle. Whether a prae-Aryan town or not, Taxila appears as in perpetual opposition to the ruling powers. Its prince aided Alexander against Poros. When Macedonian rule was established, a Brahmin from Taxila instigated Chandra-gupta’s revolt. When the Mauryan empire was established, Taxila (says tradition) revolted against Chandra-gupta’s son Vindusara, and was not subdued until Ashoka himself was sent; subsequently Ashoka ruled there as his father’s viceroy. When the empire of the Mauryas began to break up, Taxila was probably one of the earliest towns in India to come, for the second time, under Greek rule; while, if Cunningham’s before-mentioned conjecture be correct, it was one of the earliest to cease to be ruled by the Greek kings, who continued to reign at Sagala after Taxila had become subject to the Saka dynasty of Manes and his successors.

These statements can be illustrated from the coinage. The town had struck a square bronze native coinage, with a design only on one side (Fig. 1).

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27 This would of course have nothing to do with their own belief.
28 It is an objection that the word would be poetical. There are at least two undoubted poetical words on the coins, ἀνδρινός and ἄνθρωπος, the former as early as Diocles, and common; and perhaps ἀνθρώπημα and the obscure ἀνθρώπης. Also the poetical name of Hermakos’s queen, Kalliope. (On the adoption of Munna-dinars in late Hellenism, see von Gruneberg, Zerz. Zvbez., 118.)
29 A very similar case is that of the Bactrian town Eutyménon Eutyma, which must in fact have borne the queen’s actual name.
30 See MacGrindle, Ancient Indies, before cited, p. 342, note 4, “Taxila.” Its site has been identified with Shah-dagh.
31 Agathokles’s coins, etc.
This coinage was imitated in the square bronze money of Pantaleon and Agathokles. Agathokles's bronze money is said to be found near Taxila, and as bronze does not travel far from the place of issue, it is possible that this square coinage was minted at Taxila in the existing mint. Later, the town struck double die square coins of its own (Fig. 2), the art of which is said to show the influence of the money of Agathokles, and which were in turn imitated by the Saka king Manes. Therefore, before the time of Manes, i.e., fairly early, this town was either independent or autonomous. As this is the only phenomenon of the kind that occurs, except the city-goddesses before referred to, it is worth seeing if anything can be deduced from the coins as to the constitution of this town.

Of the square coins of Agathokles, one (Fig. 3) bears on the reverse a "maneless lion," on the obverse a nautch girl; the other (Fig. 4) obv. a stūpa and a star, rev. a tree within a rail. The latter coin, of course, as has been noticed, can only have been struck to meet the susceptibilities of Buddhist subjects, but no one seems to have thought it necessary to consider whether their susceptibilities would have been equally pleased by a dancing girl. Now the best known legend connected with Taxila is the story that near there Buddha, in a previous existence, had given his head to feed a starving tiger, a story commemorated in Asoka's foundation there of the stūpa of the "Head gift." This stūpa must be the one that appears on Fig. 4, and not some imaginary foundation of Agathokles's, which is in itself unlikely; and I would conjecture that the "maneless lion" of Fig. 3 is also an allusion to the same story, and is in reality the attempt of the semi-Greek artist at a tiger. In this case

28 Rapin, Indian Coins, § 54.
29 The star is obliterated on the specimen here illustrated, but clear on others, e.g. P.t. 13, No. 15.
30 Cfr. the use of stūpa: see p. 275.
31 M. S. Levi, in Le Budhismi e le Greco, already cited, p. 43; Agathokles, "solt par conviction, solt par politique, saran chat ou stūpa." This stūpa coin is perhaps imitated by a copper coin from Khotan, which appears to bear traces of a stūpa; Dr. A. R. Horsnle in f. A. 1898, p. 297.
32 It is now said to have been conclusively disproved, the individuals in question being only immature specimens. (See e.g. Reinhold, s. v. "lion.") I do not see therefore why they should figur on the coinage. Mr. E. J. Rapin (J.E. A. X. 1900, p. 107) gives a seal which he compares at length with the square coins of Agathokles and Pantaleon; the lion has a mane. The figure on the coin is certainly a poor tiger; but it would also be a poor lion, and as no Greek could ever manage a good lion, it is unreasonable to suppose that a designer on the fringe of Hellenism would succeed better with a tiger.
the coin in Fig. 3 would also be Buddhist. The dancing girl then would have to be connected with Buddhism in some way, and may perhaps be a reference to another well known Buddha story, his temptation by the Apsaras or nymphs, as Cunningham conjectured for the dancing girls of the Mathura sculptures; only the artist has imported a good deal of realism into his picture.

This leaves the star over the stūpa unexplained; nor have I seen any attempt to explain it. What follows is a guess.

When Taxila again struck its own coins, it did not try to imitate Agathokles's Greek coins, but struck square ones with Buddhist symbols; the Greek coinage was an exotic, a bit of Greek art put at the service of Buddhism, exactly like the well-known vihara at Taxila with Ionic columns. But if we hear nothing of a Greek colony, we do hear of an Iranian one. Aristoboulos knew that, unlike the rest of India, the people of Taxila exposed their dead to vultures; which can only mean that there were a considerable number of Zoroastrians. Agreeably to this, it is said that the low caste Chandalas there acted as corpse-bearers. This is no more than might have been expected, seeing that, for instance, Asoka in appointing a governor of Gujarat saw good to appoint one who from his name must have been an Iranian, and that Iranian traders or settlements were probably numerous in that region. It appears to me that this Iranian element, which must have furnished considerable assistance to the second invasion of India, by Demetrios and his successors, has also left a trace of itself on the coins in the star over Agathokles's stūpa.

The great number of Iranian deities that figure on the coins of the Kshans or Indo Scythians is well known. One theory is, that the Kshans learnt Zoroastrianism on the Oxus. Suppose, however, that the Bactrian kings had worked the mints with Greek or Graecoised artists and Iranian workmen, as is probable enough. After two or three generations, Greek influence wears out; Eukratides, and more especially Heliokles, restore the Persian weight standard; if the Kshans found the mints in Iranian hands, with some tincture of Greek art, it is natural that the Iranian coin-designer would attempt to introduce part of his own symbolism.

Applying this to Agathokles's coin, Fig. 4, I believe that the star, which

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Footnotes:

37. Stūpa of Barhut, p. 27. It has been noticed that the dancing girl is the only purely Hindu type that occurs, prior to Siva on the coins of Osnos Kudphasis (P.G. 1241); and this is an additional reason for finding an explanation for her.

38. Rapan, Ind. Coins, Pl. 1, 13; caitya on both sides, and rev.


40. The name is Tushara; M.S. Levi, *Quel de Gracco e veterum Indorum monnanae traditot*, 1899, p. 4, and generally. These Iranian settlers would be of more assistance to the Bactrian invaders than would Alexander's Indian foundations, if subsisting.—The Gracco-Bactrians seem to have found a Persian weight system established in the Punjab; Rapan, Ind. Coins, § 8.

41. Dr. A. Stein in Ind. Ant. for 1888 (vol. 17), p. 29, 28, *Zoroastrian deities on Indo-Scythian coins.*

42. It might be objected that the gold coins of the Kshans are not struck on the Persian standard, but approximate to the weight of the Roman aurel. Very likely, however, they are aurel restruck. (Cunningham in Num. Chron. 1889, p. 377.)
has nothing to do with a stūpa, is Sirius. Dr. Stein has identified the figure with a bow and arrow on Huvishka's gold coin as Sirius, whose later name, Tir, in Pahlavi and Persian actually means "arrow"; he reads the legend as teirpo, and shows that Tir in this meaning is derived from the Zend tīghrī, and that in some way the attribute of swiftness had become affixed to the star, whose swift flight was compared to that of the arrow. Dr. Stein proceeds to cite part of a passage from Eustathius, which, when read as a whole, seems to carry us one step further than was necessary for his purpose. Briefly, if it was doubted whether the name of the Tigris, swiftest of rivers, was derived from the arrow or the tiger, and if it is stated that the similar name of Tir, brightest of stars, is derived from the arrow, it is an easy piece of guess-work that there may also have been a popular connection between the star and the tiger; and an Iranian designer, drawing the stūpa of the Head Gift, with the tiger story in his mind, may have been led by this connection to put in the star, merely perhaps as some addition of the symbolism of his own creed, but possibly too as evidence of some unknown joint cult of the two faiths. I need hardly add that the above is put forward simply as a guess for what it may be worth.

Whether however Taxila can give much information about Iranians or not, it gives none about Greeks. The celebrated vihara is not dated; the coins of Akes found under it merely show that it was not built before Akes; it may be altogether outside the period I am considering.

4. Eul-che, the 'Royal city' of Ta-yuan. According to Strabo, the conquest of the Hellenes in Bactria made certain Scythian tribes famous. This conquest took place barely four generations after the revolt of Diodotus. The Chinese have left accounts of the then state of the countries which had originally formed the eastern part of the empire of Seleukos, and afterwards the Bactrian system or empire, these accounts being based on the report of Tchang K'ien, (128 B.C.), who had been sent as an envoy to the Yueh-teho, then encamped to the north of the Oxus, and who visited personally, beside the Yueh-teho, the nomad Kang-kiau (north of Bokhara) and the settled countries of Ta-yuan (Kho-

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* In the paper above referred to.
* Eustath. ad Dionys. Perieig. 976, Bernhardy. Tigris swiftest of all rivers. Ac quod est Tigris malitiam, έγον τηκε σε βαλλει. Μάλα γ'τάρ Τιγρα καπλος τόν τέκμαν. But some say it is called from the tiger; (follows a story); καλλος δι σκέα τήν παθείς ταύταν ενυσθαθη τήν εργα τοις δρομοις παραταθεις ξέρεις κα τά τοις
* pedestalis σε. For the tiger is very swift. Cf. the supernaturally swift tigers in Herodotus.
* Of an interesting suggestion of Dr. Hirth, that the metal mirrors with Bacche symbols imported into China under the Han emperors might refer to a joint cult of Dionysos and Haoma; Uber fremde Einflüsse in der Chinesischen Kunst, p. 25 sqq.
* I purposely refrain from attempting to use Philostratus. Yet he must at least be evidence of a belief that Taxila would be a reasonable location for such a story as his.

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* For the Annals of the Edler Han I use A. Wylie's trans. of 'Notes on the Western Regions,' J. Anthop. Inst. 1881, cited as 'Wylie'; for Ssu-ma-kiin, T. W. Kingsmill's translation of ch. 128 in J.R.A.S. 1883, vol. 14, 'Intercourse of China with Eastern Turkestan in the 2nd century B.C.' cited as 'Kingsmill.' Prof. Chavannes' translation has not yet, unfortunately, reached ch. 128; but his introduction, pp. 138 to lxxvii, deals with the subject-matter. Every Chinese scholar seems to transliterate the proper names differently; where I can, I have used Prof. Chavannes' spelling.
kand) and the Ta-his (Bactria). 46 Chinese scholars appear to be satisfied that our accounts correctly represent what Tchang Kien says he saw. It ought to be possible to some extent to argue backwards from these documents.

First of all, Tchang Kien distinguishes pretty clearly the warlike nomad races from the settled peoples whom he calls unwarlike. The former are the Yue-tche and K'ang-kiu; the latter the Ta-his and the peoples of Tu-yuan, Ngan-si (Parthia), Kepin (†Arachiosia), and Woo-yih-shan-le (†Aria). The last three countries he had not visited personally. Also, he knows nothing of any former Bactrian empire. Each of the states he deals with is, for him, a separate kingdom. So far as this goes, it supports the idea that the break up of Seleukid rule in the East was followed by a number of independent Greek rulers. The Bactrian may from time to time have made himself overlord 45; but Tchang Kien knows nothing of any preponderance of the Ta-his.

The various points that he makes about the settled populations, from Tu-yuan to Ngan-si, are somewhat as follows.

(1) They can make themselves mutually understood, allowing for variations of dialect, from Ferghana to Parthia. 26 This speech was of course Iranian. This statement would not be inconsistent with the use of Greek, or bilingualism, in the cities; but nothing of the sort appears to have been observed.

(2) Their military power was small, 41 and the Ta-his were unwarlike. 26 It was unfortunate to include Tu-yuan in the general statement, seeing that barely a generation later the little state not unsuccessfully resisted the strongest expedition that China could send. But the remark about the Ta-his is interesting. Looking at the sudden extension of Bactrian power after Diodotos, and the reputation as fighters left in India by the Yavanas, it is hardly what we should have expected. I fancy the right explanation must be that of Justin; they engaged in too many wars, and bled to death. 45 When Tchang Kien saw them, the strongest elements of the population were either dead or driven south over the Hindu Kush. He gives their then numbers at upwards of a million. It is possible of course that he was not indisposed to belittle the enemies of the Yue-tche, whose friendship he had been sent to solicit.

(3) The men all had deep blue eyes and large boards and whiskers. 44

48 Wylie, 87.
49 See note 32.
50 Wylie, 45; Kingsmill, 94. Cf. Strabo, 15, 724. Ariana includes parts of Media and Persia as well as Bactria and Sogdiana; vide γνωστος και ἐκθέτος παρά μοίνον.
51 Kingsmill, 83. This seems to be applied to Parthia as well as to Tu-yuan and the Ta-his; but elsewhere he knows of the power of Parthia, Kingsmill, 81.
52 Wylie, 41, 'weak and afraid to engage in war.' Kingsmill, 82, 'weak and cowardly in battle.'
Notes on Hellenism in Bactria and India.

The beard still marks the Irani. If there was any Greek ruling caste anywhere he does not mention them; still, though he notes a general similarity between the inhabitants of all these countries, it is only of the eastern part of Parthia that he says definitely that the people were all of one race.  

(4) The men were astute traders, who would wrangle about a farthing, and they had a large commerce. I have considered the question of commerce in a separate section of this paper.

(5) Among the Ta-hia there was no supreme ruler; each city and town electing its own chief. So Sze-ma-ts'een. It is impossible to read this as meaning a break-up into city communities, after the fashion of Syria. The parallel passage in the Annals of the Han, and the analogy of Ta-yuan, where the two towns mentioned have each a king show that what is intended is something much more like the system of local chieftains and fortresses which Alexander had found in the country, a system perhaps that had never really yielded to Hellenism.

(6) They paid great deference to their women. This statement creates a grave difficulty, as it will not apply to any race except one, and that is not the conquered Ta-hia at all, but the conquering Ta-Yue-teche, who were Thibetans and polyandrous. Tomashchek cites this passage as an authority for polyandry among the Yue-teche (which is said to be otherwise attested) without seeming to see the difficulty, viz. that it is not applied to the Yue-teche at all, but to the settled peoples. There may have been some peculiarity local to Bactria and the neighbouring lands of which we are ignorant, and which would explain it; but failing this it seems to me that there are only four alternatives: (a) that Tchang K'ien has made a bad mistake—a matter which, as he lived among the Yue-teche and visited the Ta-hia, would seriously impair the authority of practically the only eye-witness for any part of the period under consideration; (b) that the writers who used his report have introduced some error, a matter hardly less serious; (c) that in some way the mistake has arisen through the Ta-hia being in fact not the Bactrians but the Tochari, one of the hordes of the invaders; (d) that the Yue-teche conquest was a gradual affair, and that the Bactrians, before the occupation of their capital, had become permeated with the manners of their conquerors.

Of these alternatives, (c) is almost incredible. Ta-hia cannot be

33 Kingsmill, 91.  
34 Wylie, 45; Kingsmill, 94.  
35 Kingsmill, 83.  
36 Kingsmill, 82. The parallel passage (Wylie, 41) reads that the Ta-hia 'were originally without a chief (paramount), and were accustomed to set up petty chieftains over their cities.'  
37 Wylie, 46. 'Women are honourably treated among them, and their husbands are guided by them in their decisions.' Kingsmill, 94. 'They held their women in high estimation, and the husband commonly took his wife and rose before coming to a decision.' This statement appears to be made of all the countries westward from Ta-yuan as far as Parthia.

39 But not impossible. There must be a similar error, whatever its nature, in the contradictory statements as to the use of silk; see note p. 296.
Tocharia; the Ta-hia throughout are the conquered race,\(^{42}\) and, if they are not the native Bactrians, the whole of the Chinese account becomes an insoluble puzzle.\(^{(d)}\) (d) is in one way possible. We know that some little time elapsed between the settlement of the Yue-tche on the north bank of the Oxus and their conquest of the capital\(^{44}\); we know that they found it necessary or advisable to pass by Ta-yuan altogether without attacking it\(^{47}\); we might conjecture from one of the coins, if genuine, that some little while previously they had been fighting with the Bactrians with varying success.\(^{48}\) Bactria may have become lost to its Greek rulers by something of the same gradual process as, for instance, that by which Southern Gaul became lost to the Roman empire; but even were this the case, it is difficult to suppose that this particular form of the manœuvres would be adopted by a conquered people of alien race, religion, and temper.

If the reference be not to polyandry, it is equally obscure, as it scarcely accords with what is known of the domestic systems of Greeks, Persians, or Parthians; and we must conclude either that there is here something peculiar to Bactria and the neighbouring districts, and otherwise unknown, or that there is some mistake in the authorities which may tend to impair their credit on other points.

Now in all this no trace appears of anything Greek, unless it be the name Lan-chi and a reference to the Parthian coinage.\(^{47}\) The objection, however, as regards Bactria, may be taken, either that the Chinese envoy could not or did not distinguish Greeks from natives, or that the whole Greek element had retired to India; and this might be supported by Strabo's statement that the Scythians 'took Bactria away from' the Hellenes. It might also be conjectured that the outburst of Greek activity in India associated with the names of Apollodotos and Menander was connected with the expulsion of the Greeks from the countries north of the Hindu Kush.

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42 In 'Notes on the Western Regions' they do not even have a separate section from the Yue-tche.

43 The name Ta-hia is so far unexplained. It does not even seem to be certain whether it means Great His or not. But the common explanation that Ta-hia = Dahae seems impossible. Ta his is a great Chinese for Dahae; but unless it can only mean Dahae, which is clearly not the case (see e.g., Dr. Hirth, Uber friesele Hethiter, p. 29), it is worthless without some fact to support it.

44 No connection of the Dahae with Bactria is known. The theory is, that they may have joined in the Sakis invasion; but (1) the Chinese only mention the Sakas, (2) if as they were driven out with the Sakas before Tshang-Kor came. As a fact, the Dahae remained in their original seats, beyond Margiana, and contributed a refuge for Parthian pretenders, and mercenaries for Parthian and Seleucid kings; Artabanus III. (c. 8 A.D.) lived among them, Tax. Assur. 2, 3; they fought at Magnesia, Livy, 37, 46, and at Ephesus, Polyb. 5, 79; see also Strabo, 2, 718 and Plut. 6, 10, and Prof. F. Gardner, 'The Parthian coinage,' 1877 (In Marden's Numismata Orientalia), pp. 12, 13—Identities by similar sound are worthless in themselves, unless used to support deductions from facts.

45 Specht in J. J. 1888, p. 821 sqq.

46 See note 45.

47 Coin representing Macedonian horseman charging two riders on an elephant; Prof. F. Gardner takes the rider to be Yue-tche, and the coin to commemorate a victory of either Eukratides or Hecatombas; N. S. Chron. 1887, p. 177; but its genuineness is said to be doubtful. Is it possible that the 'Bactrians' of Justin, 36, 3, 5, allies of Demetrius Nikaor, were really an advanced body of the Yue-tche? See note 11.

48 Wylie, 39; Kingsmill, 81.
and the concentration of their energies on a narrower field, to be again curtained by the Saka conquest of the Western Punjab.

There is however one country north of the Hindu Kush to which this latter objection cannot possibly apply, as all accounts agree that the Yue-tehne passed by it and came round to attack the Ta-hia from the west: and therefore the Chinese must have found it in whatever was its normal state of development.

This is Ta-yuan, the country about Khokand and Urahbe, south of the Syr and south-west of Ferghana. Here Alexander had settled a capital and Antiochos I. had kept a general; Strabo goes out of his way to quote Apollodorus to the effect that the Greeks possessed Sogdiana, a name which would include the province in question. In the time of Tchang Kien Ta-yuan was the only part of Sogdiana, not occupied by nomads, the Kang-Kiu possessing the valley of the Polytimea, and the Yue-tehne holding the country along the north bank of the Oxus, which may have been included within the limits of Bactria. Alexander had settled several forts here beside Alexandreschate; and the Alexander-romance, curiously enough, speaks of voluntary settlements of Alexander’s friends in Sogdiana. This district moreover commanded the northern and easier of the two old trade-routes into the Tarim valley; so that, although far from what must have been the centre of the Graeco-Bactrian system, it may nevertheless be a locality in which traces of Greek settlement should be expected.

Se-ma’s-sen tells the story of a Chinese expedition against Ta-yuan, (about 102 B.C.), to procure for the emperor some of the famous Shen horses of celestial race that sweated blood, which he coveted. The first expedition was defeated; but prisoners and ruffians were impressed, and a second army of 60,000 men, not including engineers and the seven classes of criminals used as transport, together with 100,000 cattle, more than 30,000 horses, and 10,000 baggage animals, including camels, and commanded by 50 generals, left Chinese Turkestan to attack this outpost of the west. Half the effective force appears actually to have arrived before the ‘Royal city, Eul-che,’ to have defeated the Sogdian horse-archers, and to have stormed the outer town, while the engineers diverted the river that flowed through it; but the Sogdians must have fought with the same courage with which their fathers had resisted. Alexander, for the Chinese despaired of taking the inner city,
particularly as the besieged had recently secured the services of some 'men from T'sin' who knew how to dig wells. Finally the besieged killed their king, Mou-ko, who was supposed to have instigated a previous murder of Chinese envoys, and sent out his head, with a promise of some horses if the Chinese retired; but if driven to extremities they would kill the horses and call in the K'ang-kin. The Chinese general took the horses, apparently with some admission of Chinese suzerainty as well, and returned home without entering the inner city, taking with him cuttings of the grape-vine, and some plants of lucerne for the horses.

The utmost possible has been made of this story from the Greek point of view. Ta-yuan becomes the great country of the Yonas or Greeks, its capital Niese, its horses Nissaeans, its king Mégas. It appears to be admitted that the Chinese names for grapes and lucerne are really Greek; but the rest is based on nothing but a similarity of sound, and seems to be of little value, more especially Niese. Mou-ko is said to be a possible representation of Mégas; but to make out the point, it would be necessary to prove that Mégas alone is a possible name for a Greek king—as for instance Lucan can talk of Pompey as Magnus. I shall hope to show presently that, supposing Ta-yuan to mean Great Yona land, this need not refer to Greeks.

But the reasons for which I have given this story at length are: (a) Two cities of Ta-yuan are mentioned, the Royal city, Eul-che, and another, Yoon-tch'eng; and this latter has also a king. That is to say, five generations after Diódotos the country is still (or again) as Alexander found it, broken up into separate local chieftaincies. (b) If Eul-che, as universally supposed, be Uratube, and Uratube be Cyropolis, we get the important and startling result that the Persian foundation, which Alexander had razed and scattered, had again become the capital of the province, to the exclusion of his own town of Alexandreschate (Chodjend). But too much stress must not be laid on this, as the identification of Uratube with Cyropolis is not an absolute certainty. (c) The 'men from T'sin.' It

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38 The same threat that Entheodemos used to Archelaus III.
37 T. de Lamarmore, Western origin of early Chinese civilization, pp. 220, 221.
78 As the revival of the letter Žen on the Kischen tables appears to be generally accepted, and as this letter, (sound zh) is known as used in Greece for bradding horses, it ought to be suggested, to complete the list, that the Shun horses were varia. For a suggestion that Ta-yuan = Timoteus Tsepanar (the previous beyond Mery lost by Evraxis to the Parthians, and translated by Strabo, 7. 147. 11) see Morgenstierde, 61, no. 12, Epistoles, C. Nissaeans (a places which he places between Balkh and Mery); see Hirth, Plotina, 3rd Ed., p. 24; it is geographically quite impossible, as Dr. Hirth notes. A considerable number of places called Nissae are known; but the 'khali' were certainly in Media.
79 P'tao, vine = βότανος; Mul-tuk, lucerne = ῥύκτος (Rhod).
80 By Prof. Chavannes in his Introduction before cited.
81 The only case that occurs to me is the coin of the so-called Nameless king, P.O. xivii., Kabul valley, c. c. D. 30-39; the inscription is generally Βασιλεύς Βασιλείας σώρος μέγας; possibly Kushan.
82 See p. 287.
83 Eul-che = Uratube; Prof. Chavannes in the Introduction before cited, p. 136; Dr. Hirth, Ueber fremde Einzitate, &c., p. 22; both on a consideration of Chinese evidence. Cyropolis = Uratube; von Schwann, Alexander der Große in Teutschland, (1899), pp. 31, 32. The stream and citadel are there; the town gave more trouble to the Russians than any
is out of the question in 102 B.C., that they should be Romans. They must therefore almost certainly have been Greeks, whether from Syria, Parthia, or Bactria. Wherever they came from, however, they are noticed as foreigners, and the historian understands the difference between them and the natives of Ta-yuan. This suggests that Tchang K’ien might have informed himself of the same difference, had he come across it; and furnishes some reason for supposing that he makes no mention of Greeks in Bactria because there were none there to mention.

So far as Ta-yuan therefore is concerned, the case seems to be that the only Greek elements that commend themselves as fairly certain are the names for grape and lucerne, and the presence of certain foreigners in the citadel. It does not appear, for instance, that any coins of the Greek kings have been found so far north.

II.

So much has now been ascertained as to what India does or does not owe to the west,66 that it ought to be possible in some sense to argue backwards, and to see if anything can be deduced from this as to the Bactrians. I may say at once that, omitting architecture and sculpture, the only debt that appears to be proved by any evidence that would satisfy a jury is astronomy, and this belongs to the history of Alexandrian astronomy of a much later date.67

What will have to be considered in this connection may conveniently be grouped under three headings: 1. architecture and sculpture, 2. language, 3. the name Yavana.

1. Can it be deduced from ascertained results, of which far the most important here is the broad one that the Gandhara school cannot well commence before the Christian era and shows Roman influence, whether Greek or Graeco-Roman architecture was ever at the service of the Bactrian

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64 Hardly the last, having regard to the date.
65 In the British Collection of Central Asian Antiquities are seven silver tetradrachms from 'Samarqand, Tashkent, and other places in Western Turkestan,' which include coins of Heliodorus and Euthynemos, and some of which are referred to Dr. Houbigant (Ind. Ant., 1889, p. 225 seq.), to c. 150 and 160 B.C. 'Are they Saka?'
66 For discussions of this question, see (among other things) Weber, 'Die Griechen in Indien,' Sitz. d. Ak. d. Wiss. Berlin, 1890; Levi, Guide de Grande, etc.; Count Godet d'Alvillia, Ce que l'Inde doit à la Grèce, 1897, and his series of articles in the Bull. de l'Aead. royale des Science de Belgique, vol. 33 and 34 (1897), (strongly pro-Greek); Mr. V. A. Smith's three articles, 'Graeco-Roman Influence on the Civilization of Ancient India' in J. A. S. R., 1889 (vol. 33), 1892 (vol. 67), and 1893 (vol. 69); and a clear summary in Prof. A. A. Macdonell's recent History of Sanscrit Literature, p. 411 onwards. Greek or Graeco-Roman influence is of course generally treated as a whole. Bibliography of the large literature relating to the architecture and sculpture is given by Mr. V. A. Smith, and by Dr. Burgess in his recent edition, with translation, of Prof. Grünwedel's Buddhakulika Kunst in India. My references to Grünwedel are to the second German edition (1900), as this paper was practically completed before I saw the translation.
67 'Notes on Hindu Astronomy, by Dr. Burgess, J. R. A. S., 1893, p. 717.'
kings? The answer to this question was once an unhesitating affirmative; but that is ancient history. There is, however, a theory, held by D'Alviella,58 which may be described as a sort of rule of three; as the semi-Greek Kushan coinage is to the Gandhara school, so should the coinage of the Bactrian kings be to a (vanished) school of pure Greek art. That is to say, the coins postulate a contemporary school of architecture and sculpture, of which most, if not all, of the traces have vanished. A supporter of this theory might adopt Cunningham's former suggestion that possibly the conquering Yueh-teho destroyed all the works of art in question,59 and might argue (and justly) that this theory cannot be disproved until, for instance, Balkh and the site of Eukratideia have been properly excavated. But it cannot either, with our present material, be proved. There is no evidence that the Yueh-teho, whose conquest of Bactria may have been a gradual one, were mere vandals; they occupied, not destroyed, the capital; they spared certain pillars and stipes of Asoka, and quickly took over the mints. The author of the Periphus knows of old shrines standing, inland from Barygaza, attributed to Alexander. The positive evidence in support of the theory is scanty in the extreme. There are certain figures in the architecture of the Asoka period, centaurs, man-headed bulls, and other half-human types, which may be due to Greek influence, probably filtered through a Persian medium; but the explanation of their adoption may be entirely religious or philosophical.60 So far as I have been able to discover, the existing remains of 'Indo-Hellenic,' as distinguished from Indo-Persian, art, even possibly contemporary with the Greco-Bactrian or Graeco-Indian kings, or even admittedly free from Roman influence, are the Lahore Athene, the Vihara with Ionic columns at Taxila, and the sculptures at Mathura.61 The vihara appears to be 'dated' by the coins of Azes found undisturbed beneath it, that is to say, it cannot be earlier than about 30 B.C., and may be later. The Athene however is Greek,65 and might be earlier than Azes, though it resembles the type on his coins. But most of the 'Indo-Hellenic' sculptures come from Mathura. These are said not to belong to the Gandhara school, and to show undoubted Greek influence not conveyed through Roman...

58 See also Oldenberg's essay on 'Buddhistische Kunst in Indien' in Aus Indien und Iran (collected essays, 1869), esp. pp. 116, 117; and cf. Mr. Vincent Smith's Indo-Hellenic school.
59 Arch. Survey of India, vol. 5, 189.
60 Griinwedel, pp. 17, 51, 57. They may be meant, he thinks, to symbolize the doctrine of transmigration and rebirth; in each stage of animal existence the human may be conceived, to be released through good works. It is interesting to meet the celebrated Apsaras, apsiras in India, carrying the use of an alien philosophy.
61 Certain traces of Greek or Graeco-Roman influence appear in the art of Khurja, which was so largely influenced by that of India, see for instance the seals from Taklamakan given by Dr. Hoernle ('A collection of Antiquities from Central Asia,' J.A.S.B. 1899, vol. 68, part 1, nos. 34, 26, 22 and 33 on plate 8, and no. 11 on plate 10), which include two figures of Athene and the clay seals representing Athena and Eros referred to by Dr. Stein in his recent Peshawary Report of his excavations in Chinizes Turkestan, at p. 53. Dr. Stein says 'There is good reason to believe that this influence was exercised, partly through Bactria, partly through Gandhara and the adjoining regions on the N.W. frontier of India.' I do not know if any date has yet been suggested for those figures of Athene, or if they may be earlier than the Gandhara school.
62 Griinwedel, 61; 184 'direckt als griechische Gottin ist dargestellt Athene Preoachos.'
channels. How they got there is a problem whose difficulty may be gauged by the fact that Grünwedel suggests a relationship between this school and the residence of Seleucus's ambassador Megasthenes at Patala, a somewhat desperate theory, and perhaps inconsistent, with the fact that coins of several of the Indo-Greek kings are said to have been found in the Mathura mounds. Few however would care to maintain that the Bactrians must have brought Graecised architecture to India because the one group of sculpture that shows undoubted Greek influence is found at the furthest point from Bactria to which any Greek king can well have penetrated. If this theory of continuous Hellenic influence, which cannot be proved, should however, ever be disproved, the result would be that the beautiful coinage of the earlier Bactrian kings would have to be considered as what naturalists call a "sport."

But if, upon present materials, no continuous Hellenic influence can be shown, this is not the case with the influence of Persia. Few things strike the ordinary reader more, on looking through Grünwedel's Handbook, than the stress laid upon Persian influence. So far as the art, which suddenly appears full blown under Asoka, owes anything to the stranger, it owes it to Persia; the Indo-Persian school continues through a line of stupas to Amravati in the first century; Persian forms appear even among the alien art of Gandhara. It is difficult, in the face of this, to avoid supposing that such art as existed in Bactria was more native than Greek. It is perhaps also to the point to remark that no monument of any sort showing classical influence has yet (so far as known to me) come to light which would belong to the period between Asoka and the last Indo-Greek king; and such a blank may be in itself significant.

I have not overlooked the much-quoted words of Hsiouen-Tsang. When the Chinese pilgrim, some six centuries after the Yue-teh conquered Bactria, visited Amravati, he is reported to have said that the famous Tope was adorned "with all the magnificence of the palaces of the Ta-hia." This proves nothing at all; because Hsiouen-Tsang does not date his palaces. But supposing it to refer to Bactria prior to the Yue-teh conquest, then, if any one likes to attribute to the Chinese pilgrim an exact knowledge of the architectural style of six centuries previously, it would prove that the Bactrian architecture was like Amravati, viz., Indo-Persian; which is hardly the result contemplated. No one supposes that the kings had not palaces of some sort, as indeed Tsiang K'ien expressly states with regard to Kopin.  

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60 Grünwedel 30. Mr. V. A. Smith has suggested (locutely 320 B.C.) for this school.
62 Perhaps the fact that a station on the silk route became well known as "The Stone Tower," (Ptolomy), may even suggest that in the neighborhood, Sogdians for example, stone architecture was rare and remarkable. I have not seen anywhere with a description of the 'Greek' pillars at Oush in Farahana, mentioned by Vandenburch (Oriental Asia).
63 From Julian's translation. D'Alville, (Oe nos Lide, 8c. p. 52) cites this passage, together with Philostates, for a continuous Greek art.
64 Wilkins, 34, 22 the people of Kopin are ingenious in building palaces and mosques.
2. Nothing then at present known to us postulates with any certainty a
Gracised architecture or sculpture among the Bactrians. Does anything
postulate Greek speech? Omitting Philostratus, and statements in rhetori-
cians about Indians reading Homer, our knowledge seems to be this: that
Greek writing persevered on the Indo-Scythian coins: that on the coinage
of the Graeco-Indian and Saka kings the letter-forms change: that after A.D.
some Indians read Alexandrian treatises on astronomy: and that the Branchidae
town, which Alexander destroyed, had become bilingual in six generations or
thereabouts.\[88\] The reading of astronomy books means nothing, while it is
always possible to argue that Greek on the coins remained as a dead token,
as we use Latin, but in view of Dr. Stein's brilliant conjecture,\[90\] that the Π
of the Indo-Scythian coins is in fact San revived, there remain two very
strong arguments for the continuous use of Greek as a living speech. San
is known as a numeral, as a mark used to brand horses, and as used for sigma
in an old spelling of Dionysos;\[109\] a revival of San therefore must mean that
Greek numeration was still in use. And if, as I assume, the changes in the
letter-forms correspond to those in Greek letter-forms elsewhere,\[101\]—such
changes being used as an assistance in dating the coins—this becomes the
strongest argument of all. But if the Branchidae town, which was settled
by Greek men and women, was bilingual in six generations, then it is fair to
argue that Kanishka's die-sinkers, if they possessed Greek as in any sense a
living tongue, and if they were native-born, and not imported by sea,\[102\] were
probably the descendants of Greek settlers with Greek names. The argument
perhaps is rather top-heavy; but I think there is enough to show that
language must be a strong point for those who believe that Greek civilisation
did much for the East.

3. The Yavanas. The passages in Indian literature where this name
occurs have been collected by M. Levi,\[103\] who believes that the name means
Greek and nothing else. But one of the first things that strikes the reader
of his book is, that the writers quoted do not all appear to be talking about
the same thing. Sometimes the Yavana is necessarily local; sometimes he is
not necessarily local at all. On the one hand, the Yavanas are of Indian
descent (p. 20), and appear to keep their place for some nine centuries (p. 8)
and are linked with tribes like the Gandhari, whose location cannot be doubt-
ful, and the Kamboji, who cannot be located, but whom Spiegel considered to
be Iranian. On the other hand, they are people of strange customs, such as
reclining at food and shaving the hair; among them, slaves can rise to be
masters and masters sink to be slaves; they are settled in and often associated
with Gujar, they invade Oude, and leave behind them a record for furious

88 Curtius, 7, 5, 29.
89 Proceedings, 19th September, 1887.
90 Derris, Ath. 466 f. Pindar sp. Ath. 467
\(\text{b.}\), complains that singers would use san; and
\(\text{as this is generally true,}\) (a German 'sing' for
\(\text{Ich})),\) the fact that the sound could not die
might help to keep the letter alive.
90 P. G. Alvis.
91 Prof. T. Gardner (Nunc. Orient., 1887,
p. 177 sqq.) suggests, on grounds of style, that
the Kushan kings got their artists from
Bactria.
92 In \(\text{1. Quick de Gresko},\) \#3. before referred
\(\text{to.}\)
fighting and for adherence to a false religion; eight of their kings reign in India. The notices given of the science of the Yavanas, which do not come to much (pp. 23-24), may, and in one case at least must, refer to Roman times. 24 The Yavana kingdom in Orissa, again, which came to an end in 473 A.D. (p. 41), must refer to something quite different.

I believe there are other indications of a local use of the name, that is to say, of some tribe or people of this name outside India, but comprised in the Seleukid empire. The name occurs in the three province-lists of Darius; once each in those of Behistun and Persepolis, and twice in that of Nakhsh-i-Rustam. The name in the lists of Behistun and Persepolis and the first name in the list of Nakhsh-i-Rustam is associated with Sparda (satrapy of Sardis), and clearly refers to the Ionians. But toward the end of this list, appears, among peoples on the fringes of the empire, the name of 'Yunus wearing helmets.' 245

Again, the Chinese called Khokand Great Yuan (Ta-yuan), and also mention a Little Yuan (Siao Yuan), seemingly in Chinese Turkestan. There is no ground in fact whatever for treating the former as meaning 'the great land of the Yonas' in the sense of Greeks. Neither does it appear how or why the Chinese should hit upon this name for Greeks (which the Indians are supposed to have learnt from Persia), especially as a little later their name for the country of the Seleukids is Ta Ts'in. 246

It seems to me more than possible that in the name Ta-yuan, and in the 'Yunas wearing helmets' of Darius, we have traces of the local or tribal use of this name. 247 If the 'Sakas wearing hats' of the Nakhsh-i-Rustam list are the recently conquered Sakas of the Jaxartes, as appears probable, 248 it is not unreasonable to seek the 'Yunas wearing helmets' of the same list in the same part of the world, especially having regard to the frequent conjunction of the names Saka and Yavana in Indian writers. And if there were a local Yavana name and country, ruled by other Yavanas from the west, who thence invaded India, the resulting confusion would be obvious. 249 That Yavana some-

244 One would seem to date from the middle of the first century B.C., but refer only to astrology.

245 Spiegel referred these "Kronen tragenden Griechen" to some section of the Greek race; (Eoka: All., 1,228) but if the Indian satrapy had been divided, some notice of it should have been given upon the first occurrence of the name in its usual place, besides Sparda. Clearly the epithet is to distinguish these Yervas from the Ionians.

246 Hirth, 'China and the Roman Orient,' (1855).

247 Prof. Ray has suggested that the Ionians got their common name from an original people of Iavones in Asia Minor; ('Prehistoric Ionians,' Rev. Hist. Rev., 1896, p. 232) but the supposed occurrence of the name in the fifteenth and thirteenth centuries in Egyptian records appears to be a mistake, see Mr. H. R. Hall, The Oldest Civilization of Greece (1901), p. 122. The connection between 'Id presenter and 'Inas is not known (Busolt, Gr. Quell., 1,322) and it would be tempting to compare the two forms with Yavana and Yunna, but these latter seem to be identical; Levi, 'Quelch de Graces,' p. 5, (a), 'Yuna nama, prasat, idem quod Yavanas synonymus scriptor.'

248 Dr. F. Justi, Grund. Jevan., p. 444, in Geiger and Kuhn's 'Grundriss der Iranischen Philologie' (1906).

249 Since the above was written, I see that Mr. V. A. Smith, frankly calls the Yonas of Asoka's Rock Edicts 6 and 33 one of the semi-independent foreign tribes on the north-western frontier of Asoka's dominions; ('Asoka,' (1901), pp. 120, 132. But as he naturally translates the word in Rock Edict 6 as 'the
times means Greek is undeniable. But it appears to me equally true to say, not only that it sometimes has a local meaning, but that it is sometimes applied generally to people who showed the type of civilization developed in the countries ruled by Greeks. To Asoka, Antiochos is king of the Yonas; but those of them who were settled in Asoka's kingdom were presumably Iranian, as they had a king or governor with an Iranian name. It seems to me therefore that the word affords no criterion to distinguish Greek from Iranian. One thing is clear, however, that Yavana is not Saka; consequently one episode, the attack upon Ouède and the Mādhyaśamkī, which can be approximately dated, must refer almost with certainty to a Greek king. After appearing in Asoka's inscriptions, the name is not again found in a public inscription for nearly three centuries, a gap that corresponds curiously with the gap in the architecture already noticed.

III

Most writers speak of the key to the history of the Greeks of the Far East as trade—an effort to obtain control of the trade with China and the Indian sea-traffic. An obvious explanation is thus furnished both of the extension of their rule to the Tarim valley, if such be the fact, and their efforts to reach the mouth of the Indus. As regards the latter, a sea-borne traffic from India to the west was already in existence, and the explanation is a probable one when the tedious and difficulty of the land routes be considered, especially if the shore-kingdoms of Sarastes and Sigerdis, conquered by Demetrios or his successors, be brought into connection with the Yavanas colony under Asoka, of which Tushāpa was ruler, and who, it would seem, could only have settled there for commercial purposes. Tchang K'ien also speaks in general terms of the large commerce of Ta-yuan, the Ta-hin and the adjoining people. But what I wish here to consider is the question of trade with China. With the exception of the fact that Aristotle knew of the silk-worm, most of the information to be derived from the usual classical sources with reference to the trade of the East belongs to a later period.

Two inmemorial routes lead from the Oxus countries into the Tarim valley and so toward China; the southern one, by way of the upper Oxus and Badakshan to Yarkand, the northern one by way of Ferghana to Kashgar. According to the Annals of the Han, the intercourse of China with the Western regions commenced in the time of the emperor Wung-te (140–87 B.C.), that is to say, at the earliest, towards the end of the reign of the last Greek king who ruled north of the Hindu-Kush, according to the coins. Richthofen

Greek king, Antiochos, the confusion I have noticed would be as old as the time of Asoka at least.
Levi, p. 4, translates 'Tushāpa, Asoki Mādhyaśamkī Yavarnm rājā.'
Levi, p. 26. Cunningham interprets Mādhyaśamkī as the people of the middle country, that is, the chieftain provinces above the Delta (Nest. Chrez, 18, 285).
Strabo, II, 976.
Kingsmill, 38.
Wylie, 29.
dates the first caravan that went through as 114 B.C.\footnote{125} It must in any case
be later than Tchung K'i-en, in whose time the Huns were across the route,
and who was considering the question of the possibility of traffic going by
way of Shuih (Szechuan) and India.\footnote{126} It seems clear that the Chinese take
credit to themselves for opening up the road to caravans, and the meaning
appears to be intended that there had been no earlier caravans going
through from the Oxus to China, or vice versa. By the end of the century
this caravan traffic appears to have become extensive; but it does not seem
that its commencement can be dated earlier than the period above mentioned,
which corresponds roughly with the replacing of the Greek element in Bactria
by the Yue-teho; and as the latter subsequently appear as considerable
traders, it is permissible to wonder if this be only a coincidence.

But of course indirect trade may have flourished, through the medium for
instance of the dwellers in the Tariim valley, to which, according to Apollodoros,
the Bactrian kings carried their arms. It is not known what steps these
kings took to safeguard their eastern frontiers, but anyhow they were effectual;
the Yue-teho came right round and entered Bactria from the west, and this
rather bears Apollodoros out.\footnote{127} According to Tomaschek, Bactrian caravans
must have been trading with the market town of the Sere, Issusen, earlier
than the time of Herodotos, a traffic which continued for centuries\footnote{128}; but
this statement, so far as I know, depends entirely for its value on the correctness
of Tomaschek's location of the Issedones and other peoples mentioned by
Ariestes.\footnote{129} Can the Chinese trade, on other grounds, be carried back prior to
140 B.C. into the flourishing epoch of the Bactrian kingdom?

Coins of some of the Greek kings have been found in the Tariim valley;\footnote{130}
but these may have been carried there as a later period, as it is known that
they sometimes continued in circulation for a long time after the king's
death; the author of the Periplus found coins of Menander and Apollodoros
still current in Barygaza, and the same may be conjectured of the gold of
Enkratides.\footnote{131} Later, the Macedonian trader, Maes Titianus, was working this

\textit{Richtfohren, China}, p. 494.

about the overland route to China.}

\textit{It may be noted that in the message of Euthynanos to Antiochos (Polyb. 11, 54) he speaks of "admitting" the nomads \textit{spocatìs kai \textit{fokale}} as if through some barrier, which can hardly
be the Jaxartes, as they are said to be close at hand.}

\textit{Polyb.-Wiseman, "Baktrianoi."}

\textit{"Ufer der Aramaischen Ortschatz des
Aristoteles before cited. Issedon=Susa Metropolitan=Susa=Susa, Issedones, a northern
branch of the Thibetan race; Aramaget, the
Huns; Hyperboeans, the Chinese; Iranian
influence in Tariim valley, and Iranian trade
with Issedon, which may have possessed a
merchants' quarter.}

\textit{Coins of Menander and Antinaxides, II.
and the 'iron' coin of Herodotos; also Roman
coins of Constantines, Thesaurus,
Sir T. D. Barneth, F.R.G.S., 17, p. 34; Prof. P.
Gardner, Num. Chron. 1879, 378; Dr. A. F. R.
Horsfall, "India-Chinese coins in the British
collection of Central Asian Antiquities.
Ind. A. C. 1896, p. 51; also J. A. S. E. 1899, vol. 88,
part 1.; the 'iron' coins are really of copper.
As to the seal from Khotan, see note 91.}

\textit{Gold currency in Kuitun, in the time of
Tchung K'ien; on one side a man on horseback,
on the other a man's face; Wylies, 84. Not a
very good description of Enkratides' money,
but it does not appear to what else it can refer.}

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route by means of native agents, which is perhaps in favour of the Iranians having previous knowledge of it; but such knowledge could well have been acquired since 140 B.C. Of articles of trade, much the most important would be silk, and silk unfortunately furnishes no assistance, as there appears to be a direct contradiction in the two Chinese accounts. According to Si-I-ma Tse-sen, the people from Ta-yuan westward as far as Parthia "were not in the habit of using silk fabrics." According to the Annals of the Han silk and varnish are used all over the country. Both passages occur in exactly the same context, which appears to be part of Tchang K'ien's report. I may remark that, if the latter passage be the correct version, the Chinese trade for a period considerably anterior to Tchang K'ien would be proved, as neither silk nor lac could be produced elsewhere; but if the former be correct, it would not necessarily be disproved, for Tchang K'ien may be writing only of the common people of a country out of which the ruling caste had been driven, and people may also trade in a luxury that they do not use themselves. Here it must remain, until some Chinese scholar resolves the difficulty.

In later times furs and iron are mentioned as notable objects of Sogdian trade. There is a square bronze coin of Philoxenos in the British Museum, of which the figure on the obverse is described by Cunningham as Apollo radiate, clad in skins, a description which recalls the description of the furs on the radiate figure of Anaitis at Baetra. Even however if the dress be meant for furs, they may have come from the north. The Sogdian iron, which was described as the best, is supposed to have included cast iron; and according to the Annals of the Han, the countries of the west learnt the art of casting iron from a Chinese envoy who lost his troops and gave himself up. Trade in iron, however, is not referred to, though the importation of gold and silver from China is mentioned.

The celebrated metal mirrors covered with designs in clusters of grapes and with representations of panthers and other animals, that were imported into China under the Han dynasty, do not furnish any assistance, as their first appearance in China can be dated to the reign of Woo-te. The same consideration applies to Woo-te's reorganisation of the mint, which has been dated to 116 B.C., if indeed the idea was derived from a Greek source.

There remains the fact that some of the Bactrian kings struck coins of nickel, and as this was known early in China, it probably points to trade communication. Nickel coins are known of Euthydemes II, Panteleon and Agathokles, that is to say, well within the first half of the second century B.C.

Some traffic there must have been over this route from time immemorial.

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125 Ptolemy, 1, 11, § 7 (from Marinus).
126 Ringmuller, 94.
127 Wylie, 46.
128 Pliney, N.H. 34, 14; 145; Periplo, § 30.
129 Cunningham, in Nova, Chron. IX, 285. But the description given by Prof. P. Gardner (P.G. 57) is "clad in sttut, himation and boots." The boots are plain; but it does not clearly appear on the plate what the garment is.
130 See note 12.
131 Wylie, 46.
132 Figured and described by Dr. Hirth, Uber fremde Künste, &c., p. 317, note 328.
133 Dr. Lacooperia, Western Origins, &c., p. 237, note 328.
134 More will be known about these chemical analysis should ever prove that the jade objects found, e.g. in Assyria, must be Khorasan jade.
but on the above facts it appears to me that, as regards any bulk of trade with China prior to the reign of Wou-te, it is for the present a case of not proven, though probable. A fact however like the enormous number and wide circulation of the coins of Menander, whose date has been put at about 140 B.C., would coincide very well with an outburst of commercial activity at that date, connected so far as the Indo-Greeks were concerned with the conquests of that monarch.\(^{122}\)

The considerable conquests made by the Bactrians must, however, in such a state, presuppose considerable wealth, even if carried out altogether by the troops of the state, and not, as is probable when the analogy of any other Hellenistic kingdom be considered, by mercenaries, possibly including nomads. Apollodorus in express terms attributes the power and conquests of the Bactrians to the natural fertility and resources of the country.\(^{123}\) But I think that the general experience of the world shows that whatever might be true of a peasant state, a state of the Hellenistic type could only acquire sufficient wealth in two ways, by commerce or by mines, which in the ancient world must mean gold. Even without a trade with China, the internal and the Indian trade might yield a large revenue, and Tchung K'ien attests the facts of a large commerce and of the ability of the people to conduct it. But it also appears probable that, until after the reign of Eukratides, they had access to a considerable supply of gold; indeed Eukratides struck the largest known Greek gold coin. As neither the Indo-Greek nor the Saka kings coined gold, and the Kushans coined imported Roman gold, it is clear that the gold of the Bactrian kings was not derived from India, and this suggests that the 'ant-gold' of Dardistan was not of the importance sometimes assigned to it, especially if Tchung K'ien is to be understood as meaning that the Bactrians were in his time driven to importing gold from China.\(^{124}\) The inference must be, that until the reign of Eukratides they were in a position to tap the Central Asian supply from the Alai, from which came the great wealth of gold enjoyed by Panticapaeum.\(^{125}\) The great movement of tribes which was initiated by the conquests of the Huns, and which ended in the defeated Yen-ich'i being precipitated on to the Sakas, and in both nations successively being driven on to the Bactrians, must have cut off the supply, which was never renewed. That the gold coinage stopped owing to a scarcity of gold is suggested by this: that the silver coins of the sixteen kings, after

\(^{122}\) Alexander legend attach themselves along this trade route to places where Alexander certainly never was, and are not all due to Islam; e.g. the story of the foundation of Tangest and Chinidan, given by Theophrastus, is pure-Mahometan. But even if they in fact referred to the Graeco-Bactrian kings, they cannot be dated, and so would be of little value for the present subject.

\(^{123}\) Strabo, 11, 336. He calls it the greatest ornament of Iran (τὸ μεγαλότερον ἀμετέρως ἐπέχως), and says the Greeks made their conquests by growing strong διὰ της εὐεργείας τοῦ.

\(^{124}\) It was πανίκες τὴν Αϊλινα, which is borne out by Σαμ-μα-τε-κόμ, with a natural allusion of the important thing missing; Kingsmill, 94, 'Their country produced everything but silk and varnish.' (Ian).

\(^{125}\) Wylc, 86, 'They applied the Chinese gold and silver to make vessels, instead of using them for state presents.' Kingsmill, 94, 'They obtained from China gold and silver surreptitiously to make various ateliers.'

\(^{126}\) Hask, Hist. Mus. pp. 238, 239.
Eukratides became heavier, showing that gold at once began to rise in price.\textsuperscript{120}

IV.

One further point arises, from a consideration of the great extension of influence, measured by distance, which these kings are said to have achieved. We are dealing with pioneers; and when it is considered that, besides Bactria, they ruled at different times Afghanistan, Merv, Bokhara, Khokand, the Cabul valley, and the Punjab,—that they carried their arms south to the mouths of the Indus, east as far as Chinese Turkestan and the Huns,\textsuperscript{127} that they besieged Oude, reached the Jamna, perhaps the Ganges itself,\textsuperscript{128} and proverbially overthrew more tribes than even Alexander,—then it becomes clear that to do all this with the force at their disposal, (even supposing that some of their 'conquestes' meant little), little time or energy can have been left for such things as art, science and literature. In a new country (and such the East was to the Greeks) men turn to practical matters; it is not unfair to suppose that every European was needed as a fighter or a governor.\textsuperscript{129} The only two things likely to attract a man to the far East would be wealth and power, i.e. commerce and fighting; and these are just the two things most certain. The chief impression that they left on the Indian mind was, that they fought: while the statement of the Indian that among the Yavana\textsuperscript{as} slaves could rise to be masters, and the brief duration of dynasties in Bactria, point to a society of adventurers.\textsuperscript{130} On the other hand, neither Bactria nor India has yet furnished a single Greek inscription: the effects of Asoka recall nothing that is Greek, though they do somewhat follow the inscriptions of Darius: Strabo has gone for his information about the Eastern Greeks, not to any writer of their own, but to Apollodorus of Artemisia in Parthia.\textsuperscript{131} The one bit of information remaining about men of learning tends to show that they did not go to India, even when communication was easy\textsuperscript{132}; the rise of Parthia, if it did not cut communication entirely, must certainly have made it more difficult.

This might be followed out at some length; but it is probably correct to conclude that no one would ever have supposed that from the Bactrian

\textsuperscript{120} Cunningham's deduction: \textit{Num. Chron.}, 1888, p. 217.
\textsuperscript{129} Cunningham in \textit{Num. Chron.} 10, 202 seq.: Levi; \textit{Quid de Graecia}, 15-17.
\textsuperscript{130} Analogies drawn from Anglo-Indian life seem to be most misleading. It might be more in point to compare the history of the Portuguese in the Indian Ocean, more especially their later prize system in South-East Africa.
\textsuperscript{131} For the founders of new dynasties, Kurkydames certainly (Polyb. 11, 34), and Eukratides probably (p. 371), came from the west, and perhaps represented two movements of new settlers or mercenaries.
\textsuperscript{132} As to his dependences on Parthian (and Roman) sources of information, see 1, 14: 3, 115; 11, 668.
\textsuperscript{133} Vindahus's request for a sophist, which Antiochos put off with a jest; probably name would go. (Heges. ap. Ath. 558 e.)
NOTES ON HELLENISM IN BACTRIA AND INDIA.

Greeks in India could have learnt philosophy or science, (possibly art—should be included), had it not been for the coins. And in a way the coins prove too much: the realistic portraiture is too far in advance of the moneys of Egypt or Syria; individual genius must have played its part, stimulated perhaps, even if unconsciously, by contact with those whom even the Greek acknowledged as the best of all barbarians. The very novelty and variety of the coin types prove the numerous influences here at work, which had no counterpart in Syria or Egypt, more particularly in the sphere of religious cults, the sphere in which, if at all, the point of contact between the Greek mind and the Buddhist would, under the circumstances, have to be sought. The meeting of Buddhism with Dionysos-worship might have been of supreme interest.

In conclusion, it may be worth while to turn for a moment to a sketch of what even a pure Greek community might become, when isolated among Scythians; I mean the Boryshanchicka of Dio Chrysostom. The city had shrunk to half its former circuit; the temple statues were in ruins; the men, already speaking Greek imperfectly, were in Scythian dress, fighting the Scythian day and night, and clinging to their one book, Homer, as the last tie with the mother country. The rare traders who came from Greece were quite illiterate men; the arrival of one who had any tincture of philosophy was a world's wonder. And this was a town, not in Central Asia, but in Europe, not inland, but on the sea. The Scythian dress, the imperfect speech, the total absence of strangers of any culture, the survival of Homer alone—these make up a picture of which the general lines are more likely to be true of communities such as the Greeks of the far East than any sketch based upon the false analogy of Anglo-Indian life. If Apollodorus may be trusted, these Greeks expended their utmost strength in pushing down from the Oxus to the sea; once again cut off from salt-water, they were swallowed up by the peoples about them as a desert stream is swallowed in the sand.

W. W. TARN.

110 Strabo, 1. 66. The same feeling seems to underlie all Alexander's dealings with India, and was well expressed by the medieval romance writer who made of Alexander and Perseus, two knights tilting in the ring.
114 Of Cunningham in Num. Chrm. IX. 298.
146 Of Oldenberg's most interesting parallel between Orphism and Buddhism, Anecd. Indica and Iran, pp. 85 to 100.
146 A curious similarity may be noted here. King Parissades at Panticapaeum had to bring up a Scythian prince as his heir (Holm, 4, 332, Eng. Tr.), while their joint coins show that Kallippos succeeded Hermatos peacefully.
SOME OBSERVATIONS ON THE PERSIAN WARS.

2. The Campaign of Xerxes.

The defeat at Marathon made it doubly necessary for the Persian government to undertake the subjugation of the Greeks across the sea. If there was ever to be peace on the Aegean that "Majuba" must be "wiped off the slate."

This time there was to be no mistake. The expedition was long and carefully prepared, and was planned on an enormous scale. The number of Xerxes' host cannot indeed be demonstrated, but it may be estimated with some probability, and the historian is bound to attempt an estimate. No sane critic could accept the millions of Herodotus. Nor would many now be found to admit the 700,000 or 800,000 given with or without garniture by Isocrates, Ctesias, and the later authors who mostly depend upon Ephorus. These figures seem to have been deduced from Herodotus. In iv. 87, the land forces led by Darius against the Scythians are said to have numbered 700,000, and it is implied that they were the full levy of the entire empire. In viii. 100 and 118, Mardonius is to be left with 300,000, while Xerxes goes home with the larger part of the army (cf. Thuc. i. 73). In vii. 20, Xerxes' host is larger than that of Darius or any other on record. This last passage may account for the addition of 100,000 by those critics who remembered it, and cavalry, auxiliaries, and marines could always be added according to taste, although the original purpose was of course to reduce. Herodotus' total to more reasonable figures. But what is the value of the number 700,000 in Herodotus, iv. 87? The pillars set up by Darius on the Bosporus recorded ἐπεὶ πάντα δῶσα περὶ ὅγε ὦ γη ἐς πάντα τῶν ἄρχων. Did they record anything more, and if so could Herodotus read it? The one stone rejected of the builders was covered with "Assyrian" letters, but was the Greek inscription, built into the altar of Artemis, exposed to view? Herodotus in his account of Xerxes' army is obviously drawing on some official document or monument, but he cannot tell the number of the several national contingents, and his total does not appear to be derived directly from his authority. Was

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*Continued from Vol. xtr. (1890), p. 107. The present article has been delayed by press of other work. Meanwhile Ed. Meyer has published his Persephones, vol. ii., and Greek, see Allerheim, vol. iii., which partly anticipate what I meant to say, but save me the trouble of labouring certain points. I have also the benefit of my friend Mr. G. R. Grundy's elucidations, especially of Thermopylae, in his Great Persian War.*
Darius more explicit. Herodotus tells us details about the army of Xerxes which give us some clue to the method whereby he probably arrived at his figures, but he furnishes no particulars about the army of Darius. To argue from the latter to the former is to explain obscures per obscures. And after all the number 700,000 is as monstrous and contrary to common sense in the one case as in the other!

Another estimate has been based on the 300,000 left with Mardonius. If 300,000 were deemed enough to conquer Greece, is it credible that more were ever sent? If Aristobulus with 60,000 men escorted Xerxes homewards, is it credible that the king had any very large force with him? So the whole original force cannot have been much above 300,000. But even 300,000 are too many to be probable in view of the difficulty of transport and supply, the length of the campaign, the character of the country, and the limited opposition to be expected. And the number 300,000 is no better supported than the rest. Some of the most recent historians therefore have entirely given up Herodotus and calculated Xerxes' army simply by *a priori* probabilities. I do not think the problem is quite so desperate. We may not accept Herodotus' figures, but they are not mere arbitrary inventions, and we have to reckon with them. Of the discussions which I have read, M. Hanfstaengl seems to me to come nearest to a right method.

We may here leave out of account the forces serving on the fleet, the contingents supposed to have been picked up on the road through Thrace, Macedon, and Thessaly, and the non-combatants and camp followers. For their numbers Herodotus expressly says that he relies upon conjecture, and the exaggeration is patent. All the more does his catalogue of the regular army (vii. 60 sqq.) deserve attention. The descriptions of the costumes and accoutrements may be drawn from Mandrocles' picture in the Heraeum at Samos (Hist. iv. 88). But the list of forty-six nations* distributed into twenty-nine groups, each group under its own *troparion*, who is named and specified, is clearly official. It is also clear that, whether the twenty-nine groups correspond to the provinces or not, the list represents the military organization of the whole Persian empire. Herodotus, and doubtless the Greeks in general, had an unquestioning belief that Xerxes brought against Hellas every people, nation, and language, whom he ruled (Hist. vii. 21, 56; Aesch. Pers. 12, 712). It would never occur to Herodotus or any one else that he was guilty of the least inaccuracy if he transcribed a Persian 'Army List' of the period as a true enumeration of Xerxes' host. We need not believe that his catalogue was derived from any record of the review at Doricus, or gives an official account of the troops there present.

Herodotus puts the total of the land force brought from Asia at 1,800,000 (vii. 60, 87, 184). He reckons 1,700,000 to the infantry, 80,000 to the cavalry, and 20,000 to the camel and chariot corps. I interpret this reckoning to mean that he started with a total of 1,800,000, estimated the mounted troops at 100,000, and set down the remainder as infantry. The story of the

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*For the number of Hist. ix. 27 and vii. 76 with Stein's note.*
packed enclosure, which covers the calculation, cannot be taken seriously. How then did Herodotus arrive at his total? His official catalogue appears to have been something like the Byzantine military lists. It gave the names of the ἄρχοντες and of the contingents under the command of each, but no numbers (vii. 60). Herodotus must, I think, have got his 1,800,000 from his conception of the Persian military organization, that is to say, from the number of the ἄρχοντες, and the number of the troops which he imagined each ἄρχων to have commanded. He mentions twenty-nine ἄρχοντες, but so awkward a number could hardly be chosen as the basis of any conceivable scheme of organization. We might almost have conjectured a thirtieth a priori, had not the inclusion of the Immortals in the total, and the pointed way in which Herodotus introduces them at the end of his list, of itself suggested that Hydarnes, the Captain of the Guard, is to be added to the other twenty-nine. The army was organized on a decimal system. Herodotus mentions decarchs, hectontarchs, chiliarchs, and myriarchs, above whom come the ἄρχοντες and the six generals-in-chief. We might expect the next grade above the myriarchs to be captains of 100,000, and so the author of the epitaph at Thermopylae interpreted the thirty ἄρχοντες, when he wrote μισθίαν ποτὲ τῆς τρισθοσίας ἐμέχωντο. But Herodotus would make the ἄρχοντες captains of 60,000, and this number is supported by several examples and analogies in the Persian organization. The corps under Artabazus (Hist. viii. 126), and the land force at Mycale under Tigranes (ix. 96), were 60,000 strong; Cyrus, when he dispersed the river Gyndes (i. 189), is said to have broken up his army into 360 divisions; the normal number of the Persian fleet is 600 ships (iv. 87, vi. 9, vi. 95); and there were six generals-in-chief over Xerxes' host. Herodotus is probably right in setting over the myriarchs commanders of 60,000. The regular strength of a Persian army corps probably was 60,000. But is Herodotus right in making his thirty ἄρχοντες into commanders of army corps? Hydarnes commanded the Immortals, and they were only 10,000. If we are right in putting Hydarnes among the ἄρχοντες, there is a presumption that the other twenty-nine were also myriarchs. Herodotus describes the numbering of the host by myriads, and throughout his account assumes the myriad to be the unit of measurement. We naturally expect to find that the same unit underlies the list of ἄρχοντες, that each name corresponds to a myriad. The number of troops left with Malamnines, which Herodotus must have derived from another source, seems to confirm this conjecture—300,000 = 30 x 10,000. Not much stress perhaps can be laid on the evidence of Aeschylus in such a matter, but, such as it is, it goes to support our theory, e.g. Pers. 302 μυρίαν ἐπικάρημεν ἐμέχων, 314 μυρίαν ἐπικάρημεν, 980 μυρία μυρία τεκτάται, 993 μυρία μυρίαν. Herodotus in fact seems to have promoted his ἄρχοντες a step too high.8 It was not they, but the six generals over them, who were commanders of 60,000. If so, the whole army must have numbered 360,000, which agrees very well

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8 I gather from M. Hanvett's remarks, Herodote, p. 309, that M. de Goninans makes the ἄρχοντες myriarchs, but I have not seen his Histoire des Perses.
with the story of Cyrus on the Gyndes, and with the force assigned to Mardonius, which was arrived at, I believe, by deducting the corps which fought at Mycale under Tigranes—360,000—60,000 = 300,000. But thirty myriads are not 300,000, but only 300,000. The additional 60,000 must be the cavalry and other mounted troops. Probably each army corps consisted of 50,000 infantry and 10,000 cavalry (or their equivalent). Herodotus says his thirty ἀρχιστέρες in command of infantry only. We may assume six more myriarchs for the cavalry. It is true that Herodotus bas involved himself in an obvious inconsistency. He includes the cavalry in his total of 1,800,000, which (if our hypothesis is right) he deduced from his thirty ἀρχιστέρες. But he nevertheless regards these officers as commanding nothing but infantry. The root of the inconsistency lies no doubt in his mistake as to the grade of the ἀρχιστέρες—as myriarchs they are really infantry leaders and parallel to the hipparchs, but as commanders of army corps, according to Herodotus’ conception, they would each have a cavalry division under him. (The position of Hyarnes is of course even more hopelessly inconsistent.) In the words with which he introduces his account of the cavalry, Herodotus seems to imply that such ἀρχιστέρες would have had his cavalry division, if all the cavalry had taken part in this campaign—ἐκπένευς δὲ ταύτα τὰ ἔθνα: πλῆρες οἱ πάντα παρεῖχετο ἐπιν άλλα τοσάδε μούνα. Does he then give us the whole of the actually existing Persian cavalry under the impression that it is a fraction of his imaginary Persian cavalry? Does he, in other words, quote all the cavalry divisions that he found on his official list? No, he mentions only three hipparchs, whereas there ought (we maintain) to have been six. It appears to be a genuine historical fact that only part of the cavalry went on the campaign, and Herodotus must owe his knowledge of it and of the three hipparchs to some special source of information, the same doubtless whence he derived the story of the accident to Pharnaces at Sardis (vii. 88). The mounted contingents which he mentions are presumably those which he found in his list under the command of these three hipparchs. They ought on our scheme to number 30,000. Herodotus estimates them at 100,000, but it is evident how he gets his figures. Two of the eleven contingents (the Indians and Libyans) form the chariot corps, one (the Arabs) the camel corps, and there are eight cavalry contingents. Herodotus reckons each of these divisions at a myriad. It is only an apparent exception that he assigns 8,000 to the Sagartians (the only number he gives for any single

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8 Cf. Asiahly, Pers. 310; Teges, μακαρίως ἀρχιστέρες. It is true that in the preceding line this office was only μακάριος, which is probably nearer the fact, but 30,000 home may have implied to Asiahly ‘all Xerxes’ cavalry.’ What does μακάριος mean? Were the horsemen black-capped and black-cased, like Cretan irregulars, or did they have any special feature? The Turkmens, for example, wore the Tarkhan preference for black chargers.

9 There is a flaw in the text of Herodotus, vii. 86. The word κασπιώτα occurs twice. I would read Xaα as the first, because (1) the Xakse specialty distinguished themselves among the Persian cavalry at Plataea (ix. 71), and are not mentioned here; (2) their infantry was brigaded with the Bactrians (vii. 64); (3) καλαεκαί might easily be corrupted into Καισπιώτα through reduplication of Καί and the proximity of Κασπιώτα two lines lower down.
contingent in his whole list), for he brigades them with the Persians (ἐντε- τακάτο καὶ τοὺς Πέρσας, vii. 86), and he has already mentioned 12,000 Persian cavalry (vii. 40–1), so that the Persians and Sagartians together make up two myriads. The arbitrariness of his estimate is patent throughout, but particularly in the case of the camel and chariot corps (vii. 87, 184).

We have thus arrived at the following scheme of the Persian army "on paper"—six army corps, each consisting of six divisions of 10,000 men, one being a cavalry division; six generals-in-chief; and thirty-six myriarchs, of whom six were hipparchs. But was this the army which Xerxes led across the Hellespont? No, there are several indications that Xerxes had with him only three army corps. We have already seen that there were only three hipparchs. The army marches through Thrace in three divisions. In the course of the war only three separate commands can be detected: Mardonius, Artabazus, and Tigranes, of whom the latter is expressly said to have had 60,000 men under their orders. Herodotus of course sends all six generals on the campaign. Even their presence would not prove that there were more than three army corps, for it appears to have been a not uncommon practice to divide the command (e.g. Datis and Artaphernes, Artayetes and Ithamites), and the way in which Herodotus couples them on the march through Thrace suggests joint command (vii. 121). But perhaps he simply took them from his list. Was that list quite up to date? It is a little suspicious that so many prominent officers hold quite different positions in the subsequent narrative. Artabazus and Tigranes, simple ἄρχωνες at Doricen; reappear in command of army corps; was it their cases that led Herodotus to assign 60,000 men to each ἄρχων? Masistius commands not infantry but cavalry; had he succeeded Pharnaces? Mardonius seems to be in command of the marines at Samos and Mycale. Masistius might not doubt be absent from his Bactrian satrapy, but could Artayetes be spared from Sestos? On the other hand, were Darius’ sons, Abrocomes and Hyperanthes (vii. 224), without high military rank? Be that as it may, the three army corps best suit the conditions and course of the campaign. After the battle of Salamis Mardonius remains in Greece with one, Xerxes takes back one (which afterwards fought at Mycale) to keep down Ionia, Artabazus with the third guards the communications in Thrace, and in the next summer marches to reinforce Mardonius in Bocotia. 180,000 men is not an incredible number even for a campaign in Greece, if we consider the preparations, but is large enough to account for the impression made on the minds of the Greeks, who had never seen the like before.

Xerxes' fleet is no less difficult to estimate, and we find fewer data to help us in Herodotus. Here, too, we must distinguish between the names and the numbers. It is likely enough that the catalogue of nations and list of admirals has an official source, perhaps the same document as the army list. But the example of the army does not encourage implicit faith in Herodotus’

* It is unfortunate that Aeschylinea is useless as evidence on this point. He appears to be content with any Persian name that will fit his verse.
enumeration. Were all the contingents present? and how does Herodotus get his numbers? All the contingents, or members of them (the Lydian might be an exception but for Kyberninesis), are incidentally mentioned again, and two of the four admirals, Ariabignes and Achaemenes, reappear in the story. On the other hand, it seems clear that Herodotus took his total of 1,207 triremes from Aeschylus, who perhaps meant no more than a poet's 'thousand,' although he spoke ambiguously and must have had some reason for noting the 207 fast sailors among them. Herodotus distributes the 1,207 among the nations, on what principle we cannot say. It is likely that he had special information on some details, e.g. the twelve Paphian vessels and the five led by Artemisia, but it is also likely that conjectural probability had its part in the calculation. It is suspicious that whereas the Greek contingents account for 307 ships, the Barbarian add up to exactly 900, and that the Dorian hexapolis furnishes just six times Artemisia's squadron. Diodorus (xi. 3) has practically the same totals (rounding 1,207 to 1,209, and 307 to 310), but considerable variations in the items. Evidently we can lay little stress on either the individual numbers or the total. Can the latter be to any extent controlled? In the first place, the Persian fleet at Salamis cannot be put above about 600 ships, for (1) the Greek fleet according to Aeschylus numbered 310, and Achaemenes implies (Hist. vii. 236) that the Persians had about 300 more; (2) only 300 reappear at Mycale; (3) the strategy would have been different had the Persian superiority been greater. Secondly 400 ships are said to have perished in the storm at the Sepiad strand, and the 200 sent round Euboea are also said to have been annihilated. But these figures, although they cannot be checked, are probably gross exaggerations. Two naively contrary aims influence Herodotus. He starts from his Aeschylean figure 1,207, and first reduces it by divine assistance (viii. 13) to something like the number which really fought at Salamis (1,207 - 600 = 607). But when he comes to that battle he is once more confronted with his old total, for Aeschylus speaks of the fleet at Salamis. So he restores the fleet to its original strength by the monstrous supposition that the reinforcements from the islands balanced the losses. Probably, however, the losses did not exceed 200 or 300 (cf. Diod. xi. 12), and the original fleet therefore 800 or 900. Thirdly, another calculation confirms this estimate. Achaemenes was in command of the Egyptian contingent, 200 strong. Ariabignes commanded the Carian and Ionian squadrons, and probably also the Dorian which stands next them in the list and is naturally connected with them. These three squadrons would amount

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Footnotes:

8 εἰ μὴ καὶ τὰ γαρ οἱ ἱπποι, χώλας πάντα τί πάσαν οὐροῦν τινά τέκνα, ἐδέχθην ἔναν. Ιουνίππων τετορόν ἐτυκαί οἱ διόνυσες ἤτοι. οὐκ ἔμεναν ἀλλὰ τίκα καὶ ἐνέγησαν.
9 Strictly perhaps one ought to say he starts with 1207, for he has added 120 from the Greek cities of Thrace (vii. 129), but what few ships may really have come from them (e.g. from Samothrace, viii. 90) are probably already included in the Hellespontine contingent, and I do not believe that Herodotus pays any further heed to them in his following. The total losses in the battle at Artemisia cannot be determined.

on Herodotus' figures to 200 ships. If we may assume that the other two admirals commanded divisions equal to these, we get a total of 800, which would fit the other indications very well. We cannot on the evidence attain to more than a rough estimate.

The route chosen for the invasion was a reversion to Mardonius' plan. It indicates the purpose of a systematic conquest of Greece, and marks the progress of Persian policy since Marathon. It also enabled the invader to bring a larger land force to bear. I do not propose to discuss Xerxes' route in detail, but after travelling along the Thracian coast in 1896 with Prof. W. C. F. Anderson, I am inclined to agree with his theory (v. "A Journey from Mount Athos to the Hebrus" in the Commemoration Volume of Firth College, Sheffield, 1898, pp. 211-52) that the right wing marched from Dorisma up the Helles and down the Axios to Thessaly, while the centre and left wing kept together as far as the Symbolon pass between Neapolis and the plain of Philippi, and there diverged, the left wing gaining Thessaly by the road south of Pangaion, through Amphipolis, along the coast, and past Lake Bolbe, the centre by the road north of Pangaion and through Seres. Xerxes with his guard may have made an excursion to Acmathus to see the canal, but no large division can have crossed the ridge of Chalcedon. The account in Herodotus is considerably confused through ignorance of the geography.

What was the attitude of the Greeks towards the coming invasion? The league against the Medes consisted mainly of Sparta and her allies and their allies. If other states joined them it was for the most part rather out of enmity to neighbours than from enthusiasm for the cause. Sparta was not likely to surrender her hard-won headship to a foreign suzerain without a struggle. She was bound to lead the national resistance, and she stood to win as well as to lose, for the states which still withheld their pretensions in continental Greece would either be driven to accept her supremacy, as Athens had already been driven, or be left at her mercy if she emerged victorious from the battle. Athens was of course irrevocably committed. For her the war was a question of life or death. A mutual need bound these two allies to one another. The isthmus might be defended; but without the Athenians the fleet could not face the Persian armada, and wide doors were open into the Peloponnesse" (Hdt. ix. 9). That fact was not indeed as the Athenians, forgetful of Marathon, pretended (Hdt. vii. 139), necessarily fatal to the defence, but it was doubly dangerous in view of the attitude of Argos, which gave the enemy a foothold and an ally within the "island." Moreover, the security of the Peloponnesse could not of course be permanent if the Persians retained command of the sea. Athens was even more dependent on Sparta than Sparta on Athens. Thanks to Themistocles she had a fleet rivalled by none save Gelo's in the Greek world, but alone it could no more face the Persian navy than could the Peloponnesian. On land she was un-

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The line followed by the new railway from Xanthi to Drama by the gorge of the Nestos is blasting. It was not a practicable road.
sheltered by the isthmus and helpless against the myriads of Xerxes. It was natural and inevitable that, if it came to making sacrifices, Athens should have to pay a heavier ransom than Sparta. Fortunately she was guided at this crisis by the greatest of her statesmen.

Themistocles stood upon the shoulders of Pisistratus. His mental horizon was immensely wider than the parochial politics of the City state. It is almost as ludicrous to see in his creation of the Athenian navy no more than a provision against the coming invasion, as to accept the childish detraction which affected to see in it no more than an effort to finish the war with Aegina (Hdt. vii. 144, Thuc. i. 14). Τὸν ἀρχαῖον εἶθος ἡμετακεννείας (Thuc. i. 33). Of the old prosperous Ecretian league Sybaris was gone. Mileta ruined, Eretria ruined. What an inheritance might fall to Athens if she could survive to grasp it! Doubtless there was Corinth to be reckoned with when it came to the west, but once mistress of an eastern empire Athens need not fear to confront any opposition that the Peloponnesse might offer. But Themistocles never let visions of the future or prejudices of the past obscure his view of a present situation. For the moment the Persian peril made it necessary to postpone these ambitions. The Athenians must subdivide their separate interests to the general safety in which their own was included. After the war would be time enough to resume their independent action.11

That Themistocles succeeded in carrying through his policy is creditable both to him and to the Athenians. He had already persuaded them to forgo their private profit from the mines in order to build the fleet. He now persuaded them to forgo the triumph over Aegina which that fleet put in their power, to place their new navy under the orders of a Spartan admiral who brought only ten ships, to commit their destiny to the wooden wall, abandoning country and city to the enemy, and, not least hard, to lay aside all feuds and factions among themselves. In this reconciliation Themistocles himself led the way. Mindful of the danger, which had shown itself at Marathon, of intrigue between a party at home and ἐμιπρές in the enemy's camp,12 he recalled among other exiles Aristides and Xanthippus. The terms of the compact may be inferred from the facts that Aristides commands the Athenian contingent at Plataea, and Xanthippus the Athenian squadron at Mycale.

The allies endeavoured to enlist other states in support of their cause but with little success. From outer Hellas help was not forthcoming. The eastern Greeks were already subjugated, or shut off in the Enixine. The western Greeks, surely by no mere coincidence, had enough to do to maintain their own freedom against Carthage. Only one ship came to the rescue across the Adriatic. Crete sympathised rather with the Dorians in Asia than with the Dorians of the Peloponnesse. Even in Greece proper, which was

11 Cf. Hdt. viii. 2, which may be emended by afterthought as ἐπιμερὸς ἐπεμνήσημαι.1 Is concerned with Menander, Friskia, ii. pp. 218-9), but has probably some foundation in fact, and certainly is dramatically true to the situation. Of Plut. Them. 7.

directly menaced by the invasion, the allies met with little encouragement. Corecyra despatched sixty ships, but the north-west as a whole, save where Corinthian influence was dominant, kept aloof; and the Achaens held with it. The peoples represented on the Amphictyonic council mostly submitted to Xerxes, and the Delphic God approved their attitude. The Thessalians, the Boeotians (except the Thebians and Plateans), and the Argives meditated outright. No doubt the prospects of the defence were not hopeful, and the example of Ionia was deterrent; no doubt the Persian yoke was easy, and some might even gain by it; but the really influential consideration was, I am convinced, distrust of Sparta and her allies (cf. Thuc. v. 27 and 20). Most Greeks, if they could not be independent, preferred a suzerain in Mesopotamia to one at their own doors, a foreign master to one of themselves. The combination of Sparta, Athens, and Corinth appeared to them to be more dangerous to their autonomy than Xerxes and all his men.

This jealous suspicion must have been particularly strong in the Thessalians, Thebans, and Argives. These three states had all been allied with the Athenian tyrants in their anti-Spartan days, and all three were to give Sparta trouble in the future. The two former were powerful non-Dorian communities which withstood her influence in northern and central Greece. Argos was her implacable rival in the Peloponnesus. The Argives could never forget Agamemnon and Pheidon and their lost hegemony. They were still smarting from the thrashing administered by Cleomenes. Sparta had nothing to expect from them but hostility. The negotiation recounted by Herodotus (vii. 148-9) is a pretty piece of Greek diplomacy—the Argives try to entrap the Spartans into an admission of their pretensions, or at least of their equality—but it can only have served to justify their assumed neutrality, and the retort with which the story ends neatly expresses the whole situation: οὕτω δὴ οἱ Ἀργεῖοι θέλοντο τὸν Σπαρτήν τὴν πλειονότητι ἀκόμη λέγεσθαι καὶ τῇ νίκῃ τοῦ Λακεδαιμονίου. The very different measure dealt by Herodotus to the Argives on the one hand and the Thebans on the other reflects the different feeling about them in Athens at the time at which he wrote. He had the better chance of persuading his hearers of Argive neutrality, because they had for twenty years been accustomed to think of Argos as neutral, and in the case of Athenians benevolently neutral. But his tenderness for Argos is particularly unfortunate, because it has the effect of falsifying the whole perspective of the campaign. Yet he lets the truth be easily discerned under the cloak of words (vii. 148-52, viii. 73), and at last it leaps into view in the message to Mardonius (ix. 12), Μαρδώνε, ἔπεμψαν με Ἀργεῖον φρούσαν τῷ ὅτι ἐκ Λακεδαίμονος ἐξελάλυεν ἡ νίκη, καὶ ὅτι ὑπὸ δυνατόν αὐτὴν ἔχεις εἰς τὸ Ἀργεῖον μὴ οὐκ ἔξεις. The Argives, in fact, until the battle of Salamis, and the failure of Mardonius to

1 Ed. Meyer, Forsch., ii. pp. 310-71, has nearly expressed my view of the attitude of these states and Herodotus’ treatment of them. 2 As regards Argos Grose had already led the way, third ed. vol. v. pp. 88-90.
make a breach in the defence by detaching the Athenians from the alliance, had entirely altered the situation, were performing for Xerxes the same service that they afterwards rendered to Athens during the Sicilian expedition—they neutralised the offensive power of Sparta and confined her effective action to the Peloponnesus. The reproaches of selfishness and indifference so freely levelled by the Athenians at Sparta may have been natural at the time, and furnished a favourite rhetorical foil to the sacrifices so nobly borne by Athena, and a welcome retort to the taunts of her enemies after she had made peace with Persia in order to enslave the Hellenes, but they are unfair and ungenerous, and have propagated an injustice as black as any to be found even in Greek history. The Spartans simply could not march in force north of the isthmus lest the Argives should make a flank attack upon Laconia and raise Helots and Arcadians in revolt.  

Another consideration led to the same conclusion. Even apart from the danger from Argos the Spartans could not have ventured beyond the isthmus without imperilling the safety of Greece. An army of about 100,000 men and a fleet of about 400 ships was the utmost that the allies could muster, and it is doubtful whether both could be kept at full strength at the same time. Xerxes disposed of something like double these forces. It was his obvious strategy to use his superior numbers to turn the Greek positions. The probability that he would do so was fully realised by the allies, who shaped their plans not only to meet it but to take advantage of it. For the weakness of a turning movement is apt to be this, that it divides the force which attempts it and perhaps gives the enemy a chance of making a concentrated attack on one or other of the divisions. But if the superiority in numbers be very large and the turning movement very wide this weakness is avoided, for the enemy cannot afford to divide his defence, and cannot move fast enough to prevent one or other of the divisions effecting its purpose. If Marathon, for example, had been a hundred miles from Athens, the Persians might have captured the city in spite of their defeat. So likewise if the allies had met Xerxes in force at Tempe, or even at Thermopylae, he would doubtless, since he commanded the open sea, have landed an army in the Peloponnesus within a few days, which would have occupied Sparta or the isthmus long before they could get back to defend them. The reason why Xerxes never attempted to land troops behind the isthmus was, not that he could not dispense with his fleet for a time—he did for over a fortnight, not to mention his retreat—but that the Peloponnesus was so strongly garrisoned that any force which he could have landed there would have been at once annihilated. It was simply a consequence of the Persian naval supremacy that the Greek defence on land had to be as much as possible concentrated.  

A third calculation must also have weighed with those responsible for
the Greek plan of campaign. It was bad enough, but inevitable, to have one disaffected state behind the defence. It was much worse to have two or three, all of them ἐφεδροποιητεῖς τῶν ἀτυχήματι.

These considerations clearly indicated that the main line of defence by land must be the isthmus. But to confine the defence to the Peloponnesian was a plan open to grave objections, the least of which was the abandonment of all northern and central Greece and of all hope of support from the states north of Chalcis. It was all very well to crush a corps landed from the Persian fleet. It was all very well to fortify the isthmus and defy Xerxes there. But if once Xerxes arrived at the isthmus with army and fleet together, the defenders would have to meet the two attacks at the same time, and it became a serious matter. The allied fleet of course could not hope to beat the Persian if it came to a pitched battle in the open sea off the Peloponnesian coast.

To advance the land defence further northwards was impossible. But if the fleet could find a favourable station before the isthmus, it might seriously check and cripple the enemy, or even wrest from him the command of the sea. A naval victory was far the best solution for the allies, because it would not be turned by land, and if Xerxes lost command of the sea, he had at once to think of his own communications, and of the revolt of his Ionian subjects which was bound to follow on the first appearance of a Greek squadron. In the naval strategy we may plainly discern the mind of Themistocles. His plan was to post himself in a narrow sound, where the enemy could make no use of his numbers for a direct attack, but might be tempted to detach a squadron to take the Greeks in the rear. Themistocles would then fall upon his main fleet and endeavour to defeat it before the circumventing squadron could come into action. Either the sound inside Salamis or the sound inside Euboea was excellently suited for his purpose. The difficulty was to induce the enemy to attack the fleet instead of ignoring it and sailing past. In this regard, as in others, the Euboean channel was far the better position. Here the configuration of Greece came to the aid of her defenders. The pass of Tempe or the pass of Thermopylae might be held by a handful of resolute men whose absence would not appreciably weaken the garrison of the Peloponnesian. But if Xerxes were checked by land, without the Peloponnesian being laid open to invasion by sea, he would be compelled to use his fleet to turn the obstruction and force the defenders of the pass to evacuate their position. He had to arrive at the isthmus by land, and occupy the Greek army there, before he could successfully attack the Peloponnesian by sea. But a Greek fleet posted between the north end of Euboea and the south end of the Magnesian promontory guarded the only landing-places which give practicable access to the interior of the country in the whole stretch of the Hellenic peninsula from Tempe to Marathon. Marathon was of course too far south for the landing. A force disembarked there would be exposed to attack from the allies on its march through

17 The losses of Marathon had not been lost on Themistocles; cf. Plut. Them. 3.
Bocotia. Therefore if Xerxes were 'held up' at Tempe or Thermopylae, he would have to attack the Greek fleet at Artemision, and if the Greeks could win a decisive victory there, Greece might be saved from invasion, for the Peloponnesians would be set free to come up to confirm the defence of the pass, or even assume the offensive against what part of the Persian army could be spared to continue the campaign after the defeat of the Persian fleet.

Accordingly, when Xerxes reached Abydos, 10,000 hoplites under the Spartan Eumenes 16 and Themistocles himself were sent by sea (the natural route) to Halkis, whence they marched to Tempe. The fleet which brought them returned in the Pagasean gulf ready to take up its station. It seems to have been hoped that the appearance of the allied army would induce or compel the Thessalians to join the defence, possibly by bringing the Laconian faction into power. The message sent by 'the Thessalians' to the isthmus may not have had exactly the significance ascribed to it in Herodotus (vii. 172). The version retailed by him, and the persistent attempts to cast all responsibility for Thessalian medism upon the Aleuadai, are evidently apologetic—let any one who still doubts this interpretation read vii. 130 with its deliciously naive ending. At all events the invitation to the allies does not appear to have expressed the mind of the Thessalians as a whole. The cavalry did indeed present itself, and there was no overt medism, but the tribesmen held aloof. Moreover Tempe is by no means the only pass into Thessaly, and the force present was quite insufficient to defend all the passes. To close the north frontier of Thessaly would have required a much larger army than could be spared from the Peloponnesus. It is probable that the organisers of the expedition really did know of the other passes, but hoped that if the allies held the vale of Tempe, a general levy of the Thessalian tribes would turn out to guard the others, just as the Phocians guarded the Anopseas while Leonidas held Thermopylae. This hope proved fallacious, so the expedition returned to the ships and sailed back to the isthmus. The apologetic account reproduced by Herodotus slurs over the real reason of the retreat.

The failure in Thessaly was a serious blow to Themistocles' policy. The defence seemed to have fallen back to the isthmus and Salamis. Could the allies be induced to go back to Artemision, and instead of Tempe to hold Thermopylae, a stronger position no doubt, but in some degree open to the same objections, for it too could be turned by land, and the peoples of Central Greece, especially the Boeotians, were no more to be trusted than the Thessalians? Could the Athenians, on the other hand, be induced to give up all hope of a serious land defence north of the isthmus, and to evacuate Attica if the navy failed (as was only too likely) to cripple the enemy's fleet? There was evidently a party in Athens strongly opposed to the idea of surrendering

16 Σωρτός, Hist. vi. 2, is an obvious clerical error, ΣΥ = ΕΥ and ΑΙ has been absorbed in the Ν. Mammis and his 300 Thebans may have joined the allies in Thessaly (Plut. de Her. sentiores: 21), but the authority of the Boeotian Aristophanes is not above suspicion on such a point, as the context indeed might suggest.

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their country without a battle. They demanded that if Thermopylae could not be occupied in force, at least the Peloponnesians should turn out to defend the line of Cithaeron (Hilli. vii. 141, lines 4 and 5 of the oracle, viii. 40).

It was probably at this crisis that the famous oracles were delivered to the Athenians at Delphi. Herodotus no doubt (vii. 140–4, and especially the first sentence of 145) conceives that they came earlier in the story, but he lays no stress on the occasion, and both the tone of the responses and the circumstances of their delivery postulate a more pressing danger than threatened Athens at the date indicated by his words. The expedition to Thessaly moreover is quite incompatible with that date. On the other hand, we cannot postpone the occasion till after the fall of Thermopylae. Then there was no time for missions to Delphi and no question of policy left to be settled.

If Themistocles looked for help from the God in persuading the Athenians, he got more than he wanted. The priestess poured forth terrible menaces, and bade them begone to the ends of the earth. That advice went far beyond the wishes of the government. So the envoys procured the intervention of an influential Delphian, Timon, to mitigate the utterance in the sense which they desired. The second response promises salvation in the 'wooden wall' and hints at a battle at Salamis. Not a word of Artemisium! To the Delphians, who did not expect or wish the allies to hold Thermopylae and Artemisium, who aimed above all things at saving their temple and its treasures and dreaded above all things to be compromised in Xerxes' eyes by the defence, Salamis was the uttermost and northermost limit of concession to be granted to the Athenians consistently with the interests and prophetic reputation of the oracle.

Since the contenance of the Delphic God was averted, Themistocles seems to have sought to recommend his strategy by the authority of Bakis. He produced an oracle which promised a naval victory to bring freedom to Hellas when her enemies bridged with their ships the channels at the north and south ends of Euboea, at Artemisium and Cynosura. After the failure at Artemisium and the victory at Salamis this prophecy was transferred to the latter, as we find it in Herodotus, in spite of the strain put upon the toposography.

18 See Herm. of Th. vii. 145, at the beginning of Ch. 145.
19 There is no cogent reason for rejecting a line of the two oracles. The alternative plan of defence was of course known to Delphi, and it was obvious that Salamis was the naval counterpart to the isthmus. The priestesses' jealousy is a reference to Platosis, but so natural an idea needs no special explanation. The light and runs away will live to fight another day. 
20 See I. 757; cf. 809, where Cynosura appears to be taken from the oracle, as Grote saw, and Manieh is mentioned for the sake of the temple of Artemis there (cf. Stein ed. vol. 1, 189), Klos is quite unknown, but Klosth might conceivably be a corruption of Klos, and so transferred from a narrative of the Euboean operations. Grote was right. I believe, in suspecting the current explanation of the name 1089 (ed. vol. vii. 176), but it is likely that the long eastern promontory of Salamis was called Klosth (cf. Plut. 1089, ed. vol. 9, where χείμτην την προς τον ηφίον ισχηλαιασέως suggests a confusion
At all events the allies decided, although not, it would seem (Hdt. vii. 175), unanimously, to return to Artemisium and to occupy Thermopylae. The striking disproportion between the land and sea forces despatched plainly indicates that the intention was merely to hold Xerxes' army in check long enough to enable Themistocles to try conclusions with the fleet. The troops sent to Thermopylae consisted of 4,000 Peloponnesians, including 300 Spartans under Leonidas. On the way they picked up 700 Thebans and 400 Thesilians, and, in obedience to a summons sent in advance, 1,000 Phocians and the full levy of the Leocians mustered to meet them at Trachis. The total force may have numbered about 6,500 hoplites and some light-armed troops. It was sufficient to defend so strong a position for a few days, which was all that was contemplated, although the pretence was naturally kept up that a larger army was to follow (Hdt. vii. 208). The fleet at Artemisium consisted, according to Herodotus (viii. 1-2), of 271 triremes, to which must be added the fifty-three which came up later (viii. 14), making a total of 324, besides nine pentecenters. Herodotus' figures look like an official list, but most of the contingents reappear with the same numbers at Salamis in spite of the rough handling which they received at Artemisium (viii. 18). We cannot accept both enumerations. Has Herodotus transferred his numbers (so far as they coincide) from Salamis to Artemisium or from Artemisium to Salamis? We should naturally expect to find the contingents at their full strength at Artemisium rather than, after several stubborn actions, at Salamis. The 200 Athenian ships represent to Herodotus' mind the total navy of the state (cf. vii. 144, viii. 62). Half of them were more or less seriously damaged at Artemisium, yet all reappear at Salamis. Aeschylus puts the fleet at Salamis at only 310 ships (Pers. 388-40). The earlier list therefore appears to be the authentic enumeration.

There is a discrepancy of two days in Herodotus' narrative between the events at Artemisium and at Thermopylae. Buolst solves the difficulty by inserting two days in the diary of the fleet. But it seems probable that it is between two ἐνέποντοι, or a gloss upon the word), and that the coincidence helped the transcriber. In the third line of the oracle I put τοι, and take τὸτε as a gloss to qualify ἔτη. My interpretation of the oracle is supported by the lines on the monument of the Megarians (Gest. Johnn. ii. pp. 288-9).

The epigram (Hdt. vii. 228) gives 4000 from the Peloponnesians, and Herodotus, viii. 25, evidently took his 4000 death from this source, although it speaks only of Peloponnesians and not of dead but of living. Herodotus viii. 222, summarises only 3100 Peloponnesians. He else where (viii. 25) mentions Helots, and seems to imply (vii. 228) that each Spartan was attended by one Helot. But it is not likely that the epigram includes the Helots any more than Herodotus does. Herodotus' list, therefore, appears to be incomplete. Inscriptions (Pong. 90, Archil. 99), Ctesias (Pers. 29), and Dio Cassius (xli. 4) speak of 1000 Lacedaemonians. This supplement may be thought to be either confirmed by Demaratus' words (Hdt. vii. 102) or derived from them. Dio Cassius gives 1000 Leocians and 1000 Malians. The Malians are improbable, but 1000 is nearer the mark for the Leocians than the Pelasgians (x. 29, 2), and not many of them need have been hoplites.

the diary of the army which is at fault. Herodotus (viii. 15) means the three
days of fighting at Thermopylae to coincide with the three days of fighting
at Artemision. Xerxes' four days of inaction before his first attack are
surely intended to be the day of his arrival and the three days of the storm.
He would naturally wait for his fleet to come into cooperation, and possibly
he was hampered by other obstacles, as we shall see. He must have arrived
before Thermopylae on the same day on which the fleet reached the Sepiad
strand, that is to say on the twelfth day out from Therma (Hist. vii. 183), and
not the fourteenth, as Herodotus implies in the word τριήμερον (vii. 196).
Doubtless the arrival of the army and fleet at these points had been timed to
coincide, and Herodotus clearly means them to coincide, in other passages
(vii. 184, 186, vii. 68) where he refers to the total force led by Xerxes, μέχρι Σηπιαῖος καὶ Θηρμοπυλῶν.

It was probably about the time when Xerxes marched from Therma
that the Persian admirals sent out a fast squadron of ten ships to reconnoitre.
We must suppose that in order to escape notice they kept well outside
Skiathus and perhaps touched at Skyros—the Dolopes had medized—where
Pamnon may have given them his warning about the rock Myrmone. Thus
they approached the channel between Skiathus and Magnesia from the south
and pursued the three Greek ships on guard there northwards, leaving three
of their own (which the Greeks at Artemision seem to have mistaken for
the guard-ships, for they did not molest them) to set up a mark on the rock.38
This incident must have happened before Xerxes entered Thessaly, for he
must certainly have occupied Tempe, and then the crew of the Attic ship
which was run ashore at the mouth of the Peneius could hardly have escaped.
In any case Herodotus implies (vii. 183, δέ σφι τῇ ἐντολῇ ἐνεγάφε καθαροῖς) that the ten ships returned to announce that the course was clear before the
fleet sailed from Therma. Yet he involves their reconnaissance with the
sailing of the fleet in an extraordinarily confused fashion (vii. 179, 183), and
asccribes to their capture of the three guardships an effect on the minds of
the Greeks which is utterly incredible. He tells us that the news was sig-
nalled to Artemision by beacons from Skiathus, and that the Greeks there-
upon fell back in a panic to Chalce— that is to say, abandoned Artemision,
exposed the flank and rear of the army at Thermopylae, and nullified the
whole plan of campaign! Fortunately Herodotus himself supplies a clue
to unravel his own confusion, which has been most sagaciously followed up by
Mr. Bury in an article in the second Annual of the British School at Athens.
He adds that the intention of the Greeks in shifting their station to Chalce
was to guard the Eurype—μεταφρέσκοντο ἓν Χαλκίδα φολιάζοντες τὸν Ἑλονον.
What danger threatened the Eurype? Mr. Bury has ingeniously shown
that what was really signalled from Skiathus was the passage outside that
island of the 200 ships sent to turn the Greek position by circumnavigating

38 Herodotus (vii. 179–83) omits that the Persian squadron made straight for Skiathus,
and the three ships ran on beyond the rest. But this conception does not fit his story.
Euboeae, and that it was not the whole Greek fleet that fell back to defend the Euripus, but only the fifty-three ships afterwards introduced into the narrative; from nowhere in particular (Hdt. viii. 14). It is impossible to believe that the whole Greek fleet left Artemision, but the despatch of the fifty-three ships would account for the story. It is impossible to understand the stratagem of sending the 200 ships outside Skiathus if they were sent, as Herodotus states (viii. 7), from Aphetae, in full view of the Greek station, and in the broad daylight of the mid-afternoon. It is impossible that these ships should have quitted Aphetae in the afternoon, rounded Skiathus and Cape Geranesus, and reached the Hollows of Euboeae in about twelve hours, as Herodotus' account demands (viii. 6-14). But these objections of time and place are avoided by Mr. Bury's hypothesis that the 200 ships parted company with the main Persian fleet off the Sepiad strand. I need not repeat all his arguments, but I will add a few considerations which confirm them. In the first place, nothing which had not been foreseen could be signalled by beacons. It must have been preconceived that beacons should be lighted in certain numbers and certain positions, if the enemy did this or that, which it was foreseen that he might do. The capture of the Greek scouts, after a chase which carried them (say) fifty miles north of Skiathus, cannot have been either seen or foreseen, and so cannot have been signalled. But the passage of some of the enemy's ships outside Skiathus was a contingency which must certainly have been foreseen, and arrangements were doubtless made for signalling both the fact and the number of ships. Thus both the ten ships and the 200 would be signalled, and Herodotus has confused the two squadrons. He knew that the ten ships came within sight of Skiathus, he had no idea that the 200 parted from the fleet before it arrived at Aphetae. Hence he could only refer the signal to the reconnaissance. This explanation throws light on both sides—the movements of the ten ships are mixed up with the movements of the 200, no less than the movements of the 200 with the movements of the ten. Secondly, the use of beacons suggests that the signal was made at night. The Persians must have put in to the Sepiad shore about sunset (Hdt. vii. 183), and the 200 ships would pass Skiathus with the last of the daylight. Thus the fire-signals fit the hypothesis. Thirdly, we can hardly believe that the despatch of the 200 ships was a happy thought which first occurred to the Persian admirals at Aphetae. It was surely a deliberate plan premeditated at Therma. But if so, can we believe that these ships were ever brought inside Skiathus to Aphetae?

26 Mr. Grundy, Great Persian War, p. 324, supposes that the whole Greek fleet had to run before the storm round Cape Kaminum. It is more likely that the ships were drawn up for the night on the strand at Artemision, but even if after they had left shelter there, and safely hard by at Oreus; v. Lellling in Ath. Mitte, viii. p. 18.

27 Possibly Herodotus' information about the capture of the three ships came from Pythias, (vii. 181, viii. 92, about the signal from some one with the fifty-three ships, he has unskillfully combined them.

28 It might help to explain Xerxes' delay before Thermopylae.
It is an additional advantage to Mr. Bury's theory that it dispenses with the second storm, which looks very much as if it were got up on purpose to account for the wreck of the circumnavigating squadron. Herodotus knew that this squadron was wrecked, but inasmuch as he did not start it on its voyage until after the first storm, he was driven to postulate a second storm to wreck it. It must be admitted that his efforts to raise the wind put some strain upon our credulity. Two storms in as many days are a most unusual phenomenon in Greece in August or September. At Aphetae the second storm produces absolutely no effect that might not be due to the ordinary land breeze blowing down the channel at night. There is thunder and heavy rain, but that is not the weather for wind, and no wind is mentioned. Can the same night have been so tempestuous at the south end of Euboea? But, it will be urged, Herodotus wreckers the 200 ships at the Hollows of Euboea, and the first storm was a north-easter (viii. 13, 14, vii. 188). How could a storm from the north-east drive ships on the south-west coast of Euboea? And if the 200 ships were wrecked in the first storm, why do not the 53 ships get back to Artemision until the day before the last battle? As regards the Hollows, Herodotus refutes himself. He tells us (viii. 13) that the night of storm fell upon the Persians ἐν πελάγεσ φερομένοις, and he expressly distinguishes τὰ πέλαγος, the open Aegean, from the sheltered waters of the channel (vii. 176, 193; cf. iv. 86). That the shipwreck took place in the 'first storm,' and outside, not inside Euboea, may also be inferred from vii. 192, where the scouts run down from the hill-tops to Chalcis on the second day of the storm, and announce to the Greeks there παντα τὰ γεγομένα περὶ τῆς ναυγίας. The main Persian fleet was at the Sepiad strand, forty miles north of Mount Dirphys, and if visible from there (which I doubt 26), at all events concealed by the corner of Magnesia from the more northerly Euboean hills. How much could the scouts report of the shipwreck of the main fleet, especially in such dirty weather? No! what they reported must have been the wreck of the 200 ships, and that wreck must have been on the east coast of Euboea, for the scouts ran down from the hills, not up the west coast from the Hollows (where indeed the scouts would be ships). The scouts were doubtless sent up from Chalcis to Mount Dirphys and other points of vantage to signal the progress of the enemy's circumnavigation, and

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26 The date and wreckers of the first battle drift to show at Aphetae — Ἀφεθαὶ — τῷ Ἀφεθάς. The exact position of Aphetae is unknown. In spite of Ht. vii. 192-3, it is difficult to believe it lay inside the gulf of Pagasus, and he elsewhere estimates its distance from Artemision at 80 stadia (vii. 8). The Ἀφεθάς does not help us, for it has no reference to direction (cf. ἄττακα, viii. 19, 76, and ἐπιστέφων). But one would expect to find Aphetae rather east than west of Artemision, else the Greeks would have been in danger of being cut off from the Euripus.
not left behind above Artemisium, as Herodotus in conformity to his general misconception imagined (vii. 182).

But something must have happened at the Hollows to bring them into the story. What was it? Perhaps our answer to the second objection will enlighten us. The fifty-three Attic ships get back to Artemisium, with the news of the wreck of the turning squadron, on the afternoon of the day before the last battle (Hdt. viii. 14). This date is very early if (as Herodotus fancies) the wreck took place only on the preceding night, but it is very late if the wreck is to be placed (as we argue) on the first night of the great storm. The fifty-three ships were sorely needed at Artemisium. How do we account for the delay? In viii. 14, Herodotus mentions three incidents one after another. The first is the arrival of the fifty-three ships. The second is the news of the wreck, which arrived at the same time. Herodotus does not expressly say that the ships brought the news, but the inference is almost certain (cf. Bury, i. p. 89). The third item is that the Greeks, emboldened by the reinforcement and the news, sallied forth at the same hour as on the previous day, fell upon the Cilician ships, and having destroyed them started at nightfall to sail back to Artemisium. This attack was evidently a serious action, for Herodotus twice refers back in a pointed way to the Cilicians (viii. 68, 100). But it is difficult to see how the Cilician ships came to be isolated from the rest, and why no assistance was sent to them from the main fleet. And it is difficult to see why the Greeks should have waited for the same hour as before. Is it not possible that this action was really fought at the Hollows of Eubea, by the fifty-three ships, and formed part of the news which they brought, but that Herodotus has transferred it by a misunderstanding to Artemisium? That none of the 200 ships survived is hardly credible. The survivors would naturally have rallied in the Hollows under the lee of Eubea, and may well have been destroyed there by the fifty-three ships on the day after the storm, at about the same hour as the Greeks at Artemisium were fighting their first battle—a coincidence which would be remembered. The fifty-three would then have started at nightfall to sail back to Artemisium. The Cilician squadron, we may suppose, was the largest contingent of the 200. Herodotus was all the more likely to transfer the action itself to the place and time of its announcement, because he was prepossessed with the parallel between the fighting at Artemisium and at Thermopylae. It may be noted for what it is worth that Diodorus emphasises the separation of the Persian squadrons, and describes only two battles at Artemisium (xi. 12-3).

Minor points must not long detain us. The recurrent motif of panic and retreat is of course inconsistent with our general conception of the campaign, but it is also inconsistent with the record of the fighting, and is adequately accounted for by Herodotus' desire to bring out the dramatic contrasts in his story, and by the prejudices of his informants.

In particular the story of the bribery of Themistocles (viii. 4-5) is to be rejected. It does not harmonise well with viii. 19-20, where the Eubeans ἐκκοιμησαν τὸν ὀδὲν, and it falls into line with the other slanders and insinuations whereby Herodotus' malignant (Alemaconid) source seeks to take
away the credit of Themistocles' achievements and blacken his character when it cannot deny his ability. Is it likely that any Greek would have squandered thirty talents on Themistocles when he might have bought Eurybiades, the commander-in-chief, for five? Eurybiades has suffered for the sins of his fellow-citizens individual and collective, Adrastus of course, here as elsewhere, for the sins of his son.

The news brought by the diver Skyllias to Artemision (viii. 8) must have been the loss sustained by the Persian fleet at the Soulda strand, as Mr. Bury shows, rather than the despatch of the 200 ships. The news brought by the scouts to Chalcis is not however to be dismissed as mere patchwork (v. supra).


The two positions, Artemision and Thermopylae, were mutually inter-dependent. It is universally recognized that Thermopylae could not have been held without Artemision, for it would have been at once turned by the enemy's fleet. But it is also true that Artemision was useless without Thermopylae, for the Persians would never have attacked the Greek fleet, but simply sailed past it outside Euboea, if the land road to the isthmus had been open. All that they wanted was to get their army and fleet to the Peloponnesus at the same time. The Greek defence by land was from the very first fixed at the isthmus. All that Leonidas had to do was to hold Thermopylae until the Greek fleet had fought a decisive action with the Persian. In the pretence that the full force of the Peloponnesians was to follow him, and the alleged hindrances of the Carnean and Olympic festivals, we have to recognise only official dust for the eyes of the extra-Peloponnesian populace (Hdt. vii. 203, 206, viii. 26, 40, 72—into this last passage Herodotus has perhaps thrown a touch of irony). On the other hand, the assertion (vii. 207) that the Peloponnesians wished to abandon Thermopylae and fall back to the isthmus, and Leonidas was only pressed into staying by the indignant protests of the Phocians and Locrians, is half malignant and half apologetic, malignant against the Peloponnesians, apologetic for the subsequent medism of Phocians and Locrians.

But Thermopylae could be turned by land as well as by sea, and that not merely by mountain paths, but by the road up the Asopus and over the col into Doris. This road was doubtless no charasae, and may never have been practicable for wheels (cf. Livy, xxxvi. 15), but it was not a difficult road, as hill roads go in Greece. And Mr. Grundy (Gt. Pers. War, p. 261, 302) testifies that even at the present day, in spite of the excellent modern road beside it, 'there is considerable mule traffic' over it. The position of Trachis, and the colony sent there by the Spartans in the Peloponnesian War, are indications of its importance. The Thessalians were of course familiar with this road, and according to Herodotus led the Persians by it into Phocis after the fall of Thermopylae (vii. 31). Artabazus retreats by it after the battle of Plataea (ix. 66, 89).

Why then did not Xerxes adopt this route on his first arrival before
Thermopylae, or at all events send a division by it to turn Leonidas' position, which was not worth two days' purchase if this road was open! There can be only one satisfactory answer—the road was held. Mr. Grundy has well brought out two facts: (1) that the road was very easily defended, for the gorge of the Asopus, up which it runs, is long and precipitous, and so narrow that at one point it contracts to twelve feet (pp. 261–301); (2) that the defence of Thermopylae regularly included the defence of Heracles (Trachis), which commanded the gorge (pp. 262–4, note). Heracles lay at the foot of the flat-topped hill which overhangs the mouth of the gorge on the west. This hill formed the citadel, a very strong position, which the Greeks cannot conceivably have left unoccupied. Even the lower town was so strong that in 411 B.C. a garrison of 2,000 Aetolians defied the consul Aelius Gallus and his army there for twenty-six days (Livy, xxxvi. 16, 22–4). We can scarcely doubt, in spite of the silence of Herodotus, that Xerxes found at least the citadel of Trachis occupied, and consequently the Asopus road barred to him. This inference is supported by a parallel omission in Herodotus' distribution of the defenders. The Peloponnesian and Boeotian contingents were with Leonidas in the pass, the Phocians were guarding the path Anopaea, but where were the Locrian levies? The Locrians must have been the garrison of Trachis.

Herodotus' description of the path Anopaea, which started from the Asopus (vii. 216), and of the march of the Immortals (217), might naturally be taken to imply that Hydarnes began by ascending the gorge. This view seems to be universally accepted without further question. If it is right, we must suppose that Trachis had meanwhile been captured, or surrendered by the Locrians. But Pausanias, who had been at Thermopylae (iv. 35), gives a different account. In his narrative of the invasion of the Gauls under Brennus (x. 10–23), he describes two paths up into the mountains near Heracles, neither of which can be identified with the Asopus road. The one was very steep and abrupt, started from near Trachis, and passed not far from a temple of Athena. In this path I recognize the original of the modern high road, and in the temple of Athena the original of the monastery of the Panagia. The other was easier for an army, and led through the territory of the Aenians, i.e. round the western end of the Thracian cliffs.

35 Mr. Grundy (p. 269 and elsewhere) seems to me to make too much of the difficulty of transport. He appears to imagine Xerxes' commissariat train, entirely on wheels, whereas one might gather from Herodotus that it consisted entirely of pack-animals of various kinds, including camels (see among numerous references, especially vii. 123, 387; and cf. ia, 39). Probably the truth lies between these extremes. But there are very few roads too difficult for the light, narrow Asiatic ox-waggon, and an external army (pace Herodotus) requires extraordinarily little baggage or even food.

36 On Heracles Trachis, v. Livy, xxxvi, 22–4. Thuc. vii. 92, Hdt. vii. 199, Strabo, 435, Paus. 22. Lesbo, N. Greece, ii. pp. 24–81. Herodotus implies, I think, (with Mr. Grundy, p. 252,) that the lower town was on the Thermopylae road. It is clear from Thucydides that there was never any change of site, although in Roman times (Strabo, Paus.), when Heracles had completely retreated up the hill (cf. Livy), the ruins of the lower town, six streets below, were exclusively known as Trachis.

37 It may be noted that the Locrians and Phocians mustered at Thermopylae, and that Xerxes commands all northern Greece, see Thermopylae (Hdt. vii. 208, 201).
Presumably it passed behind Trachis and connected with the Anopaea path in the valley of the Asopus above the gorge, for this, says Pausanias, was the path by which Hydarnes, and afterwards Brennus, circumvented the defence of Thermopylae (x. 22, § 8, cf. § 10). There is nothing in Herodotus inconsistent with Pausanias; on the contrary, the expression τον Ἀσοπούς διαβδίσαντες (vii. 217), which is unnatural on the received view, distinctly supports him. There may be topographical objections, but I cannot discover that the topographers have ever even considered the question. If Pausanias’s account may be accepted, the Persians simply turned the obstacle of Trachis to get at Thermopylae.

If Trachis still held out, the Phocians who were guarding the path Anopaea can hardly have expected an attack from the side of the Asopus. But they had another function, which, although barely hinted at in the story retailed by Herodotus, may have occupied more of their thoughts. They were not merely φρουρώντες τὴν ἄβραχον, but also ἱσσαμενον τὴν σφετερὸν χώραν, which interpreted into the concrete means defending Pausanias’ steep path whereby the Gauls first attempted to scale the ridge of Oeta. We should expect therefore to find them posted somewhere near the intersection of this path with the Anopaea, probably somewhere not far from the monastery of the Blessed Virgin. This station seems to me to fit the notes of time in Herodotus’s narrative better than Leake’s and Mr. Grundy’s, and to be confirmed by the oaks which the latter notes (p. 302) in this zone of the forest, surely a genuine touch in the tradition. It also saves Hydarnes from too much forest-groping in the dark.

What happened in the morning twilight we shall never know for certain. It is obvious that Herodotus gives us only the Phocian apology, and a ludicrously lame one it is (vii. 218). We may conjecture that he is inspired from Delphi, for the tone of the advocate for the accused is audible in almost all that he says about the Phocians. Their spirited reply to the overtures of the Thessalians, and the old feud between the two peoples, dragged into the story time after time, are on a par with the Athenian reply to Alexander of Macedon, and the Alemaenid hatred of tyrants. The devastation of their country is too emphatically paraded in contrast to the immunity of Boeotia to absolve them from the charge of meism. The fastnesses of Parnassus are the last refuge of their reputation. Their courage is vindicated in the very camp of Mardonius. And even this shameful farce on the Anopaea is worked into a blasphemous parody of the last heroic stand of the Spartans at Thermopylae! At best these Phocians were more anxious to defend the path into
Phocis than the path to Alpeni. At worst they bartered away the safety of Halas and the lives of their allies for the security of Delphi and its treasures. A thousand Phocions appear next year in the enemy's ranks (Hdt. ix. 17, 31); is the number a mere coincidence? At all events the Phocions cleared out of the way, retiring towards the summit of the ridge, probably on the path towards Phocis, and the Persians did not follow them far, but having dismissed them, possibly with a few volleys of arrows, resumed their march for Alpeni.

Meanwhile what of Leonidas? He easily repelled the assaults of the first two days, which were probably not so seriously meant as the Greeks imagined. For the Persian generals clearly had no idea of carrying the position by a frontal attack. Their initial delay is to be explained by three considerations, all of which may have contributed to determine their inaction at Thermopylae. First, there was the expedition of the 200 ships round Euboea, which promised to compel the Greeks to evacuate the pass without striking a blow. Secondly, it is probable that the Persians at least attempted to get possession of Trachis, and so open the other pass, with much the same result. Thirdly, the turning movement by the Asopus may have been already contemplated, but deferred by the storm which, even without rain (and much rain would be unusual in such a storm), would render night-marches in the mountains difficult. It is highly probable that this movement was originally designed for the night of the day after the storm, but was prevented by the heavy thunder rain with its ῥέματα ἱπαχνόντας, which would raise a spate on the Asopus (cf. Grundy, pp. 262, 300). It seems likely therefore that both the first and second assaults were rather feints to divert attention from the turning movement than serious efforts to force a passage. It was during the second night and at daybreak next morning that the earliest intimations of Hydarnes' march reached Leonidas, and it is here that our difficulties begin.

Apart from the jarring note of Theban treachery, which may be explained as a later interpolation by the author into his original draft (cf. the last words of vii. 233), Herodotus's whole narrative of the defence of Thermopylae reads like a national poem. Like the Perses of Aeschylus it seems to breathe the spirit of the envente-eordate, the ἱμαλαγία των Μήδων. For the moment the clouds of spite and jealousy are melted and the story suffused with a glow of generous idealism. It is this chapter of his history which we might fancy to have been chosen by Herodotus for recitation at the Olympic festival, and to have moved the boy Thucydides to tears. One feels almost guilty of sacrilege in pointing out that this golden legend of heroic self-sacrifice and patriotic devotion owes its origin to a poetic fiction and its ungrudging acceptance to a coincidence of interests. But, fortunately, when criticism has said its last word, there remains in the bare facts enough of sober heroism to console us for the loss of the adventitious glories of the romance.

Three motives are very evident in the narrative of Herodotus: first, the wish to explain the catastrophe by the oracle; second, the wish to shield the
allies from the blame of having left Leonidas to his fate; third, spite against the Thebans. The two former are closely related. In the oracle, which here (vii. 220) appears for the first time, and is inconsistent with the account of Leonidas's expedition given a few chapters before (202-7), we must recognize the official explanation of the disaster; put forward to counteract the impression made on the minds of the Greeks by the news that one of the Spartan kings had been defeated and slain. It was produced to meet the discouragement which would naturally follow so sinister an opening to the campaign, and to turn the bad omen into a presage of victory. But although primarily in our view an apology for a fact, an event, the story of the voluntary self-devotion of Leonidas and his band of heroes proved to all parties so convenient a screen against censure, that it was at once adopted by tacit consent as the authorized version; and being unchecked by any criticism soon won its way to the domain of the romantic. The responsibility was indeed pretty equally distributed. The Spartans were chiefly responsible for the conduct of the campaign on land, and in a more general way for the whole policy of the league. They not only saved but enhanced their military reputation, and could now point to a signal and disinterested sacrifice in the cause of their allies. The Athenians above all the rest had to answer for the plan of holding Thermopylae. It was their advocacy which had persuaded the Spartans to attempt the defence of the pass, and 'let them in for' this calamity. The Peloponnesian allies escaped all blame of having basely deserted their general in the hour of need. It was simply a consequence of the voluntary self-devotion of Leonidas that he should haveidden them depart in peace, and the λέγει adopted by Herodotus (vii. 220), confessedly in the face of his facts, may even have been an original part of the explanation, for the Spartans could not in the crisis of the war afford to be exacting. Even the Phocians gained by the diversion, for they shared the blame with the Gods and their excuses were not so closely scrutinized. Only the brave Boeotians suffered wrong, but they no longer counted for anything.

It need scarcely be pointed out that the official apology is naively external in its point of view. A great disaster was fated to befall Sparta, but the fates allowed it to take one of two alternative forms. Leonidas devoted himself 'that the scripture might be fulfilled' (cf. viii. 53). Thanks to his patriotic sacrifice Sparta was now secure. The story is meant to explain the fate of Leonidas rather than his motive, still less his strategy. It was afterthought and posterity that worked up the subjective side, although even in Herodotus this elaboration is already far advanced. But we may safely say

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27 Except perhaps the words καὶ τὰς ἐκ τοῦ τοιαύτατον τραυμάσεως κλέεις in 293. Can the τέ to in the preceding clause ἄρα τοι ἔπει δια τοῦ τοιαύτατον τραυμάσεως be a corrupt reduplication of τέ-τραυμαστέων, and not τές ἐκ τοῦ τοιαύτατον τραυμάσεως κλέεις, an afterthought added with the note on the Thebans which fills the rest of the chapter, cf. the opening words of 294, which would fit on very well!  
28 The view so often expressed (e.g., by Bunsen, Die Eroberung, p. 119, note), that the Spartan government invented the oracle to excuse themselves, seems to me to make a false distinction between the Ephors and Leonidas, and between the Spartans and the general council of the allies.
that none of the motives attributed to Leonidas either by or in amplification of the official apology really determined his action. In particular, it was no disgrace to a Spartan commander to retreat when sound strategy demanded it (e.g. Euribidas, Pausanias); and the explanations put forward wholly fail to account for the fact that Leonidas’ doom was shared not only by his Spartan guard, who might be bound to abide by him Λακεδαιμονίων βάσις πεθούνα, but also by the Boeotians, at all events the Thespians, if not the Thebans (v. Bury, Ann. of relat. Sch. ii. p. 101–2).

The spite against the Thebans needs no demonstration. It is patent, and the criticisms of Plutarch (de Her. mat. 31–3) have never been rebutted, although they glance off. Herodotus on his malignant Athenian informants. The clever hoof peeps out in the mention of Eurymachus (vii. 233). Leonidas, like Adeimantus, has suffered for the sins of his son, and it is likely enough that he has been promoted by Athenian enmity to a command which he did not hold, for the Boeotian Aristophanes, drawing apparently on documentary evidence, claimed it for Auxandrus (Plut. l.c.). We cannot refuse to believe that the Thebans, like the Thespians, came and remained of their own free will. Diodorus (xi. 4) says that they were of the anti-Persian party, ἀπὸ τῆς ἐτέρας μερίδος, and the statement, although perhaps merely an inference, is yet a just and probable inference, and is supported by the Theban apology in Thucydides, iii. 62.

The attitude of the Boeotians in contrast with that of the Peloponnesians is significant. The other allies ἐπήρξαν Σπάρτῆς ἡγεμόνα προσπευτῶν. The Thespians and Thebans elected to stay with Leonidas. They were not merely more nearly interested in the defence of the pass—at best now a matter of hours—but were in a desperate plight once the Persians got through. No refuge could be looked for in their own country, already predisposed to medize, and they may well have preferred to fall into the hands of Xerxes rather than into the hands of their enemies at home. While therefore we do not admit that Leonidas’s intention was to immolate himself and his men, we must still recognise that it involved a risk which deterred all but the most desperate of his allies.

What then was the situation as it presented itself to Leonidas at his last council of war (Hist. vii. 219)? Apart from the prophecies of Magiarias, derived by Herodotus from his epitaph, the first news of the turning movement were brought by deserters during the night. Obviously they could announce no more than that Hydarnes had marched in a certain direction. Then came the scouts from the hills, who arrived at break of day, ἠδη διαφαμωνύσα ημέρης. There is nothing in Herodotus to show that they brought any information beyond τὸν Παροιμένον τὴν προόδον. The Persians reached the Phocians, who were stationed (we have seen reason to suppose) about the junction of the path Anapocas with the steep path above the right bank of the Asopus, somewhere near the monastery, at daybreak—ἤς τε ὑπὸ διάφαμα (217). This point is separated from Leonidas’s position by a long stretch of difficult country. Yet the advent of the Persians and the announcement of the scouts are represented as simultaneous. It would of
course be absurd to press the expressions of Herodotus to the letter, but it is obvious that we cannot allow the scouts many minutes of observation if his words are to be even roughly accurate. We must assume that they saw the Persians come up, and may suppose that they saw the Phocians fall back before them up the path towards Doris. It is quite conceivable that they were even dispatched by the Phocian commander himself to tell Leonidas that he was retiring on Phocis pursued by the enemy, whom he would endeavour to hold in check and delay as long as possible.

At all events it does not appear that they waited long enough to see the Persians enter upon the path to Alpeni, or that any later message came down to Thermopylae. Leonidas, therefore, may naturally have supposed (possibly on the authority of the Phocian commander) that the Persians were making for the valley of the Kephisus and would not become dangerous to him before the next day at the earliest. Since he had not himself known of the existence of the Anopaeas path until after his arrival at Thermopylae (vii. 175), he might well imagine that Hydarnes was still ignorant of it, especially as the other path, if not to be called a road, must always have been much the more conspicuous and frequented. On the other hand he was certainly kept informed of the progress of the naval contest (cf. vii. 173, viii. 21), and must have known that the decisive battle was expected on that very day. It was of supreme importance that that battle should be fought, but the Persian admirals would decline it if they learnt that Thermopylae was evacuated—was it for this news that they waited that morning (viii. 15)? There was no doubt grave danger in holding the pass for even one day longer, if the Persians were on the march for Phocis. On the morrow they might be threatening the rear of the Greeks from Boudonitis or their communications from Elatea, and once Hydarne got upon their line of retreat the doom of the defenders was sealed—unless indeed the fleet were victorious and could pick them up under the eyes of Xerxes, as the Athenian triremes saved the Greek army from Brennus two centuries later. But the end was worth the risk, so Leonidas judged. Not so his Peloponnesian allies. They could urge at the council that the position was turned and had become untenable, that the fleet had had its chance, that now not a moment must be lost if they were to make good their retreat. So they went their way. But inasmuch as the Boeotians volunteered to stay, Leonidas reckoned that he could carry out his purpose without the Peloponnesians. He had still about 1,400 hoplites, besides the Helots, and no very determined attack was to be expected before the turning force appeared. The sudden descent of Hydarnes must have taken the defenders by surprise. All retreat was cut off.\[7\] Leonidas had

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\[7\] Herodotus (vii. 225) clearly means by the

\[\textit{εν τῷ γάτῳ}, where the last stand was

\[\textit{made, one of the two mounds in the middle

\[\textit{"gate," cf. vii. 176. But it is perhaps possible

\[\textit{that the tradition was attracted to the lion,

\[\textit{and the last stand was really on the mound

\[\textit{"gate." If so, the Greeks may

\[\textit{have been overwhelmed in an attempt to with-

\[\textit{draw, and the story of the sortie in front of

\[\textit{the wall (Hdt. vii. 222, Diod. vi. 6, 16

\[\textit{Plut. de Herc. vii. 32) may have arisen out

\[\textit{of the confusion of the two mounds. Cf.

\[\textit{Irace, N. Greece, ii. pp. 30-7. 33: Grundy

\[\textit{St. Greece, War, pp. 285-60.}
already fallen, and the rest of the devoted band could only share his fate and his fame.  

The disaster at Thermopylae rendered further defence of the Euboean channel nugatory, even if the Greek fleet could have held the position longer, which after their losses in the third day's battle they evidently could not (Hdt. viii. 18-9). The land roads southward were now open, and the Greek hope of snatching a naval victory had failed. The defence fell back to the isthmus and Salamis. Xerxes resumed his march.

Herodotus (viii. 31-3) describes the advance as though the whole Persian host traversed the pass from Trachis (which must have surrendered on the fall of Thermopylae) into Doris and down the valley of the Kephissus. But it has been generally recognised that the easier passes, and especially the main road along the coast, must also have been used. Probably Herodotus's information was limited to the march of a single corps, and was derived from a Phocian source at Delphi. The Phocians were afterwards anxious to cover up and excuse their Medism and this anxiety (we have seen) is reflected in most that Herodotus says of them. They would be sure to make much of their sufferings in the cause of Hellas in order to prove their loyalty and the compulsion that forced them to serve in the enemy's ranks (ix. 17, 31). There is also some difficulty in reconciling the destruction of the temple at Abae with other notices of it in Herodotus (vii. 27, 134; cf. M. Hauvette's useful summary of Pontow's objections, *Herodote*, pp. 380-3). We may suspect that the devastation of Phocis is grossly exaggerated, and that the real attitude of the Phocians is better expressed by Herodotus's remark in ix. 31 (apologetic as it is) than by his highly coloured narrative in viii. 27-33. Yet it can hardly be denied that there must have been some basis of fact in the story. A Persian division, especially if detached on an independent march, and free from the surveillance of the head-quarters' staff, was likely to do much damage in a Greek territory whether the inhabitants were officially regarded as friendly or hostile. In the case of Phocis there is a strong presumption that the devastation was unauthorised and contrary to the king's wishes, for, in the first place, Xerxes does not appear to have accompanied the column through the Trachinian pass, but only reappears after the junction of the coast road, secondly the Thessalians, the old enemies of the Phocians, guided the invasion by this route, and, thirdly, special care was taken that the Boeotians should not suffer in the same way—Macedonian officers were sent in advance to the several cities to protect them. This fact, and the settled policy of clemency pursued by Xerxes till he reached Thespiae, justify us in saying that the burning of the three Phocian

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*It may be urged against the theory here stated that Leonidas must have had constant information of Hydarnes' progress. I quite admit the force of this objection, but every alternative is open to some objections, and this theory seems to me the least objectionable. It keeps nearer to Herodotus than that which I regard as the second-best, namely, that Leonidas sent the Peloponnesians to meet Hydarnes, whether in the pass near Baudonius (as I should say), or near Alpeni (Bury, *I.C.* p. 102), or on the Anopass (Grundy, p. 308).*
towns south of Pampotamii (if it is true) must have been perpetrated before the king arrived, and not, as Herodotus says, on the expedition to Delphi.

These considerations may throw some light on the despatch of the detachment to Delphi (Hdt. viii. 35–9). The expedition is wrapped up in supernatural disguises. It is difficult to reconcile with a later passage in Herodotus (ix. 42). The attitude of the Delphians and the interests of Xerxes himself make it improbable a priori. The inscription recorded by Diodorus (xi. 14) cannot be used to confirm Herodotus, for (assuming it to be nearly contemporary) it is only another expression of the same story derived from the same source. If the Persians wanted to sack the temple, why did they never do so? Neither the oracle nor the alleged repulse of this detachment gives any adequate explanation. The reason can only be that the Persians did not want to sack it. No wonder that the whole episode has been rejected by some historians! But if no force was ever sent to Delphi at all, there was no sufficient motive to invent the story—it is too far-fetched an apology for the general attitude of the Delphians during the war. We must accept the fact that a force was sent, and it is supported by the detail with which the road is indicated. The starting-point of the road and the express mention of Xerxes' orders preclude the hypothesis of Pombaö that the detachment was merely a band of marauders. But the purpose of their mission may have been misrepresented. According to Herodotus that purpose was ἀποθείωσιν τῷ Ἰοντῷ ἐν Δέλφοις Βασιλείας ἐπέργασαν ταχὺ χρῆμα. But it is possible that the real intention was to protect the temple and its treasures from plundering such as had befallen the Phocian towns. Perhaps the Persian guard was harassed from Mount Parnassus by inquisitive zealots who were not in the secrets of the God, and had been carefully sent away by his promise to take care of his own. But in any case the Delphians were sure in after days: to represent the expedition as hostile, and ascribe their protection to Apollo rather than to Xerxes. If the words ἀποθείωσιν ταχὺ χρῆμα cover an inventory, the king had indeed an accurate knowledge of the precious things in the temple, and the sacred armour may have come out of its shrine only to be registered.

Meanwhile the Persian army pushed on through Boeotia. Thespiae and Plataea were laid in ashes, and Athens, save the acropolis, was occupied without a blow. Xerxes naturally made for Athens rather than the isthmus, because Athens had been from the outset one of the chief objects of his attack, and because he wished to recover touch with his fleet in order to concert the further operations against the Peloponnese. The Athenians had abandoned the city and migrated to Salamis, Aegina, or Troezen. Perhaps this migration had begun on the return of the Thessalian expedition, when the oracle of the wooden wall was probably delivered, for the Spartans in Herodotus, viii. 142, speak of the Athenians having lost two harvests. At all events we must not take too seriously the statement that the Athenians expected the Peloponnesians to meet the enemy in Boeotia. It is partly afterthought in the light of the Platanean campaign (cf. Ed. Meyer, G. A., iii.
p. 384), partly a natural protest of the agrarian opposition against the policy of Themistocles and the Peloponnesians.

The yeomen of Attica, heroes of Marathon, adherents of Aristides, who had withstood the creation of the fleet, could scarcely be expected to surrender their farms to pillage without a murmur. In the story of Herodotus the conflict of parties turns mainly on the interpretation of the oracle about the wooden wall (vii. 142-3). But the oracle had been merely the occasion, and its interpretation involved important questions of policy, not only military. Themistocles had carried his main point, the plan of campaign, but he was compelled to purchase the support of the opposition by very large concessions. Aristides and Xanthippus had been recalled and promised military and naval commands for the next year. Athens was not now completely evacuated, but a garrison was left in the acropolis—for so we may interpret the story of the few poor men' (Hdt. viii. 51), which seems to be a version devised to cover the failure of the defence (cf. 53, ἐρείπες κ. τ. λ.). Themistocles doubtless was not sorry to see Athens laid in ruins. He wished to abandon the old site and transfer the city to the Piraeus (cf. Thuc. i. 93, Plut. Them. 4, 10, 19). But the opposition, who wished Athens to be agrarian, not commercial, suspected his design and clung to the inland rock. Their scruples about an even temporary evacuation had to be soothed by the disappearance of the sacred snake, and they insisted on retaining the acropolis as a guarantee of eventual return. Aristides ὑπὸ πολιτικὰς δείκτες, may also have used the crisis to extort from the government the political concessions carried through by him after the war (Plut. Arist. 22, cf. Aristotle, Pol. viii. 4, 1304, ἈΕ. πολ., 23-4), which I am inclined, in spite of the alleged dates, to interpret to mean the opening of the archonship to his Zeugite clients and the introduction of the lot. Possibly the strike of the crews, not by the eight drachmas a head provided by the Areopagus, may be connected with the same agitation. The history of the struggle of parties is obscure, but the fact emerges that, as in the fabled conflict between Athena and Poseidon, the champions of land and sea were contending for the prize of Attica, and the shoot that sprang from the burnt stump of Athena’s olive may have had a special significance beyond what has generally been seen in it.

The Greek fleet took up its station in the sound of Salamis, not merely, as Herodotus would have us believe (viii. 40), at the request of the Athenians, who were anxious to transport their families and property, nor in any hesitation about fighting there, but determined to bring on a decisive battle if possible. It consisted of the still seaworthy part of the ships which had fought at Artemisium, reinforced by a few fresh adherents and by such contingents as had been collected meanwhile at Pogon. The total according to Aeschylus (Pers. 358-40) was 300, with an additional special squadron of ten,

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23 See Bury in the Classical Review, x. (1886), pp. 416-7. His argument is perhaps open to criticism in details—the occupation of the acropolis is not quite in harmony with the decree recorded by Plutarch (Them. 16); the fortification’s siege is hard to reconcile with Hdt. vii. 66-78—but seems to me right in the main, and is quite borne out by a consideration of the position of parties.
and these figures, although the 300 is evidently a round number, are surely (as already argued) nearer the truth than those given by Herodotus (viii. 42-3, 82).

It is possible, however, to show how Herodotus' total, 380, may have been calculated from the basis of Aeschylus' total, 310. Aeschylus lays a stress on the separation of the ten — ἐκάσῳ ἦν τῶν δὲ χωρίς ἐσκέφτω — which suggests that they played a distinct part in the naval operations. Now Herodotus assigns thirty ships to the Aeginetans, but notes that they had also other ships in commission with which they were guarding their own country (viii. 46). Pausanias (ii. 29, § 5) mentions that the Aeginetans furnished the largest contingent after the Athenian (cf. also Hdt. vii. 203). In Herodotus' list the Corinthians come next to the Athenians, with forty ships, so that the statement of Pausanias would be justified if the Aeginetans had the same number forty. Herodotus' total, exclusive of the Lemnian and Tenian vessels which came over from the enemy, is 378. But his items make only 368. It is usually held that the missing twelve are the Aeginetan extra squadron, and Stein accordingly proposes to insert συνοίκων at the end of the clause ἔστιν μὲν αὖ καὶ Ἀλκαίοι πεπληρωμένοι νῆς. But obviously Cobet's suggestion, Ἀλκαίοι θ', is far more convincing. These considerations make it probable that the ten ships of Aeschylus are to be identified with the other Aeginetan ships. But the author of the computation may easily have overlooked this identity and added the ten Aeginetan ships to the 310 of Aeschylus, making 320. Now the difference between 320 and the 380 of Herodotus is exactly sixty, and Herodotus in vii. 168, a passage wholly disconnected with his list here, tells us that the Corcyraeans manned sixty ships to come to join the allies, but never rounded Cape Malea, because they did not wish to commit themselves to either side. However that may be, these sixty ships might not unnaturally be reckoned to the total allied fleet afloat, and account for the remaining difference between Herodotus and Aeschylus.

We have still to account for the discrepancy of two between Herodotus' items and his total. It might be suggested that he has omitted two Naxian vessels, for Plutarch (de Her. mil. 36) notes that Helianicus credited 6 to the Naxians, whereas Herodotus only allows them 4 (Plutarch says 3). But all the items except the 10 Aeginetans, which is supported by or derived from Aeschylus, seem to me dubious. I prefer to say that Herodotus (or his authority) started from the total 380, deducted 12 for the Aeginetans and deserters, and then deducted the deserters by inadvertence a second time. The double deduction of these two ships would be the easier because they are mentioned very far apart, and only added to the list 34 chapters after it is completed. Herodotus may of course have had information about particular contingents, but our general conclusion is that where he has not simply repeated his figures from Artemision, he has more or less adjusted them to make up his total of 380, which was derived from a different source.49

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49 The question whether we ought to read ημεριάς or ημερολόγιον in Thuc. i. 74, neither than from 11.
To return for a moment to the Corcyraeans—it is very remarkable that Thucydides seems studiously to ignore the story of their double dealing in the very passage (i. 31-43) where he would naturally have mentioned it. Although they never saw the enemy, and could never be inscribed on the roll of fame among the states, ὅσιοι ξυκαθελοῦσι τῶν βασιλέων ἐπιστᾶσαι τῷ ἁρπᾶµα, may they not have had more to say for themselves than was told to Herodotus? The subsequent neutrality of Corcyra between the Peloponnesian and Athenian leagues, like the subsequent neutrality of Argos, predisposed Herodotus and his contemporaries to see neutrality in her attitude during the Persian invasion, and such neutrality could hardly be thought to have been benevolent. But perhaps it was never in the Corcyraean bond to come up to Salamis. The possibility that the Persian admirals might detach a squadron from Euboea or Phalerum to attempt a descent on Laconia in concert with the Argives was sufficiently near to make any prudent commander anxious to keep a fleet in reserve in the south (cf. Thuc. i. 73). The Corcyraeans for their part were sufficiently remote from the Persian attack and sufficiently exposed to the Carthaginian to make them unwilling to incur liabilities in the Aegean which might hamper them in the Ionian sea. Possibly their obligations to the allies were from the first limited to the defence of the western and southern coasts of the Peloponnesse.

It was doubtless the problem, how to bring the enemy’s fleet to battle in the position most favourable to themselves, that chiefly occupied the council of Greek admirals at Salamis. Herodotus’ account of their meetings and deliberations is more than questionable. No one who has studied his history of the war will be ready to believe that he had any intimate knowledge of the plans of the leaders. His information is entirely external, and his reports of what went on at the meetings are merely dramatic expressions of it, only a few degrees nearer to historical fact than the backgammon councils of Darius and Atossa or Xerxes and Artabanus. Possibly a mot such as the reports of Themistocles to Adræmanus may have become current and been remembered, but the speeches as a whole are scarcely less imaginary than those in the Persæ of Aeschylus, and the allusions to later events can hardly be mistaken. The narrative is dominated and distorted throughout by the idea that the Peloponnesians were eager to run away to the isthmus. That idea is incredible. The arguments against retirement were as obvious as they were final. The tone of feeling in the fleet described by Aeschylus, and by Herodotus himself when he comes to the battle, is fundamentally different. The vein of spite in the story is patent. This besetting illusion of Herodotus appears to be compounded of the following elements of fact and feeling, which act and react in a complicated way on one another and on the whole narrative. First, the main source of the illusion, Themistocles’ message to Xerxes. The fame and prominence of this message have had a disastrous effect on the tradition. Themistocles told Xerxes that the Greeks were bent on running away, and posterity has taken him at his word. There is a close parallel in the story of his second message (Hdt. viii. 109-10) which was evolved out of his letter to Artaxerxes (Thuc. i. 137). Second,
Athenian prejudice, which was only too eager to accept this literal interpretation so far as concerned the Peloponnesians and especially the Corinthians. Third, the natural temptation to the historian to make much of the fears of the Greeks for the sake of dramatic effect. Fourth, the popular misapprehension of the point of Themistocles' message and consequently of the battle itself. The advantage aimed at was not so much, as was afterwards supposed (Hdt. viii. 60, Thuc. i. 74), that the Greeks might fight in the narrow waters of the sound instead of the open gulf by the isthmus, but rather that they might divide the enemy's fleet, as at Artemision, and so redress the disparity of numbers. This consideration, as soon as it is realised, brings out the full absurdity of the notion of the retirement. There are idiots and cowards in every assemblage of men, and of course there may have been some in the Greek fleet who wished to retreat. It is also likely that a rumour of such an intention was put abroad by the admirals to help Themistocles' stratagem, and their repeated meetings might give colour to it. But we refuse to believe that retreat to the isthmus was ever seriously contemplated, much less deliberately voted by the council.

Herodotus' account of the meetings (viii. 49–63, 74–5, 78–83) is full of suspicious features. He describes three. The first decides on the news of the fall of the acropolis, to retire to the isthmus, the second reverses this decision at the instance of Themistocles, prompted meanwhile by Mnesiphius, the third, held on the eve of the battle, is only prevented from reverting to it by the advent of Aristides with the news that retreat is now impossible. At the first the admirals, we are told, received, in one breath, the news of the entry of Xerxes into Attica and of the capture of the acropolis (viii. 50, 56), although (52) it held out ἐνὶ χεῖναι συγγενὲς! Not only does the council decide to retreat to the isthmus, but Themistocles calmly acquiesces, and requires to be prompted by Mnesiphius to protest! This meeting looks very much like a dramatic fiction devised on purpose to express the panic of the Greeks and to bring in Mnesiphius. That mysterious prompter plays a part suspiciously suggestive of the detractors of Themistocles. It was a question much debated in the schools of the sophists whether ἀνεργή, political capacity, was due to φῶς or to διδαχή, and Themistocles became a stock example in whom this question was 'clothed in circumstances' (v. Xen., Mem. iv. 2, 2; Plato, Mem. 93, Plut. Them. 2). Doubtless his case was an echo of political controversy. Mnesiphius represents διδαχή and the enemies of Themistocles. Thucydides on the other side, in energetic protest against the story, contends for φῶς, (3. 138)—ἢ γὰρ ὁ Θεμιστοκλῆς ἑταίρινα δῆ φῶς ἐκχεῖν δηλώσας κ.τ.λ.—and surely with justice. It does not enhance the credit of the episode to find that Themistocles' published argument, as represented by the words put into his mouth by Herodotus at the second meeting, do not repeat the railing accusation of Mnesiphius against the allies of Athens, but are of a different order and more convincing. Mnesiphius in fact seems to
have proved as useful a witness against the Peloponnesians as against Themistocles.

At the second meeting, according to Herodotus, Themistocles gets his way about staying at Salamis, but only by putting pressure on Eurybiades and in spite of Adeimantus. We may conjecture that what was really discussed was the message to be sent to Xerxes. The third meeting, we are told, assembled to debate about retreat, and (on the news of the Persian movement) broke up to prepare for battle. But is it not more probable that the dispositions and preparations for the battle were the sole and original business of the meeting? The supposed motive is only Herodotus' besetting illusion once more. The dramatic element in the story is here much in evidence. It appears in the despatch of Sikimnis early in the sitting, the surrounding of the Greek fleet by the Persians in the middle of it, and the arrival of Aristides and the Temians at the close! Herodotus brings Aristides straight back from exile, but he must really have been recalled early in the summer.12 Herodotus has not hitherto had occasion to mention him, but that may only mean that he has carefully been kept out of the story. The opposition to Themistocles was not likely afterwards to boast of its past attitude! Mr. Bury (Class. Rev. x. 1896, pp. 414–8) very plausibly argues that Aristides was now one of the ten στρατηγοί, and in command of part of the Athenian troops on the island of Salamis, which would account for his action at Pytaleia. He ingeniously explains his escape from the Persian fleet, and arrival from Aegina, by the suggestion that he had been sent in the trireme that went to Aegina to fetch the Aecidae.

The battle of Salamis is a difficult problem, but its difficulties are rather critical than topographical. The physical features of the scene are plain enough and have long been adequately known. The two cardinal points, the site of the town and harbour of Salamis and the island of Pityaleia, are identical to everything's satisfaction, and recent researches do not add much of any moment.13 The Heracleum and Xerxes' throne remain doubtful. No fresh evidence identifies Keos or Cynosura, or Colias or the Temple of Athens Skiras. The Sileian shore is a little point gained, but the 'Trophy of Themistocles' and the 'Polyandrion' are not securely proved, and in any case have no bearing on the battle, for the dead would of course be taken back to the station of the fleet for burial, and the trophy might well be erected near the anchorage 'whence they sailed forth to victory' (cf Thuc. i. 54, ii. 92). But the broad features of the topography are sufficient to check our literary authorities, and if they have not always had due weight in the estimation of the evidence, it has been rather from deficiency of imagination in the historian than from ignorance of the facts.


Of our literary sources Aeschylus, an eye-witness writing in the fresh memory of the events, is obviously the best. We may not find a systematic account of the battle in the Persae, but the pictures given are assuredly trustworthy so far as they go. Herodotus has collected a miscellaneous store of anecdotes, but every attentive reader must see that he has little idea of the operations as a whole. He deals in episodes and incidents such as might be picked up from floating tradition, but he scarcely attempts to understand the strategy. What general notion of the battle can be detected in his narrative appears to be ludicrously naive and entirely a-priory. His attempts to adjust to it the details which he records can hardly be expected to be very successful or consistent. Herodotus conceives the Greeks to have been ranged along the Salamian coast, the Persians facing them along the Attic coast—were not the Greeks in possession of Salamis, the Persians of Attica? In order to get the Persian fleet from Phalerum opposite to the Greeks he moves it up the straits on the afternoon before the battle. That he imagines the Persians to have taken up that station at that time is clear from his expressions in viii. 70—ἀνὴρας τὰς νέας ἐπὶ τὴν Ἑλλάδα καὶ παρεσχησαν διαματαιντες κατ' ἰσορροπίαν, τοὺς μὲν ἐκείνοις ἔκρυτος ἡ ἡμέρα ναυμαχίας ποιήσασθαι νικὲ γὰρ ἐπεδένετο οἱ δὲ παρεσκευάσθων εἰ τὴν οὔσημην. The time is late afternoon, and the word παρεσχησαν is conclusive as to the position. After the receipt of Themistocles' message therefore the Persians had only to swing round their right wing to enclose the Greeks on the west, ἀνῄρειας μὲν τὸ ἀπ᾿ ἐσχήμον κέρας κυκλοφόρει πρὸς τὴν Ἑλλάδα (76), and to curl up the tail of their left so as to block the channels on each side of Psyttaleia at the east end of the straits. This movement of the left is oddly described because (as has been generally recognised) Herodotus holds a brief to vindicate the veracity of Bakis, and tries to force the situation at Salamis into conformity with his oracle, which was originally invented (if my interpretation is right) to suit the Euboean conditions.

But Herodotus' conception cannot be admitted. It is hardly credible that the Greeks allowed the Persians quietly to file past the noses of their ships and take up their position at only a mile's distance. It is hardly credible that the Persians allowed the Greeks quietly to embark next morning and put to sea in their faces. But the conception is flatly inconsistent with other features of the story. Themistocles' message becomes a ridiculous farce, for when once the Persians got opposite the Greek fleet escape was impossible without a battle—there could be no question of slipping away. All the parade of secrecy, of which Herodotus makes so much, becomes meaningless. Psyttaleia, occupied for the reason that it lay ἐν πόρῳ τῆς καυμαχίας τῆς μελλούσας ἑσθανίας (viii. 76), becomes utterly remote from the probable course of the action. Finally, Herodotus' conception is hopelessly irreconcilable with the descriptions of Aeschylus. But our critical canon must be that Herodotus may be used to supplement Aeschylus, but not to contradict him, and later writers may be used to supplement both these authorities, but not to contradict them where both are consistent.

What then do we gather from Aeschylus, and how far can we supplement
his account from Herodotus or Diodorus and Plutarch. In Aeschylus there is no hint of the Persians offering battle before the advent of Simmias. Themistocles’ messenger arrives apparently in the afternoon (Pers. 557), and the movement to surround the Greeks begins at nightfall after the evening meal (364, 375, 377–8). Herodotus would seem to have antedated the start from Plataea to the afternoon and postulated the envelopment to midnight (viii. 70, 76). Professor Goodwin (p. 251) to save Herodotus supposes that the fleet moved out to the south-east of Salamis before the message came—to my mind an absolutely impossible interpretation of Herodotus’ description of this movement in the passage (viii. 70) already discussed. Bauer (p. 100) sends the Persians inside Psyttaleia to the harbour of Piraeus, but this compromise seems to me to be no improvement. The fact is that Herodotus has simply adapted or misinterpreted his information to suit his preconceived idea of the battle.

Xerxes’ order to his admirals is given by Aeschylus as follows (Pers. 366–8):

ταξαι νεὼν μὲν στῆφος ἐν στοίχεοι τριάτην
ἐκπλουσοι φυλάσσεις καὶ τόροις ἀλλαράθους,
ἄλλος δὲ κύκλῳ νήσον Άλαντος πέρθη.

That is to say, the mass of the fleet was to be ranged in three lines to guard the three channels, (1) between Attica and Psyttaleia, (2) between Psyttaleia and Salamis, (3) between Salamis and the Megara, while other ships were to be stationed round about [the southern coasts of] Salamis to complete the semicircle. Probably Aeschylus pictures to himself a continuous line of ships round the outer side of the island; but a few cruisers would suffice to cut off fugitive boats or blockade-runners, and keep up communication between the main squadrons, which was all that was wanted. To these dispositions must be added what Aeschylus describes later (447–54), the occupation of Psyttaleia by a garrison of Persian troops. According to both Aeschylus and Herodotus (viii. 70) the purpose of this occupation was that the troops might rescue the friends and destroy the foes who might be driven upon the island during the coming battle. But it may be suspected that there is something of afterthought in this explanation. It may be doubted whether the Persians looked for a regular battle or any immediate fighting. All their dispositions are directed (Pers. 369–71, 384–5) to a blockade or siege of Salamis, and the Greek sally is not at all of the sort they had expected (381–4). The occupation of Psyttaleia would obviously much facilitate the blockade, and may be simply explained by that consideration.

All night long, if we are to believe Aeschylus (382–5), the Persian squadrons patrolled their several boats, but the Greeks made no attempt to run the blockade. Aristides must have been the last to get through, and he went in not out. At daybreak the Persians heard with consternation the psalm chanted and the trumpet ring out as their enemy, still invisible [in the inner strait], put forth to battle (386–97). Suddenly the Greek fleet emerged to view [round the long eastern promontory of Salamis], the right wing leading.
in orderly array (398-401). So far there has been no word of a forward movement of the Persians. They are still outside the straits south of Pyattalia. But when the Greek fleet burst into sight, οὐκετί ὁ μέλλων ἀρμην (407). With a cheer (406) they streamed (412, cf. 88 and Goodwin, pp. 249, 254) through the channels, and charged the enemy (408), hoping no doubt to throw them into confusion and defeat them before their rearguard had time to get clear of the inner strait. But the Greek admirals seem to have had the same idea, and carried it out with greater skill, helped perhaps by their smaller numbers and preconcerted action. They backed water (if we may here draw upon Herodotus, viii. 84) and fell back toward the northern shore, thus both gaining time for their last vessels to come out into line, and drawing the enemy on into the trap. For the Persian squadrons, entering the narrows from the open gulf with too broad a front (cf. DioI. x. 18), fell into helpless confusion, and offered excellent chances for the Greek running tactics (413-6). An indescribable mêlée ensued. The Athenians pressed the enemy back on the west, the Aeginetans, acting perhaps in concert with their squadron outside in the gulf, worked round his right flank and cut off his retreat (417–8, cf. Hdt. viii. 85–6, 91). Yet so stubbornly did the Barbarians and their allies fight that it was only night that put an end to the battle (428), and a large proportion (probably half) of their ships were able to make their escape to Phalenis. The garrison on Pyattalia, however, abandoned to their fate, were all shot down or backed to pieces by the victors (454–64). According to Herodotus (viii. 95) it was Aristides who perpetrated this butchery. Some Athenian hoplites were drawn up on the shore of Salamis, probably on the eastern point of the island, where they could perform for their fellow-countrymen the same services as the troops on Pyattalia were rendering to the Persians. Aristides, if we may accept Mr. Bury’s ingenious theory, was in command of them, and doubtless saw his opportunity of claiming for his landmen a share in the glory of the victory won by their naval rivals. As the Athenians formed the west wing of the fleet, he can have found no difficulty in getting the hoplites ferried across to Pyattalia, where they massacred the Persians to a man.

Herodotus, apart from his general misconception of the positions and preliminary movements of the fleets, agrees very well with the version of Aeschylus. There are no contradictions in his narrative of the actual battle (viii. 83–95). The Greeks put out at daybreak. They are at once attacked by the enemy. They at first back water, then charge. The Athenians are opposed to the Phenicians, who form the western wing of the Persian line. The Lacedaemonians are opposed to the Ionians on the eastern wing. The Lacedaemonians therefore fought on the Greek left, the Athenians on the right. Aeschylus (Pers. 399–400) says that the right wing led out, and we must assume that the Lacedaemonians in virtue of their hegemony led the van. But what had been the right wing in the bay of Salamis became the left in the battle, for the Greek fleet on passing the eastern cape of the island changed front and faced the south. The Aeginetans were probably with the Lacedaemonians at the eastern extremity of the line, for they station them-
selves in the channel and intercept the fugitives making for Phalerum. It seems to be implied that they had turned the enemy’s right flank, and it may be conjectured that this movement of theirs decided the day; for it is the Aeginetans who receive the prize. Herodotus, like Aeschylus, emphasises the confusion into which the Barbarians fell, and his anecdotes of the various ships which encountered one another in the battle well illustrates this point.

Curiously enough it is Herodotus who has unwittingly preserved almost the only details which we can gather about what was taking place at the other end of the sound of Salamis. He retails a malicious Athenian story against Adeimantus and the Corinthians—how at the very outset of the battle they hoisted sail and made off (towards the isthmus, we must understand), and were only turned back by a mysterious barque which met them off the temple of Athena Skiras with the news that the Greeks were victorious. They then returned to the fleet at Salamis after all was over. But surely it is clear that the Corinthians were despatched towards the western strait to hold in check the enemy’s squadron which had been posted there, just as the fifty-three ships were sent to Chalcis from Artemisium to meet the 200 which were sailing round Euboea. Since the Corinthians claimed to have played a foremost part in the battle, and the rest of Greece (except the Athenians) admitted their claim, we may conclude that they spent the day fighting, probably against heavy odds, although possibly not alone. The scene of their action depends on the identification of the temple, which is quite uncertain. Personally I should look for it at the monastery of the Phanero- mene near the ferry to Megara, but a situation near or north of the island of S. George is not impossible. In this episode Herodotus has unconsciously preserved a strong confirmation of that account of the battle which we have found in Aeschylus, and a strong argument against his own conception.

Diodorus is probably following Ephorus, and Ephorus had a keen sense of the intelligible, which in spite of its occasional temptations is a valuable faculty. Accordingly Diodorus brings out clearly the three essential points: the blockade of the Megarian strait, the forward movement of the Greeks out from Salamis, and the fact that it was the attempt of the Persians to enter the sound from the open sea with too many ships abreast that threw them into confusion, and so he produces the most lucid account of any of our authorities (xi. 15–19). On the other hand, this account is simply constructed out of the materials supplied by Aeschylus and Herodotus. I doubt whether in the whole narrative there is a single new item of fact. It has been built up by reflection, inference, rationalism, and conjecture. It is in some respects an admirable piece of
work, but it is exactly on a level with the work of a modern historian of the campaign—it is reasoned history, not independent historical evidence. The statement that the Egyptians furnished the squadron sent to the western strait is an inference from their apparent absence from the battle, just as the statement that the Cilicians, Pamphylians, and Lyceans came next to the Phoenicians and Cypriotes is an application of the method of residuary. Ephorus perhaps rejected the destruction of the Cilicians in Herodotus, viii. 14, and evidently reckoned the Carians with the Greek contingents. He also seems to have seen objections to the episode of the dramatic return of Aristides, for he replaces him by a Samian swimmer, whom I suspect to be a confabulation of Skylas and Hegesistratus (Hdt. ix 90–1). Diodorus is irreconcilable with Herodotus on the arrangement of the contingents for the wings of the two fleets. His reasons (if they are meant to be reasons) are arbitrary or inadequate. His tale of the losses, forty Greek ships and 200 Persian, is in itself plausible, but probably rests upon some calculation. He reckons 400 Persian ships at Mycale, and we have seen that data in Herodotus point to 600 at Salamis. At best the figures are only an estimate.

Plutarch is more likely than Diodorus to bring fresh evidence. He does add a number of details, but they are mostly of a trivial kind, and we cannot guarantee their accuracy. Is he right, for example, in shifting the exploit of Lyconedes from Artemisium to Salamis (Hdt. viii. 11, Plut. Them. 15)? or what is the value of the story of the sacrifice of the three captives, as to the occasion of which Plutarch does not seem to be quite consistent with himself (cf. Them. 13 and Arist. 9)? On the main features, however, he agrees well enough with Aeschylus. The channels and outer sea are occupied by Persian ships. The battle is fought in the sound, but at the eastern end of it, for the thick of the fighting is concentrated about Pytuliea. The Barbarians struggle on till evening (Them. 12, 15, Arist. 8). On the other hand, Plutarch probably takes his 200 ships from Ephorus, although he (prudently?) does not call them the Egyptian squadron, and seems to imagine that they did all the blockading (and none of the fighting?). His most novel contribution to the story, the statement that Themistocles waited for the sea breeze before attacking, is inconsistent with Aeschylus and Herodotus, who agree that the Greeks moved out at daybreak, and may be invented on the model of Phormio's tactics in the gulf of Corinth (Thuc. ii. 84).

Our examination of the authorities has shown us that Herodotus has been led astray at the outset by his childish misconception of the battle, but is otherwise perfectly consistent with Aeschylus, that later writers have little or nothing to add to these two, that the account of Aeschylus was generally accepted, and that it was interpreted substantially as we have explained it. But there still remains the hardest question about the battle of Salamis—why was it ever fought at all? Granted that the Persians were no longer strong enough to contain the Greek fleet at Salamis, and at the same time detach a large part of their own to effect a diversion behind the isthmus

46 On this question Ed. Meyer has some excellent remarks, Geesch. d. Att., iii. § 224.
from Argos, yet was it not their obvious policy to ignore the Greeks and
steer straight in full force for the Peloponneso? The Greeks might follow
if they pleased, but they must lose the advantage of their stronghold in the
sound, and could they venture to face the undivided Persian fleet in the
open sea? Clearly it was this danger that preoccupied the mind of Themis-
tocles: His problem was not how to get the Greeks to fight at Salamis, but
how to get the Persians to attack them there. It was with this object that
his famous message was devised. But how came the Persian leaders, whose
strategy had hitherto been irreproachably prudent and correct, to fall into
the trap? Aeschylus (Pers. 353–4, 362) can only ascribe the blunder to
divine infatuation. Herodotus in the mouths of Demaratus and Artemisia
(vii. 235; viii. 68, cf. vii. 130, viii. 136, ix. 9) echoes Greek criticism. Thucy-
dides (i. 60) suggests that Xerxes failed from his own mistakes. Was it the
prospect of annihilating the Greek fleet at a blow, and getting rid of it once
and for all, that tempted him? So we must conclude. But was it not
easier to annihilate the Greek fleet at the isthmus? What better news
could Themistocles have sent the Persian admirals than that the Greeks were
bent on running away from Salamis? By all means let them go! Does not
this reflection surely indicate that it was the second clause in Themistocles'
message that proved so tempting a bait? The Greeks were quarrelling
among themselves and a strong party of them was ready to meddle on the
first appearance of the Persian fleet. What party? Themistocles does not
leave us in doubt; he says distinctly—the Athenians! Put into plain words
his message means: Our allies have played us false. We have already lost
Attica, and now they refuse to defend our families and property in Salamis.
We have had enough of them, and are anxious to make terms with you.
And, to be candid, was there not a very large element of truth in that
message? I think that any one who ponders the internal political crisis at
Athens, of which we have already seen evidence, and compares it with the
negotiations of the next year and the intrigues of ten years before, will
admit that there was real danger of that party coming into power which was
opposed rather to Sparta than to Persia, which valued Attic farms more than
empire overseas, and municipal liberties more than national independence.
We may conjecture that both Xerxes and Themistocles had better reason
to take the message seriously than is recorded in our tradition, and that there
was a note of irony in Themistocles' voice as he dictated it, and remembering
the price he had paid for Aristides and Xanthippus, identified himself
with their policy! But the same influences, which have sharpened the
one edge of the message against the Peloponnesians, have blunted the
other in defence of Athens and the Alcmeneidae.

The battle of Salamis was not in itself a crushing defeat for Xerxes, but
its consequences were decisive of the whole campaign, for it meant that the
Persian fleet had lost the command of the sea. Xerxes had now to think of
his communications with Asia, and of the revolt which was bound to follow
in Ionia so soon as a Greek squadron showed itself on the other side of the
Aegean. The design of building a mole from Attica to Salamis, imputed to
him by the Greeks, is scarcely credible even as a pretence to mask his retreat (Hdt. viii. 97). Possibly the victors discovered some preparations for throwing a boom across one or more of the channels, and this fact was magnified in transmission. Possibly such words as ἐμφραύτων and διαζώσατι (which are used by Diodorus and Plutarch l.c.) were too literally interpreted. Possibly the story is a mere invention on the analogy of Xerxes' other violations of Nature, the bridge over the sea and the canal through the land (cf. Isocr. Paneg. 89). At all events the Persian fleet at once withdrew to watch the Asiatic coasts and the Hellespont. Xerxes left back one army-corps to garrison Ionia. Mardonius was left with another in winter quarters in Thessaly to complete the conquest of Greece next year as best he could; Artabazus with the third was told off to secure the communications in Thrace and Macedon, where there was trouble brewing.

The miseries of Xerxes' return (Aesch. Pers. 482-512, Hdt. viii. 115-7) offered a fine theme for rhetoric, of which the Greeks have made the most. But it was a leisurely and orderly retirement, and although there may have been some scarcity of provisions, the numbers at Mycale and under Artabazus next year (allowing for garrisons) sufficiently refute the tale of immense losses. The incident of the ice on the Strymon is an exaggeration which can be matched in the official story of Austerlitz.47

Themistocles, we may well believe, would have pressed his victory farther and struck at once at the Hellespont. But the Athenians were not strong enough for such an enterprise without allies, and the Peloponnesian leaders were not eager to create an empire which must inevitably become Athenian (cf. Hdt. ix. 106), while their crews were doubtless anxious about next season's crops. Themistocles was afterwards fain to claim virtue for the necessity, and so gave occasion for his enemies to blaspheme.

But although Themistocles might have made more of Salamis to the advantage of Athens, the solid gain to the Greek cause may best be estimated from the fact that in the next campaign the allies assume the offensive not only by sea but also on land. As Aeschylus puts it (Pers. 728).


J. A. R. Munro.
BRONZE-AGE VASES FROM ZAKRO.

[Plate XII]

In describing the recent excavations at Zakro (Annual of the British School at Athens, vii. p. 121 ff.) I stated that the pottery found there could not be fully published yet. Pending the resumption of its study, however, three vases of exceptional excellence, which were copied in Candi by Monsieur E. Gilliéron, may be made known. One of these (No. 1) was found in fragments in the principal house (A) of the Lower Town (ibid. p. 129 ff.), which yielded also the hoard of sealings published in the previous issue of this Journal. The precise findspot was the doorway between the rooms 3 and 5 (v. plan, ibid. p. 131), which I believe to have contained a stairway of two flights leading to an upper level or storey. These rooms were full of collapsed ruin, among which the fragments of this vase were dispersed. I offered a special reward, and had all sherds dug out of this house minutely examined; but about a third of the vase was not recovered. Part of a second vase (lip and neck) of precisely similar character came from the same rubbish. The other two vases (Nos. 2, 8) figured in the accompanying Plate (XII.) were built up from fragments found in the Ægeos (Fit I) on the western spur (ibid. p. 126) among countless sherds of Bronze-Age pottery of the best Cnossian period.

(1) This vase stands 13\frac{1}{2} in. high, and is of a pinkish-yellow clay, very pure and perfectly levigated. The buff slip has been carefully polished after the firing, which was a little unequal in operation, causing the painted decoration to vary from a pale madder red to a much duskyier tint. The slip is hard, but the pigment is not lustrous. The vase has no foot or flattened base and must have stood in a ring-rest; it is not pierced at the bottom, like the common "filler" vases. The form is now among "Mycenaean" forms, but may be traced through my vase No. 3 to a type of vessel common among "kitchen" wares of Mycenaean period. So far as I know its graceful outlines were not exactly repeated by any later potters.\footnote{Mr. R. C. Bosanquet, in alluding to this vase in his annual Report on Archaeology in Greece (J.H.S. xxi. p. 339), compared a Kefiri form lamp, Dynasty xviii. If he was thinking of the slender vase which is figured with the Kefiri tribute in the Bokhmaria tomb, the parallel is not very close, for that vase has a foot and no visible handle. The lip, neck, and upper part of the body, however, correspond to my vase well enough.}
The decorative scheme has one obvious peculiarity, viz. the realism with which part of its constituents are treated. A Mediterranean shell is here depicted in such a natural a form that there can be no doubt the vase painter had recourse to a model in nature. Hitherto we have known shells in ceramic decoration of the Mycenaean period, only in such more or less stylized and conventional treatments as are shown in Fig. 1. The algae also on this vase are presented as they live and sway in their native element. Nevertheless the scene is not such a realistic glimpse below sea as is suggested by the Flying-fish panel at Phylakopi (P.E.A. iv. Pl. 3) or the Fish fresco at Cnossos (not yet published); for the stars or suns, with rays divided by circles, which occupy the most prominent position on the vase, are purely conventional ornament. That these are stylized presentations of celestial bodies and not of sea-stars, may be assumed; for the artist, who drew the shells and algae from life, would hardly have rested content with such unreal starfishes.

Realism, however, in connection with the work of primitive artists, is a relative term, as we shall see presently. The aspiration towards it here is unmistakable, but the success is not so complete that one can be quite sure of the species or genus of the object represented. This shell is not a Muræa, but is possibly of the Pompier family. It is less like specimens of either family, however, than it is like the common triton forms of the Mediterranean.

Very few Aegean objects have been found which show anything like even this degree of realism in the treatment of marine motives. The great bulk of the pottery with marine decoration, known to us, comes from two sites, Ialysus and Mycenae; and its motives are already stylized and conventional. The same must be said of the cuttle motive on Mycenæan gold work. The main exceptions to this stylism, outside Crete, are supplied by (1) the Phylakopi Flying-fish fresco, (2) certain fine fragments of pottery with cuttle
BRONZE-AGE VASES FROM ZAKRO.

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decoration found in a streetway of the Second Town on the same site and identical in fabric, glaze, and pigment with this Zakro vase; (3) certain stone vases, e.g., from Mycenae and from Kerment in Upper Egypt, which show cuttles in low relief. It is worth notice that among this small number of naturalistic representations of marine objects, some are almost certainly of Cretan origin, and all may well be so. (1) The Flying-fish fresco is put down as the work of a Cnossian artist by all who have seen both it and the Fish fresco of Cnossos. (2) The Phylakopi cuttle sherd is question are not Melian, and are almost as certainly Cretan as the 'Kamares' sherd which have been found in numbers on the same site. (3) An Upper Egypt Mycenaean vase must be held to have come from Crete more probably than from anywhere else, in view of the intimate connection between these two countries proved by the Cnossian excavations. It has been observed already that the Tell el Amarna 'Aegean' sherd correspond as a whole much more closely to ceramic types of Cnossian provenance than to any others found in the Aegean.

In Creto itself evidences of naturalistic treatment of marine motives are beginning to show themselves as unmistakably as the evidences of that naturalistic treatment of human, animal, or vegetable motives, which have already converted several scholars to the belief that the more realistic products of high art found elsewhere in the Aegean area are of Cretan origin. We have, for example, from Cnossos a wonderful triton-shell vase in marble, the exact replica of a natural shell, and the nautilus ornament of the 'Draught-board'; a painting of fish, almost as true to life as the fish in the Punt scenes at Der el Bahari; that rude but faithfully represented cuttle-fish which is carved in relief on the 'standard weight' (B.S.A. vii. p. 42, Fig 12); many fragments of fine ceramic paintings of cuttles and algae (parts of a very fine cuttle vase were found in the Dictische Cave); and fragments of stone vases with relief decoration of cuttles. And now comes this Zakro vase.

We shall not long want, I am convinced, for more evidence on this matter. Meanwhile I put forward tentatively the suggestion that the Aegean naturalistic school of marine decoration was a Cretan, and probably in the first instance a Cnossian, school; and that it was the parent of the drier and more conventional school of Mycenae and Largus, which hitherto we have regarded as typical. In ceramics this school caused marine motives to be treated with the same skill and success with which geometric and vegetable motives were already being treated by the makers of the finer Cnossian vessels, notably those from whose splendid fragments Mr. J. H. Marshall deduced the Cretan origin of certain vases found at Vaphio.

(2) This vase stands 8 in. in height. The clay is both pinker and more

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* In a paper read before the British School at Athens in the spring of 1901, but not yet printed.

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* E.g. the Vaphio goblets, and the Mycenaean daggers blades and 'dino' vase, according to M. Edouard Potter (Études de Poïès. March 1902, p. 175) and even more objects according to
coarsely levigated than that of No. 1.; but it is pure enough. The floor of
the vase is pierced for straining, as in the case of most vases of its form. It
is of a typical Bronze-Age Cretan shape, characteristic of the Lower Town at
Zakro (v. J.S.A. vii. p. 132, Fig. 43. d.) and of the Gournia settlement, and
developed originally from the Kamares ‘hole-mouth’ vases. The metallic
appearance of the handles usually associated with this shape also speaks to a
Kamares tradition. There is nothing worthy of special remark in so much
of the decoration as was laid upon this vase before the firing. After that
process a floral design was painted in white upon the glaze. The applied
pigment was apparently not fired, glazed, or varnished, for it may now be
removed with the lightest touch of the finger.

It is the singularity and beauty of this super-decoration that makes the
vase worth special notice. The plant, represented herewith more than Egyptian,

![Diagram](image-url)

**Fig. 3.—Nymphea Caerulea Savign.**

and almost Japanese, freedom is, as eminent botanists, Professor S. H. Vines
and Dr. M. T. Masters, agree, a water-lily. The first named authority
decided at once against *Nelumbium* and also against *Nymphea Lotus L.*, on
the ground that the flowers of the latter do not project above, but rest on the
surface of the water; but in favour of *Nymphea stellata* Wild. (*N. Caerulea*
Savign.), whose blooms stand high above the surface (Fig. 2). Dr. Masters
laid stress on the same point; and their conclusion finds itself in agreement
with the contention of the author of the *Grammar of the Lotus*, who showed
conciliatory that the familiar ‘lotus’ of Egyptian designs was not
*Nelumbium speciosum* Wild. (no longer found in the lower Nile lands) or
indeed any true lotus, but *Nymphea caerulea* Savign. Professor Vines
rightly adds a protest against archaeologists' carelessness in the use of the term Lotus, which, with a sacred association, should be confined to the rarely represented Nymphaea speciosa, Wild.

This development of a Nymphaea motive in the hands of an Aegean artist is interesting. In all probability he took it originally from Egyptian art, for Nymphaea stellata does not grow in arid Crete, and probably never did. Nor were the Aegean craftsmen nearly so prone to invent motives as to adopt and modify them. The Zakro painter's impulse came from such motives as I show in Fig. 3, or that which is introduced into the western central panel of the Tell el Amarna pavement. Having got the design, he wished to refer it to something in nature, but, knowing in all probability nothing of the plant from which it had originally been derived, took some field flower, perhaps a marigold or corn-flower (Centauraea cyanus L.) as the nearest in his experience, and modified the uncozenial stiffness of his model by introducing curves into its stems and disorder into its blooms. The original Nymphaea, however, has a stiff and rigid growth; and, therefore, his Aegean instinct for naturalism has led our artist not to but away from nature. The general result is a medley of realism and convention in about the same proportions as were observed in the design of the marine painter of vase No. 1. Convention has made the Zakro painter not only introduce purely formal lilies of the ordinary 'Myriam' type, but retain sufficient characteristics of Nymphaea from his Egyptian model (e.g. the long stems, the heart-shaped leaf on the left, the conical buds, and the stiff tripartite calyx) for the identity of his model to be obvious. Realism, on the other hand, has led him to confound his hieratic model with a living model, and produce a plant form which never was on land or water, but grows in far more life-like fashion than the more faithful Egyptian representations of Nymphaea. One could hardly have a better demonstration both of the tendency which dis-
tinguished this Aegean art, especially in Crete, from the elder and parent art of Egypt, and of the limitations of a derived art from which it was by no means free.

(3) This vase stands, as restored, 7½ in. in height. In material and fabric it is much nearer No. 1, than No. 2. The clay is levigated equally finely, but of a pinker hue. The body of the vase is overlaid with a yellow slip; but the neck is plastered with the thick creamy wash, rendered familiar by some of the finer Kamares-vases (cf. J.H.S. xxi. Plate vi. a). This wash alone would indicate the Cretan origin of the vase. The body decoration of conventional white lilies on a red ground is painted on the upper part only and in large pear-shaped lozenges—a disposition not uncommon on fine vases of the good Cnossian period in Crete. The vase has no further peculiarity worth discussion. I publish it because of the excellence of workmanship and design, which raises it above its class.

D. G. Hogarth.
FIRST REPORT OF A JOURNEY IN PISIDIA, LYCAONIA, AND PAMPHYLIA.

PART II.

I am availing myself of the kindness of several friends and especially of Professor Ramsay's to make the following additions or corrections in Part I. In the first inscription (p. 97), line 7, the Τ should have been marked doubtful; Professor Ramsay conjectures ἀδπάβολεν. Line 8 should read ΝΟΣ and not ΜΟΣ. Line 10 should be deleted and the remaining lines renumbered. In line 13 (formerly 14), the Α may be an Ν. In the second inscription, line 6, the first letter had the shape of a Ω rather than a Τ. Professor Ramsay tells me also that, according to his drawing, the outside walls of the three shorter arms of the chapel (p. 96) were less square than I have represented them.

With reference to No. 10, it is worth while to note that the word βασιλικ shows in a Coptic ostracum recently published by Mr. W. E. Crum (Coptic Ostraca, No. 209, cf. p. 58 of the Commentary). From what we know of the title, we should be inclined to say that this 'Eustathius of Hermouthis' (cf. also op. cit. No. 366) there mentioned had invoked the aid of the civil power and that 'Paul the vicarius' was a civil officer (cf. Crum op. cit. p. xviii.). The possibility, however, that Paul was an officer of the monastery is not excluded, and there are several considerations which would make such an interpretation suitable. The ostracum is written, for instance, by 'the poor in the prison' of a monastery (that of Phoebammon, in Hermouthis), and is addressed apparently to a bishop. Paul had cast them into prison at Eustathius' instance.

Besides the inscriptions from Yonualar published in the first part, we found there a stone (probably uninscribed) with a large Latin cross upon it. This may be the tomb of some Latin pilgrim; or, as the simple cross was often used by Latin pilgrims as their mark, it may be used as such here (cf. Langlois in Rev. Archéol. xiii. p. 489). The examples, however, given in our Nos. 43 and 118 prove that in earlier times no stress can be laid on the distinction in shape between Greek and Latin crosses. The present stone, which is not unlike No. 43, is probably quite a late one; perhaps as late as the Crusades.

On p. 106, Nos. 13 and 15 belong to Yenidje; No. 14 to Toldja; Nos. 39, 40 and (probably) 42 to Konia. In No. 39 the restorations Nεθλεν and
Melpon are uncertain (read probably Melpos simply): in No. 40, the word αὐτῷ in the restoration should be deleted.

Before passing on to fresh inscriptions, I wish again to thank Professor Ramsay for the very great assistance he has given me in their publication. I am the more indebted to him as he has kindly allowed me to publish some of the inscriptions collected by him in his recent journey from Tarsus to Smyrna and Konia and to use some of its results.

B.—continued

Konia and neighbourhood (Second Collection).

No. 60.—W.M.R.

ΚΕΡΕΝΝΙΟΝΑ ΗΣΙΑΝ
ΙΜΟΝ-ΠΕΡΕΝΙΟΥ

The restoration may be Ἀ[γ]ρησία[α κατὰ Ὀμής]μον. In C.I.G. 3204 (Smyrna) we find the name Α[ρέφλων(ου) Σεπτίμιοι] Ηλιάδορον; he was also, like some other prominent athletes, a citizen of Antioch. The name is not unknown to Iconium, for it is found in C.I.G. 4001 on the tomb of a woman Ἐρενία Κασία. Her husband's name Α[λ]ιός (an evident mistake of the copyist for Η. Αλίος) can be only partially recovered. Ἐρενίος is the Latin Herennius or Erennius, the name of a Roman plebeian gens. The name occurs six times in all in the C.I.G. (Asia Minor) and once in the corresponding part of the C.I.E.

No. 61.—In the Museum. W.M.R.

ΘΟΥΘΟΥΣΕ
ΣΙΛΑΝΟΥ
ΚΑΙΣΩΝΑ
ΤΙΑΜΕΝΕ
ΔΗΜΟΥ
ΔΟΜΗΗ
ΘΥΓΑΤΡΙ
ΜΝΗΜΗΗΗ
ΧΑΡΙΝ

The name Θουθούςε is given in Sterrett Ε. J. No. 177 (Tacharak-Serai near Antioch). Cf. Θουθούςε (J.H.S. 1897, pp. 289, 295), a common name in Lycia and South-east Phrygia.

1 All inscriptions given in this collection were found at Konia.
FIRST REPORT OF A JOURNEY IN PISIDIA, ETC. 344

No. 62.—In the Museum, W.M.R.

| ΜΙ | Λ | Μι[χαή]λ |
| ΛΑ | C | λα[τιπό]κ |
| ΑΝ | ΠΑ | ἀν[ἐστη]σον |
| 5 | ΤΗΓΛΥΚΥΤΑ | τῇ γλυκυτα- |
| ΤΗΜΟΥΣΥΜ | τη μου συμ- |
| ΒΙΩΑΥΡΔΟ | βλω Λύρηλας Δό- |
| ΜΝΗ | ΜΝΗ | μνη μνη- |
| ΜΗΧΑΡΙΝ | μης χαριν |

If the conjecture in line 2 is right, this inscription is Jewish or Christian. For Μιχαήλ compare No. 122.

No. 63.—W.M.R.

| ΑΥΡ | ΧΙΑΣ | Αὐρήλια Διόμην |
| ΑΥΡΗΛΙΩΙ | Αὐρηλίῳ [Νέωρ-] |
| ΩΓΛΥΚΥΤΑΤ | ὦ γλυκυτατὶ μου |
| ΑΝΔΡΙΚΕΕΜΑΥΤΗ | ἀνδρὶ κὲ ἐμαυτῇ |
| ΖΩΚΑΝΕΝΕΣΤΗΣ | ζώοσα ἀνέστησα |
| ΕΝΕΚΕΝΜΝΗΜΗΣ | ἐνεκεν μνήμης |
| ΧΑΡΙΝ | χάριν |

For ἐνεκεν μνήμης χάριν, cf. No. 100. The gap in l. 2 is too small to allow of the insertion of the article except with a very short personal name, such as Τά.

No. 64.—On a fragment of entablature, more than five feet long.

W.M.R.

ΜΕΛΕΑΓΡΟΣΔΙΟΜΗΔΟΥΣΑΡΧΙΕΡΕΥΣΚΑΤΑΚΕΛΕΥΣΙΝΤΗΣ
ΚΥΡΙΑΚΜΗΤΡΙΖΙΣΙΜΜΗΝΗΕΥΧΗΝ

Мелеагрος Διомήδου аρχιерея ката κέлеуσιν τῆς
κυρίας ΜητρίΖιζιμινίη ευχήν.

Professor Ramsay’s explanation of Zizimene as a dialectic form of Didymene or Didymene (Ath. Mitth. xiii. 1888, p. 237, No. 9) has been accepted by Kretschmer (Einleitung, p. 196), and by J. G. C. Anderson (J.H.S. 1899, p. 280). The spelling Ζιζιμινή is supported by the inscription given by the latter. This was apparently the form usual at Ieonium: the more correct form Zizimene was used at Laodicea further north,
No. 65.—W.M.R.

\[\text{anismia}\]
\[\text{kaiajacry}
\[\text{zizimmi}

ο δείνα κατά κειλεσίν τῆς θείας Μητρὶ Ζαξιμ[υρή

Professor Ramsay notes that the letter at the beginning of line 2 is not ζ, as the stone has no mark immediately below the part of it which is left; otherwise we should restore ἀνάστησα.

No. 65α.—Copy shown to W.M.R., 1902.

МАКИСПА
ΚΑΙΔΑΣΚΓΥ
ΖΙΖИММΗ

Маи<α>ς Πα[σικρατους]
αι [Δ]ιαν γυν[ή] αὐτοῦ Μητρὶ
Ζαξιμ[υρή] εὐχήν

A bad copy of an inscription, said to have been found at a village, twelve hours towards the north of Kouia. In the hope of receiving money as a guide, the owner refused to tell the name of the village.

No. 66.—In front of a mosque. W.M.R.

ΔΟΜΝΟΣ
ΔΙΟΚΚΑΙΠ
ΛΙΩΝΥΙΟΣ
ΤΟΥΕΛΤΟΙΙ
ΖΩΣΙ

Δόμνος [Φλάβιος] τό [ολικών] νίος καὶ τὸ έαντος
ζωσί.

Dr. Diamantides notes the letters ΦΑΛΑ on the right of line 1: the stone has been broken since he copied it. This inscription is given in Sterrett (E.J., No. 228).

No. 67.—On a round column before a mosque. W.M.R.

ΜΕΝΕΛΑΟΣΚΙ
ΕΡΜΟΓΕΝΗΣΚΑ
ΜΕΝΗΔΗΜΟΣ
ΕΡΜΟΓΕΝΗΣΓ
ΤΡΙΚΑΙΒΑΤΗΜΗ
ΤΡΙΖΟΝΤΕΚΙ
ΦΡΟΝΩΝΤΕΜΝΗ
ΜΗ∆ΕΝΕΚΕΝ

Μενέλαος κε
Ερμογένης καὶ
Μενηδήμος
Ερμογενῆς τῷ παρατρί καὶ Βά τῇ μη-
τρὶ ξωτες κε
φρονωντες (το) μη-
νης δυνατον.
No. 68.—W.M.R.

ΙΡΝΟΟΟΟC
ΣΥΚΑΑΑΑ
ΥΓΑΤΙ
ΧΑΡΙ

Δόπημος [Ἀντω-
νίου Κατανική
θυματίῳ μνή-
μη] χαρίν

The names (except Pothos) are restored merely exempli gratiā.

No. 69.—W.M.R.

ΝΤΩΚΥΝΑΙΚΙΚΤΕΝΟΙΚ

Καλυτυρον κε γυναῖκε κε σενοικ.

Engraved in good letters on the right half of a large pediment.

No. 70.—In the street leading to the quarter or suburb Seidiler. W.M.R., H.S.C., G.A.W.

//ΤΙΛΕΝ
///ΝΑΝΔΡΑΑΥ
///ΣΤΑΙΝΙΝΥ
///ΟΙΩΝΗΛ

ἡ δεινα ἁνεκτητην
τοιω ανδρα αυ-
της Τάουρ σιν
καὶ των νιον
καὶ εγχρά

The stone is complete to the right. Professor Ramsay notes that in the last line between O and ζ the reading is not ζ simply, but τζ or κζ or some letter larger than ι. The dative was already passing out of use. The name Tabis or Tabea was common in the district: examples occur in the sequel. It is undoubtedly for Tavis or Tavis, and would have been spelt, according to the usual rule, Τάους before about A.D. 150. It is related to the city name Τάους or Τάστου, which was not a Celtic but an Anatolian word, as is shown by the epithet Ζεὺς Ταύρος (for Ταύρος). It may be regarded as probable that the Lycaonian name Τος is a shortened form of Tavis, just as the Lycaonian Ba is of Banba, Bauba, Vava or Wawa (Ramsay, Cities and Bishops, I. No. 137 and Add. 25; cf. however Kretschmer op. cit. p. 334).

No. 71.—In the Seidiler Cemetery. W.M.R., H.S.C., G.A.W.

ΚΡΙΜΑΤΡ
ΩΝΑΜΗ
ΘΡΟΛΥΜ
ΠΙΟΥΚΑΙ
ΚΑΛΠΑΘΗ
ΝΑΙΑΗΓΥΝ
ΑΝΕΣΤΧΑ
ΜΕΝΜΗΗΗ
ΧΑΡΙΝ

Κρίστα! Σι (λία?) Ματρ-
δινα μή-
τηρ Ολυμ-
πίου και
Καλπουρνία' Ἀθη-
ναια ὑ γυνη
ἀναστῆσα-
μεν μημης
χαρίν.
I am by no means confident of the restoration of the first line. The abbreviation marks show that the names were three in number. Crispina and Silvina may be right.

No. 72.—W.M.R.

ΔΙΩΝΑΟΙΚΑ
ΟΣΤΩΛΕΑΤΟΥ...
ΦΙΛΟΣΤΟΡΓΙΑΣΕΝΕ

No. 73.—W.M.R.

ΙΑΩΟΡΟΓΟΣΕΑΥΤΩ
ΑΙΣΧΑΛΟΥΙΑΠΟΥΒΙΑ
ΜΟΥΚΙΛΑΙΓΥΝΑΙΚΙΑΥ
ΤΟΥΚΑΙΤΕΚΝΟΙΚΙΑΙΕΓ
ΓΟΝΟΙΚΤΗΛΑΡΝΑΚΑ
ΣΥΝΤ

Perhaps the restoration in l. 1 should be Π. Αλλος.

No. 74.—W.M.R., H.S.C.

Λεω-κή έκοσμησεν τῶν ἔργων αὐτοῦ Ἀντωνίου καὶ τὴν ἐγκρίμαν αὐτοῦ Ἀντωνίαν.

No. 75.—In the wall of a street. W.M.R.

ΟΥΑΝΓΔΑΜΟ ΗΜΕ
ΝΟΔΗΜΟΥΣΝΤΟΙΣ
ΑΔΕΛΦΟΙΣΜΕΝΕΙΗ
ΩΤΩΠΑΤΡΙΚΑΙΝΙΝΕΙ
ΤΩΝΗΜΠΡΙΚΑΙΑΝ
ΝΑΘΗΑΝΑΛΑΣΕΦΗ
ΜΗΣΕΝΕΚΕΝ

Οδηγεῖ[α]μης Με-κεδήμου συν τοῖς ἀδελφοῖς Μεκεδή-μοῖς τῷ πατρί καὶ Νινει
This is O.I.G. 4003b, which is given from Hamilton's copy. His reading of the first line is ΟΥΑΝΓΑΛΑΛΟΥ ΗΣΜΕ. The restoration in the Corpus is Οὐα[λ]ίξ[έρος] Παλ... Hamilton reads the Μ at the beginning of line 4 and ΤΗ ΕΑΥ at the beginning of line 5. He also reads ΕΛΑΥΤΩΝ in line 6, and ΜΝΗΜΗΣ ΧΑΡΙΝ in line 7. For Οὐανγεδάμων (or Οὐανγεδαμών, for the space in line 1 may perhaps have contained a letter), compare Οὐραμώς (Lycia), Οὐραμώς, and Οὐανγεδάμως. Sterrett E.J. 206. Compare also Kretzschmer (op. cit. p. 365 ff.).

In the inscription of Sterrett's, which was found at Konia and is now in the Museum, the restoration of Α should be Τροκώμας καὶ Οὐανγεδάμως τά θερετά, implying that two foundling children joined in erecting the tomb. The termination -βασιν or -βασιου is Isaurian, and Professor Ramsay believes the stone comes from the north of Isauria, though it was in Konia as early as 1882. This type of sepulchral monument is certainly characteristic of the Boz-Kir district (Isauria and the surrounding country), especially on the north side and east. In Β in line 1 the reading is Κ not ΚΕ; in line 2 there is a space of three letters after ΑΝΔΡΟΣ and before ΛΟΝ.

No. 76.—W.M.R.

ΣΕΛΕΥΚΟΣ ΠΑΤΡ
ΗΡΑΛΑΚΑΙΜΗΤ
ΚΑΛΛΙ ΠΗΝΑΕΣ
ΗΣΑΤ///ΣΠΘΑΙ///
ΜΝΗ ΧΑΡΙΝ

Σελευκος πατρι
Ηραλακαιμητ
Καλλι πηναες
Ησατ///σπθαι///
Μνη χαριν

No. 77.—A tablet on a large bomos. W.M.R.

ΤΙΤΟΣ ΟΥΡΟΣ ΟΥ
ΚΑΙΝΟΘΕΣΤ
ΓΥΝΕΚΙ

Τίτος Οὐρος οὐ[ετρά
νός, έαυτῷ] καὶ Άνθεστ[ηρικ αὐ]
έαυτοι] γυνεκί.

The word έαυτῷ was omitted by the engraver.

No. 78.—At Meinam W.M.R.

ΟΥΑΛΕΡΙΟΣ
ΚΑΛΛΙΣΤΕΙΝ Ε
ΓΥΝΕΚΙΑΛΟΤΟΥΔΟ
ΝΑΚΟΥΓΑΤΡΙ
ΚΛΗΜΕΝΤΕΙΝΑ

Οὐαλερίος
Καλλιστεινε\nγυνεκι αυτοι Δι
μφρ κε θυματρι
κλημεντεινα.

This is given by Sterrett (E.J. 219) after Dr. Diamantides. Our transcription differs considerably.
No. 79.—On a column from Mendian Eurenius. W.M.R.

\[\lambda\alpha\]
\[\thetaε\varepsilon(\upsilon)\delta\alpha\]
\[\piουβα\]
\[\thetaουβα\]
\[\deltaε\varepsilon\thetaε\varepsilon\]
\[\piουβα\]
\[\thetaουβα\]
\[\nuε\varepsilon\thetaε\varepsilon\]
\[\nuε\varepsilon\thetaε\varepsilon\]
\[\nuε\varepsilon\thetaε\varepsilon\]
\[\nuε\varepsilon\thetaε\varepsilon\]

The woman's name may have been Ησδλα. As the name of the woman's father, Publius, is given, this restoration must supersede that of Sarre (Archäolog.-Engr. Mitth. xix. 1, Wien 1896, p. 31), who reads [πα]τηρ αυτής after Ναρχος in the last line. Professor Ramsay notes that there is no trace of the T (see Sarre loc. cit.) in line 5; there is no need, therefore, for the conjecture \[θερεπ\]τηρ, which he made an reading Sarre's copy and before seeing the stone.

No. 80.—In the garden of an Armenian's house. W.M.R.

\[\sigmaυλ\]
\[\alpha\varepsilon\]
\[\kappa\mu\]
\[\mu\]
\[\pi\]
\[\alpha\]
\[\lambda\]
\[\lambda\]
\[\lambda\]
\[\lambda\]

This inscription is given by Sterrett (J.J. p. 208, No. 225) from the copy of Dr. Diamantides. It is engraved on the flat surface under the body between the fore and hind legs of a lion, which once formed the top of a small sepulchral monument. This form of monument is common in Pisidia and Isauria. For Mannis cf. Ramsay, B.C.H. 1888, p. 315.

No. 81.—W.M.R.

\[\alpha\pi\]
\[\alpha\pi\]

The name occurs in U.T. 3962 (Apana Cibotus).

No. 82.—W.M.R.

\[\alpha\]
\[\alpha\]
\[\alpha\]
\[\alpha\]
\[\alpha\]
\[\alpha\]
\[\alpha\]
\[\alpha\]
\[\alpha\]
\[\alpha\]

This (like the other inscriptions) is repeated here on account of the differences between our copies and the published texts.
FIRST REPORT OF A JOURNEY IN PISIDIA, ETC.

ΔΕΠΕΙΣΙ Γε ἐπεισε[πεινήκαν σώμα· ἐν δε
ΑΝΕΠΕΙΣΕ ἀν ἐπεισε[νύχιῃ ἡ ἀδικήσῃ, δώσει
ΤΩΦΙΣΚΩ 10 τῷ φίσκῳ [ἡμαρίᾳ διόσχυζε (ι)
PENTAKOS τεντακόσια καὶ εἶξε Μήνα κε-
ΧΟΛΩΜΕΝΟ χολωμένον.[

The restoration in lines 11 and 12 may be θεους κεχολωμενους.

No. 83.—In a house. W.M.R.

ΜΕΝΕΜΑΧΟΣ Менемахос
ΠΑΤΡΟΚΛΕΟΥΣ Πатроклеонς
ΓΕΣΙΝΙΑΣΙΟΙ

Line 3 is so much cut as to be undecipherable. The restoration may be Τατειν Πατροκλέους τῇ ἀδελφῇ μ. χ.

No. 84.—In Armenian School-house garden. W.M.R.

Ἡ Αὐρη[λιός Π]αύλο-
ε Πατ[τὰ τῷ] ἀδελ-
τῷ μ[ου] γ[υ]κυτᾶ-
τῳ Πα[ντὶ] φά
5 σοῦ τῇ [ἀδελ]φῃ
μου [Μαρκο]λύχη
ἀνε[στὶα]μεν
μη[σ]ής χάριν

This inscription is Christian and probably of a later date than 350. The restoration in line 2 may be Πατ[τά τῷ] or Πατ[τύλιον τῷ], if there be room for a longer restoration.

No. 85.—In a street on the way to the American Mission near a fountain. W.M.R., H.S.C., G.A.W.

ἈΦΟΝΟΚΑΣ ων
ΝΥΜΦΩΝ ΧΟΡΟC
ΕΚΡΑΜΕΝ ΑΚΤΥ

Λαβθονος αε[ν]ιε
νύμφων χορός
ἐδραμεν ἀστυ

The stone is built in the wall upside down. The letters are of a late type. There is a hole in the stone after the ninth letter of the first line.

No. 86.—At Meiram, beside a bridge. W.M.R., H.S.C., G.A.W.

φΔς
M + ALLIVS s.i
PALATIN + ΔιΚΗΣ]
S F 0

D (is) [M(anibus)]
M(arius) Allius, M(arii) [f(ilius)],
Palatina (tribu),
[p(ecunia)] s(uae) f(asciendum) c(uravit).

After the name of the tribe would follow the cognomen.
On the lower part of the same stone are the letters: lines 2 and 3 are complete on left.

AI
LIST
LI'

No. 87.—W.M.R.

AV...VM
LE...Vt
PR...PR

Au[iidi]um
leg[atum eius]
pr[io]. pr[aetore]

The C.I.L. Part III. mentions two men of this name, C. Avidius Nigrinus (C.I.L. Part III. 567) and Avidius Quietus (355a). The latter was legatus Augusti pro praetore. He is mentioned by the younger Pliny (Ep. vi. 29, xx. 13, 15). He was governor of Galatia in Trajan's reign, to which date this inscription must also belong.

No. 88.—In the old wall of the city. W.M.R., 1882.

ΟΥΕΣΤΙΝΤΟΣΧΜΑΤΟΥΤΟΕ
ΤΕΩΣΟΡΟΘΟΔΟΣΟΥΚΕΘΟΥΟΥΧΡ
ΤΗΣΟΣΙΟΥΔΙΑΚΟΝΟΚΑΙΤΟΥΓΡ
ΘΟΛΙΚΗΣΚΛΗΡΙΑΚ//ΤΑΣΘ
ΙΕΣΥΕΣΘΕΙΣΙΟΥΘΕΟΥΔΙ
ΟΥΤΟΚΕΤΟ//ΜΝΗΜΙΟΝΕΝ
ΣΚΕΥΑΣΕΝΚΈΘΕΙ
ΤΙΤΛΟΝΕΥΠΟΙΗ
ΡΑΖΕΝΕΝΕΚΕΝ
ΠΙΝΟ

Εὐγενί([])αν ἐστιν τὸ αἴμα τούτο ἐκ τῆς πίστεως ὀρθοδόξου καὶ ἰδίου χριστοῦ προσκυνέων, ὕπο ποιμενικοῦ λιτουργοῦ τῆς καθολικῆς ἐκκλησίας καὶ τῆς τῆς Ιουλίας ἐκκλησίας. Καί ἄρα εὐγενεῖται ἐπὶ τούτου διὰ τούτο ] οὕτως καὶ τὸ μητέρων ἔργο τα ἑαυτῷ κατεσκέπασε καὶ τῇ ἑαυτοῦ συμβορίᾳ ἐπιτλον εὐποίητον ἑπεκάραζεν έλεειν
εὐνοιας καὶ μονᾷ καὶ χαρίν

The inscription is complete at the top, and the right side (except l. 1) and the bottom, but it is broken on the left. This is Starrett E.J. No. 200. The conjecture Εὐγενίων is supported by the εὐγενεῖσθης of line 5.
FIRST REPORT OF A JOURNEY IN PISIDIA, ETC.* 349

No. 90.—On a column at a fountain: letters worn. W.M.R.

ΓΑΛΕΡΙΟΦΡΟΝΩΝ
ΘΗΜΑΡΚΟΥΛΑΗ
ΕΙΩΜΕΝΩΝΦΡΟΝΩΝ
ΤΟΙ ΤΑΦΟΝ ΑΙΤΟΝΕΠΙ
ΒΟΛΑΝΕΧΕΙΝ
ΔΕΕΣΟΥΛΙ
ΕΙΝΑΛΟΥ
ΛΟΜΑΙΣΕ
ΠΡΟΣΟΔ
ΟΝ ΞΤΑ
ΕΚΝΟ

Οικλέριος Φρόνις τον Φιλίτη Μαρσούλη θείω μεν ζων φρονίων τού τάφον [κ]αι τον περί- 5 Βολον ἔχειν δε ξινοσία- ν δετίι διού- λομαι δε προσόδ- 10 ον [μ]ετά τέκτων

The lines seem complete on right, top and bottom. The provision in l. 5-7 is common, but ungrammatically expressed. The formula θείω is more usually expressed by καθιέρωσα or some other similar word (cf. No. 115, ἰπτιέρωσα). In line 1, ΝΝΩΝ was on the stone apparently, but perhaps Ν and Τ were ligatured; in line 2 part of the Λ remains—perhaps τῇ φιλαντή. This is given by Sterrett (E.J. No. 248).

On pp. 188–222 (Nos. 191–251) of his Epigraphical Journey, under the head Κοινα, Professor Sterrett gives a collection of sixty inscriptions, either

* There is no No. 203 in Sterrett.
found and copied by himself or published from the copy of Dr. Diamantides. It will illustrate the vicissitudes of inscriptions to say that of this considerable number we failed, in spite of many efforts and the offer of large rewards, to find thirty-five. The lost inscriptions are Nos. 193, 194, 195, 197, 198, 201, 202, 203, 204, 207, 208, 212, 213, 214, 215, 220, 221, 222, 224, 226, 227, 230, 231, 232, 233, 234, 235, 237, 239, 240, 241, 242, 247, 249, 250 and 251. Nos. 197 and 203, however, were found by Professor Ramsay in 1902, No. 200 in 1882, and No. 208 in 1891. It is just possible, moreover, that two or three of this number, taken from the copies of Dr. Diamantides, may be exceedingly bad and fragmentary copies of inscriptions which we have seen. On the other hand, it should be noted that of the remaining twenty-five, ten do not belong to Konia at all: Nos. 202, 216, and 217 are from Ladik; 209, 210 from a bridge on the road to Karaman; 229 from Sille; 238 from Ak Tcheshme; of Nos. 218, 243, and 245 the provenance is doubtful. No. 218 does not come from Konia, and Nos. 243 and 245 were copied from a book. I may add that of the inscriptions given in the Corpus we found hardly any. To compensate, however, this loss, we found a large number of inscriptions which are given neither by Dr. Diamantides nor by Professor Sterrett. If, therefore, inscriptions are found and soon used up, there is always good hope of finding new texts in the best known cities: οἰς τερ φύλλων γεννή, τοιώδε καὶ έπιγραμματός.

Returning to Professor Sterrett's collection, the following corrections, which seem obviously necessary, may be added with regard to the inscriptions which we could not find.


St. No. 202. Read Τατάδη and Δωδώνη, where η is used with the value i in the dative of the female names Tatas and Dodos (more commonly Doudas).


St. No. 213. Read [....]ος κα[τ] Αθήν[ας] ε[ν] Βασιλείας οἰκονομή αύτοῦ. Οἰκογενεία is here used much in the same sense as the more common θερμότατος, and the nominative plural is falsely spelt. At the end, perhaps, Βεφήθω τε ά[ι] Δα[δέκας γνωρίς αύτοῦ].

St. No. 214. Read μονάδον for Μονάδος, and Ποι[λάκιον] in line 8. Μονάδος, however, was a woman's name in Lycaonia, and Μόνα (genitive of Μόνας) may be right here.

St. No. 215. See above p. 119.

St. No. 218. The provenance of the stone is doubtful; not from Konia.

St. No. 221. Read Ουλπίας κα[τ] Ου[λπιούς ιατρόος.

St. No. 222. After ΑΥΡΗ follows i as mark of abbreviation.

St. No. 224. Read perhaps [....]ος κα[τ] Τάραξας το[ύ]ς: the physician's inscriptions were often badly copied.


St. No. 229. Published by Prof. F. Cumont in the Lycaen. Zts. iv. p. 99; he assigns it to 1297 A.D.

κόψας ἄρτος ἔστησεν: it is published by MM. Radet and Paris (B. C. H. 1886 p. 505), who give no restoration, but a better copy than Sterrett. For ἰδ[εν], ἔστησεν, a Pisido-Iassian formula, cf. Sterrett.

St. No. 237. Read ἵππος δὲ τις τάς [στρα]ταξικής καὶ ἄνδρα τῶν Ἑλατης ἔργον ἑλικόν ὑμοῦ, where ἔλατης is evidently intended according to a common legal formula. Ἐλατης is merely exemplified, and Ἐλατησ ἐστι perhaps more probable.

As to those which have been seen, the following notes are required:

St. No. 191. Read πεντακιεῖλος not πεντακισχεῖλος.
St. No. 192. See above p. 124, No. 56.
St. No. 196. Correct: a few letters are now broken. Onesimus was a slave of Caesar.
St. No. 199. Correct.
St. No. 200. See above, p. 348, No. 88.
St. No. 208. Seen in 1902; Read Περσείς (i.e. Persis, the wife of Menas). The inscription is one side of a small altar, on which is also represented a horseman galloping to the left, bearing a trident. The present Greeks believe that St. Menas is here represented.
St. No. 206. See above, p. 124, and p. 345.
St. No. 208. Seen in 1891 and 1902. Correct, even to the reading προσβότερος.
St. No. 211. Correct: but it is doubtful if any letter was lost at the end of line 10. έχοντο Μήνα is possible in Phrygian Greek; cf. Ramsay, Philologus, 1889, p. 544 and above No. 42.

St. Nos. 216, 217. Belong to Ladik; they are engraved side by side on one stone and are published by Professor Ramsay in Athen. Mitth. xiii. (1888) p. 271 f. In No. 216 and No. 217 respectively the readings Γαίες and Ὄρεστην (not Ὄρεστ[ες]) are clear on the stone.

St. No. 210. See above, p. 345, No. 78.
St. No. 223. See above, p. 342, No. 66.
St. No. 225. See above, p. 346, No. 80.
St. No. 228. Correct in transcription: read ΘΕΩΝ in line 3.
St. No. 236. See above, p. 349, No. 59.
St. No. 244. Seen but not copied. The date is 1733 A.D.
St. No. 246. See above, p. 125, No. 54.
St. No. 248. See above, p. 349, No. 90.

Konia: from the Collection of Dr. Diamantides.

The following inscriptions were copied by M. Sava Diamantides, government physician in Konia, where he has resided for many years. He has

* I regret to learn from Professor Ramsay that he was murdered in his bed in his own house at Konia during the winter of 1901-2.
kindly allowed us to publish them. We did not think it necessary to give the epigraphic text. We print them, therefore, from his copies in transcription only, though we have tacitly introduced into them many obvious corrections. Uncials are employed where the restoration is uncertain. Many other inscriptions contained in his note-book have been copied by us from the stones themselves, often without any knowledge on our part of the existence of his copy. Wherever any indication of locality is forthcoming, we have given it; otherwise, the inscription may come from anywhere in the Vilage of Konia, to the most distant parts of which his journeys extended. In the case, however, of all the inscriptions which we give here, record had been lost of the exact spot in which they were to be found, and we were unable to examine the originals for ourselves.

No. 91.—Στέφανος Δείω [μ]ουφ ἀνέστησεν μ(νήμης) χ(άρω).
The name Δείω is found at Laodicea Combusta and Ancya.

No. 92.—Κονία (?).

No. 93.—Κονία (Kars-Tehigan).
Σοῦδους | Μεριμά[χαν και Χρο[νία Διομή]βει νωρ [μ(νήμης)]
χ(άρω).

For Σοῦδους, cf. No. 61.

No. 94.—Κονία (Meiram).
Τιμάθεος *Αστάλων Δορυμαίους και *Λ[ινα] γυνή?
κατοί εαυτοίς ξόντες μ(νήμης) χ(άρω).

No. 95.—Κονία.
Ἄρης] Εὐσέβιος *Τλασ κέ
Φλά(ους) Κυριακὸς Κ ἀνεστή-
σαμεν τῷ γλαυκώτατο [πατρί (?)
Εὐσέβιο καὶ τῇ μητρί
Εὐβλε π(νήμης) χ(άρω).

This must be identical with C.I.G. 3900 l, which gives a better trans-
scription, and with Ramsay, Ath. Mitth. 1888, p. 260, No. 82. In that case it belongs to Laodicea Combusta. The name Κυριακὸς would imply Christian

No. 96.—Φλασιω 'Αδαμάντιος α-
πό προτεκτόρων καὶ
'Ησύχιος Κέ 'Αρόντιος [κέ Τι-
ηθ[γ]ορείος 'Ολομπείου Ὀκ-
καὶ ἤπειρος Ἀρόντιος [κέ Τις
γλαυκώτατος ἦμῶν γονεῖ-
σων (!) ΑΡΩΝΟΛΚΗΕΙΩ καὶ τῇ
γλαυκώτητι ἦμῶν μητρὶ Δώμη
μ(νήμης) χ(άρω) [κέ Δωσιβίο. [Σα-
10 λαοεία Καλεστίλλα.
At the top of the inscription is the six-point star. The name given in uncial in line 7 is the name of the father. Της γαλ. ει. μητρι is an unnecessary repetition, being involved in γοβεσθαν (=γοβεσθαυ). Perhaps we may conjecture with the aid of lines 3 and 4 Άρωτιος (or ΄Αρωτιος) Ώλιομεσις for the father's name. The following points in the epigraphic text should be noted: line 1 αεω, ΑΕΙΟΙ; line 3 κε Αρ, ΚΑΡ; line 4 μη[ν], ΒΙΤ. The inscription is Christian. The restoration in line 1 may be Φωλομος (Εινουμος); in line 10 Βαλεντιλα (Valcuntilla). For πρωτικτόρων cf. Van Herwerden, Lexicon Graecum suppletorum et dialecticum, p. 709, and Bury, op. cit. ii. 557.

It is unfortunate that Dr. Diamantides had no note or memory of where he found this inscription. It contains the ethnic Οκρνος. The same ethnic occurs in an inscription on a small altar brought by him to Konia from Ak-Sheber (Philomelion). This little altar has on one side a radiated bust (see above, p. 112) and on another a defaced bust above a garland, with an inscription. The inscription alone (without transcription) is published by Professor Sterrett (E.J. No. 155). As his copy differs very much from ours, I give it here.

///NAPO///

ΟΧΗΝΟΣ

Bust

ΔΕΙΖΕΜΕΙΑΣΤΗ

ΕΣΧΗΝ

The copy is by Professor Ramsay, who notes that the letters are very faint and worn, and several are uncertain. He adds: 'In line 1, I hesitated much between Α and Λ; Sterrett has Α. There may be a letter lost at the beginning of line 2; but No. 96 defends Οκρνος simply. In line 3, Sterrett has ΔΕΙΖΕΜΕΤΑΕΙΝ, and he may be right about Σ for Σ; it is quite impossible now to say whether the letter was Σ or Γ or Τ. But with his copy before me, I preferred hesitatingly ΕΣΘ to ΕΙΝ: Σ especially was very doubtful.'

The transcription is perhaps [ΗΠ]Η[α]ρο[ς] or perhaps [ΜΕ]ρο[ς] or [ΑΛΕΞ]αρ[ος] Οκρνος Δει Ζεμιαστη εςχιν. Oka was a village somewhere in the region of Philomelion, and doubtless on the south or east side. The travels of Dr. Diamantides did not extend north or west of that city. There was another Oka in the Hellespont district (cf. Hist. Geography, p. 154).

No. 97.—Konia.

Π ειθα κατ'ακτινο δενπρακτος | Δομεστικος Λακιαρος
ο κιριο της Αυρος την άξιαν αύτου ο δε έπιλεψεν
μμορφ τη αυτου συνβου τι άθλη επιστρη[δ].

The last three letters are 1AI, αυτου in line 2 represents ΑΝΤΟΥ. The inscription is Christian, and later than Constantine. For δομεστικος, cf. Mommsen, Ephemeris Epigraphica, v. p. 121 sqq. and Bury's edition of the H.S.—Vol. XXII.
Decline and Fall of the Roman Empire, ii, p. 557. For lances see C.I.G. 4004, and for 

No. 98.—Konia (Α.)

Πεσολιανός . . . . κατόσ-
κεύασεν τὴν σορον ἑαυτῷ καὶ
τῇ ἐλκυστάτῃ μητρὶ
ἐκ τῶν ἢδον. ὡς δ' εἶν
ἐπιβιάσατε, δώσει
θεῷ λόγον.

Probably Christian (cf. Ramsay, Cities and Bishoprics of Phrygia, ii.
p. 407).

No. 99.—Konia.

Ἀρι: Μαίρου
κε Μαρία κι
Δουδής ἑδώ-
ῳ πατρὶ κε
Σαλωνει-
να σύμβιος
ἀνεστησα-
μεν 'Ανε-
κυτος Τάτ-
τας μυ[μήσ] χ(ἄρι).  
The opening letters of line 3 are ΔΙΩΔ. The restoration of line 1 may be Αθρ(ήλεος) Μαίρου. Δουδής is a name common in Lycania. 
Anicetus and Salonina were parents of Doudes and the others. Evidently 
Christian.

No. 100.—Konia (Imam-Bagh).

Αδρ(ήλεος) Ἀσιατικὴ Ἀνε-
kυτοῦ ἀνεστή-
sα τῷ γλυκυτάτῳ
μου ὑφι Νεων
καὶ ἑαυτῇ ζῶσα
ἐνεκεν μυ[μής]
χάριν.

No. 101—

Αδρ(ήλεος) Νεωνε-
κως Δάου
ἑαυτῷ ξω-
tες (!) ἴμνεκει τὸν βιο-
μὸν μη-
μ[ν] χάριν.

The name Δάου is found near Termessus (C.I.G. 4366 w). In lines 3 and 4, probably read ξῶν [κε] τῇ[α] or τῇ[ε].
No. 102.—Konia.

Διάρ(ήλιος) Μείρος Δια[γένους]
κε 'Αμμία ἡ αὐτῆς
ός μου σήν το-
ις γαλακτάτων
ημῶν νοῦς ἐν
ἐίρηνη.

The letters at the end of line 5 and in the last line are εΥ ΕΡ. Η. Ν.

If our restoration is right, the inscription is either Jewish or Christian.

No. 103.—Konia.

Εὐστάχιος Πατά τηριερα μένος καὶ Διαρ(ήλιος) Ματρώνα ἡ |
[γρη τού (ή)] Εὐστάχιον αὐτοῦς | ξώτες ἀνεστήσα| 
[θαμευ (μήμης) 
Χώροι].

The letters represented by γρη τοῦ are ΟΥΤΟΥ. Αὐτοῖς ὧν ἄναυτοῖς.

No. 104.—Konia.

Δόμνος Θαλάσσου.

No. 105.—Konia.

...ον ἡ γρη Τάνταλος
ζώοτες.

Perhaps Παῦλος ἡ γρη Τάνταλος.

No. 106.—Konia (Imam-Bagh).

Εὐστάχιος Μενής (ή)
ἐς προεβάλε-
ρος νίκ. Δοκί-
ων καὶ τή συν-
βίοι μου Πατρο-
νή ἀνεστήσα-
μετ., . . . τῇ
μνήμης χ-
άμοι.

For Μενήας, cf. C.I.G. 3881.

No. 107.—Konia (Imam-Bagh).

Ἀλίβια
Μείρος Π-
μαχαύριος ἤ-
ιοφ μνήμιν
χάμοι.

The spelling η for ϊα is found very often in certain long inscriptions of
the Praenitessos district. It marks a period as yet undetermined.

No. 108.—Konia (Imam-Bagh).

ὅβεβοθώ
φιωναίερπ
φιωτ
No. 109.—Konia (Ketchiji).

+ | Αλρ(ήλος) Ευάγγελος | Δόμανον ξων ανεώτητα τῷ | πάσπιοι μου. Ευ-
| άγριω προεβ(υτέρον) | κε τῇ γλυκυτάτῃ μου γυναικὶ Μάρια κε τῇ άδελφή
| μου Συνβάνη τῶν | τίτλον τουτον | μημη(ν) χ(άριν).

This is C.I.G. No. 3998.

No. 110.

μεσάθητοι Κύρρε [τῆς] ψυχῆς τῶν ομοδιάδου ἀφεντο-
Ἰω(άννου)

Πέτρου, βασιλέα πᾶσης Οὐράγροβλαχίας, ἔως τοῦ Ἰω(άννου)
Μήρτζα, βασιλέα, κε ἐκεμιβείκεν ἔτους[σ]. ἤδη· ἐν μη(ν) Ἀλ-
γούστρα ωθε· κε ἐβασιλέως ἔτην κεγ.

Βασιλέα is the Moldavian title voivode. The date 7077 is, presumably, of the Byzantine era, and corresponds to a.d. 1569. It is difficult, however, to fit the date in with such facts as I can collect of this period of Moldavian history, which is very complicated and obscure (cf. The Cambridge Modern History, pp. 82, 83). The Moldavians trimmed between their Christian and their Mahometan neighbours; and there were repeated usurpations and restorations. One is inclined to infer from the inscription, that John Peter (Ivon is a common name among the voivodes) sided with the Christians, and was banished in consequence to Konia. He may be identical with Peter, the brave voivode who appealed to Basil Ivanović of Moscow against Turkey and Poland and was voivode when Suleiman ravaged Moldavia and took away its autonomy (Karamzin vii, p. 161, viii, p. 21). He is, however, too early, if the date is right, and another Peter of the same dynasty, the son of John, is too late. I may note that, apparently, the first Peter succeeded in 1528, and his son Stephan in 1551; this gives Peter a reign of twenty-three years. I have to thank a friend for much of the information here given, and I regret that, in spite of his help, I have to leave the point unsettled. Μήρτζα is Mircia. This inscription has been published, I understand, in the Proceedings of the Russian Archaeological Society of Constantinople.

No. 111.—Konia (Araplar).

P(ublius) Mestriu, P(ablius) filius, Macefjiana] veteranus
[leg(ionis) VII] M(arco) Lollio, M(arco) filio, veterano
[leg(ionis) septumae amico [bene merenti ] posuit

Πάπλιος Μέστριος, Παπλίου ύος, Μακιαζής, ὀστεράνω
λεγανόντος ἦβδομης, Μάρκος Ἀλλίπ(ο), Μάρκου ύος, ὀστεραφ
λεγανόντος ἦβδομης, φιλοστοργίας ἐνεκεν.

No. 112.—Konia (Araplar).

Διόπτης Μ[ενεμόνον . . . . Πα]τροκλεί τῷ ἀνδρὶ | αὐτῆς τῶν
κειμῶν ανεστηκεν μὴμη(ν) χ(άριν) | . . . . ο[ς καὶ Τιμοθεο λθεπτον αὐτοῦ] . . . . Θεόθερον . . .
. . . . . . . . . ἦμερις ζωὴς Μήνα κατακλύζων θύμων [ετερον
eσενεκθήμερα] κε μὴ μόνον τὰν δούλην [μου . . . .]
FIRST REPORT OF A JOURNEY IN PISIDIA, ETC. 357

No. 113.—

Kaltpoûros
τῷ ἔλεος πατρὶ
Λόφ(ηλά) Παύλος ἐλ τῇ
ἔδει μητρὶ Λόφ(ηλά)θῃ
Πρ(θι) ανέστη-
σα μηνῆς χάριν.

A cross stands above the inscription and another cross divides the first three lines of the inscription. Perhaps the last a of line 4 should belong to the word which follows, ἀπρικια, ἀπρίλλα or ἀπρονία; but, more probably, the letters which stand here, πρει, conceal the dative of Prius, a common Lycaonian name; and we have so restored it.

This will be the best place to give the inscriptions which Professor W. M. Ramsay kindly sent me. Two of them belong to Konia and three to Sidirvar, a village about eight hours from Karaman on the road to Eregli. They were copied during a journey made by him in the spring and early summer of the present year from Tarsus to Smyrna. Professor Ramsay identifies Sidirvar (Sidivre in Kiepert’s map) with Sidropalos.

No. 114.—Konia. W.M.R., 1902.

... Ἰος Ἀπαλὸς Ραφός
Πορτορία Μα[ρ]κόλη τῇ γυναικῇ
αὐτοῦ φιλοστοργίας καὶ μονής
ἀνέκει (εἰς).

The letter before Ἰος in line 1 may be i or τ.

No. 115.—Konia. On a large unsmoothed bohos; rude letters. W.M.R., 1902.

Δαν(κιάς):Π(όρειος?) [Φ]άλαμας
ζῶν ἐντορ καὶ τέκνοις
Π(όρκιος) Πάνσας καὶ Π(όρκιος) Μάρκης
Ἀπαλὸς Μίκαλος ἀπε-
θέωσα τῇ λάρνακα: δὲ
δὲ ἠν ἐπισύμανται
ὑποκείεται φίλεχν
(δημιοί), α.

In line 1, W. M. Ramsay corrects p. of his copy to φ: the final ζ, being very small, may be a punctuation mark, and he suggests Δαν. Π. Φάλαμας
ζῶν(τι) αὐτῷ καὶ τέκνοις... Α. Μίκαλος ἀπεθάνεσα (cp. above, No. 90) as the original form. One of the family, Porcius Flamna, perhaps governed Galatia about A.D. 200, and thus the name was used in Iconium.


+ ἐνθα κατακαίει Καλλίππος ἔπισκοπος Ἐλαχιστος

Letters rude and late. Cross and symbols over inscription, but now broken. The cross may have been Latin in form.
No. 117.—Sidirvar. W.M.R., 1902.

Τιβέριος Καλαμίδιος Διονύσιος Τιβέρια Κλαύδε | Εύνοια σεν |
βιβρ [missing] | χαρία

No. 118.—Sidirvar. W.M.R., 1902.

tοις συμμετασχήν (sic) καὶ χριστιανοῖς τάσι... τοῦ μνημείου
τότον (sic)... βίας[ν]τα... θα τοúτου καταφρονηθα... 
δημάρχη 
μύριο δισθλία πεντακόσια.

C.—Zaz-ed-Din Khan (Πρώτα Κάμις η Πρώτη Κώμη ?).

Zaz-ed-Din Khan is a ruined Seljuk khan distant about four hours (twelve or fourteen miles) from Konia. Its bearing from the Alas-ed-Din mosque at Konia is 48°. From the same point the bearing of the pass by which the Konia-Obruk road crosses the Box Dagh is 68°. In the map which accompanies Stewart’s Wolfe Expedition, the road is therefore, represented fully ten degrees south of its proper direction. The khan is on this road, which at that point lies a little west of the direct line between Konia and the pass. Before the khan fell into ruins, it was a magnificent building, the beauty of which can have been only slightly marred by the presence in its walls of stones—moulings, pillars and such like—previously used in older buildings. Whatever other buildings may have been despoiled, it is certain, both from the character of many of the stones and from the inscriptions, that the church and grave-yard of the village have been put under contribution. This was natural, as the church, probably already in ruins when the khan was built, lay close to the mound. Its foundations can be traced a few yards north of the khan, and the stones it contributed are so numerous, that an architect could probably rebuild it from them. The inscriptions, which are all sepulchral, are in most cases undoubtedly Christian, and in all cases probably so.

No. 119.—W.M.R., H.S.C., G.A.W.

ΚΩΝΤΟΣ ΗΡΑΚΛΙΟΥ
ΠΡΩΤΟΚΩΛΙΕΙΣ ΚΥΝ
ΤΗΣΜΠΟΙΩΜΑΤΡΩΝΗ
ΚΑΙΤΕΚΝΩΝΑΝΙΧΙΤΩ
ΚΑΙ ΚΑΤΙΛΑΙ ΟΙ ΤΕΕΣΑ
ΠΙΚ ΕΝΟΘΑΙΣ ΚΕΙΝΤΕΤΥΜ
ΒΩΤΗ ΗΔΑΛΟΧΟΝΙΚΗΤΟΥ

Καίστος Ἁρακλῆας,
πρωτοκωμήτης, σών
τῆς αυτῆς Ματρώνης
καὶ τεχνοῦ Ἀριστήρ
καὶ Κατσκλῆ, σύν τόσον
πικ ἐνοθαίς κείντε τύμ-
βιβρ. ὑδ. ἄλοχος Ἀριστήρ

* The bearing from Buin Bashi railway station, Professor Ramsey tells me, is about 105°. I have altered 22° W., throughout for the variation of the compass; this particular reading was taken with a pocket-compass. This would make the distance from the Alas-ed-Din mosque 15 miles. The first syllable of the name of the khan suggests some Arabic word in a form which makes its identification impossible.
The restoration of line 11 may be μον Νου<μ> μεταφυ (Latin Numerus). The name Βασίλισσα is found in C.I.G. 3900n (probably Laodica Combusta) and 4001b (Iconium). There is a stop, shaped like a T, in line 7. Ματρόνα points to a connexion of some sort with Rome, though it need not be close. The genitive τέκνων (line 4) and μούσου (line 11, if the first restoration be adopted) after σὺν should be noted, as examples of the decay of the dative inflexion. For δειάκων, compare C.I.G. 3980 t (Khathay-Khan); for the use of the word for διακόνος, compare C.I.G. 3057 (Metropolis, where however the word is used in a heathen sense), Ath.-Midth. 1888, p. 254, No. 63, Romans xvi. 1 (of Phoebe of Conchrea) and Apostolic Constitutions ii. 26; iii. 15. The use of the Constitutions is not, however, uniform as διακόνος is found in the later parts.

From the age of her child (cf. νυμφή δυτι in the last line) it is perhaps fair to infer that Basilissa was herself young. If that is so, a parallel for her ordination may be found in the case of the young widow, Olympias, who was ordained deaconess by Nectarius (Sozomen, H.E. viii. 9). This inference, however, may be wrong, as the age was fixed at forty by the council of Chalcedon (a.d. 451, c. 15), by the Trullan council (cc. 14, 40) and by Justinian (Novell. 123, c. 13; cf. however, vi. 6). The probability is, I think, that she was under forty. It is not impossible, moreover, that she was a deaconess before her husband’s death. It is, at all events, more likely that his death rather than that of some member of his family was the immediate occasion of the erection of the monument. If its erection followed, as it probably did, close on his death, Basilissa must either have been ordained deaconess almost as soon as she became a widow, or she was one before her husband died. Δίακων can hardly mean a deacon’s wife.

The name Πρώτη Κόμη (or less probably Πρώτη Κόμη) has been suggested by us provisionally as the name of this village. The name Prata is known in Anatolia; it is, for instance, the name of an island in the Propontis, near Constantinople. The form of the name can be paralleled by Ψηφιακομίτης, Ρεκκαμίτης, Λαυρακόμητης, Λαπτακόμητης, Ολύμποκομίτης, Δασκαλίκομήτης, Καρπακομίτης (cf. Ramsay Hist. Geo. p. 412) and others. In making this suggestion, however, we did not forget that the word may be explained on the analogy of πρωτοπολίτης, i.e. πρῶτος τῆς πόλεως. The word πρωτοκομίτης in such a sense occurs in Leou. Cypr. (Migne, 1725 D) and in Palladius, Historia Lavicia (Migne, 1169 B). It is also found on an odeson (Crum, Coptic Odesse, No. 131, cf. p. 28 of the Translations and Commentaries, where he is identified with the ἰάσανε). The use of this word in Syria and Egypt is well established. It does not occur in the C.I.G., though
κομάρχης does occur twice, in C.I.G. 3420 (near Philadelphia) and add. 3461 b, line 66, on each occasion in the plural. Πρώτος τῆς κομάρης also occurs, but only in inscriptions probably of later date than this. I have not come across any instance of πρώτοκομάρης in Asia Minor.

No. 120. — W.M.R., H.S.C., G.A.W.

ΧΑΙΛΙΟΝΜΑΡΤΥΡ
ΕΥΔΡΟΜΗΩΤΩ
ΜΗΤΗΝΔΑΙΕ
ΕΥΝΟΜΙΩΝΑΓΕ
ΣΕΝΜΗΝ

This inscription is Christian. It is probably not later than Diocletian and may be earlier. The names Μαρτύριος (C.I.G. 8872, 9483) and Ευδομος (C.I.G. 9267) are found in Christian inscriptions. Ευδομος has the appearance of a Christian name (see footnote to p. 362).

No. 121. — W.M.R., H.S.C., G.A.W.

ΤΥΜΒΟΚΟΔΕΝΘΩΝΗΚΑΤ
ΛΥΦΙΑ//ΤΑΤΟΝΑΝΔΡΑΣΗΕΕ
ΥΝΟΠΑΝΤΑΘΕΟΥΒΟΥΛΕΩΣΙ
ΕΤΕΙΞΕΝΣΑΦΙΙΟΝΟΒΙΟΤΟΙΟ
5 ΟΥΔΟΥΟΟΥΦΕΓΑΛΗΣ///ΥΤ
ΟΛΟΝΩΝΑΝΤΑΗΠΗΣ
ΚΕΤΥΝΒΟΝΣΑΩΣΙΕ
ΚΕΜΠΟΧΟΥΙΟ
ΟΞΑΒΕΟΣ

The stone is built, upside down, within the khan in a dark corner; the present right-hand lower corner of the inscription being concealed by an arch. It is in rough hexameter verse, the end of each verse (a gap in line 5) being marked. The tone appears to be Christian. For γεγονός, a local form of γέγονε, compare the Homeric γεγονός.

No. 122. — W.M.R.

ΩΝΜΗΧΑΛΟΠΡΩΤΙΣΣΟΝΟΝΧΩΝΠΑΘΑΡΙΟΙΟΙΩΝΣΕΡΟΙΟΙ

ζησον Μήχαλα πρωτισσόν εν σπαθαρίῳ

Of this inscription, Professor Ramsay notes that it was read by him with the help of a glass. The stone was very high up; there was no ladder by which it could be reached; both the limits of the stone and its precise character are, therefore, uncertain. The name Μήχαλα is common in Christian inscriptions. In C.I.G. 8836 (Gerouna) it is the name of the πρωτο-
σπαλάρης, in whose time τὸ κάστρον τοῦ ἱεροῦ ... was restored. For this title πρῶτιστος ἐν σπαλάρηι is used here, apparently metri gratid. As I hope to deal on another occasion with the position of those who held this office and offices akin to it, I will merely note here that Michael was an official of high rank at the Byzantine court, whose military duties were not necessarily more than nominal. Πρῶτιστος is common in Homer and Aristophanes.

No. 123.—W.M.R., H.S.C., G.A.W.

+ΜΝΗ
ΜΗ ΝΙ
ΚΟΜΑ

The name Νικομαῖα is found in C.I.G. add 3827 x (Cotyaeum).

No. 124.—W.M.R., H.S.C., G.A.W.

+ΜΗ
ΛΑΚΟΝΟΙ
ΔΟΜΝΙΟΥ
ΕΚΣΚΟΥΒΙΤ
ΡΟΣ

This inscription is Christian. The stone was the size of a man and its lower part was occupied by a cross. Εκσκουβίτωρ is the Latin exenibitor. The ἐκσκουβίτωρες were the Imperial body-guard. They were introduced by Leo I. (A.D. 457–474) in place of the scholae (Bury, op. cit. ii. 557).

No. 125.—W.M.R., H.S.C., G.A.W.

The other title, εὐαγγελιστής, by which he is described, an error for σπαλάρηι. Dr. Stephanus ad πρῶτιστος.
H. S. CRONIN

Ενθάδε κύτε ἀνήρ, ἵππες μεγάλοιο θεοί,  
ὅς ἔνεκεν πρωτότητι ἐπουραίαν κλέος ἤρεν  
ἀρταγής ταχέως ὡς ἐκλησίης τε καὶ λαοῦ  
'Απολυμάριος τού που ἐκών, λαὸν σέμινον μέγα κόδος.

The spelling ἐκών for ἐγὼν is noteworthy.

No. 126.—W.M.R., H.S.C., G.A.W.

ΕΝΘΑΔΙΚΗ ΧΕΑΝΗΡΙΕΥ  
ΘΕΟΙΟΟΣΕΝΕΚΕΝΠΡΑΟΣΘ  
ΟΝΚΛΕΟΣΙΡ  
ΑΠΕΚΑΛΗΣΙΗΣΤΕΚΑΙΑΟ  
5 ΡΗΓΟΡΙΟΣΤΟΥΝΟΜΕΧΩΝ  
ΟΥΣΕΝΟΜΕΓΑΚΥΝΟΗ  
ΣΙΓΗΟΟΣΥΝΙΟΘΕΩΜΕΗΑ  
ΝΟΝΑΝΔΡΑΖΩΝΓΡΑΝΑΣΤΕ  
ΙΤΥΝΒΟΤΙΩΔΑΣΚΑΡΑΞΕΙ

'Ενθάδε κύτε ἀνήρ ιέρες[α] μεγαλοί θεοί,  
ὅς ἐνεκεν πρωτότητι ἐπουραίαν κλέος ὥρ[εν]  
ἀρταγής ταχέως ὡς ἐκλησίης τε καὶ λαοῦ[ν].  
Γ' ομορος τούτων ἐγὼν, ἅ[λ]αοι σεμινοί μέγα κόδος.  
[..] οἱ γνησιωτάτοι θεοὶ με[λεί]των ἄν[δρα,]  
Σων ἄρ ἀνάστησ[αι επὶ] τύπιζον τε ὁδὸν ἐκάραξεν.

In the spelling ἐκάραξεν for ἐκάραξεν, we have a parallel for the ἐκὼν  
of the last inscription, which is spelt correctly here. The last letter of line 6  
may be a B. Both these inscriptions are Christian, the second one having a  
cross (✝) on the left. It is interesting to note the phrase ἐκλησίης τε καὶ  
λαοῦ in both: it may imply that the deceased was of repute among those  
that are without, but more probably it is the equivalent of clergy and laity.  
Such a distinction is of comparatively early date; so also is the use of the  
word ἱερεὺς for a priest. The fact that the metre, at no times smooth, is  
broken completely in line 4 by the names, suggests either that the tombstones,  
epitaphs complete, were kept ready made and the names inserted when  
required, or, more probably, that certain metrical epitaphs were stock property  
and were used as occasion arose. If we keep γνησιωτάτοι and do not restore  
γνησιώτας, we have a false form on the analogy of μεγάλοιο.
This inscription was built sideways into the inner side of the main wall of the khan. It was, therefore, in a very dark place, and it was much worn and at an uncomfortable height from the ground. Many of the letters are, therefore, uncertain. In line 1, B may be Ο; in line 2, the first I may be Τ, and the Η: a T may stand after the last N of line 3; the Ε in line 4 may be a Π; and in line 5, the first two letters may be ΔΚ, while the space may be occupied by Ι or Ο; the last letter of the same line may be a Τ. Line 6 may read ΧΑΡΙΤΑΣ ΖΩΥΣΑΙΑΝ; the space in line 7 may be filled with an Ν. In line 8 there is a hole in the stone which extends to the upper part of line 9. In line 10 there is a mark after the second Ν; the second Α may be Λ. The line may read ΛΑΝΠΡΟΝΙΣΙΑΒΟΥΣΑ. Line 11, the first Ι may be Ο and the first three letters of line 12 may be ΟΥΝ. Line 14 may begin ΕΓΩΝ. With this amount of uncertainty in the readings, the restoration must remain doubtful. Enough, however, can be made out to show that it is a monument to a woman and that she was also a deaconess. We had hoped to examine the inscription again, but we had not the opportunity. This imperfect copy may save the time of another traveller. It is the latest of all the inscriptions which we found at the khan.

No. 128.—W.M.R., H.S.C., G.A.W.

ΠΑΙΚΙ/////ΔΟ///// Πεσών [Δής] Αδειων
ΚΕΛΙΝΑΘΟΥΣΑΤΡΗ Κέλινα Θεωτατη
ΜΝΗΜΗΣΧΑΡΙΝ μνημής χάριν

Below the inscription is a relief representing three figures; on the left a person seated in a high-backed chair facing right; in the centre and on the
right two other persons, standing, facing left. The restoration of the first line may be Ποσίκ[λής και (or κέ)] Δι[μυρα. The name Κέλσος occurs at Yaghili-Baiyat.

No. 129.—W.M.R., H.S.C., G.A.W.

ΑΥΡ ΠΑΥΛΑΘΥΓΑ
ΤΗΡΜΟΜΟΙΟΥΣΥΝΤΥ
ΣΥΙΥΣΜΟΥΝ
Ρ ΚΕΜ ΑΛ
ΝΕΚΣΘΣΑΜΕΝΛΩ
ΓΑΥΚΥΤΑΤΩΜΟΥΚΕΠΟ
ΘΙΝΟΤΑΤΩΛΑΝΔΡΙ
ΔΗΜΗΤΡΙ ΜΗΝ
ΜΗΣΧΑ

Διφ[ηλία] Παύλα θυγά-
τηρ Μομόου συν τό-
γ υίος μου "Ον[ησάθ-
ρ[ι] κι Μ[αμ]ά α-
νεστάμεν τό-
γλυκατάτω μου κι πο-
θιστάνα τόνδρι
Δημήτριο[φ] μυρ-
μυρ χάριν.

The name Μαυρός, given in C.I.G. add 3827aa (Cotyæum), is an evident mistake for Μομός, cf. Kretschmer, op. cit. p. 338.

No. 130.—W.M.R., H.S.C., G.A.W.

ΑΡΑ
ΛΑΚ Ω
ΛΑΝΩΚΒΑΣ
ΣΣΗΚΔΙΟΓΕ
Ν ΜΗΛΗΗΣ
ΠΙΝ

Θέκλα κέ [Παύλω]
κέ...χάρι κέ Βασ-
ιλίσση κέ Διογέ-
v[ε]ι μυρίς
χάριν.

The fragment of a letter at the beginning of line 3 is not Κ. There is room for five letters before the Α, one of which would be the abbreviation for και. Epitynechoanes seems too long for the space in line 3.

No. 131.—W.M.R., H.S.C., G.A.W.

ΕΔΗΝΗ Ν.
ΙΚΗΤΟΥΛΛ
ΕΛΑΝΔΡΟΥΑΔΡ
ΑΥΘΣΚΑΙΥΩΛΥ
ΘΗΜΝΗΜΗΣΧ
ΑΡΙΝ

Σ[λόγη Ἀν-
κήτου Άλ[ε-
ξάνδρου (?) ἄρι
αύτῆς καί ἐν οὐ-
τής μυρίς χ-
ἄρι.

The copy leaves it uncertain whether there is a letter before Ε at the beginning of line 1; the arrangement of the inscription on the whole requires it. On the form ἄρι for ἄνδρι see Hesychius ad ver., the form is Pamphylian.
FIRST REPORT OF A JOURNEY IN PISIDIA, ETC. 365

No. 132.—W.R., H.S.C. G.A.W.

ΔΥΡΜΑΚΕ
ΔΩΝΙΜΕΙ
ΡΩΤΩΓΛΥ
ΚΤΑΤΑΘΜΟΥ
ΑΔΕΛΦΗ
ΙΩΣΗΦ
ΑΝΕΣΤΗΣΕ
ΗΜΗΧΑΡ
ΠΙΝ

Διρ(ήλιος) Маке-
δόνες Μει-
ρο το γλυ-
αυτάτη μου
άδελφο
Ιωσήφ
ἀνέστησε
μετήμπις χά-
ριν.

Metros was the father of Macedonius; Medro is a genitive form. For
forms in -ις contracted from -ιος cf. No. 33. The inscription is Jewish or
Christian.

No. 133.—W.R., H.S.C. G.A.W.

ΘΕ ΕΝΟΣ
ΜΕΝΕΝΙΜΟΥ
ΘΕΟΣΕΝΩ
ΤΩΓΓΟΝΩ
ΜΝΗΜΗΚΕΝ
ΕΚΕΝΚΑΙΒΑ
ΝΥΝΦΗΖΩΧΗ

Θεόςεινος
Μενεδήμου
Θεόςφη
τῳ ἑγγίσσῃ
μνημής ἐν-
εκεί καὶ θῷ
νύφη ξυφη.

No. 134.—W.R., H.S.C. G.A.W.

ΔΟΥΔΗΣΕΡ
ΑΛΙΤΩΕΙΔΙΣ
ΑΝΑΡΕΙΚΑΙΑ
ΧΤΩΕΙΔΙΩΠΑΤ
ΗΧΑΡΙΝ

Δούδης Ἐρ[μ]-
ἀτι τῷ εἴδιον
ἀνδρεὶ καὶ Γάϊ-
ος τῷ εἴδιον πατ-
ρί μνήμης χάριν.

No. 135.—W.R., H.S.C. G.A.W.

ω
ΑΙΩΝΚΕ
ΦΑΣΠΑ
ΤΡΙΚΑΙΑ
ΔΕΛΦΗ
ΠΑΠΑΙΔΙ
ΑΝΕΣΤΗ
ΣΑΜΝΗ
ΜΙ///ΝΧΑΡ

Διρ(ήλιος ἱο-) II[ω-
λον Κς-
φᾶς πα-
τρι καὶ ἀ-
δελφή
Παπαῖ
ἀνέστη-
σα μνή-
μη(ς) χάρ-
ιν.
The inscription is Jewish or Christian. *Kephay* (probably *Kephas*) is the father of Paliu.

No. 136.—W.M.R., H.S.C., G.A.W.

ΓΡΗΓΟΡΙΝΑΚΑΙΖΙΒΑΧΗΝ

*Agapios kai Zibavos*

For *Zibavos* compare *Ouacelezas* and *Ourizas* (see No. 75).

No. 137.—W.M.R., H.S.C., G.A.W.

Π ΟΝ

κι Σοινα θνησ[τ]οι

μην ης χάριν.

No. 138.—W.M.R., H.S.C., G.A.W.

ΕΝΘΑΔΕΚΕΙΤΕΛΑΝΗΡΩΛΑ

ΣΙΦΕΙΑΙΟΙΟΙΠΟΘΤΟΣΑΣΙΟΝΤΙΟΣ

ΤΟΙ/ΙΑΡΙΣΤΟΤΟ/ΕΥΕΡΓΙΜΑΣ Ν

ΥΠΗΡΧΕΑΝΤΟΣΑΓΡΕΤΙΖΩΝ

ΤΥΒΟΝΑΝΕΣΤΗΣΕΝΝΑΜΑΤΙ

ΜΝΗΜΟΣΥΝ.

*Ενθαδε κείτε ἀνήρ πολλ[ο]ι-

ας σεθλαίαι πολύτοις Λεόντιος

τοι [αριστο] [σ] ὑ[σ] εὐεργήμασθε (*)

ὑπήρχειν αὐτὸς γιὰ τί ζων

τόμβου ἀνέστησεν μνήματι

μνημοσύνης.

In line 3, at the beginning, there may be no gap between Ο and ι, and the latter part of the line is very doubtful. We have in our notebooks *ΕΥΕΡΓΙΜΑΟΚ* and *ΕΥΕΡΓΙΜΑΟΚΙ*, besides the copy given in the text. The objections to the restoration we give—the false use of the particle and the unknown form of the noun—are obvious. Alternative restorations—none satisfactory—are Λεόντιος: [οῦ] [το] [σ] [αριστο] [σ] ὑ[σ] εὐεργ[εσι]ας and τ[ω] [αριστο] [σ] ὑ[σ] εὐεργ[εσι]ας.

With regard to the metrical inscriptions published here and in Part I., we may notice that No. 58 must have been copied from a model in which the second hexameter ended in ἐντος, not ἐντος; and that No. 138 was probably imitated very freely from an older epigram, in which Doric forms like *μνήματι* were more freely used.

The stone is high up on the outside of the khan; it can be most easily read, though even then only with difficulty, by climbing out along the buttress which is near it.

No. 139.—W.M.R.

ΙΘΑ

ΔΕΚΑΤΑ

ΚΙΤΕΚΑΛ

ΛΟΣΥΝΗ

ΕΥΓΝΗΣΙ

ΠΟ

ΣΥΓ

ΛΑΝ

*Ει]βα
té

de katá-

cite Kal-

λοσύη

Σω

[εργησίω]tou l

πο[λή]-

eρομένου l
A large cross occupies the lower part of the monument, the upper portion dividing lines 6, 7 and 8, where the letters fail, and the cross-piece coming below line 8. It is a Christian inscription.

The discovery in one place of this number of inscriptions, most of early date, many certainly of Christian origin and none of undoubted heathen origin—No. 138 is probably no exception—presupposes the wide and early spread of Christianity in Lycania and Eastern Phrygia which has been argued from other evidence. It confirms the view often put forward by Professor Ramsay (cf., for example, Hist. Geo. of Asia Minor, p. 24) that here Christianity was Greek, and that it was not until the country became Christian that the old civilization yielded to the new. Besides throwing light on these larger problems, these inscriptions illustrate or raise several questions which concern the church discipline and organisation of Asia Minor. With regard to No. 119, the question is raised whether Basilissa was a deaconess before her husband’s death, and before she reached the age fixed by the council. Nos. 125 and 126 illustrate the standard of clerical character (ἐνέργεια προσφέρεται) prevalent at the time and place; and most probably they also express in language the division which sprang up only too early between the clergy and the laity.

The name of the village which occupied this site is, perhaps, fixed as Πρόποτα Κόμη by the word προστακομίτης, which occurs in line 2 of No. 119.9 The evidence, however, is very doubtful. It was on the road joining Iconium and Arbelus, and in the diocese of the former. Its position on the road and near an important city would secure it, both in Roman and in Christian times, a certain measure of activity and prosperity to which its present state of ruin and desolation is an instructive contrast. It would be the first halting place on the journey from the west.10 It is likely enough that its connexion with Iconium was made closer by the establishment near it of a certain number of country seats, the property of government officials, or of wealthy merchants of Iconium who retired thither in their intervals of leisure, or when their active life was ended. The ruins at all events are considerable, and the monument to Michael the Protospatharius (No. 122) is consistent with such a state of things.

D.—YAGHLI-BAIYAT (Σιάνατρο).

When we were at Konia we had occasion more than once to visit the suburb Meiram, and we were told that many of the stones, with which the house of the Chelibi Efendi was built, came from a place called Yaghi-Baiyat. With the exception of one stone, which is unimportant, all the inscribed stones have been built into the wall or floor of the house face inwards. Such information about Yaghi-Baiyat as we were able to obtain at Konia or Meiram was of the vaguest kind; the only description indeed that we could

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9 See however the note on No. 119.
10 Hence, perhaps, Πρόποτα Κόμη, though this is even more doubtful than the other derivation of the assumed name.
obtain even of the place in which it was situated was that it was somewhere in the Boz Dagh, and that in order to reach it we ought to follow the Obruk road. It was clear, however, that it was being used as a quarry, and we decided to make an attempt to find it.

As the rain had made the plain impassable, we went at first along some slightly higher ground to the west of the usual road to Obruk.11 We joined that road, however, at Zaz-ed-Din Khan and followed it to Sindjerli Khan and to the top of the pass.

Sindjerli Khan.

Sindjerli Khan is six hours direct from Konia. As the bearing of St. Philip’s, the high hill above Serai-Keui, W.N.W. of Konia, is 252°, we were confirmed in our impression that there was an error in the map.12 The ruins of a village lie about the khan; and the ground plan of its church, a building of some size, can be traced immediately to the east. The ruins have contributed the stones of which the khan is built. One inscription from Sindjerli Khan is given by Sterrett (E.J. No. 253). We found two others (Nos. 140 and 141). The first was near the buttress on the west side and was easily accessible. The second was at the door on the south; it was built face upwards into the wall at a height of three feet, and we had to remove the stones immediately above it, before it could be deciphered.

No. 140.—W.M.R., H.S.C., G.A.W.

\[\text{ΚΕΞΟΝΗ} \quad \text{TATHN}\]

Above the inscription is a cross, inscribed in a circle.

No. 141.—W.M.R., H.S.C., G.A.W.

\[\text{ΠΑΥΑΕΙΝΑΠΑY} \quad \text{ΠΑΥΛΕίνα, Παυ-}\]
\[\text{ΛΕΙΝΟΥΟΓΑΤΗΡ} \quad \text{λείνον [θυ]γάτηρ,}\]
\[\text{ΔΙCA} \quad \text{ΛΑΡΑ} \quad \text{Δι Σαλαρά-}\]
\[\text{ΜΕι} \quad \text{ΕΥΧΗΝ} \quad \text{μει εύχην}\]

A relief occupies the space left blank in lines 3 and 4. Unfortunately it has been defaced. For \(\Delta ι \Sigma λαραμές\), cf. Ζεύς Βατοκολάκεις, (C.I.G. 4474, 4475, Baetocæce near Laodicea in Syria), Ζεύς Μεγάστες (add 4301 d; Megiste cf. 4301 b), Ζεύς Σαλαμές (4366 k, Termessus) and other local deities. We may have here a key to the name of the village or district.

Dokuz Dukaz Mersîme Mâli Kûnu.

The ‘well with the ninety-nine steps,’ is a short distance east of Sindjerli Khan. It is described by Sterrett (E.J. pp. 226, 227), who has copied and

11 Our guide increased our wanderings by trying to lead us to another village called Egri-Bayat.
12 See p. 358.
published the inscription which follows. As our copy and restoration differs from his, I give it. The inscription has been defaced to the right since he saw it in 1884.

No. 142.—W.M.R., H.S.C., G.A.W.

ΓΑΠΗΝΙΟΝΙΟΚΙ
ΕΙΚΟΝΙΟΥΚΑΙΑΙΛΙΑ
ΑΙΛΙΩΤΙΟΥΛΙΑΝΩΤΕΙΜΟ
ΤΟΥΓΥΝΑΙΚΙΜΝΗΜΗ
ΕΕΕΕΤ ΕΙΣΚΟΝΙΣΘΗ
ΝΙΟΥΚΑΙΔΙΔΩΓΥΝΑΙ

Π(διος) Αππαμων Κριστος δ[][
Εικονιου και Αιλια [Διοδο η γ]][να αυτο]
Αλλης Τουλανς Τεμουθιοι νυφ [[και τι αυ-
του γυναικι μνημη], χώριν. [[[/μερος
έξεσται] ειςχομαιθή]και σορ[ων η μι] Αππα-
νου και Διαδο γυναικων]]]

I have indicated by double brackets that portion of the restoration which is without epigraphic support from either copy. In line 2 Διοδο (not Διαδο) must be right; cf. line 6; the name occurs also in C.I.G., 4124 (Galatia). In line 2 it would be simpler to restore Eikoniou with the title of some office before it in the previous line. Διορθωτης, δικαστης, διμικητης would hardly do, though Sterrett reads a broken Δ after Κριστος; perhaps, as the inscription is probably later than Hadrian, δεκουμιον or διναρκος might do (cf. Ramsay, Hist. Com. on the Galatians, p. 218, where he indicates the bearing of this restoration on the question of the constitution of Iconium).

When we had crossed the highest point in the pass by which the Oburk road traverses the Boz Dagh, we left the road and took a rough track which led in a south-easterly direction along the top of the range. After following this track for about an hour, we came just at sunset upon a small cemetery close to the track on the right. Most of the stones in it were unengraved; in one instance, however, an inscription was legible.

No. 144A.—W.M.R., H.S.C., G.A.W.

ΓΩΡΝΙΑΝΟΣ
ΤΗΓΛΥΚΥΤΑΘΜΟΥ
ΣΥΜΠΙΘΕΛΕΑΝΗΠ
ΕΡΤΟΥΜΕΙΑΙΟΤΟΤΑΛΚΥΤ
5 ΑΘΝΗΣΥΖΗΝΖΑΚΑΜΟΙ
ΧΡΟΝΟΥΕ ΑΙΓΟΥΣΕΠΙ
ΙΝΛΕΚΤΕΤΥΕΙΩ
ΙΟΥΤΩΠΡΩΤΟΤΟΚ
ΑΜΒΡΟΣΙΩΤΩΔΙΧΣ

Η. Β.—VOL. XXII.
The inscription is clearly Christian; cf. the name Ἀμβρόσιος, the epithet παρακαρίτης, and the phrases τοῦ τὸ λοιπὸν ἔχει ἐκείνη, ἐξακομοῦ δὲ κύριο πρὸς ὑμᾶς and, perhaps, παρακομοῦ ὑμᾶς: παρακόμου. The restoration presents several difficulties of construction, ὑπὲρ τοῦ μελίτου γλακατίας, τοῦ τὸ λοιπὸν (for λοιπὸν, cf. Γαίανης, for Γαίανη, ἔχει ἐκείνη (this phrase may have been suggested by a confused recollection of Gen. ii. 24 and Mk, x. 2–12 and parallels); the change also in line 15 is abrupt. Ἐξακομοῦ δὲ κύριο πρὸς ὑμᾶς recalls 2 Sam. xii. 28 though the LXX. reads παρακόμου.13 Γαίανης occurs in C.I.G. 5981 (Rome); Ἀμβρόσιος in C.I.G. 3691 (Cyzicus) and 7802 (locality unknown); the form Γαίανης is, I believe, unknown, and the name is not found in the C.I.G.: Γαίανος is found in C.I.G. 2983 (Ephesus), 4016, 4017 (both Ancyræa), 4112 (Tekia) 4379 (Madschdel, Syria) and 5244 (Ptolemais). The language appears to be that of a man who did not use Greek as his native language: the tale, however, which he has to tell is clear and pathetic enough. His wife died in child-bed a year or so after marriage, and his only son died fifty days after his birth and soon after his mother’s death.

This stone may have been used again as the head-stone of another grave. The following inscription, at all events, has been carved on another side.

No. 143 b.—W.M.R., H.S.C., G.A.W.

Δόμνιλλα τῇ[ν] θυγατέρια μη[ή-] μης χαρίν

The letters are larger and, if anything, better than those used in 143 a. The resemblance between them is, however, very close. More probably, then, Domnilla was Gaiænē’s mother.

The light was fading rapidly when we started again on our journey after copying these inscriptions, and a storm, which fortunately passed off, was threatening. We went on in darkness for some time until the moon, then at its full, rose and aided us with its light. When we reached Yaghli-Baiyat we

13 With L. 4 compare γλακατίας. For the pathetic Christian inscription of Rome, dated a.d. 268. There can be hardly any doubt that this Lyconian inscription is later, if at all, than the third century.
found not a village but a small collection of mud huts, perhaps twenty in all—a 
*yaïla*, without inhabitants except in the summer months. Our journey 
from the cemetery occupied an hour and a half.

The next morning, however, left us no doubt that we were on the site of 
a town, once of considerable importance. The *yaïla* lies almost in the 
centre of an amphitheatre of hills, a short way only up the slope of its 
eastern side. For a considerable distance in every direction—towards the 
west for upwards of a mile—the hills were covered with ruins. On the hill 
to the extreme west, called Maltepê, were the ruins of a temple. East of 
Maltepê, about half a mile west of the *yaïla*, were the ruins of a small 
theatre looking east. In the low ground, immediately west of the *yaïla*, 
we could trace along the road which led to Konia the sites of several public 
buildings. This road went south of the theatre, the road by which we had 
come passing north of it, below the hill on which the theatre stands.

The first inscription (No. 144) that we found was in one of the houses of the 
*yaïla*. The title of Anacharene and her husband (ἀρχιερεία, ἀρχιερείαν 
Σεβαστῶν) confirmed the impression, which we had formed from the extent of 
its ruins, of the importance of the city. Only a city of good rank would 
have a high-priest of the Imperial cult. The stone had unfortunately been 
left for building purposes, and only the upper part of the letters which gave 
the name of the city could be read. There is enough left, however, to place 
the identification of the site with Savatra practically beyond doubt. This 
point is discussed later.

No. 144.—W.M.R., H.S.C., G.A.W.

| ANXARPHIN | Αὐχαριστήσιν |
| ΣΑΚΕΡΡΩΤΟC | Σακερρότοι |
| ΑΡΧΙΕΡΕΙΑΝ | ἀρχιερείαν |
| ΣΕΒΑΣΤΩΝ | Σεβαστῶν |
| 5 ΓΥΝΑΙΚΑΣ | γυναῖκα |
| ΦΛΑΙΟΥΜΑΡ | Φλάιου Μαρ- |
| ΚΕΛΛΟΥΜΑΡΧΙ | κέλλου ἀρχι- |
| ΕΡΕΟΣΕΒΑΣ | ερέους Σεβα- |
| ΤΙΝΚ ΙΕΡΕ | τίνων *θα[ης] ἱερ- |
| 10 ΩΡΕΩΝΠΑ | ου θεον πα- |
| ΤΡ /// ΑΡΕΟΣ | τρ[ην] Αρεός |
| ΚΑΙΑΡΕΙΩΝ | καὶ Δρείων |
| ΘΗΝΠΑΝΑΡΕ | την παναρ- |

*See p. 376.*
The letters ΠΩΝ probably occupy the space in line 11, though we could not be altogether certain of the reading. The name of the city making the dedication would be expected in line 15. Though the possibility of the site being Savatra was suggested by Professor Ramsay and discussed by us on the spot, the resemblance of these scraps of letters to the upper portions of the opening letters of the name of that city was not noticed until our return to England. The name Ἀχάρρας occurs in C.I.G. 6829 (the precise locality in which this inscription was found is uncertain, but it was somewhere in Asia Minor; it is a dedication to Severus and Julia, μήτηρ στρατιτής; Anachares was an Ephesian and archon at the time that it was set up). Σακέρδων is found in C.I.G. 3882; η (near Afion Karn-Hissar; Τιμίου Σακέρδων was consul in 219 A.D.; this inscription also honours Julia Domna, μήτηρ κόστρων, cf. C.I.G. 1055); 3953 (Attalida, Phrygia), 4351 (Sidon; Σακέρδων is described as ἐπισκοπός and as πρεσβύτεος παράκεφλος, add. 4380 η (Cibygna, A.D. 180); Sacerdos had been thrice γραμματεύς; and 5830 (Naples—the connexion with Asia Minor is maintained, for Τιμίου Σακέρδων, και ἐπισκόπος is described as Κυριακίους, i.e. Crete or more probably Cilicia). The word παράκεφλος occurs in the next inscription but two (No. 147), and in Nos. 4150 (Amastria), 4415 b (Iotape) and 6650 (Rome) of the C.I.G. The use in 4413 a (Iotape), παρακεφλον παρακεφλον και δεκαπρότον is interesting. The epithet appears to refer to social position rather than moral qualities.

No. 145.—W.M.R., H.S.C., G.A.W.

Tito Servaeo Sabino,
pp. (string), p. (fish), donato omnibus
donis, iucum: Servaeo
Sabinae, centurio leg.(omis) sextae Vici(cris),
patri suo fecit.

The trophies consist of a cuirass, a head-dress, and three spears, represented conventionally.

* It is perhaps well to add that we examined the remains of these letters very carefully and without allowing any theory, of their meaning to influence us.
No. 146.—W.M.R., H.S.C., G.A.W.

ΟΥΣΕΙΣΕΡΟ\

On a large block of stone, letters 4" high.

No. 147.—W.M.R., H.S.C., G.A.W.

A

ΚἸΟΥΛΙΤΤΗΓΥΝΔΙΚΠΑΝΑΠΕΤΩ
ΝΕΙΚΗΧΗΜΗΙΠΡΑΥΘΣΚΑΙΚΚΕΛ///
ΚΩΜΟΝΟΙΩΤΗΝΑΙ///ΝΑΚΑΜ///
ΝΑΣΚ

B

ΔΡΩΠΕΙ
ΤΚΙΟ
ΝΙΕΛΛΤΙΩΚΕΛ

C

ΗΙΣΤΡΑΤΩ
ΓΛΕΠΑ
ΤΩΝΕΛΗΜΗ

Καὶ ἐκ τοῦ Κάλσου μόνος τής λίμνης
καὶ ἐκ τῶν μνήμων αὐτῆς καὶ Κάλσου κόσμου.
καὶ ἐκ τῶν μνήμων αὐτῆς καὶ Κάλσου κόσμου.

This is on the right side of a sarcophagus lid now broken into three pieces. On the lid is the marble figure of a woman reclining on her left elbow. The pieces measure on the right side 2'8", 2'0", and 1'8"; the writing occupies 2'3", 2'0" and 1'1". It was impossible to determine the probable number of letters lost in the right and left fragments of B; but the three fragments were parts of a continuous inscription. For Kάλσος, cf. C.I.G. 3097 (Icium), and C.I.G. Pl. III 250 (this Celsus was legatus Augusti pro praetore of Galatia). For Καλλίτης, cf. C.I.G. 4056 (Ancyra) and add. 4062. The name Stratonic occurs in 4003 (Icium), in 4068 and 4070 (Ancyra) and is not infrequent elsewhere.

Before describing the route by which we returned, or attempting to justify at any length the identification of this site with Savatra it will be convenient to give the two inscriptions which we copied on our way back to Konia. The first (No. 148) we found in a small cemetery about an hour and a half from Yaghi-Bayat; the second (No. 149) is on a sarcophagus which forms a cistern for a khan, four miles east of Konia. The name of the khan is Khan Sakyatan Musll. Neither inscription is of much importance.

No. 148.—An hour and a half from Yaghi-Bayat. W.M.R., H.S.C., G.A.W.

CHNIEΠΗΝΚΕΦΑ
ΕΠΘΑΚΑΙΔΕΚΑ
ΑΕΙΤΙΕΓΚΟΕΠΟΛΑ
ΡΗΠΕΝΣΕΝΤΑΡΚΟΙΟΙΟΙΟ
ΠΥΡΣΟΚΟΜΝΑΤΗΘΜΑΜΑΛΛΑΟ
ΣΒΕΣΘΙΕΝΣΟΚΟΘΗΚΑΜΙΙΣ
ΩΕΑΡΙΟΤΟΦΑΝΙ ΤΕΚΑ///ΕΛΠΗΔΩ
ΟΙΣ ΜΟΥΝΟΙΚ ΕΤΕΝΑ: ΤΕΛΑ
Aristophanes and Elpidius are the brothers of Astius, in whose memory the monument is erected.

No. 140.—Khan Sakyatán Musli, four hours east from Konia.  W.M.R., H.S.C., G.A.W.

**AIIIOCKRATEx**  
**POCBOYYAYT**  
**HCTYRANOY**  
**AIIAOYANA**  
**AICZWNTEC**  
**MNNHHCXAx**  
**PINKAMOCXWYIw**

*Eantric is to be understood before kai Móγχως.*

**Yaghli-Bayyat to Konia.**

On making enquiries at Yaghli-Bayyat, we found that there was a shorter and more direct route to Konia than that by which we had come. By this shorter route Konia was distant between ten and twelve hours (say 36 to 40 miles). The general direction of the route was south-west until the hills were left; it then went almost due west across the plain to Konia. From Yaghli-Bayyat to the foot of the hills was about 8 miles, from thence to Konia nearly 30. To be more precise, the road went from the *zaita* in a westerly direction south of the hill on which the theatre stood. It ascended gradually for about ten minutes, crossed by a low pass the hills which surround Yaghli-Baiyat, and, descending rapidly for a short distance, turned almost south-west. Just before we reached the top of the pass we found that we were,
FIRST REPORT OF A JOURNEY IN PISIDIA, ETC. 375

without doubt, following the line of an old Roman road, unmistakable traces of which were visible both there and at intervals for the next two hours and more. The direction south-west was maintained for an hour and a quarter, the Roman road running to the left of the track we followed, and being raised sometimes eight or ten feet above the level of the ground. We then reached the small cemetery at which we copied No. 148, the reading back from which to the top of the pass was $51\frac{1}{2}$. In thirty-five minutes more (two hours from Yaghli-Baiyat) we reached the top of a second pass, the descent from which to the plain occupied fifty minutes. From the foot of the second pass to the Goutcher Yaila was half-an-hour; thence to Khan Sakyatan Musl (No. 149) three hours, and to Konia seven.

Savatra.

Of late years the belief has been established that the site of Savatra was to be sought somewhere in the region between Lake Tatta and the Boz-Dagh. The language of Strabo, to which we shall have occasion to refer later, and to a less extent the indications of Ptolemy leave no doubt on this point; especially as they are consistent with what we can learn from Hierocles and the Notitia. Within this region Professor Sterrett fixed on Obruklu, to which the objection (cf. Ramsay, Historical Geography, p. 280) is that it draws its water from a lake and not from wells (cf. Strabo, xii., 568 and infra). Sarre (Reise in Kleinasien, p. 98), suggests Suverek (the resemblance in name is tempting), or Dewejuklu Keni. Professor Ramsay (Historical Geography, p. 343), who was followed by Mr. J. G. C. Anderson (J.H.S. xix. p. 280), was at one time in favour of Ak Ören, near Eski-II. The new site, however, which he suggests, fulfils all the conditions which are necessary for its identification with Savatra. It is in Lycaonia, and within the limits of the region fixed by general consent as alone likely to establish a claim to it. Its ruins, and especially the ruins of its public buildings, show that it was a place of considerable size. The imperial worship was represented by an ἄρχων (No. 144). It derives its water from wells, and it is on a Roman road. There is nothing in all these things inconsistent with what we know of Savatra, and it would be very difficult to find another place which would suit the site as well. We know that Savatra was an important place—coins of it are preserved from Trajan's reign onward, and in later times it was a bishopric; the evidence of the Peutinger table shows that it was on a Roman road; and Strabo signals it out as the typical city of a waterless land—")δάτων στόμας πολλά· ὅπων δὲ καὶ ἐφεξῆς διανοτός, βαθύτατα φρέατα τῶν πάντων, καθιστέρ ἐν Σωτηρίας, ὅπων καὶ παράσχεται νῦ θάρρος (Strabo, Geographica, xii. 568). Recent investigations of Professor Ramsay, made in his journey of the last summer, show that a road ran from Laodiceia by Savatra and Hyde to Heracleia. The discovery of this road removed the one great difficulty which Professor Ramsay felt to the identifica-

See however, Smith's Dict. of Greek and Roman Geography, Savatra.
First Report of a Journey in Pisidia, Etc.

The only road available, previously being the one further north, and joining Laodicea and Archelais. Its position on this road made Savatra of importance in Byzantine as well as early times.

There are besides this only two difficulties in the way. The first is that immediately following the quotation which I have just given from Strabo, the words occur as a description of Savatra, ἑκτι δὲ καμάνους Γαρασούραν πάντων. For our purpose Γαρασούρα may be regarded as identical with Archelais, and the distance from Ak Surai, the received site of Archelais and Yaghli-Baiyat, might be considered too great to justify these words. The difficulty, however, disappears when the context is examined. Garsuoura had been mentioned before, and was a convenient enough guide to the situation of Savatra, even if we are right, and although that city is as a matter of fact nearer to Iconium, the place next mentioned.

The second difficulty is connected with one of the coins struck at Savatra and here reproduced. It is given in the British Museum Catalogue of Coins, Lycocnia xxi, 1900, p. 12 and Plate 68), and Mr. Hill says of it that 'The type of No. 2 is certainly a water-deity of some sort, and if the country is waterless must represent a salt lake in the neighbourhood.' He suggests Tatta as the lake, and has drawn my attention to the fact that the figure is standing, not reclining as a river-god usually does. Although Lake Tatta is nearly forty miles distant from Yaghli-Baiyat, it is such a conspicuous feature of the district that the appearance of its tutelary deity on the coins of Savatra would, in spite of the distance, present no difficulty, were we certain that the territory of Savatra reached so far as its shores. This Professor Ramsay thinks hardly possible, and suggests as an alternative the lake beside Obruklu (Purgos, cf. Hist. Geography, pp. 345, 346). Obruklu, he adds, must have been subject to Savatra, and coins mention only what is in the territory of the city.

H. S. Croixin.

17 Note, especially, the vagueness of the ἱστανέω and of the παρασύνεσις, ιεροί τοις ταύταις τε. 

τοῖς οὐ Τάιρος.
A FOUNDATION-DEPOSIT INSCRIPTION FROM ABYDOS.

While excavating on the temenos wall of the great temple of Sety I at Abydos in Upper Egypt, Mr. A. St. G. Caulfield found the foundations of a stone pylon, a fragment of a great lintel, inscribed by Ptolemy IV, Philopator, and a small limestone block here figured.

[Symbols and text]

Scale 1:5.

Σαραπίνος Ὀσερίδας Μεγίστως Σωτήρι
Διόσκορος ἑγοματίς τοῦ νομοῦ ὑποδομησέν ἐπὶ ἀγαθ(...)δι.

This block was probably a foundation-deposit; the inscription is incised; the surface has been gilded. It seems probable that it refers to the building by Philopator. It is figured in 'The Temple of the Kings,' by Mr. Caulfield, Pl. XX.; and described on p. 19, On Sarapis and Oistros at Abydos; see J.H.S. xxi. p. 277.

W. M. FLINDERS PETRIE.
ARCHAEOLOGY IN GREECE 1901—1902.

The repairs of the Parthenon are drawing to a close and visitors coming to Athens next Easter may hope to see the temple freed from its casing of timber. They must be prepared for other changes also. Already the removal of part of the scaffolding and the re-erection of it in July round the Erechtheum have shown that the Greek authorities intend to carry into effect the scheme for rebuilding the North Porch and West Wall which aroused some vigorous protests when it was publicly announced in April. The Parthenon repairs have been works of conservation. The present scheme is one of restoration, and it is natural therefore that it should have aroused a good deal of hostile criticism. The case for restoration is as follows:

(1) The ruined condition of the Erechtheum is largely due to injuries received in recent times;

[A Caryatid of the South Porch and a column of the East Porch were removed by Lord Elgin in 1804. Three pillars and the roof of the North Porch, and the West Wall with two engaged columns, fell during the War of Independence.]

(2) Most of the fallen members, excepting those removed by Lord Elgin, are still on the spot and can be assigned with certainty to their original positions;

(3) The proposal to replace them involves no new principle, for important features of the Erechtheum as it stands are the result of a similar restoration;

[Three pillars of the North Porch were re-erecled in 1838; it is now proposed to replace the roof which fell when they did. The South Wall was rebuilt in 1844, and the South Porch repaired in 1844 and 1846.]

A paper issued by the Minister of Education, Mr. Mompherrates, on April 4, (N.S. 17) of this year, specifies the works which have since been begun. The following is a free and somewhat condensed translation.

4 In view of the Report of the Committee of engineers and architects, Messrs. Saoul, Durfleid, Cases, Kallias, Balanos, and Mezaxas, and in accordance with the opinion of the Eshor-General of Antiquities, we resolve to proceed with the restoration of the North Porch of the Erechtheum. Use shall be made of the ancient material lying there, supplemented only so far as is absolutely necessary with new marble.

4 I have to thank Mr. Kavvadits and Mr. Byzantinos for their courtesy in supplying me with copies of the Report on the Erechtheum by Mr. Balanos, dated October 1901, of the Report of the Committee, dated March 28, 1902, and of the andraikis dounyapi of the Mr. Mompherrates and dated April 4, 1902. —E.C.F.
(a) In the third column from the East two damaged drums, the third and fourth, shall be renewed in part.

(b) In the column at the North-West angle the fifth drum shall be renewed in part, and the sixth which is missing shall be supplied; we shall be made of the new blocks lying beside the Erechtheum which were provided for this purpose on a former occasion.

(c) In the column on the West side the missing part of the fourth drum shall be supplied by the insertion of a new piece and the injured parts of the fifth and sixth drums shall be renewed.

(d) The marble beams of the roof shall be replaced in their original positions, supported by steel joists running their whole length which shall be masked with a marble facing three to four cm. thick, so that they shall not be visible.

(e) The other architectural members shall be replaced in their original positions and shall be tied together with iron cramps and dowels. When a coffer of the ceiling is missing its place shall be filled with an ordinary unsculptured slab.

(f) For the support of the central marble beam which slants on the wall above the doorway and might by its weight cause injury to the broken lintel, a steel joist shall be inserted in the wall immediately under the roof-beams.

(g) Further we resolve that the West Front of the Erechtheum shall be partially reconstructed in its original form and that the half-columns and their capitals which are preserved shall be erected in their original positions. New marble may be used when it is absolutely necessary in place of missing parts of the shafts.

(A) The technical direction of the works is entrusted to Mr. N. Balanos the engineer attached to the Ministry of Education; he is to act in consultation with the Ephor-General of Antiquities, who shall have the supreme control of the works. The Minister reserves the right of summoning the Committee of engineers and architects in order to hear their views on questions that may arise during the progress of the works.²

Of the members of the Committee responsible for this momentous decision Mr. Saurot is director of public works, Dr. Dürpfeld at once an archaeologist and an architect, Mr. Metaxas an architect, Mr. Balanos the skilful architect and engineer who has superintended the repairs of the Parthenon, while Mr. Gazes and Mr. Kallinas are civil engineers. It is a local committee of technical experts, familiar with marble architecture both ancient and modern, and well qualified to advise on the methods and materials to be adopted and on difficulties which may present themselves during the restoration. But the experiment of restoration would be watched with less anxiety if the question whether or not it should be undertaken had been submitted to a Committee more international in character and more varied in composition. However, the discretion exhibited in the repairs of the Parthenon affords good ground for expecting that the restoration of the North Porch and West Wall of the Erechtheum will be justified by the result. What many lovers of the Acropolis fear is that the successful execution of these works may lead to a far more difficult and dangerous experiment, that of re-erecting the columns of the Parthenon. They have come to believe that these monuments, the

² A criticism of these proposals by Mr. K. W. Schultze, in the Athenaeum of June 29, contains two important recommendations, that the metal supports should be entirely covered in concrete and made to look exactly what they are—modern expedients; and that the ties or cramps used should be made of iron or of bronze or gun-metal.
heritage which Greece has received from the past, belong not only to Greece but to the whole civilised world. But those who claim a voice in the administration of this trust should remember that Greece, one of the poorest countries in Europe, has for generations borne the whole cost of maintaining her ancient monuments and has maintained them worthily, and that a foreigner may visit the sites and museums of Athens and the provinces without being called upon to pay a penny either by way of admission-fee or as a voluntary contribution to the cost of their maintenance.

The principle of restoration has been accepted at Athens ever since the reconstruction of the little temple of Nike. During the present summer Mr. Kavvadias has been simultaneously excavating and rebuilding the cela of the temple of Apollo at Bassae. Many of the blocks, dislodged by earthquakes, lie one on another in a grouping so near their original order that intelligent excavation has made it possible to replace them with absolute certainty. The course by course.

Another work of reconstruction, which has been on the programme of the Archaeological Society ever since it came into being, is likely to be undertaken soon, the reconstruction of the monumental Lion of Chaeronea. Mr. Skias has been deputed to make a preliminary excavation of the spot where it stood. Some years ago Mr. Cecil Smith as Director of the British School offered to undertake the re-erection of the Lion with funds which had been put at his disposal for the purpose. The offer was refused - a striking instance of the unbending patriotism with which Greeks insist that they, and they only, are responsible for the maintenance of their national monuments.

The wall of the Areopagit immediately north of the Erechtheum has been lowered so as to make the temple more visible from the streets below. In the course of some repairs to the wall further west there was found a fragment of the inscription C.I.A. i. 324, relating to the building of the Erechtheum in the year 407.

The diving operations off Antikythera brought little of interest to light in the later months of last year and have now been discontinued. After fruitless negotiations with Herr Sturm of Vienna, whose success in piecing together the bronze athlete from Ephesus I described in this record two years ago (J.H.S. xx. p. 170), the Greek Government has entrusted the task of repairing the Hermes of Antikythera to the French restorer, M. André. His experience has been mainly with smaller works of art, such as the treasure of silver plate from Bosco Reale, but he is an artist of extraordinary knowledge and versatility. He reached Athens with two assistants in the last days of August, and by this time the statue should be ready for exhibition.

Among the important events of the summer has been the presentation to the National Museum by Mr. Carapanos of his collection of antiquities including the valuable series of bronzes from his excavations at Dodona and of archaic terracottas from Corfu. The collection is to be kept together and will be accommodated in a hall hitherto occupied by sculpture of
secondary interest. Schemes for enlarging the National Museum and for erecting a new Epigraphic Museum, perhaps in the neighbourhood of the Dipylon, are still under consideration. Space has been made for a part of the important series of early cypresses found in the excavations of the British School at Phylakopi by clearing some cypresses in the Mycenae Hall. Where the remainder of the Melian collection is to be exhibited has not yet been decided.

Turning to the excavations of the past year, we find once more that the discoveries made in Crete, in the palaces and cities of what we are beginning to call, not the Mycenaean, but the Minoan period, surpass all others in novelty and importance.

Dr. Arthur Evans has furnished the following summary of the results of his third season:

"At Knossos the work which began on the 15th of last February and was continued to July has been fertile in results beyond all anticipation. It seemed at first destined to be rather a campaign of finishing up and of rounding off a fairly ascertained area. But, besides the chambers that remained to be explored immediately contiguous to the Hall of the Double Axes and that of the Colonnades, excavated last year, the whole building was found to have a considerably larger extension on the Eastern side than had been expected. The building was thus seen to have climbed down the slope in descending terraces to a point some 80 metres East of the Northern entrance.

"Considerable remains were uncovered of the Eastern boundary wall, or rather of four separate walls in immediate contiguity with each other. The "Hall of the Double Axes" excavated last year was found to have a double portico at its further end facing both South and East. In the South Wall of this Megaron there had been visible last year a doorway leading to a finely paved passage with a "dog's leg" turn so constructed as to inscribe the privacy of the chamber beyond. The chamber thus approached has proved to be of quite original construction. It is flanked on two sides by a stylobate, also serving as a bench, between the pillars of which light was obtained, on the one side from a portico with two column bases, on the other from an area the further wall of which stepped back so as to insure the better lighting of the chamber within. On the West side of this room is a balustrade with an opening giving access to a small bath chamber. Above the gypsum lining slab of this bath-room a fine painted frieze of spirals and rosettes was found still clinging to the wall. Remains of a painted terra-cotta bath were found near.

"Another interesting feature of the new Megaron itself was a small private staircase in its North Wall, leading up to the thalamoi or bedrooms above. Of the wall-paintings that had originally adorned the Megaron and its calambar fore-hall some important remains were discovered—including quite an aquarium of fish, with parts of two dolphins. This discovery sup-
plies the counterpart to the fine fish fresco brought to light by the British School at Phylakopi, and the latter work must be now definitely recognised as a product of the Knossian School. One very characteristic feature is common to both works. As the different tones of blue had to be mainly reserved for the fish themselves, and in order to give them greater relief the ground was left white, and the sea water gracefully indicated by azure wreaths and coils of dotted spray.

Here too was also found the upper part of a lady in a yellow jacket and light diaphanous chemise, whose flying tresses suggest violent action. It had possibly belonged to a scene from the bull-ring. Another fragment found here shows a smaller female figure nearly naked, springing from above and seizing the horn of a galloping bull like the Tiryns figure. It has moreover been possible to put together a large part of a painted panel found in 1901, giving a highly sensational scene from a Minyan circus-show. A Mycenaean cow-boy is seen turning a somersault over the back of a charging bull, to whose horns in front clings a girl in boy's costume, while another female tereador behind in similar disabille stands with outstretched arms as if prepared to catch her as she is tossed over the monster's back. The whole is a tourn de force of the Minyan arena. Among other fresco remains were naturalistic foliage and lilies, and in a gallery East of the Hall of the Double Axes, fine veined imitations of marble slabs. A very suggestive piece of wall-painting also found on this side consists of a succession of mazes, more elaborate than those on the later coins of Knossos, and showing that the prototype of the Labyrinth in art goes back here to prehistoric times.

Throughout all the region of the great South Eastern halls, it has been possible to support a large part of the upper storey, and a most elaborate system of drainage has been found, including latrines with flush pipes and drains of advanced construction, together with a succession of stone shafts descending from the upper floors to a network of stone conduits beneath the pavement of the lower rooms, large enough for a man to make his way along them. Removal of some later constructions has greatly modified the Northern entrance passage, which now, with its massive Western bastion, has a very stately appearance. Outside this have been brought out the remains of a considerable portico, including the bases of a series of large piers.

Large fresh deposits of inscribed tablets have come to light, the general purport of which was shown by the appearance of certain ideographic signs, such as swords and granaries, and those indicative of persons of both sexes. The largest deposit referred to percentages—some with the throne and sceptre sign before the amount—apparently recording the King's portion. A piece of a Mycenaean painted vase with linear characters and two cups, with inscriptions written within them in a kind of ink, supply wholly new classes of written documents. Great numbers of clay seal impressions were also brought out, including a fragment of one stamped by a late Babylonian cylinder. In magazines below the later Palace level, and belonging therefore to an earlier building, occurred seal impressions with pictographic signs, a striking evidence
of the antiquity of this system of writing on the Palace site of Knossos. Interesting new materials have also accumulated, bearing on the metric systems employed and even it would seem on the origin of coinage.

Among the finds of smaller objects two stand out respectively as of first-rate importance in the history of architecture and sculpture. One of these was the discovery of parts of a large mosaic, consisting of porcelain plaques—a series of which represent the fronts of houses of two or three storeys. Fragmentary as most of these were it was possible to reconstitute a fair number with absolute certainty, and thus to recover an almost perfect picture of a street of Minoan Knossos in the middle of the second Millennium before our Era. The different parts of the construction, masonry, woodwork and plaster, are clearly reproduced, and the houses, some of them semi-detached, with windows of four and six panes—oiled parchment being possibly used for glass—are astonishingly modern in their appearance. Other plaques found with them show warriors, and various animals, a tree, a vine, and flowing water, so that the whole seems to have been part of a large design analogous to that of Achilles's shield. The other find, made towards the close of the excavation, which throws a new light on the "Art of Daedalus" is the discovery of remains of ivory figurines. These are carvings in the round, the limbs being jointed together, and seem to have represented youths in the act of springing, like the cow-boys of the frescoes. The life and balance of the whole, the modelling of the limbs and the exquisite rendering of details, such as the muscles and even the veins, raise these ivory statuettes beyond the level of any known sculpture of the kind of the period to which they belong. The hair was curiously indicated by means of spiral bronze wires, and the amount of gold foil found with them suggests that they had been originally, in part at least, coated with gold—in which case they would have been early examples of the chryselephantine process. Some beautiful examples of goldsmith's work were also found, a small gold duck with filigree work, a miniature gold-fish, exquisitely chased, and a spray resembling fern leaves.

The new materials bearing on the local religion are extraordinarily rich. Remains of a miniature temple of painted terra-cotta with doves perched above the capitals of columns occurred in a stratum belonging to the pre-Mycenaean building. In the later Palace a series of finds illustrated the "baetylic" cult of the Double Axe and its associated deities. A gem shows a female figure—apparently a Goddess—bearing this sacred emblem. But more important still was the discovery of an actual shrine belonging to the latest Mycenaean period of the Palace with the tripod and other vessels of offering still in position before a base upon which rested the actual cult objects, including a small double axe of steatite, sacred horns of stucco with sockets between them for the wooden shafts of other axes, terra-cotta figures—cylindrical below—of a Goddess, in one case with a dove perched on her head; and of a male votary offering a dove. The actual discovery within the Palace walls of a shrine of the Double Axe must be regarded as a striking corroboration of the view already put forward in this Journal as to the
identification of the building with the traditional Labyrinth, and of the philological connexion of the latter with the "labyres or double axe" arrived at independently by Max Mayer and Kretschmer on philological grounds.

One very important result of this year's excavations has been the discovery of a whole system of chambers and magazines below the level of the later building showing, as is also proved by the abundance of re-used blocks with more primitive signs, that an earlier Palace had existed on the site. The magazines belonging to this earlier building were full of the remains of painted pottery belonging to the purer "Kamares" class, and of finer fabric than the more transitional and later off-shoots of the class found in some magazines brought to light this year in the S.E. quarter of the Second Palace. Some of the earlier painted vases found in the magazines of this lower building are of an egg-shell-like fineness of fabric, an elegance of shape and delicacy of colouring that was never certainly surpassed in the whole history of ceramic manufacture. Many are embossed in evident imitation of metal-work. We have here the proof of a highly developed "Minoan" culture going back at least to the middle of the third Millennium B.C. Fragments of obsidian vases found in this First Palace are of the Liparite type, unknown in the Aegean, and must have been derived from the Italian islands.

Below the "First Palace" structure again the remains of the extensive Neolithic settlement that underlies the whole site everywhere came to light. A considerable harvest of stone implements, primitive pottery, and "idols" of clay, marble, and shell was obtained from this Neolithic deposit.

Owing to the constant need for propping up the upper storeys, and for supporting terraces, much of the work has been of a difficult and at times dangerous nature, entailing a vast amount of actual construction in wood, stone, and brick. The Shrine, like the Throne Room, had to be roofed over. Vast masses of earth had also to be removed from parts of the site and nearly 250 workmen, including over a score of masons and carpenters, were constantly employed. Throughout the whole the explorer had the devoted assistance of Dr. Mackenzie in superintending the excavation, and of Mr. Fyfe on the architectural and engineering side.

The excavation of the S.E. corner of the Palace has still to be completed, and some works of delimitation must be carried out in other directions. The search for tombs must certainly be renewed and the lower Palace strata have also still to be explored at several points, and more "Kaselles" opened. Continued researches into the Neolithic deposit are also desirable, as well as the examination of some neighbouring buildings. Unfortunately the total amount that the Cretan Exploration Fund—including the British Association Grant—was able to contribute towards the year's expenses has again fallen far short of what it was necessary to expend.

During April and May the British School undertook preliminary excavations at Palaiokastro. Mr. Bosanquet was accompanied by the architect of the School, Mr. Heaton Coyn. The plain of Palaiokastro, the
largest plain on the East Coast of Crete, measures three miles from East to West and two from North to South. Almost uninhabited at the beginning of last century, it has gradually been brought under cultivation, and its olive groves are now the best in the province. There was no important settlement here in Greek or Roman days; the only visible remains of the classical period are some foundations on the little harbour, probably those of a warehouse from which the oil and other produce of the district were shipped. A Venetian writer describes the place as uninhabited in the seventeenth century and explains that it was the resort of corsairs. The Cretan seas have been the haunt of pirates throughout history, and the islands clustered round the North-East corner of Crete afforded them an especially convenient shelter. Whatever the reason, there seems to have been no large settlement at Palaiokastro from Mycenaean times until the middle of the nineteenth century. But in Mycenaean times it was one of the principal centres, perhaps the capital, of Eastern Crete. The excavations were rewarded by the discovery of a Mycenaean town extending over an area of at least 500 by 300 yards, and of cemeteries which throw new light on the burial customs of the earliest inhabitants.

The most conspicuous feature of the plain is a steep table-topped headland, called Kastri, which juts out into the sea midway along the low, and in places marshy, beach. In spite of its acropolis-like form it does not seem to have been fortified. The scanty remains on its summit are those of a very late Mycenaean village. Beneath them we found a few fragments of much earlier pottery, including some Kamáraíi ware. At the foot of Kastri, and sheltered by it from the north, lies a sandy crescent-shaped bay, the natural harbour of the plain. A smaller promontory forms the southern horn of the crescent, and from this point southward and westward lie the extensive ruins of the Mycenaean town. A building on the southern promontory, constructed of enormous limestone blocks, may be the Palaiokastro, which gave its name to the place. The principal ruin-field is called Roussolakkos, the red hollow, on account of the red earth formed by the disintegration of the Mycenaean brickwork. It is cut in two by a ridge running north and south on which are the earliest cemeteries. The houses near the sea are built on the gravel cliff and are humbler in character and apparently older than those lying inland. One of them yielded evidence of a primary and secondary occupation, fine pottery of the Knossian Palace style being found beneath the higher floor level. Another contained whole vases of the Kamáraíi style, but nothing Mycenaean in the strict sense.

The largest of the houses which were examined lies inland, in a group of what appear to be spacious upper-class houses; they are constructed partly in the megalithic style, characteristic of the Mycenaean homesteads so common in the limestone districts of Crete, partly in regular ashlar masonry; the upper storey, where one existed, was of brick. The plan of this house is perfectly intelligible, and in some respects anticipates that of the Greek house of classical times. The entrance is from a large courtyard into an L-shaped hypogeum, twenty-five feet long, the roof of which was supported on four
columns placed round a cemented impluvium, six feet square. The megaron can have had no windows and derived its light almost entirely from this hypaethral opening. Four doorways give access from the megaron into other living-rooms, one of them containing a sunken bathroom; a reproduction in miniature of those found in the palaces at Knossos and Phaestos. In all thirty-six rooms were excavated here, of which twenty-two lie within the megalithic walls of the original mansion, and the remainder round a second courtyard. The house was originally one-storeyed. Later an upper storey was added in brick, with two staircases leading to it, one of them over six feet wide. This principal staircase ascended to a richly decorated megaron; the rooms below it were full of fallen masses of fresco, and of wall-revetsments of polished schist; and in one of them there was found a large column-base, fallen from the upper floor and lying in the earth; some feet above a smaller column-base in situ in the ground floor. At the time of the construction of the upper storey some of the ground-floor rooms were converted into magazines. One of them has a plaster floor painted in colours, and a stone bench against the end-wall. This and an adjoining chamber yielded over 500 vases. Among the smaller 'finds' are a well-preserved tablet inscribed with characters in a linear script nearly related to that of Knossos, a pair of 'sacred horns' in stucco, and jars containing wheat and two kinds of peas.

Still more important results were obtained in the Cemeteries. Hitherto, we were very imperfectly informed as to the method of sepulture practised by the Cretans of the Kamárais period; and graves containing Kamárais pottery were practically unknown. Of the beehive tomb, the typical tomb of Mycenaean times on the mainland, only one example was discovered. It is cut in the clay subsoil and approached by a passage twenty-five feet long. It yielded six late Mycenaean vases and three bronze implements, a dagger, a knife and a razor. As a rule the Mycenaean inhabitants seem to have laid their dead in small family burial-places near their homesteads. Groups of two or more earthenware vessels, shaped like bath-tubs or coffers with gable-lids, occur in many parts of the plain. These had contained not complete corpses, but bones which were removed from the earth when time sufficient to decompose the body had elapsed after the original interment. A similar custom still prevails in the island. A still older form of this practice was illustrated by a very remarkable enclosure discovered on the ridge which cuts the town-site in two. It is a rectangle measuring twenty-seven feet by thirty-two feet, enclosed by a wall of rude limestone blocks, and subdivided by four similar walls into five parallel compartments, within which were packed in seeming confusion skulls, bones, and vases, principally cups of various patterns. The date of the deposit is given by the vases, many of which are good examples of Kamárais ware, with a brilliant decoration of white and red on a black ground, and by a three-sided seal bearing pictographic characters. There was also an unique series of miniature vessels carved out of marble, steatite, and alabaster, and of earthenware vessels painted in imitation of them. The bones were in heaps or bundles, not laid
in their natural order. The skulls had been transported from their previous resting place with some care, but for the other bones there was no rule; in some cases the heap beneath the skull seemed to represent a complete individual; in others the minor bones were almost wholly wanting. Sometimes the principal bones were formed into a kind of bed on which two or three skulls were laid.

A second and apparently similar bone-enclosure has been discovered and will be excavated next spring, with the help, it is hoped, of a physical anthropologist, towards whose expenses a grant of £50 has been made by the British Association.

**Fig. 1.—PHAESTOS. CORRIDOR WITH STORE-ROOMS ON EITHER SIDE.**

At Phaestos Professor Halbherr and Mr. Perrier have finished the excavation of the Palace. By their kindness I am permitted to publish here two photographs which give an excellent idea of the corridor with store-rooms opening from it on either side (Fig. 1), and of the great stairway, forty-five feet wide, which leads up from the west terrace to the principal Megaron (Fig. 2), described in the last volume of this *Journal* (vol. xxi, p. 337).

During the past season the excavation has been continued northwards, where the women's quarters are thought to have been. Here are a vestibule with eight entrances and a portico with two columns, more elaborately decorated than the rooms hitherto discovered. The wall-paintings represent foliage and flowers, among which the vivid colouring of the oleander, most characteristic of Cretan shrubs, is easily distinguished. Bath-rooms have
been discovered here as well as in the quarters of the men; the walls are decorated with geos duru and alabaster. Unexpected results were obtained by trial-pits sunk through the floor of the megaron, which revealed a series of store-galleries filled with pithoi and smaller crockery, evidently the basement-rooms of a palace of the Kamária period which had been destroyed by fire. When the palace was rebuilt these rooms, choked with fallen masonry to a depth of six or seven feet, were used as a substructure. The interval cannot have been a long one, for there are indications that the rebuilding took place in the Kamária or early Minoan and not in the Mycenaean period.

Fig. 2.—Phaestos. Stairway to the Megaron.

Having finished the excavation of the palace, the members of the Italian Mission, reinforced by Mr. Gerola who had been occupied previously with the search for tombs, and by Mr. Savignoni, turned their attention to a site known as Hagian Triada where they had noticed surface-indications of Mycenaean remains. Phaestos, it will be remembered, stands on the easternmost of a chain of heights which break the monotonous level of the great Messara plain and deflect to the north the slow waters of the Geropotamos some five miles from their outlet into the sea. At the other end of the ridge, two miles to the north-west, is a rounded eminence which takes its name from a Venetian chapel of the Holy Trinity, Αγίας Τριάδας. Here the lords of Phaestos seem to have had a summer residence—possibly a sea-side villa, for river and sea must have met near the foot of the hill at an
earlier stage in the formation of the delta. Trial-pits have revealed ashlar walls (and in one of them a window), a stair and a portico, and rooms which seem to have been undisturbed since the day when the occupants fled. Two of the tall-stemmed stone lamps, so characteristic of Minoan interiors, were found standing to right and left of a doorway. There is reason to hope that the minor antiquities and works of art, which were almost wholly lacking in the adjoining palace, may be found here in abundance. Already we hear of freecoes and alabaster friezes; one wall-painting represents a cat stalking a bird, described as a silver pheasant; another shows a hare running across a meadow, woods and rocks being represented in naturalistic fashion. A vase of carved steatite furnishes an equally life-like representation of the human inhabitants. Like many steatite vases it was made in several pieces, ingeniously fitted together; the two surviving pieces formed the upper half of the body and the neck. Round it runs a low relief representing a joyous procession of peasants, dancing and singing, carrying three-pronged forks on their shoulders. The leader is a conspicuous figure with long hair, in a cuirass of scale armour; the remainder, a score or more in number, wear only the characteristic loin-cloth with a tight belt and a small cap. Midway in the procession is a man beating time with a sistra for three fellows who march behind him with mouths open as if singing lustily. The group which brings up the rear is carrying a man shoulder-high. The discoverers explain the scene as the return from a successful foray, and the man carried aloft as a prisoner. One is rather tempted, in view of the light equipment of the party, to regard it as a ‘harvest-home,’ and to see in the tridents which they carry the epivases or winning-forks which are still called ἐπιφανεῖα in Crete.

Dr. Dörpfeld has continued his search for the Palace of Odysseus in the island of LEUKAS. With the aid of Dr. van Hille, a young Dutch scholar, he has sunk a series of trial-pits along the northern edge of the plain where he supposes the home of Odysseus to have been, and has discovered a considerable prehistoric settlement. They have also located an ancient conduit, formed of curious conical earthenware pipes, leading down into the plain from the hills on the west. If the theory be right, this may point to the τοιχή τιφών mentioned in the Odyssey. Some of these tapering pipe-sections, with a projecting collar for the joint, are very like those found at Knossos and may therefore be of early date.

Dr. Schrader, the new Second Secretary of the German Institute, has been studying the remains of the pediment-sculptures of the Hecatompedium, the sixth-century temple of Athena on the Acropolis. He assumes as the central figure of one gable a seated goddess, probably Athena herself, seen on face between two seated gods, Zeus and another, seen in profile, the angles being filled by two snakes. In the other pediment he places the group of Hercules in combat with Triton and the well-known snaky monster with triple human head and body, the so-called Typhon of the Acropolis Museum. The cornice-blocks above this pediment were decorated with
figures of waterfowl carved in low relief and coloured, those above the 'Zeus and Athena' pediment with figures of eagles.

At Corinth Professor Richardson and two members of the American School, Mr. B. Hill and Mr. S. Bassett, were at work from the beginning of March until June 14. Once more enormous masses of earth have been removed, bringing to light a fresh region of the Romanised city at a disheartening depth and at a proportionate expense. The most important of the newly discovered buildings is a late Hellenic στυλό which has been traced and in great part cleared for a length of 350 feet along the South side of the Temple-hill, and is believed to extend still further to the West. Its back served as a retaining wall to the temple-terrace. Its front, facing South, was of the Doric order. Along the axis of the portico ran an interior line of Ionic columns with an intercolumniation twice as great as that of the front—a common arrangement. Capitals, architrave-blocks and painted cornices have been found and furnish all the data required for a restoration on paper.

It was standing in Roman times, for the fine hard stucco of the architectural members has been overlaid with a thick coat of coarser Roman stucco; but its front was then hidden by a row of vaulted shops built only three feet from it and opening into a new south stoa further forward. Their front walls rest on the foundations of a large Hellenic building terminating in an ase, perhaps a θυελλατζέων. A similar street of shops at right angles to that just described was discovered in 1898 to the East of the Temple-hill, and proved to be the continuation within the city of the main road from the port of Lechaion. The whole series has now been cleared, eighteen chambers in all, and the excavation pushed back up the slope of the hill, where there had been an open piazza, bounded on the East by the shops and on the West by a very late, perhaps Byzantine, portico. Under the piazza, which had been artificially levelled up, are the remains of a Greek stoa of larger dimensions than that already described as bordering the south side of the hill, decidedly older and probably dating from the fifth century. Several water-conduits have been discovered. The largest, which has been traced for over a hundred yards, is generally large enough for a man to stand upright in, and seems to be contemporary with the South Stoa, the line of which it follows exactly. In it were found large quantities of lamps, ranging over all possible periods; it is fortunate that Mr. Bassett, one of the excavators, has for some time devoted himself to a study of the forms, ornaments and descriptions of ancient lamps.

Generally speaking, this season has been more productive of small antiquities than any of the six preceding it. In an article in the New York Nation of July 31, Professor Richardson mentions old Corinthian and Proto-Corinthian pottery in abundance, measured by bushels; terra-cotta figurines, some of them extremely archaic and at the same time finely wrought, and several old Greek inscriptions, one of them as old as the sixth century and in the local Corinthian alphabet. In 1903 he proposes to clear the stage buildings of the theatre, the position of which to the North-West of the
Temple was determined as long ago as 1896. This spring he cut a trial trench across the orchestra and stage buildings. The fact that this trench was eight metres or over twenty-six feet deep, narrowing, owing to the looseness of the accumulated soil, from six metres at the top to two at the bottom, conveys some notion of the difficulties to be encountered. As was to be expected it revealed only a complex of walls of different dates and a quantity of marble fragments; among them there was one real prize, the head of a young man in Parian marble.

A modest Museum has been built at Old Corinth, at a cost of over 5000 drachmai, to house the sculpture and inscriptions, and it is to be hoped that local enterprise may soon provide simple quarters for travellers wishing to pay more than a flying visit to this impressive site. To its old attractions, the view North across the blue gulf or South to Acrocorinthus, the labours of the American School have now added a foreground of ruins which, arid and repellent though they seem, yet enable us to picture Corinth as she was, the city of commerce and of pleasure, of big shops and stately porticoes and cool running fountains.

A useful popular account of the excavations, with a plan of the site, was published by Dr. A. S. Cooley in Records of the Past for February and March of this year.

At Delphi M. Homolle has undertaken no further excavations. The efforts of the French School have been concentrated on reducing to order the excavations already carried out and particularly on the installation of the new Museum, which has been formally opened. At Delos M. Dürrbach, a former member of the School, has been engaged since June in clearing away the unsightly mounds of excavated earth which have long defaced the sacred enclosure. When these 'spoil-heaps' have been removed, the foundations of the temples, porticoes and treasuries ought to tell their story as plainly as those in the Altis at Olympia.

Mr. Vollgraff, of the French School, has kindly permitted us to publish some notes descriptive of his successful first season at Argos. He excavated there from May to September. The work was begun with an exploration of the hill, called 'Aspron' by the ancient and Prophet Elias by the modern inhabitants, which lies to the north of the present town. Its ancient name of 'The Shield' is justified by its shape; it is a low rounded hill, some four hundred feet high and two miles in circumference. At the top, where there is a little church of the Prophet Elias, Mr. Vollgraff came upon the foundations of a dwelling-house—possibly, he thinks, the abode of a chief—of the prehistoric period. The pottery and the construction of the walls are said to present analogies to those found in the lowest strata at Troy and at Tiryns. On a lower terrace girdling the summit are remains of several mansions one above the other, belonging to a period a little more recent, but yet anterior to the Mycenaean period. The lower terrace was surrounded by a strong cyclopean wall about 500 metres in length. Side by side with the foundations of the
cyclopean wall and outside them, ran those of a polygonal wall which may date from the seventh century. The Greek wall had four square towers and one round one; it did not surround the top of the Aspis entirely, but only defended that part of the hill which does not face the town, the remainder being enclosed between the city walls, the traces of which have been discovered on the slopes of the Aspis. On the west the city wall descends towards a place now called Portites, where the site of one of the gates of the ancient city has been determined, and then rises again towards the summit of the Larissa, stopping short at the rocky height crowned by the picturesque ruins of the Venetian Castle. On the east the wall is more difficult to follow, and it seems impossible to discover the line of the city-wall in the plain. But various indications warrant the statement that the modern town does not coincide with the ancient, which extended farther to the south. On the southern shoulder of the Aspis, Mr. Vollgraff has cleared a remarkably well-preserved reservoir, intended to hold rain-water collected from the roofs of the buildings higher up the hill. It consists of two parts, a circular cistern which served apparently as a settling-tank, its only outlet being at a considerable height, and a long reservoir beside it. Both are lined with fine hard cement. The reservoir is a rock-cut tunnel, forming in section a pointed arch and resembling the built galleries at Tiryns, with the difference that its walls are nowhere perpendicular but curve inwards from the floor-level. The only openings for drawing water are at the two ends. It is almost certainly a work of the Mycenaean age. Finally, in the valley named Dedalos, which separates the Aspis from the Larissa, Mr. Vollgraff has discovered a Mycenaean cemetery with a number of tholos-tombs; all had been plundered at some distant period, but they still contained a number of Mycenaean vases of the close of the third style. One tomb had been re-used in the geometric period. The continuation of the excavations is assured by a generous donation from Mr. A. E. H. Goekoop, a compatriot of the excavator.

In the course of preliminary excavations undertaken in the island of Tinos, M. H. Demoulin, foreign member of the French School of Athens, has succeeded in determining the site of the sanctuary of Poseidon and Amphitrite. He has cleared the walls of a portico, an exedra and the steps of a large building which appears to be the temple. This at any rate is the conclusion indicated by the inscriptions and fragments of sculpture discovered at this spot.

At Thera Baron Hiller von Gahrtingen brought his excavations to a close by three weeks of work in the month of June. Dr. Pfuhl has been so kind as to furnish the very important notes that follow.

Within the area of the city itself the ground was cleared in several places and various gaps filled up. An interesting torso of Apollo in the archaic Parian style was found in the wall of a cistern by the Gymnasium of the Ephebi. The ‘bag’ of inscriptions is over a hundred, including many of the archaic period and some valuable Ptolemaic records. A trial excava-
tion by the chapel of Ζωοδόχος Παμμή was unsuccessful but the ground about "Λάγος Στέφανος was completely excavated, revealing a Byzantine and a late classical settlement. An inscription belonging to the Byzantine building names the Αρχιεπίσκοπος.

On the south-west slope of Mesavmos (cf. J.H.S. xx, p. 177) Dr. Pfuhl excavated a cemetery differing essentially from that excavated by Dr. Dragendorf on Sellada; the two are contemporaneous (eighth to sixth century) but the nature of the ground necessitated a different arrangement. Beneath the limestone rocks of the hill on which the city is situated the slope rises in great steps. Five of these have been fashioned into terraces, with a roadway in front of each, the difference of level between them being about four metres. In details this extraordinary cemetery exhibits all sorts of irregularities; in one part the graves are arranged in groups and singly between masses of rock fallen from the heights above. Built in most cases with quarried stones, the graves are of many different types. Dr. Pfuhl hopes to be able to show how the forms of chamber- and shaft-tomb, both round and square, developed from a simple lining or packing of the grave with stones for the protection of vases placed in it. There are many oval and round tholos-tombs and intermediate types such as a shaft-grave with two straight walls and one vaulted circular wall. The roof was formed by the overlapping of flat stones but is always more or less ruined. The direct derivations of all these forms from those which Tsountas has discovered on the Cyclades, especially in Syra, is manifest. It is noteworthy that many primitive forms survived side by side with the developed forms and that even inside the chamber-tombs the several urns are often sheltered by a packing of stones. The layer of ashes from the funeral offering is often found under and upon the urns. For later offerings special pits were used, heaped in the rock and surrounded with a wall. The bones show that oxen, swine, sheep, goats, and rabbits were in use as victims; the latter occur chiefly in poor graves (the wild rabbit is at the present day the chief meat diet of the peasants of Thera), while the ox is found only in the richest family graves which contain a large number of interments. Cremation was the rule in Thera in archaic times, with the single exception that children up to the age of five or six were sometimes interred unburned in large jars. Certain rectangular enclosures were identified as burning-grounds, some of them public, others attached to family tombs. The usual offerings were eating and drinking-vessels, the former sometimes containing the remains of a meal. Weapons (daggers, lances, sling-stones) and ornaments (necklaces and rings) were rare. A very fine gold ornament of orientalizing style, and in other cases brooches and pins, had been affixed to the border of a cloth used to wrap round the bones. The vases furnish new evidence for the late geometric and orientalizing style, and indicate that Thera in the archaic period maintained close relations not only with Crete but with Cyprus.

In Thessaly Dr. Tsountas has this summer continued his exploration of prehistoric villages in the plain north-west of Volos. At Seskle, a site
resembling Dimini, besides stone celts he has discovered one of lead. On the same hill-top he has excavated a prehistoric πεύκον, furnished, unlike the palaces of the Argolid, with an opisthodomos. It is satisfactory to learn that these Thessalian finds are to be deposited at Halmiras, a town which already possesses a vigorous society of local antiquaries, and to form the nucleus of a special Thessalian Museum.

R. C. Bosanquet.
M. N. Tod.

Note.—Since this article was passed for press, we learn from Mr. Bosanquet that the Hermes of Antikythera has been successfully restored and is now exhibited, and that the work on the Erechtheum proceeds apace.

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RULES

OF THE

Society for the Promotion of Hellenic Studies.

1. The objects of this Society shall be as follows:

I. To advance the study of Greek language, literature, and art, and to illustrate the history of the Greek race in the ancient, Byzantine, and Neo-Hellenic periods, by the publication of memoirs and unedited documents or monuments in a Journal to be issued periodically.

II. To collect drawings, facsimiles, transcripts, plans, and photographs of Greek inscriptions, MSS., works of art, ancient sites and remains, and with this view to invite travellers to communicate to the Society notes or sketches of archaeological and topographical interest.

III. To organise means by which members of the Society may have increased facilities for visiting ancient sites and pursuing archaeological researches in countries which, at any time, have been the sites of Hellenic civilization.

2. The Society shall consist of a President, Vice-Presidents, a Council, a Treasurer, one or more Secretaries, and Ordinary Members. All officers of the Society shall be chosen from among its Members, and shall be ex officio members of the Council.

3. The President shall preside at all General, Ordinary, or Special Meetings of the Society, and of the Council or of any Committee at which he is present. In case of the absence of the President, one of the Vice-Presidents shall preside in his stead, and in the absence of the Vice-Presidents the Treasurer. In the absence of the Treasurer the Council or Committee shall appoint one of their Members to preside.
4. The funds and other property of the Society shall be administered and applied by the Council in such manner as they shall consider most conducive to the objects of the Society: in the Council shall also be vested the control of all publications issued by the Society, and the general management of all its affairs and concerns. The number of the Council shall not exceed fifty.

5. The Treasurer shall receive, on account of the Society, all subscriptions, donations, or other moneys accruing to the funds thereof, and shall make all payments ordered by the Council. All cheques shall be signed by the Treasurer and countersigned by the Secretary.

6. In the absence of the Treasurer the Council may direct that cheques may be signed by two members of Council and countersigned by the Secretary.

7. The Council shall meet as often as they may deem necessary for the despatch of business.

8. Due notice of every such Meeting shall be sent to each Member of the Council, by a summons signed by the Secretary.

9. Three Members of the Council, provided not more than one of the three present be a permanent officer of the Society, shall be a quorum.

10. All questions before the Council shall be determined by a majority of votes. The Chairman to have a casting vote.


12. The Secretary shall give notice in writing to each Member of the Council of the ordinary days of meeting of the Council, and shall have authority to summon a Special and Extraordinary Meeting of the Council on a requisition signed by at least four Members of the Council.

13. Two Auditors, not being Members of the Council, shall be elected by the Society in each year.

14. A General Meeting of the Society shall be held in London in June of each year, when the Reports of the Council and of the Auditors shall be read; the Council, Officers, and Auditors for the ensuing year elected, and any other business recommended by the Council discussed
and determined. Meetings of the Society for the reading of papers may be held at such times as the Council may fix, due notice being given to Members.

15. The President, Vice-Presidents, Treasurer, Secretaries, and Council shall be elected by the Members of the Society at the Annual Meeting.

16. The President and Vice-Presidents shall be appointed for one year, after which they shall be eligible for re-election at the Annual Meeting.

17. One-third of the Council shall retire every year, but the Members so retiring shall be eligible for re-election at the Annual Meeting.

18. The Treasurer and Secretaries shall hold their offices during the pleasure of the Council.

19. The elections of the Officers, Council, and Auditors, at the Annual Meeting, shall be by a majority of the votes of those present. The Chairman of the Meeting shall have a casting vote. The mode in which the vote shall be taken shall be determined by the President and Council.

20. Every Member of the Society shall be summoned to the Annual Meeting by notice issued at least one month before it is held.

21. All motions made at the Annual Meeting shall be in writing and shall be signed by the mover and seconder. No motion shall be submitted, unless notice of it has been given to the Secretary at least three weeks before the Annual Meeting.

22. Upon any vacancy in the Presidency, occurring between the Annual Elections, one of the Vice-Presidents shall be elected by the Council to officiate as President until the next Annual Meeting.

23. All vacancies among the other Officers of the Society occurring between the same dates shall in like manner be provisionally filled up by the Council until the next Annual Meeting.

24. The names of all candidates wishing to become Members of the Society shall be submitted to a Meeting of the Council, and at their next Meeting the Council shall proceed to the election of candidates so proposed: no such election to be valid unless the candidate receives the votes of the majority of those present.
25. The Annual Subscription of Members shall be one guinea, payable and due on the 1st of January each year; this annual subscription may be compounded for by a payment of £1 15s., entitling compounders to be Members of the Society for life, without further payment. All Members elected on or after January 1, 1894, shall pay on election an entrance fee of one guinea.

26. The payment of the Annual Subscription, or of the Life Composition, entitles each Member to receive a copy of the ordinary publications of the Society.

27. When any Member of the Society shall be six months in arrear of his Annual Subscription, the Secretary or Treasurer shall remind him of the arrears due, and in case of non-payment thereof within six months after date of such notice, such defaulting Member shall cease to be a Member of the Society, unless the Council make an order to the contrary.

28. Members intending to leave the Society must send a formal notice of resignation to the Secretary on or before January 1; otherwise they will be held liable for the subscription for the current year.

29. If at any time there may appear cause for the expulsion of a Member of the Society, a Special Meeting of the Council shall be held to consider the case, and if at such Meeting at least two-thirds of the Members present shall concur in a resolution for the expulsion of such Member of the Society, the President shall submit the same for confirmation at a General Meeting of the Society specially summoned for this purpose, and if the decision of the Council be confirmed by a majority at the General Meeting, notice shall be given to that effect to the Member in question, who shall thereupon cease to be a Member of the Society.

30. The Council shall have power to nominate British or Foreign Honorary Members. The number of British Honorary Members shall not exceed ten.

31. Ladies shall be eligible as Ordinary Members of the Society, and when elected shall be entitled to the same privileges as other Ordinary Members.

32. No change shall be made in the Rules of the Society unless at least a fortnight before the Annual Meeting specific notice be given to every Member of the Society of the changes proposed.
RULES FOR THE USE OF THE LIBRARY
AT 27 ALBEMARLE STREET.

I. THAT the Library be administered by the Library Committee, which shall be composed of not less than four members, two of whom shall form a quorum.

II. That the custody and arrangement of the Library be in the hands of the Librarian and Assistant Librarian, subject to the control of the Committee, and in accordance with Regulations drawn up by the said Committee and approved by the Council.

III. That all books, periodicals, plans, photographs, &c., be received by the Librarian, Assistant Librarian or Secretary and reported to the Council at their next meeting.

IV. That every book or periodical sent to the Society be at once stamped with the Society's name.

V. That all the Society's books be entered in a Catalogue to be kept by the Librarian, and that in this Catalogue such books, &c., as are not to be lent out be specified.

VI. That, except on Christmas Day, Good Friday, and on Bank Holidays, the Library be accessible to Members on all week days from eleven A.M. to six P.M. (Saturdays, 11 A.M. to 2 P.M.), when either the Assistant Librarian, or in her absence some responsible person, shall be in attendance. Until further notice, however, the Library shall be closed for the vacation from July 20 to August 31 (inclusive).

VII. That the Society's books (with exceptions hereinafter to be specified) be lent to Members under the following conditions:

1. That the number of volumes lent at any one time to each Member shall not exceed three.

2. That the time during which such book or books may be kept shall not exceed one month.

3. That no books be sent beyond the limits of the United Kingdom.

VIII. That the manner in which books are lent shall be as follows:

1. That all requests for the loan of books be addressed to the Librarian.

2. That the Librarian shall record all such requests, and lend out the books in the order of application.

3. That in each case the name of the book and of the borrower be inscribed, with the date, in a special register to be kept by the Librarian.

4. Should a book not be returned within the period specified, the Librarian may reclaim it.
(5) All expenses of carriage to and fro shall be borne by the borrower.
(6) All books are due for return to the Library before the summer vacation.

IX. That no book falling under the following categories be lent out under any circumstances:
   (1) Unbound books.
   (2) Detached plates, plans, photographs, and the like.
   (3) Books considered too valuable for transmission.
   (4) New books within one month of their coming into the Library.

X. That new books may be borrowed for one week only, if they have been more than one month and less than three months in the Library.

XI. That in the case of a book being kept beyond the stated time the borrower be liable to a fine of one shilling for each week after application has been made by the Librarian for its return, and if a book is lost the borrower be bound to replace it.

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General Meetings will be held in the Rooms of the Society of Antiquaries, Burlington House, London, W., for the reading of Papers and for Discussion, at 5 p.m. on the following days:

1902.
Tuesday, November 4th.

1903.
Tuesday, February 24th.
Tuesday, May 5th.
Tuesday, June 30th (Annual).

The Council will meet at 4.30 p.m. on each of the above days.
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Ephemeris Archæologique, Athens.
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Jahreshefte des Österreichischen Archäologischen Institutes, Turkenstrasse, 4, Vienna.
Journal of the Anthropological Institute, Hanover Square.
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Mnemosyne (care of Mr. E. J. Brill, Leiden, Holland).
Neue Jahrbücher (care of J. R. J. IIberg, Rosenthalstrasse 3, II., Leipzig).
Numismatische Chronik, 12, Altenburger Strasse.
Praktika of the Athenian Archaeological Society.
Publications of the Imperial Archaeological Commission, St. Petersburg.
Revue Archéologique, Paris (per M. Georges Perrot, 45, rue d'Ulm).
SESSION 1901-1902.

The First General Meeting was held on November 7. Prof. P. Gardner, V.P., in the chair.

Mr. Cecil Smith gave a description of a large Proto-Attic amphora, of which drawings were exhibited. The fragments of this vase were found in the course of excavations by the British School at Athens on the site of the Gymnasium of Cynosarges, in circumstances which suggest that, like most of its class, it probably stood on the outside of a tomb in place of a stele (J.H.S. xxii. p. 29).—Mr. John F. Baker-Penoyre showed his illustrations for a forthcoming paper by Mr. J. H. Hopkinson, entitled "An Early Island Vase Fabric," and gave some particulars of Mr. Hopkinson's researches (J.H.S. xxii. p. 46).—In the discussion which followed the papers, the Chairman, Mr. Cecil Smith, Prof. Ernest Gardner, and Mrs. S. Arthur Strong took part.

The Second General Meeting was held on February 25, Mr. Talfourd Ely in the chair.

Mr. A. H. Smith read a paper, illustrated with the magic lantern, on 'Humour in Greek Art.' Examples were shown of the many varieties of humour that are met with in the different periods of Greek history. At the earliest periods the modern spectator is for the most part laughing at rather than with the artist; though perhaps in some instances the artist himself intended a humorous effect, so far as his limited resources permitted. Later his attempts at humour take various forms. He may choose an obviously humorous subject for his theme, such as the story of Hermes and the cattles of Apollo, as told in the Homeric hymn to Hermes. Or he may make a humorous variation of a well-known subject. Thus the beautiful vase of Hieron, showing the goddesses going before Paris, represented the climax of a long artistic tradition. The artist who showed the same goddesses, each adjusting her toilet for the Judgment, treated his subject with a truly humorous touch. Later on we have scenes of more Aristophanic buffoonery from the comic stage. Again, in another direction, scenes from the life of childhood and youth begin to appear in the fourth century, and continue till the Roman Empire.—In the discussion that followed Prof. E. A. Gardner and Mr. G. F. Hill spoke of the origin
of the 'archaic smile,' and Mrs. S. A. Strong laid stress on the diversity of the subjects exhibited.

The Third General Meeting was held on May 7, Sir R. Jebb, President, in the chair.

Mr. G. F. Hill showed lantern illustrations of some of the more remarkable Greek coins acquired by the British Museum during the past five years. A gold stater of Tarentum, of about 338 B.C., with the infant Taras appealing to his father Poseidon, is connected with the appeal made by Tarentum to Lacedaemon, in response to which Archidamus came to Italy. A unique silver stater of the Achaean League, in style resembling the fine Arcadian coins of about 360 B.C., proves the correctness of the old attribution to the Achaeans of Peloponnesus of other coins now generally classed under Achaean Phthiotis. The head popularly known as Odysseus on an electrum stater of Cyzicus was considered in connexion with the other types which suggest that it is rather one of the Cabiři. A small silver coin was attributed to the Carian city of Lydæ, on the ground of its inscription and the resemblance of its types to those of Cnidus. A bronze coin of Claudius with a figure of the goddess of Myra in Lycia was shown to permit of the attribution to that province of a group of coins hitherto regarded as uncertain. A unique stater of Tarsus with a facing head of Heracles is, it is suggested, additional evidence of the influence exerted by Western Greece on the Cilician coinage of the early fourth century. In connexion with a tetradrachm bearing the types of Alexander IV., but the name of Ptolemy, Prof. Jan Six's view, that the portrait represents not Alexander the Great, but his son, was disputed, and the relation of the type of the fighting Athena to other types, such as the Athena Aleis of Macedonian and Seleucid coins, was considered.—The Chairman and Sir H. Howorth made some comments on the paper, which was very favourably received.

The Annual Meeting was held on July 1, Sir R. Jebb, President, in the chair.

In moving the adoption of the Council's Report the President referred to the satisfactory increase in the number of members, and alluded to the losses which the Society had sustained by death, including the names of the Bishop of Durham, Mr. C. J. Monk, and Mr. W. J. Stillman.

The following Report was read by the Acting Hon. Secretary (Mr. H. B. Walters) on behalf of the Council:

The Council have again to report a satisfactory session, in which the work of the Society has been carried forward in its several departments with energy and effect. Three General Meetings have been held and have been well attended. And in regard to these meetings a new arrangement has been made which should materially increase their success in the future. It has for some time past been felt that for this purpose the rooms of the
Royal Asiatic Society were hardly adequate. The use of the lantern in recent years has tended to draw a larger number of members to the meetings, and the rooms in question have on several occasions been inconveniently crowded. Fortunately the Council has been able in the course of the past session to come to an arrangement with the Society of Antiquaries, whereby in future all General Meetings will be held in their excellent rooms in Burlington House. The small fee charged for this accommodation has been met by a corresponding reduction in the rent charged by the Royal Asiatic Society at Albemarle Street, so that the greatly improved accommodation for General Meetings has been secured without any additional outlay. The Council feel that cordial acknowledgments are due to the Council of the Society of Antiquaries for the very friendly spirit in which they received the overtures of the Hellenic Society in this matter, and that this co-operation between two Societies working in the same field should be of real advantage to the studies in which both alike are interested.

The Council have again made a grant, this time of £100, to the Cretan Exploration Fund. By the aid of this Fund Mr. Evans last year carried further his remarkable excavations on the site of Knossos, while Mr. Hogarth made some interesting discoveries at Kato Zakro. The two explorers described their results at some length in the recent issue of the Annual of the British School at Athens. The response to the Appeal issued by the Managers of this Fund last autumn was unfortunately so inadequate that it was found necessary to confine its operations during the present season to the work at Knossos upon which Mr. Evans has again been successfully engaged, though it is doubtful whether the funds now available will suffice for the completion of the excavations. Considering the unique importance of these Knossian discoveries to the history of ancient art and civilization, as recognised by archaeologists in all parts of the world, it would indeed be a matter of profound regret if Mr. Evans were to be prevented by lack of means from carrying them to a satisfactory conclusion.

Meanwhile another very promising Mycenaean site, at Palaeokastro, near Sitia in Eastern Crete, which Mr. Hogarth had hoped to excavate under the auspices of the Cretan Exploration Fund, has been undertaken by the British School at Athens, and it is hoped that the Director, Mr. R. Carr-Bosanquet, may be able to present to members on this occasion a preliminary report of the results.

Some members will probably be aware that a British School has now been established at Rome on much the same lines as the School at Athens. Although the financial position of the new School is still far from secure, a competent Director has been found in Mr. G. McNeill Rushforth. Several good students have availed themselves of his guidance, and the nucleus of a library has been formed in excellent rooms secured for the School in the Palazzo Odascalchi. Seeing that Greek Art can be studied with advantage both at Rome and elsewhere in Italy, the Council have thought it right to respond to an appeal for support to this young and promising institution by...
making a grant of £25 a year for a period of three years from January 1, 1903. The success of the School at Rome is a matter of real concern to this Society, and the Council cordially commend its needs also to the private benevolence of members.

Satisfactory progress has been made with the Facsimile of the Codex Venetus of Aristophanes which was announced in last year's Report. The Facsimile itself is practically complete. It had been hoped that Professor J. W. White of Harvard, on whose initiative, as President of the Archaeological Institute of America, the Facsimile was undertaken, would have contributed the Introduction. Unfortunately it was found necessary to abandon the task, and the work was then entrusted to that very competent scholar and palaeographer Mr. T. W. Allen, who paid a special visit to Venice in the course of the spring for the purpose of revising his notes on the MS. He is now well advanced with the work, and it is hoped that the Facsimile may be ready for issue in the course of the autumn. It is satisfactory to report that already about eighty of the two hundred copies have been subscribed for in Europe and in America.

Another special publication, which was announced last year, that of the Report on the very important excavations undertaken by the British School at Athens on the site of Phylakopi in the Island of Melos, has also made good progress, and it is hoped that the volume may appear before the end of the year. Members are reminded that, in order not to interfere with the publication of the Journal, it was decided to issue this volume at cost price to members and at a higher price to the general public. The Council trusts that members will support this undertaking by purchasing enough copies to ensure the Society against loss. In no more effective way could they help the Society to carry on its work, for it is obvious that its ordinary revenues are insufficient to do more than assist, in excavations and publish such preliminary reports as space can be found for in the Journal alongside of the other important contributions which are always available. For any completer publication special funds must be raised, and the readiest method seems to be that members should be willing to purchase such extra publications at cost price. The only alternatives would be a Special Publication Fund, or an increase in the annual subscription to meet such contingencies. For it is not to be supposed that members of this Society would be content to leave the results of important researches without any adequate publication.

It may be of interest to members to know that the Society has been invited to send representatives to the celebration of the Tercentenary of the Bodleian Library at Oxford in October next. The President of the Society, Sir Richard Jebb, and the Hon. Secretary, Mr. Macmillan, have been deputed to represent the Society on this interesting occasion.¹

¹ For the text of the Latin Address presented on the occasion, and written by the President of the Society, see p. iii.
Library Report.

The statistics of work done in the Library again show considerable progress. The number of visits paid to the Library was 343, compared with 236 in 1900-1901, and 190 in 1899-1900. On the other hand, there was a reduction in the number of members using the Library, which was 66, compared with 81 and 70. These figures seem to show that though the number of readers has not increased during the year, the Library is becoming more serviceable for purposes of study. The number of volumes borrowed was 247, compared with 199 and 156 in the two previous years.

The Council have decided that the time has now come when it is expedient to print the Library Catalogue. The list of accessions has been printed year by year, and a list of periodical publications has been given in recent volumes of the journal. No catalogue however has been printed, except the brief list given in volume viii. of the Journal, and it seems likely that a new catalogue will greatly increase the usefulness of the Library both for visitors, and for members at a distance. The revised draft is now nearly ready for press, and will, it is hoped, be distributed to members in the autumn.

The Overbeck tracts (about 700 in number) described in the last Report have been arranged and bound. They will be entered in the forthcoming catalogue.

The purchases of the year include:

Corpus Inscriptionum Atticarum
Tischbein, Hamilton Vases.

Also six volumes, which were wanting or imperfect in the Society's set of the Revue Archéologique.

The Notizie degli Scavi have been added to the list of periodicals.

Thanks are due to the Trustees of the Hunterian Collection, for the second volume of the Catalogue of Greek Coins. Thanks are also due to the following donors of books: The Delegates of the Clarendon Press, Messrs. Methuen and Messrs. B. T. Batsford; also to Mr. F. S. Benson, Mr. E. R. Bevan, M. Gaspar, Mr. J. F. Hewitt, Dr. W. Leaf, Sir E. Maunde Thompson, K.C.B., and Dr. P. Wolters.

Photographic Collection.

The year 1901-2 has been a period of steady extension, and increased use of the collection. Donations of slides,—amounting to sixty-two in all, and dealing chiefly with the antiquities of Olympia and with Greek athletics,—have been received from Messrs. Dyer, N. Gardiner, Awdry, Kaines Smith, and A. H. Smith; Mr. R. A. Hardy has allowed a selection of prints to be made from his negatives for incorporation in the reference collection; and Mrs. S. Arthur Strong has deposited a series of some 120 negatives.
from which slides or prints may be obtained by members. The thanks of
the Society are due to those members who have given their help in
this way.

The slide collection has been used by twenty-seven persons, for
teaching purposes, and the number of slides hired in all has risen greatly.
The sales of slides for private use have also increased, and include
large orders from the University of Sydney, N.S.W., and from American
subscribers.

Substantial progress has been made with the work of indexing and
cross-referencing the whole collection, and a few inadequate slides and
negatives have been replaced by better examples.

Finance.

The Balance Sheet shows the present financial position of the Society.
Ordinary receipts during the year were £1022, against £1037 during the
financial year 1900–1901. The receipts from subscriptions, including arrears,
amount to £641, against £646, and receipts from libraries, and for the
purchase of back volumes £185, against £179. Life subscriptions amounting
to £78, donations £3, and for lantern slides £19 have also been
received.

The ordinary expenditure for the year amounts to £665, against £716.
Payments for rent £80, insurance £15, salaries £60, are the same as in
the preceding year. Sundry printing, postage, and stationery accounts
show a reduction of £20; the cost of purchases for the Library shows £83
XXI, amounts to £367, against £382. The usual grant of £100 was made
to the British School at Athens, and a grant of £100 to the Cretan Explora-
tion Fund. The balance carried forward at the close of the year
under review amounts to £409, against £252 at the end of the previous
financial year.

The expenditure on the facsimile of the Codex Venetus of Aristoph-
anes is shown in a separate account.

Forty-nine new members have been elected during the year, while
thirty-seven have been lost by death or resignation. The present total of
subscribing members is 759, and of honorary members 25, the names of
Professors Federico Halbherr and Adolf Wilhelm having been added
to the roll of honorary members.

Six new libraries have joined the list of subscribers, and five have
stopped payment, making the number at the present time 143, or with the
five public libraries 148.

Conclusion.

The present year, like most of its predecessors, may be described as a
prosperous, if uneventful, one for the Society. The steady increase of
numbers—the present year showing a net gain of twelve—is a favourable sign
that the Society is continuing to extend its influence; and the fact that two distinguished members of the present Government have joined its ranks during the year may be taken as a happy augury that classical archaeology is in a due way to a more adequate recognition by the State than hitherto. We may still hope that the time will come when we shall no longer be behind France and Germany in this respect. Meanwhile it is to be earnestly desired that individual members will bear in mind the opportunities open to all of them for furthering the Society's interests by making known its work to the outside world and increasing the number of its members.

In the matter of finance, the Society may congratulate itself on an increased balance for the year and a satisfactory outlook for the future. On the other hand, with the publications of the Aristophanes facsimile and of the Phylakopi excavations in view there can be no question at present of further investments of capital.

The adoption of the Report was seconded by M. Bikelas, and the motion was unanimously carried.

Mr. Arthur Evans then made a statement on the results of his work at Knossos during the past season, illustrated by diagrams and lantern-slides. The season's work in the Palace of Knossos, which began on February 12, and was continued to June, was fertile beyond all anticipation. Besides the chambers that remained to be explored immediately contiguous to the Hall of the Double Axes and that of the Colonnades, excavated last year, the whole building was found to have a considerably larger extension on the eastern side than had been expected. The building was thus seen to have climbed down the slope in descending terraces to a point some 90 metres east of the northern entrance. Considerable remains were uncovered of the eastern boundary wall, or rather of four separate walls in immediate contiguity to each other. The new rooms adjoining the principal halls of the central part of the eastern quarter proved of great interest. South of the Hall of the Double Axes was a chamber flanked on two sides by colonnades and light areas, and provided with a small bathroom and a private staircase leading to the upper rooms. Throughout all this region it has been possible to support a large part of the upper story, and a most elaborate system of drainage has been found, including latrines and drain pipes of advanced construction. Further fine remains of fresco had come to light—naturalistic foliage and lilies, an aquarium of fish, and a lady in a jacket and diaphanous chemise. It has also been possible to reconstitute an important panel of wall painting from a room excavated last year, giving a complete and highly sensational scene from the bull ring, in which girl toastors took part. Large fresh deposits of inscribed tablets had come to light with ideographic signs, such as swords and granaries and those indicating persons of both sexes. The largest deposit referred to percentages—some, with the throne and sceptre sign before the amount, apparently recording the
king's portion. A piece of a Mycenaean painted vase with linear characters and two cups with inscriptions written within them in a kind of ink supplied wholly new classes of written documents. Great numbers of clay-seal impressions were brought out, including a fragment of one stamped by a late Babylonian cylinder. In magazines below the later palace level, and belonging therefore to an earlier building, occurred seal impressions with pictographic signs, together with an abundance of painted pottery of the 'Kamares' or 'Early Minoan' class, including specimens which for egg-shell-like fineness of fabric and beauty of form and hue have certainly never been surpassed.

Among the finds of smaller objects two stood out respectively as of first-rate importance in the history of architecture and sculpture. One of these was the discovery of parts of a large mosaic consisting of porcelain plaques, a series of which represent the fronts of houses of two or three stories. Fragmentary as most of these were, it was possible to reconstitute a fair number with absolute certainty, and thus to recover an almost perfect picture of a street of Minoan Knossos in the middle of the second millennium before our era. The different parts of the construction—masonry, woodwork, and plaster—were clearly reproduced, and the houses, some of them semi-detached, with windows of four and six panes—oiled parchment being possibly used for glass—were astonishingly modern in their appearance. Other plaques found with them show warriors, and various animals, a tree, a vine, and flowing water, so that the whole seems to have been part of a large design analogous to that of Achilles's shield. The other find—made towards the close of the excavation—which threw a new light on the art of Daedalus, is the discovery of remains of ivory figurines. These are carved in the round, the limbs being jointed together, and, to judge by the most perfectly preserved, they seem to have represented youths in the act of springing, like the cowboys of the frescoes. The life and balance of the whole, the modelling of the limbs, and the exquisite rendering of details, such as the muscles and even the veins, raise these ivory statuettes beyond the level of any known sculpture of the kind of the period to which they belong. The hair was curiously indicated by means of spiral bronze wires, and the amount of gold foil found with them suggests that they had been originally, in part at least, coated with gold, in which case they would have been early examples of the chryselephantine process. The new materials bearing on the local religion are extraordinarily rich. Remains of a miniature temple of painted terra-cotta, with doves perched above the capitals of columns, occurred in a stratum belonging to the pre-Mycenaean building. In the palace itself a series of finds illustrated the cult of the Double Axe and its associated divinities. A gem showed a female figure—apparently a goddess—bearing this sacred emblem. But more important still was the discovery of an actual shrine belonging to the latest Mycenaean period of the palace, with the tripod and other vessels of offering still in position before a base, upon which rested the actual cult objects, including a small double
axe of steatite, sacred horns of stucco with sockets between them for the wooden shafts of other axes, terra-cotta figures of a goddess, cylindrical below, and in one case with a dove perched on her head, and of a male votary offering a dove. Of great interest also was the discovery in an eastern corridor of the palace of a decorative wall-painting, consisting of a series of labyrinths, more elaborate than those of the later coins of Knossos. Owing to the constant need of supporting the upper story, much of the work has been of a difficult and at times dangerous nature, entailing much work from carpenters and masons. Vast masses of earth had also to be removed from parts of the site, and nearly 250 workmen were constantly employed. Throughout the whole Mr. Evans had the devoted assistance of Dr. Mackenzie in superintending the excavation, and of Mr. Fyfe on the architectural side. There still remained a certain amount of delimitation and further exploration of the strata below the later palace to be carried out next season.

Mr. R. Carr-Bosanquet, Director of the British School, also gave an account of his excavations at Palaeo-Kastro, in Crete, illustrated by diagrams. Interesting remains of Mycenaean houses had been discovered, and numerous tombs investigated, with some very interesting results in painted vases.

The former President and Vice-Presidents were re-elected, and Messrs. George Macdonald and E. E. Sikes were elected to vacancies on the Council.

The usual votes of thanks to the Auditors and the Chairman closed the proceedings.
Text of Address presented to the University of Oxford at the celebration of the Tercentenary of the Bodleian Library, October, 1902.

ACADEMIAE OXONIENSI

SOCIETAS GRAECA STUDIA COLENTIUM LONDINENSIS

S. D. P.

Gratias vobis, Viri clarissimi, agimus habemusque maximas quod ad celebranda Bibliotecae vestrae natalicia, Thomae Bodley opera abhinc annos trecentos instauratae, a Societate nostra legatos adesse voluistis. Neque dubium nobis quidem videtur quin singularis vestra erga nos humanitas Fundatoris ipsius ingenio ac voluntati feliciter respondeat, qui, qua fuit animi magnitudine praeditus, non Almae Matri solum sed toti litteratorum reipublicae beneficium illud immortale comparaverit. Id autem Societati nostrae est propositum, ut ad rerum Graecarum studia colenda atque augenda, quantum possit, opituletur; qua studia vester ille, ut erat humanarum artium fautor acerrimus, jam ab ineunte actate penitus dilet. Beroaldum Graecos scriptores praelegentem Genevae puer audivit, Homeri carmina Robertum Constantium magistrum adeptus evolvit; mox adolescentem Oxoniensis Collegio Mertonensi ascriptus ipse Graecas litteras publice docuit. Iure igitur Societas nostra, cuius inter auctores Carolus Newton alique Oxonienses in hoc genere disciplinæ principes numerantur, pietatis vestrae documentis suae quoque observantiae testi- monium libenter adiungi. Floreat semper Academiae vestrae insigne ornamentum, doctrinae liberalis adiutrix atque lux, magna illa Biblioteca, cuius limen quoties intramus, Thomae Bodley memoriam gratis animis recordamur.

Datum Londoni Kal. Oct. MCMII.
### THE JOURNAL OF HELLENIC STUDIES ACCOUNT FOR THE YEAR ENDING 31ST MAY, 1902.

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<th>Description</th>
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<td>122</td>
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<td>&quot; Advertisements in Journal</td>
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<td>&quot; Balance, to Cash Account</td>
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### CASH ACCOUNT.

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<td>&quot; Petty Cash</td>
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<td>&quot; Members' Subscriptions, 1901-1902</td>
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<td>&quot; Arrears</td>
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<td>&quot; Donations, F. D. Mocatta, Esq.</td>
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<td>&quot; April 1, 1902</td>
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<td>&quot; Corporation of Nottingham 3 per cent.—Nov. 1, 1901</td>
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<td>&quot; May 1, 1902</td>
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<td>&quot; Library Account—Sales of Duplicates, Fines, &amp;c.</td>
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<td>&quot; Lantern Slides Account</td>
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**To Balance at Bankers, 31st May, 1902**

| Petty Cash                                                                 | 499  | 8 | 10|

### ARISTOPHANES FACSIMILE FUND.

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<td><strong>Balance brought forward</strong></td>
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We have examined this account, compared it with the vouchers and bankers' book, and find it correct.

DOUGLAS W. FRESHFIELD, Hon. Treasurer.

30th June, 1902.

ARTHUR JOHN BUTLER,
STEPHEN SPRING-RICE,
Auditors.
A comparison with the receipts and expenditure of the last ten years is furnished by the following tables:

**ANALYSIS OF ANNUAL RECEIPTS FOR THE YEARS ENDING:**

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<td>Mr. D. G. Hogarth (Alex-</td>
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<td>£ 1,156</td>
<td>£ 1,140</td>
<td>£ 1,024</td>
<td>£ 1,021</td>
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**ANALYSIS OF ANNUAL EXPENDITURE FOR THE YEARS ENDING:**

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<td>£ 1,124</td>
<td>£ 1,084</td>
<td>£ 1,156</td>
<td>£ 1,149</td>
<td>£ 1,021</td>
<td>£ 1,021</td>
<td>£ 1,168</td>
</tr>
</tbody>
</table>

Balance: £ 1,117 | £ 1,293 | £ 1,124 | £ 1,084 | £ 1,156 | £ 1,149 | £ 1,021 | £ 1,021 | £ 1,168 | £ 1,274
PROCEEDINGS OF THE CAMBRIDGE BRANCH OF THE HELLENIC SOCIETY.

Session 1901–1902.

On Saturday, November 30, 1901, a meeting was held in the rooms of Mr. W. G. Headlam, King's College.

Two papers were read, one by Miss J. Harrison on *The epidaurion of Hermes*, the other by Mr. A. B. Cook on *The gong at Dodona*. The former, dealing fully with the literary and monumental evidence of the subject, investigated the double aspect of the *caduceus* as (a) a herald's staff and (b) a magic wand. The latter paper, which included a proposed restoration of the Dodonæan gong, has since been published in this Journal (vol. xxii. pp. 5–28). Both papers were followed by a discussion in which Dr. Sandys, Prof. Ridgeway, and others took part.
THE SOCIETY FOR THE PROMOTION OF HELLENIC STUDIES.

COLLECTION OF PHOTOGRAPHS AND LANTERN SLIDES.

The Photographic Collection consists of the following sections:

A. A Reference Collection of Photographic Prints.
B. A Loan Collection of Photographic Prints, Diagrams and duplicate Plates from various Publications.
C. A Loan Collection of Lantern Slides.
D. A Collection of Negatives from which Prints and Lantern Slides may be made as they are required.
E. A Collection of Enlargements suitable for Class-rooms and Libraries.

A. The Reference Collection contains Prints from every suitable negative in Section D 1 below; from negatives in private hands, which have been submitted for registration under the conditions of Section D 2; and from the principal series published by professional photographers in Great Britain and abroad; and includes prints from the negatives of the Lantern Slides in Section C. Thus the Reference Collection forms an illustrated catalogue of the Slides for the convenience of intending borrowers. This Collection is confined to the Society's Library, in the same manner as the rarer Engravings and Plates. The Prints are mounted, some in albums, but the majority separately, for convenience of consultation, on substantial card mounts of uniform sizes.

The Collection contains already some 4,000 Prints. It is at present fairly complete in views of Sites and Monuments in Greece proper; and poorest in views of Greek Sites elsewhere than in mainland Greece—and particularly in the Islands, in Asia Minor, and in Sicily and Magna Graecia. It is also far from adequate in regard to Works of Art other than Sculptures and Vases; and particularly in regard to Coins and Inscriptions.
A Catalogue, which will eventually be printed, is already in use in the Library, and is arranged—

(1) In geographical order, for views of sites and monuments in situ. An abstract of this list will be found printed below (p. lxxiii. ff.).

(2) In historical order, for works of art and their subjects, types and styles.

(3) In alphabetical order, for mythological or historical persons, museums and collections, &c.

The Catalogue records also (1) the subject of the Photograph; (2) the name of the Photographer; (3) the whereabouts of the Negative; (4) the reference number of the Lantern Slide or Loan Print of the same subject, where such exists; and (5) the price of a similar Print, or a Lantern Slide, if ordered through the Assistant Librarian on the terms stated below.

In all but a very few cases, duplicates of the prints in this Collection may be obtained through the Assistant Librarian on the terms stated below (p. xlix).

B. The Loan Collection of Prints and Diagrams contains duplicates of select Photographic Prints in the Reference Collection, and other Views, Diagrams, Plans, and Sketches of sites and objects, which are not otherwise easily accessible to teachers. These will be lent for short periods to duly qualified persons, in illustration of lectures and tuition; on such terms as will fairly cover the cost of maintenance and carriage. They are being mounted and stored in the same way as the Reference Collection, and will before long be ready for circulation in waterproof portfolios inclosed between substantial boards.

C. The Loan Collection of Lantern Slides has been in working order for some years already. A Catalogue was published in 1897 (J.H.S. xvii. p. liii. ff.) and a Supplementary Catalogue, in 1900 (J.H.S. xx. p. li. ff.). A further Supplementary Catalogue, including important new series of slides of ‘Prehistoric Greece,’ ‘Olympia,’ &c., will be found on pp. liv. ff. below.

Until further notice, Slides should be quoted, in borrowing, by their numbers in the Catalogue of 1897 and its supplements. Additions are being made as opportunities occur.

The Regulations for the use of Slides will be found at the head of each of the Lists of Slides above-mentioned. The Catalogue of 1897, with the supplements of 1900-2 may be obtained separately from the Assistant Librarian: price 6d., or post-free 7½d., prepaid.

Members of the Hellenic Society are further reminded that, under an agreement with the Educational Museum of the Teachers' Guild, they are entitled to make use of the Slide Collection of the Hellenic Association (cf. J.H.S. xx. p. lxxiii.), the Catalogue of which may be obtained from the Assistant Librarian of the Hellenic Society.

D. The Collection of Negatives consists at present of two parts.

(1) Numerous negatives have been either made for the Society, or presented, or kindly deposited on loan by private individuals for the use of
the Members. These negatives are deposited with a professional photographer, who is responsible to the Society for their safety. Orders for prints and lantern-slides from these negatives should be sent through the Assistant Librarian, and will be executed in accordance with a scale of charges, which is printed below, and is arranged to cover the bare cost and working expenses of the Collection.

Members of the Society, who possess suitable negatives, for which they have no immediate use themselves, but which they desire to make available for use by other students of Hellenic subjects, are invited to deposit them with the Society either permanently or temporarily, on the terms outlined above.

(2) Private collections of negatives have been from time to time deposited by their owners with professional photographers who are authorised to make prints or lantern slides to order for Members and other properly qualified persons, at approximately cost price.

**Prices of Prints made to order:**

<table>
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<tr>
<th>Size</th>
<th>Ordinary Silver Prints</th>
<th>Bromide Prints</th>
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<tbody>
<tr>
<td>3½ x 3½ (slide negative)</td>
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<td>0 3</td>
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<tr>
<td>4½ x 3½ (quarter plate)</td>
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<td>0 3</td>
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<tr>
<td>5 x 4</td>
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<td>0 4</td>
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<tr>
<td>6½ x 4½ (half plate)</td>
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<td>0 5</td>
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<td>8½ x 6½ (whole plate)</td>
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<td>0 8</td>
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<td>10 x 8</td>
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<td>0 10</td>
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<td>12 x 10</td>
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<td>15 x 12</td>
<td>1 6</td>
<td>1 9</td>
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</table>

**Prices of Lantern Slides made to order:**

| Duplicates of Slides in the Society’s Slide Catalogue, or from other negatives in the Society’s possession | from 0 9 |
| Slides made from Photographs, Drawings, or Engravings in the Society’s Library or elsewhere, of which no negative exists already | from 1 6 |

N.B.—The above are the customary charges, but the right is reserved to charge at a higher rate in cases where for any reason the actual cost-price exceeds the customary charge.

N.B.—Bromide enlargements, up to 30” x 20”, which are convenient for class-room purposes, and for small lectures, can be made from the majority of the negatives in the collection, and may be obtained at proportionate prices.

**E. The Collection of Enlargements for Class-rooms and Libraries.**

Through the generosity of the proprietors of the negatives, the Society has been enabled to arrange with the Autotype Company for the enlargement, by permanent process, of twenty-five views taken in Athens and twenty-three views taken in Sicily by Mr. W. J. Stillman; of seventeen views taken in
various parts of Greece by Mr. Walter Leaf; of ten by Mr. R. Elsey Smith; and of six by Mr. J. Thacher Clarke.

The prints, which measure about 17 x 13 inches, are supplied by the Autotype Company, 74 New Oxford Street, to members of the Society at the rate of 3s. each unmounted, and 4s. 6d. each mounted. The price of the photographs to the general public is considerably higher. A list of the subjects is appended (below), and a complete set of proofs of the photographs may be seen at the Society's Library.

To avoid mistakes in ordering these enlargements, the number of each photograph in the list, as well as its subject, should be given.

**LIST OF ENLARGEMENTS FROM**

**Mr. STILLMAN'S PHOTOGRAPHS OF ANCIENT ATHENS.**

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Acropolis and Theseion</td>
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<tr>
<td>2</td>
<td>Acropolis—from the Museum Hill</td>
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<tr>
<td>3</td>
<td>Acropolis—from the Stadion</td>
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<tr>
<td>4</td>
<td>Acropolis—from the Hill of the Nymphs</td>
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<tr>
<td>5</td>
<td>Temple of Wingless Victory—from the Propylæum</td>
</tr>
<tr>
<td>6</td>
<td>Doorway of Pandroseion</td>
</tr>
<tr>
<td>7</td>
<td>Portico of Pandroseion</td>
</tr>
<tr>
<td>8</td>
<td>Parthenon—East Front</td>
</tr>
<tr>
<td>9</td>
<td>Parthenon—from the N.E.</td>
</tr>
<tr>
<td>10</td>
<td>Part of Frieze of the Parthenon (in site)</td>
</tr>
<tr>
<td>11</td>
<td>East Portico of the Parthenon</td>
</tr>
<tr>
<td>12</td>
<td>West Portico of the Parthenon</td>
</tr>
<tr>
<td>13</td>
<td>Erechtheum—from the Parthenon</td>
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<tr>
<td>14</td>
<td>Erechtheum—West Side</td>
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<td>15</td>
<td>Erechtheum—East Side</td>
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<tr>
<td>16</td>
<td>Erechtheum—Interior of Cells</td>
</tr>
<tr>
<td>17</td>
<td>Erechtheum—Architectural Details</td>
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<tr>
<td>18</td>
<td>Cerythia. Single Figure from the Erechtheum</td>
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<td>19</td>
<td>Theatre of Herodes Atticus—Interior</td>
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<tr>
<td>20</td>
<td>Theatre of Dionysus—General View of Interior</td>
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<tr>
<td>21</td>
<td>Theatre of Dionysus—from the South, showing Auditorium</td>
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<td>22</td>
<td>Propylæum—from the S.W.</td>
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<td>23</td>
<td>Propylæum and North Wing</td>
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<td>Temple and Precincts of Asklepios</td>
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**LIST OF ENLARGEMENTS FROM**

**Mr. STILLMAN'S PHOTOGRAPHS OF SICILY.**

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<thead>
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<th>Number</th>
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<tr>
<td>1</td>
<td>Greek Theatre, Syracuse</td>
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<tr>
<td>2</td>
<td>Temple of Concord, Girgenti</td>
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<td>3</td>
<td>Temple of Concord, Girgenti—East Face</td>
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<td>Temple of Concord, Girgenti—Eastern Portico</td>
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<td>Temple of Concord, Girgenti—Interior</td>
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<td>6</td>
<td>Temple of Concord, Girgenti, Interior taken with wide angle lens</td>
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<td>7</td>
<td>Girgenti from Temple of Concord</td>
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<td>8</td>
<td>Temple of Juno, Girgenti</td>
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<td>9</td>
<td>Temple of Juno, Girgenti—from the West</td>
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<td>10</td>
<td>Temple of Juno, Girgenti—distant view</td>
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<td>11</td>
<td>Girgenti from Temple of Juno</td>
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<td>12</td>
<td>Temple of Castor and Pollux, Girgenti</td>
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<td>13</td>
<td>Temple of Hercules, Girgenti</td>
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<tr>
<td>14</td>
<td>Area of Temple of Jupiter, Girgenti, and Asaphelid Field</td>
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<td>15</td>
<td>Temple at Segesta</td>
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<td>16</td>
<td>Temple at Segesta—from the South</td>
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<tr>
<td>17</td>
<td>Temple at Segesta—Interior</td>
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<td>18</td>
<td>Flank of Temple at Segesta—showing curve of Stylaba and bases for lifting the stones</td>
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<td>19</td>
<td>Selinus—the Acropolis</td>
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<td>20</td>
<td>Selinus—Main Temple on East Side</td>
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<td>21</td>
<td>Selinus—Ruins on East Side of River</td>
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<td>22</td>
<td>Greek Tombs, Syracuse</td>
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<td>23</td>
<td>Latomus (quarries), Syracuse—Prison of the Athenian Army</td>
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### LIST OF ENLARGEMENTS FROM
**Mr. WALTER LEAF'S PHOTOGRAPHS.**

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<td>Athens - from the Monument of Thilooppeas</td>
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<td>2</td>
<td>Temple of Sounius - from N.E.</td>
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<td>3</td>
<td>Temple of Sounius - East End</td>
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<td>4</td>
<td>Temple of Ceres</td>
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<tr>
<td>5</td>
<td>Delphi - General View</td>
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<tr>
<td>6</td>
<td>Delphi - Partial Wall and Steps of the Athenians</td>
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<td>7</td>
<td>Eleusis - Remains of the Hall of the Mysteries</td>
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<td>8</td>
<td>Eleusis - Pedestal of Plato</td>
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<tr>
<td>9</td>
<td>View of St. Luke, Stube - Parnassus in the background</td>
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<td>10</td>
<td>Argos - Temple from S.E.</td>
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<td>11</td>
<td>Argos, Temple - another view</td>
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<td>12</td>
<td>Mycenes - Gated from S.</td>
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<td>13</td>
<td>Mycenes - Mrs. Schliemann's Treasury</td>
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<tr>
<td>14</td>
<td>Megalopolis - Theatre and Site of City from S.</td>
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<tr>
<td>15</td>
<td>Megalopolis - Theatre and View of Cave</td>
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<tr>
<td>16</td>
<td>Tyrins - Sallyport and Ancient Staircase</td>
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<tr>
<td>17</td>
<td>Tyrins - the Great Portal</td>
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### LIST OF ENLARGEMENTS FROM
**Mr. ELSEY SMITH'S PHOTOGRAPHS.**

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<td>Athens - The Propylum</td>
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<tr>
<td>2</td>
<td>Epidauros - Theatre</td>
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<tr>
<td>3</td>
<td>Olympia - Pediment from Temple of Zeus</td>
</tr>
<tr>
<td>4</td>
<td>Argos - Temple</td>
</tr>
<tr>
<td>5</td>
<td>Olympia - Hermes and Infant Dionysus</td>
</tr>
<tr>
<td>6</td>
<td>Olympia - the Temple of Zeus</td>
</tr>
<tr>
<td>7</td>
<td>Tyrins - Approach to Great Portal</td>
</tr>
<tr>
<td>8</td>
<td>Athens - Theatre of Dionysus</td>
</tr>
<tr>
<td>9</td>
<td>Athens - Porch of Erechtheion</td>
</tr>
<tr>
<td>10</td>
<td>Mycenes - The Lion Gate</td>
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### LIST OF ENLARGEMENTS FROM
**Mr. THACHER CLARKES PHOTOGRAPHS.**

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<tr>
<th>No.</th>
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<td>Ancient Quarries at Syracuse (Pros of the Athenians)</td>
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SECOND LIST OF ADDITIONS

TO THE

COLLECTION OF LANTERN SLIDES,

1900–1902.


The Regulations for their use are as follows:

1. The slides shall be lent only to members of the Society, or to members of the Teachers’ Guild who desire to use them for the purposes of demonstration.

2. Those members who have presented slides to the Society shall have a right to the free loan of two slides annually for every slide thus presented.

[Note.—The definition of the free loans, as two slides per annum, does not apply to contributions made before June, 1900, unless by consent of the donors.]

3. For the loan of slides beyond this number, and for loans to members who have not presented slides, a charge of 3d. for each slide shall be made. If the slides are returned within three days, the charge will be reduced from 3d. per slide to 2d.

4. All applications must be made to the Assistant Librarian, Hellenic Society, at 22 Albemarle Street. In each case, every slide must be quoted by its number, and in the case of the lists of 1897 and 1900 by the letter or letters which denote the series in which it occurs; e.g. the first slide on p. ix. of J.H.S., xx. should be quoted as 80 62. If desired, slides will be packed and forwarded to any address within the United Kingdom at the risk and cost of the borrowers. Such slides are reckoned to be at the risk of the borrower until they have been received by the Assistant Librarian.

5. The sum of half-a-crown must be paid for every slide broken while at the risk of the borrowers; save that in cases where the total damage done on the same occasion exceeds 10s., the Library Committee may
remit the remainder of the fine over and above the cost of repairing the damage.

6. The slides may be kept for a period not exceeding fourteen days. If for exceptional reasons it is required to keep them for a longer period, special application must be made to the Library Committee. Slides required at a particular date may be booked for not more than three months in advance.

The slides in the topographical classes are mainly from negatives taken by members of the Hellenic Society. A few have been taken, by permission, from the photographs of the German Archaeological Institute.

Those in classes P and S are for the most part taken from the originals, but in some cases from engravings, etc. In the case of sculpture, slides marked with * have been taken by photographic methods from the originals; if marked † they have been derived from casts. If not thus distinguished they have been taken from drawings and engravings.

In class V, most of the slides are derived from published illustrations. Where there is a choice of publications, reference is made by preference to that which was used for making the slide, except when it is difficult of access.

The following is a list of the principal contractions employed:—

A.M. Mittheilungen des Arch. Inst., Athenische Abteilung.
A.Z. Archäologische Zeitung.
B.D. Baumeister, Denkmäler.
B.M. British Museum.
B.S.A. Annual of the British School of Archaeology in Athens.
Conze, Die Attischen Grabreliefs.
G.A.V. Gerhard, Ausserländische Vasenbilder.
H.B. Overbeck, Gallerie höriöser Bildwerke.
Jahrbruch, Jahrbuch des K. Deutschen Arch. Instituts.
K.B.H. Ohnefalsch-Richter, Kypros, the Bible, and Homer.
M.d.I. Monumenti inediti dell' Instituto Archeologico.
Mich. Michaelis, Der Parthenon.
Mon. Ant. Monumenti Antichi.
Myc. Schliemann, Mycenae. 1878.
P. Prisse d'Avennes, Hist. de l'Art égyptien, 1863.
P.E.F. Quarterly Statement of the Palestine Exploration Fund.
R.C. Bayet and Collignon, Hist. de la Céramique grecque.
Schuchh. Schuchhardt, Schliemann's Excavations (Eng. Tr.).
W.V. Wiener Vorliegeblätter.
SLIDES RECENTLY ADDED TO SERIES CONTAINED IN PREVIOUS CATALOGUES.

Co.—NORTHERN GREECE:

Architectures, etc.

1574 Delphi : Athenian Stoa; [= Co 1]
1444 " " " another view; [= Co 2]
3251 " " " Theatre; general view
3552 " " " upper seats
3553 " " " Stadion, looking E.
3254 " " " W.
3255 " " " W., showing starting point
3257 " " " two more views of starting point
3256 " " " supporting wall

Db.—PELOPONNESE: Views.

3567 Corinth : Isthmian Canal, E. entrance looking W.
3558 " " " K. entrance
3559 " " " midway, looking W.
3260 Ephelons; distant view
3275 " " Tholos, lion-headed cornice
3279 " " skroniterion
372 Lernese March; from an engraving (Worsworth’s Greece, p. 483)
3262 Sphacteria: view of south entrance, from within, looking S.

[For other views of Mycenae and Tiryns see Prehistoric Series below.]

Eb.—ISLANDS, etc.: Views.

720 Argos; general view of Temple, from an engraving (Worsworth’s Greece, p. 134)
1849 Ikaria; from Cephalonia; [= Eb 3]
3268 " " the modern town (Vathy) from the sea
3267 " " entrance to Vathy Bay
3268 " " to Dazia Bay, from so-called “Cave of the Nymphs”
3269 " " Mount Ascus, from Passano Bay, “Castle of Odysses,” with cyclopean walls on summit
3270 " " Mount Ascus; E. slope, looking up to the Kastro
3271 Tinos: Watch, Eye of the Annunciation Festival
3272 " " procession of the Sacred Picture
3273 " " Annunciation Festival; keeping the line
3274 " " Annunciation Festival; the crowd

OLYMPIA.

[Incorporating all slides illustrating Olympia in previous lists.]

Mounts and Plans.

2362 Map of Ilion, Exeuta, Methone (Ol. Mappe VI., x.)
2363 " " South Portion, Foumaterion, Temple of Zeus (Ol. Mappe VI., 0)
2354 " " Echo Portion, Treasuries, Stadium (Ol. Mappe VI., x)

Views.

3201 General View; before excavation (from an engraving); [= Eb 10]
3255 " " after excavation, from W. (Drava) (Ol. Pl. 1)
iv. 2659 Treasures: of Cela and Messoria, looking S.W., (Ol. Pl. 5a)
2664 " " of Selinus and Metapontum (Ol. Pl. 7b)
2661 " of Sikyone, with Met:async (Ol. Pl. 151)
2678 " restored corner of a Treasury, showing coloring (Ol. Pl. 126)
2674 " various fragments of marble showing coloured ornamentation (Ol. Pl. 113)
2678 " " painted terracotta facade [of Temple, Ol. (Ol. Pl. 117)
2690 South West Gate of Altes from N.E. (Ol. Pl. 3b)
1931 Lapidarium: terracotta ornaments (Ol. Museum)
3508 Palastria: present state
2679 " " ground-plan
2677 " " and Tachisablois: general view (Ol. Pl. 4a)
2683 " " Philippeion, Gymnasium, Heraion, Prytaneion, restored (Ol. Pl. 151)
2671 Philippeion: elevation (Ol. Pl. 8a)
2686 Stadium: entrance from Altes (Ol. Pl. 4b)
2684 " " Altes (another view)
2689 " elevation: cross-section and plan of gilded (Ol. Pl. 47)
2685 " " gold-lines at eastern end
2662 Nero's House (Ol. Pl. 6b)
2665 Byzantine Church: looking S. (Ol. Pl. 7a)
2661 " " Interior (Ol. Pl. 6a)

Sculpture from Olympia.
3882 Hermes of Praxiteles: (Ol. 3a)
376 " " head only
3659 Nike of Patroclus
3644 Pedimental groups of the Temple of Zeus, restored (Ol. 6a)
2677 " " Pediment separately (Ol. 6a)
2647 " " " aged Seat (Ol. 6a)
3848 " " " central figure (Ol. 6a)
1841 " W. Pediment: view from Museum (Ol. 6a)

SCULPTURE.

Sh—Reliefs of Fine and Later Periods.
844 Athlete and ball (B.C.H. 1889, Pl. 10)
3579 Victory Akropolis: Epidaures
3589 Votive relief to Asklepios (Filae, Mus.)

So—Statues, Bronzes, &c. of Fine and Later Periods.
3659 Nike of Patroclus (Olympia)
3582 Atlante (Munich)
3702 Nibe. Gordian, fig. 102
Va—VASES: Geometrical and Orientalizing: (classified under local styles)

(The series has been completely revised, but the slides contained in the previous lists may still be ordered under their former numbers, which are printed here in [square brackets].

For Mycenaean and earlier styles see Va 1–7 in the list of 1897, and the section on *Vases* in the new **Prehistoric** series, below.)

---

2698 Argos: *grotesque-headed amorphos* (*Delt.*
R.C., fig. 29.

2699 **Aegina**: *tryphe-inscribed oinochoe* (*Eck.*
R.C., fig. 28.

2700 Corinth: *orientalizing*: R.C., PI. 5.

2701 *Cyprus*: Geometric and Phoenician vase, *Hel这一切.*

2702 Corinth: *Proto-Corinthian*: *Askm. Mus.*

2703 Corinth: *orientalizing*: R.C., PI. 5.

2704 *Cyprus*: Geometric and Phoenician vases, *Hel这一切.*

2705 Corinth: *Proto-Corinthian*: *Askm. Mus.*

2706 Corinth: *orientalizing*: R.C., PI. 5.
109 Rhodes: plate: Gorgon, J.H.S., vi, Pl. 59;
[=Va 29]
436 [ ... ] Euphrosyne, Menelaus, Herakles, E.M., [=Va 29]
2799 [ ... ] oinochoe, Lyrarai, B.C., fig. 29
891 Thera; geometrical, Jahrb. 1890, p. 51,
figs. 6, 7; [= Va 31]
892 [ ... ] Jahrb. 1890, p. 51,
figs. 6, 7; [= Va 23]

143 Uncertain: Aristophanes, vase, Mt. I., ix,
[ ... ] [ ... ] [ ... ] [ ... ] [ ... ]
454 [ ... ] male head from amphora vase;
Heibl, Rmos, fig. 74; [= Va 17]

[Vb—VASES: black-figured.

109 Panathenaeic amphora: runners, B.C., fig. 60
847 Kamares (B.C., fig. 348)
778 Death of Achilles (Birch, Anc. Pottery,
1874, p. 190); [= Va 55a]

782 Funeral Procession (Gardner, Sculptures
Tombs, fig. 4); [= Va 59a]
1038 Francois Vase: Apollo and Fountain
3691 Charriot Race: hydria, Berlin, (Bestricher,
Olympia, fig. 18).

[Vc—VASES: red-figured.

845 Athletes practising (G. A. F., iv. 271)

MISCELLANEOUS.

N.B.—The old series, Ma, Mb, have been reclassified and enlarged as follows; but slides contained in them may still be ordered by their former numbers, which are given in [square brackets].

Ma—PREHISTORIC GREECE.
Cyklades.

3596 Antiparos : bronze-age obj. (B.S.A. iii. p. 49)
814 Syros : acropolis and cemetery of Chalandriani (Epik. 1899, Pl. 7)
815 ... and Siphnos : pottery : selected types (Epik. 1899, Pl. 80)
816 ... implements etc. (Epik. 1899, Pl. 19, 41)
2570 Keos : marble figures (Athen. Nat. Mus. : A.M. 1884, Pl. 6)
2732 Amorgos : marble figures (Ashmolean)
2733 ... bowl, etc. (Ashmolean)
2229 Melos : obsidian vs. flint
2228 Melos : obsidian flake
2226 Phyliakos : from land side
2227 ... S.W. angle
2227 ... panorama of upper part of site
2561 These : vases with naturalistic painting (P.C. vi. Pl. 20)

Crete (Vines, etc.).

817 Knossos : General View from near Candia
4858 ... Plan of the Palace, 1901
4811 ... W. Court from S. W. Portico
4812 ... Magazine with palms
4812 ... large pithos
4814 ... Throne-Room : Antechamber from N. entrance
4815 ... Throne-Room : from Antechamber
4816 ... Throne-Room : from Antechamber
4816 ... Throne-Room : from N.W.
484 ... Throne-Room in course of excavation

Myconian Art in General.

2795 Mykonian pottery (Marnari, Mon. Ant. vi. Pl. 9)
2794 ... Knossos (J.H.S. xxv. Pl. 6, 7)
483 ... vases : selected types (B.D. 2002 ff.)
491 ... from Karpathos and Kalymnos (J.H.S. viii. Pl. 83)
497 ... tegula kamina type : [= Va 8]
4259 ... floral ornament, somewhat conventionalised, from Shaft-grave (P.C. vi. Pl. 21)
1858 ... marine subject (P.C. vi. fig. 480)
511 ... octopus (Marseilles Mus.)
489 ... later style : 'Warrior Vase' from Myconian obs. (Schnichl. fig. 280) : [= Va 5]
713 ... later date : 'Warrior Vase' rev. (id. fig. 285) : [= Va 4]

Vases : later date : warrior, horse, and dog : Tyros
2236 ... sub-Mycenaean : Lapithos in Cypros (K.B.H. xxviii. 1)
2711 ... Tell-es-Safi in Philistia (P.E.F.' 1899, 524)
442 Fresco-painting : bull-catching : Tyros : [Ma 1]
892 ... façade of temple : Knossos (J.H.S. xxi. Pl. 5)
892 ... façade of temple : Knossos (restored id. p. 139)
892 ... cupbearer : Knossos (Monthly Record. March 1901, p. 124, fig. 6)
892 ... girl : Knossos (B.S.A. vii. fig. 17)
892 ... asses : Mycenae (J.H.S. xiv. p. 81)
892 ... reconstruction of coiling spirals (J.H.S. xiv. Pl. 12)
5710 Gems : selected (B.M. Cat. of Gems, Pl. 1)
2571 ... (G. vi. Pl. 10)
489 ... (Epik. 1888, Pl. 19 = Ty M., p. 215)
4885 ... (from casts : seven slides)
4885 ... (other groups : eleven slides)
514 ... demons (Miklosich, Arch. J. K., figs. 41, 48)
48 ... male deity and lion (J.H.S. xix. p. 169)
48 ... animal figures (J.H.S. xiv. 169)
48 ... Cretan seal-stones (Eurys, J.H.S. xvi. p. 327)
48 ... seal-stones, prama, with photographic signs
48 ... script : clay tablets : linear (B.S.A. vi. Pl. 14)
48 ... Sculpture and Modelling : statuettes, Kamos (Teochniki, Mus. Ath. Pl. i, 14)
48 ... human figure (marble) : Knossos (B.S.A. vii. fig. 6)
48 ... head of bull 3 (Knossos (Monthly Rev. 1901, 129, fig. 7)
34 ... stele from 'Shaft-grave' : shrine, chariot and armed man (Schnichl. fig. 140) : [Ma 47]
551 ... disc of Sarcoph. (Berlin) from photo. : [Ma 30]
344 ... gold mask from 'Shaft-grave' (Schnichl. Myc. fig. 474) : [Ma 4]
344 ... diadema (Schnichl. fig. 159) : [Ma 30]
5517 ... half only (Schnichl. fig. 140) : [Ma 37]
Egyptian Contact with Aegian Civilization.

2354 Nubian pots with spindles (photo): [=Ma 29]
2355 " " boat (photo): [=Ma 40]
2739 Aegina vase (Karnarla type) from Kahun, (J.H.S. xi. pl. 14)
3510 Cretan seal-stones and Egyptian scarabs (J.H.S. xiv. fig. 227): [=Ma 41]
3828 Cartouch of King Khyan, from Knoess (B.S.A. viii. fig. 21)
3721 Egyptian stelaes from Palace of Knoess (Eg. Exp. Final Report, 1899-1909, vii. 68 ff.)
834 Egyptian banners and solar disc, of Cretan seal-stones (J.H.S. xxii. p. 162)
1910 Gryphons, Egyptian (Aeg. type) and Mycenaean (Schuch. fig. 189): [=Ma 22]
1004 Fresco-subjects, Egyptian: cats (B.M. No. 170): [=Ma 27]
3227 " " Egyptian: bull (Petrie, Tell-el-Amarna, Pl. 8): [=Ma 18]

3528 " Egyptian: calf (Petrie, Tell-el-Amarna, Pl. 4): [=Ma 19]
1910 Egyptian: canal scene (unpublished): [=Ma 21]
3529 Spinal ornament on stele (Petrie, Tell-el-Amarna, Pl. 10): [=Ma 17]
3228 " Netherzope ceiling (P. S1): [=Ma 24]
3531 " " (P. 23): [=Ma 24]
3532 " " and lotus (P. 88): [=Ma 25]
3533 " " (P. 82): [=Ma 26]
2709 Relief vases: from Rodhamn tomb
3834 " " single example (P. 160): [=Ma 23]
Mycenaean Architecture: House Plans, etc.

218 Gla: recess-plan (ToM, p. 376); (= Da 6)
2509 Mycenae: house-plan (P.C. vi, fig. 48)
3828 Mycenae: palace-plan 1901-2 (E.S.A. vii.
frontispiece)
2555 Mycenae: houses near the "circle" (P.C. vi.
fig. 114)
2566 Thera: house-plan (P.C. vi, fig. 39)
2568 Theban: (P.C. vi, fig. 29)
2715 Tiryns and Mycenae: palace plans (J.B.S. xx, p. 131)

Mycenaean Sites: Views, etc.

2447 Athens: "Pelasgic Wall" on Aeropoli
478 Mycenae: ground plan (Schuchhardt)
[ (= Da 1)]
2061 " general view from "Treasury
of Atreus" (= Da 60)
2828 wall and tower below Lion
Gate: (= Da 1)
845 Lion Gate, general view:
[ (= Da 6)]
2064 " nearer view
2565 " from within
1959 " Postern: (= Da 6)
2565 " from within
1688 " Gallery leading to Well in N.
Wall: (= Da 7)
3535 " Palace, Walls: (= Da 10)
3429 " staircase: (= Da 11)
3450 " megaron and hearth
3067 Circle and Shaft-graves: (= Da 8)
2068 and Shaft-graves, nearer
view: (= Da 7)
445 during excavation (Schl.
Jsp. Pl. 7).
457 " Treasury of Atreus," façade,
before excavation
3060 " Treasury of Atreus," façade,
after excavation: (= Da 18)
2563 " Treasury of Atreus," façade,
restored (P.C. vi, Pl. 5)
3568 " Treasury of Atreus," ground
plan.
3929 " Treasury of Atreus," longi-
tudinal section
1983 " Treasury of Atreus," interior,
present state: (= Da 14)
2560 " Treasury of Atreus," restored:
(P.C. vi, Pl. 7)

887 Tiryns: megaron restored: (= Da 26)
884 Capital from "Treasury of Atreus" restored
(Pacheco, Das Ton, Grp. fig.
(= Da 15)
1355 Mycenaean and Dorian profiles compared
(J.B.S. vii, p. 163): (= Da 16)
1816 Bridge (syclopian) near Epidauros: (= Da 89)
247 Tiryns: ground-plan (Schuchhardt): (= Da 2)
2715 " compared with Mycenaean.
(J.B.S. xx, p. 131)
1684 Mycenae: "Mino. Schlessmann's Treasury,"
stepped and doorway: (= Da
17)
1451 " Mino. Schlessmann's Treasury,
view of lintel from above:
(= Da 34)
462 " upper sitelid only
2715 " compared with My-
cenaean. (J.B.S. xx
p. 131)
400 " megaron only (Schuch-
hardt): (= Da 3)
378 " general view from West: (= Da
18)
1670 " from Outer Gate on
E. side: (= Da 19)
3430 " from N. flanking
Tower from within
(= Da 20)
1900 " Ramp to Entrance
(= Da 21)
864 " North Wall and Posterns: (= Da
23)
3443 " Upper Citadel men
from the North
3449 " West wall of Upper Citadel
3442 " and Silly port: (= Da
24)
1679 " South Wall, Gallery: (= Da 24).
another view, 2564
5431 " East Wall, Gallery: (= Da 25).
another view, 3533
3293 " Gallery, section
8286 " Masonry, detail, from inside.
Ma—EaRLy IRON AGE: Geometrical and Orientalizing Art-styles.

[For Vases of these styles see the Series Va above.]


2534 Cyprus: iron sword from Tenea, K.B.H., xxxvii. 7

2533 Cypro-Mycenaean vase handle: demons and vases. K.B.H. civii. 4

2547 Graeco-Phoenician shield boss from Amathus. K.B.H. edit. 5

872 Egypt: bronze bowl (reviv., dyn.), Jbod. 1888, Pl. 2. (= Ma 35)

315 Phoenician Bowl: Cyprus, Egyptian subjects. Jbod. 1888, figs. 7, 7a. (= Ma 50)

3349 Cyprus: mixed style. B.C.H. 540; (= Ma 42)

340 Cyprus: griffons and lions. Clermont-Ganneau, B.C.H. 1888, Pl. 4. (= Ma 50)

Cyprus: elegy scene. Helbig, Epos, Pl. 1. (= Ma 40)

341 Phoenician Bowl: Punic, Etruscan. Etrusca, Egyptian subjects. M.H.T. x, Pl. 32, fig. 1. (= Ma 52)

493 Olympia, Bronze column (engraved figures only). Helbig, Epos, fig. 46. (= Ma 70)

35 Priam reddening Hector. Ausec, K. Occlusus nova, Pl. 4. (= Ma 71)

3802 Harpies and Tritons. Gardner, figs. 2-5. (= Ma 34)

3592 Bœateus, Olympia, p. 182. (= Ma 17)

2674 painted marble, fragments. Oet. Pl. 118.


3006 "Chester of Kyllin"; diagram. Gardner, fig. 5. (= Ma 83)

3541 "Chester of Kyllin" restored. J.H.S. xiv. Pl. 3.

Armour and Warfare.

[For Mycenaean Armour see the "Prehistoric" Series above. For Hellenic Armour compare also Battle-scenes on Vases in series Vb, Vc: esp. in the "Trojan Cycle."]

176 "Bow of Odyssey" vase.

538 'Homeric Warrior' (Leaf and Rayfield): side view. (= Ma 15)

539 'Homeric Warrior' (Leaf and Rayfield): front view. (= Ma 16)

2712 "Bosalian shield": early types. Reiche1, Hom. Waffen, figs. 13, 14, 15

2718 "Bosalian shield": and other early shields (vases): id. fig. 25

470 "Shield of Achilles" (Murray). (= Ma 33)

5604 "(Gardner, fig. 4): (= Ma 57)

2716 Greaves: hoplite putting them on. (Vases): Reiche1, Hom. Waffen, fig. 32.

2718 Greaves: early example from Cyprus. Ekkomia, Reiche1, Hom. Waffen, figs. 50, 81.

3549 Hoplite armour: painted tablet. Acro- polis. (= Ma 73)

471 " " " " " " " Bronze statuettes, B.D.

701 "Mediterranean vase. (= Ma 15)

234 " " " " Youth'sarming (Vases). B.D. 2267 (= Ma 87)

2911 Armored Foorace. B.D. 2600.

2919 "Dekhisai of Cavalry, B.A. xi, 7.

572 "Pyrrhic Duke (relief)
Ixxii

Coins.

3807 Asia, E., showing primitive statue.
Gardner, fig. 7.

3813a Achaean; [= Mb 34]

3819 Arcadia; [= Mb 46]

947 Athens, E., 5th cent. ; head of Athene:
[= Mb 15]

388 A, contest of Athene and Poseidon.
J.H.S. Pl. 75, Z xiv.; [= Mb 38]

3892 " A, Athene with shield and thunderbolt.
J.H.S. Pl. 75, AA xiv. [= Mb 17]

3898 " A, statue of Apollo of Delos.
Gardner, fig. 26.

395 Corinth, E., Apollo of temple.
J.H.S. Pl. 53, G xxvi.; [ = Mb 29]

3993 " E., Apotheosis in temple.
J.H.S. Pl. 58, G xxxvi.; [= Mb 21]

3994 Cyprus, E., Temple of Apollo at
Paphos (several examples): Roman:
[= Mb 23]

3949 Egypt, E., Ptolemy I.; Alexander III.-IV.
(together); [= Mb 49]

3950 Elusa, E. Triad; blazon.
J.H.S. Pl. 77, EE xx.; [= Mb 19]

3954 Elusa, E., Olympian Zeus; Gardner,
fig. 64; [= Mb 5]

3955 " E., Olympian Zeus; Gardner
fig. 55; [= Mb 6]

3956 Corinth, etc.

3959 Lampsis; [= Mb 32]

3960 Lydian; [= Mb 48]

1074 Macedon, Philip II. N. staters: Head of
Apollo; [= Mb 73]

3944 " Philip III. (Gandhali imitation);
[= Mb 44]

3948 Myra (godess of): Gordian; Claudius;
[= Mb 48]

342 Rome, E.: arrival of Ascalaphus at Isuls
Tiberina; [= Mb 22]

3608 Sparta, E.: statue of Apollo.
Gardner, fig. 6; [= Ma 78]

3947 Taranta, Alexander of Epirus; [= Mb 47]

3945 Tarantos, Demetrius II.; the God Salmias,
etc.; [= Mb 45]

[Compare the large series of shdes of Coins in Hellenic Association Series
J.H.S. xx. lxiii.]
A LIST OF

PHOTOGRAPHS OF HELLENIC SITES.

CLASSIFIED IN GEOGRAPHICAL ORDER, AND SO FAR AS POSSIBLE
FROM EAST TO WEST.

The following list of photographs represents one sub-section of the
reference-collection which is preserved in the Hellenic Society's Library.
The columns of asterisks show the approximate size of the photograph
which is included in the collection; thus, an asterisk in the column
headed—

1 signifies a photograph of quarter-plate size or less (3" x 3", &c.).
2 half-plate = (5" x 4").
3 whole plate = (7" x 5").
4 more than whole plate size (usually 8" x 10").

In the large majority of cases, members may procure copies of these
photographs by ordering from the Assistant Librarian: in such cases the full
title of the photograph must be quoted, together with the size required.
It should be noted that where two or more sizes are shown, they are
usually from different negatives, and the point of view from which the
photographs were taken is not necessarily identical in all cases.

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<th>ASIA MINOR.</th>
<th>ASPENDUS.</th>
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<td><strong>ADANA.</strong></td>
<td><strong>Theatre (= Texier Pl. 39)</strong></td>
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<td>View from the tu.</td>
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<td><strong>LEIUM KARA HISSAR.</strong></td>
<td><strong>COMANA Cypriotes (Shake).</strong></td>
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<td>Town and citadel.</td>
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<tr>
<td><strong>AMASIA.</strong></td>
<td>General view: theatre in middle distance</td>
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<tr>
<td>General view, with tombs of Pontic Kings.</td>
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<tr>
<td>Citadel: from Turkish road.</td>
<td>Theatre: nears</td>
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<td></td>
<td>Temple ruins</td>
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<td>Bridge over Iris</td>
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<td>Mound</td>
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<td>Ramily Buildings.</td>
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</tbody>
</table>
EPHESUS.

Plain of Ephesus
Cayster River and Railway Bridge
ruins in river bed
Ayaanalik village
from E.
from W.
from N.

native men

women

aqueduct and café

General view from Theatre, looking W.

from Mount Prion

Walls on Mount Prion
and rock-cut cistern

Stadium (? on Mount Prion

Temple of Artemis: before excavation
after excavation
from Castle Hill
formerly supposed site
present state (1901)
column base, etc.; Brd. Mus.

Theatre: general view
seats; from promenium
proscenium
seats (2 views)
and seats to right
recently discovered fragments (1901)

Castle Hill and Cause
Gates ('Gate of Persuasion')

Corinian Gate
Gymnasium

nearby view

Odasum
Sacrarium: altar

Sculptured tank near Agora (Austrian Excavations)
detail
and view, looking W.

Details: composite capital near harbour
late capital near harbour
between Agora and Theatre

emporium

museum of Constantin

Christians, Byzantines, Etc.

St. Luke's Church

St. Paul's Prison (so-called)

Byzantine Fortress and St. John's Church

bit of wall

Double Christian Church

Baptistery Font

Large Mosque

W: entrance
Mosque of Isa Bey; looking S.
looking N.W.; plain behind
ruins

HALYS River.

View between Sivas and Zara

HIERAPOLIS.

View from Theatre; looking W.
S.W., showing baths
Ruins of large Church
outer gate with round towers
Hot Water Pool
Neapolis
Greek tombs

IRIS River.

View at Turhal
down stream, from bridge in Amasia
at Comana Pontica

Cnidus.

Shrine of Demeter

LAODICEA.

Theatre
Odeum
Stadium and Public Buildings
Ruins of small church
Stone with water pipes

LYCIA.

Harpy tomb: landscape, from drawing
sculptures (3 views)

MAGNESTIA (or Magnesium)

Ruins of Temple

MARASH.

View looking S.

NICAEA.

Lake shore; walls, looking W., council chamber to left
rutilum: council chamber to right

Council chamber

Walls of Hadrian: north

north: entrance from Brusa

east

south

Lake gate: outside, from N.E.
inner opening

Yunusceli gate and walls: outside
inner opening

Old College

Bemaul Mosque

NIKOPOLIS (Pontus and Park)

General view

PERGAMUM.

General view from west gate
West gate
Roman Basilica
Christian church, now a mosque
[For Map and Reconstructions see Sides Catalogue.]
PHILADELPHIA.

View from road, looking W. on top of hill.
Walls, looking E. 2 views.
Christian Church, now a mosque.

PHOENIX (Chersonese).

LYZEEN.

Lion Tomb
Temple 1. 2. and 3 together

1. 2. 3, and 4 separately.

MIDAS NEAROPOLIS.

Tomb of Midas
with marbles patterned
Rock altar
Fallen Lion Tomb
... head of lion
Stone cut like a man.

SARDIS.

General view of plain, looking E.
Temple of Cybele
Christian Church: stage
Stadium; Theatre, and Church.

SIS (Codrus).

View in valley towards Sia.
... away from Sis.
Armenian monastery.

SYRIA.

Gate of Seljak College.

EYPT.

General view from Buca near
Burma and railway line
Caravan Rest: entrance to town

Village of Buca.

... Protestant Church
St. Anne's Valley: River Moes
... aqueduct
Aqueduct: other side from 'Great Palace'
Old Khan.

TAURUS Range.

View from top up the valley
... ten miles W. of Yezien from Kasak.
... from Kasak Kasak along the great eastward road
Gorge above Zedun
Ksekik Pass: view from summit down the Fyramus valley
... view up stream northwards.

TRYATIRA.

General view from Windmill Hill.

TOSAY.

General view
... with castle.

TEALLES.

Gymnasium

TURKISH.

Gaz-Torna: general view
Izis River.

CYPRUS.

Amorgia: view from village
Nestor: carved wooden church seven.

Balaclava
... palala
... road, etc.
... gorge near Arachova

Euboea: the chasms

Drain of Amara: Castle

Lykophy: (Kurits) from W.

... Akropolis and site of excavations, 1892.
... workmen and stuff, 1893 (2 views).

Famagusta: General view: Cathedral and Church of St. George

... ramparts and moat.
... Cathedral from coach.
... W. front.
... S. side.
... S. side.
... church door
... church door.

Lydian palace: gateway.

Kypria: Romanic Port.

Laelia: Castle of Knights Templars.

Kokkino: Village

... the village mosque.
... threshing floor.

Kokkino: Church

Village W. of village
... N. E. village, and village.

Lykaphos: tomb and monastery.

Lythranto: Palace: Crusaders' Fortress

... from S.

M. Nicolas, Ovo Gotta, Lysimach Church.

Paphos: St. Sophis, W. end
... interior.

... Cathedral Church.

... Street scene.

Paphos (Kokkino): Monolithic by the sea
... Temple, S. Wing, S.W. angle blocks.
... another view.
... from S. Pouch.

... Central Court: Breakfast.
... S. Pouch: excavations.
... W. end.
... S. E. angle.
... S. E. angle.
... N. wall: W. end.
... N. W. angle block (Canal's)
... S. chamber from E.
GREEK ISLANDS.

AGINA.
General view
Temple of Athena distant view
from E.
W.
S.W.
S.W.
S.W.
S.E.
N.E.
N.

AMORGOS.
Minoan: primitive acropolis wall
heroon on acropolis
Heliconic watch tower
farnese
oil-press block

CRETE.
See separate list hereafter

DELOS.
Precinct of Isis
Cynthia Meno
from Lake of Leto
Temple of Apollo
Cave Temple: Roman house in foreground
foundations
statue of Isis
Lake of Leto
Temple of Apollo: ruins
Temple of Apollo, akropolis, Athens, Nat. Mus.

Theatre
priest's seat

Baths
Naxian colonnade statue
Archaic female statue from Delos
[Athens, E.]
Portrait statue of C. Oldhams
Inscription

EUROPA.
Chios: the Ilissus
Mt. Mestapon

MELOS.
Rocks off N.W. promontory
Adamanum: from the sheltered
Tyrrell, etc., from the harbour (panorama)
from Adamanum road
small bay sailing St. Lazarus' song

Plaka: church
Koera: church exterior
baptistry
altar

So Nychsa: obelisk on site

Kretia (= Hellenic Odyssey): Panorama from Tyrrell: site and harbour.
(four views)
Akropolis and stadium
and town wall
Town wall
gate site

d Polygonal wall
Martha terrace (stadium)
 retaining wall
Three Churches Site, statues
statue of woman
tomb of man
statues
architrave
baptistry
Theatre: view
retaining wall
Mosaic: general view
altar
fish panel and altar
birds

Roman aqueduct statue
Small marble head
Peristyle inscription
Cave Site
Olpe:-piece of the Erymanthian
Panathenaia: Dionysian altar
view of Plaka.

Psyklapot: General view

October: fort on the mainland
Adamanum: Easter afternoon service
kissing the Gospel
hanging Judas
Judas' breast band
end of ceremony

Inscription in Crete Museum
HELLESPONTINE AREA—THRACE AND MACEDON.

CONSTANTINOPLE.

The Golden Horn
Hippodrome
Seraglio Point and St. Sophia, from N.
Galata from S.

THESSALY.

Larissa: mosque (at) 13
Matros: Kalamaka, from the railway

and H. Trikala

and H. Stephano Laki, general view

of

and H. Bari'ama, etc.

monastery of H. Bari'ama


Pelion and Volos

Pitheus: valley of Baka

another view

view towards the sea
Volos and [Pithec].

CENTRAL GREECE

(between Thessaly and Aetolia).

Amphipolis: view

Chimæriot: the acropolis and theatre from E.

the acropolis and theatre from N.

the battle-field

the town

[land only]

Delphi: General view from the E.

View from S.

Crissa and Kastri from S.W., from the Plain of Cricket

View from Delphi looking E. towards Arachova

View from Delphi looking W. towards Kirklara Plain

Sculptures of Pergamum, and Athenian Stoa

Kastelian spring

'Logi,' the 'Gate of Hades'

Book-tomb below wall of Phila

From Nymph Hill
West front, entrance from W.

The Acropolis is in course of demolition
From N.W. from Acropolis
   N.W. bastion
From the N.W.
   with the Thessalian
From N.E., from Lykaion
   King’s Garden
Grotto of Pan
Wall on N. side, hastily built with column-drum, etc.

ACROPOLIS: DETAILS.
Temple of Nike Apteros.
From E. with Propylaea Wall
From E. mast view
S.E. corner
Turkish guard house, from S. (Odessa)
From S. (Odessa)
From S.W. with Propylaea and Pelasgian Wall
From N.E.
Door between columns of Propylaea.
Monuments steps from W. (hewn below)

Beauties of Odysseus
View taken in 1889 (since destroyed)

PALACE WALL.
   W.
Propylaia.

From the East.
View through the door.
From the top of the Parthenon
   S.E. from Kition’s Wall (S.E.)
   S.E. Hall (unfinished)
   S.W. from Nike Bastion
   S.W. from Nike Bastion
   The Pinakothek
   S. general view
   W. looking up from Beak’s Gate
   N.W. mast view
   N. (showing Grotto of Pan)
S.E. S.E. Hall (unfinished)
Detail of S. doorway
Anta of inner Ptereum Propylaea
Monument of Agrippa
Pyriform Inscription
Strongylus Inscription
Temple from S.

Minor Monuments.
Arbela of Heracles
Go Kystrophonos’ Inscription

Erechtheum.
From E.
From S.E.
   S. with part of Old Temple from S.
   the top of the Parthenon
   With foundations of Old Temple
West Pediments.

Carrey's drawing
S. and (view in Elgin room)
and centre (Carrey's drawing)
S. and (view in Elgin room)
(Carrey's drawing)
Hissor
Kepheus' horses
'Kokrops' and daughter
Possidon's horses
Central Figures:
Pediments: ancient copies of the sculptures, Athens, N.M. 300-3
- of Parthenon and Olympian, together.

Precis.

Showing order of Parthenon procession:
East: Athena, Apollo, Hermes
Hermes to Zeus: Michaelis xiv, 24-27
Zeus, Hera, and Iris: Michaelis xiv, 28-35
Head of Iris
Central group: Michaelis xiv, 36-37
Athena and Hephaestus: Michaelis xiv, 38-39
Poseidon, Dionysus, Demeter
Aphrodite, Eros, Eilex
Mabuse, Michaelis xiv, 49-56
North: Castor, Michaelis xiv, 8-9
Sleep, Michaelis xiv, 8-12
Pheidias narrates, Michaelis xiv, 13-16-19
Choral group, Michaelis xiv, 45-47
Michaelis xiv, 54-58

Hermes, Michaelis xiv, 110-114
Michaelis xiv, 115-118
Vesta and horses, Michaelis xiv, 138-141
\[ \text{Vara from above} \]

West: Hermes (leading 95), Michaelis xiv, 2-3
Youth, Michaelis xiv
Horse and man, Michaelis xiv, 10
Horses and youths, Michaelis xiv, 22-24
Hermes (as tithe)
Magistrates (statue 17).

ACROPOLIS (S. SIDE):

Columnas: with triangular capitals.
Thasian monument (present state)
Lykavitos monument

Precis:

Disappearing Theatre:
From Acrópolis above
\[ \text{N.F.} \]
From N. E.
N.
N. with the two temples.
E.
S. front view.
S.W.
S. stage from E.
N.
of Pheidias from E.
N.
details.
Remains of earlier stages.
Old Orchestra.
Priest's chair.
... another view.
Inscribed stele.
... three together.
Temenos of Dionysos: altar.

Achilleion.

From E.
Retaining wall of theatre.
Boundary stone.
Entrance to well.
Interior of well-house.
 Cyclopean wall.
pit.

Escalation.

General view.

Odyssey of Hercules Atticus.

Interior from above.
Exterior from S.

THE PRINCIPAL MONUMENTS OUTSIDE THE ACROPOLIS FROM E. TO S., TO W., AND TO S.

Arch of Hadrian: from the S.E.
N.
with the Olympian.
Olympias: from S.E.

nearer view.
from N.W.
Acropolis.
N.
from the King's garden:

group of columns.
marble Ionic cap found in the Temenos.

Hyma: valley.
Kallirrhoë: Hyma ravine.
Station.
Monument of Pelopponese.
Tomb of Kimon.
Prov of Socrates.

Pages: General View from Nymphi Hill.
Bouza: from E.
W.
Rock-wall from W.
Palaestra houses at back of Pnyx.

Excavations between Pnyx and Acropolis.
Alter of Temple of Dionysos.
Wine-press.
Junction of streets by wine-press.
12-foot road, looking S.E.

" drainage system.
Alter of Dionysos: en Limnio.

Acronomos: from gate of Acropolis, from
Grotta of Eumenes, from N. E.

Nymph Hill: observatory.
inscription.
Thalamus: from E.
S.
S.W.
W.
N.W., Acropolis behind.
S.

 Trey of the Market.
The Old Market.
Tower of the Winds.
Stoa of Attalos.
Stoa of the Giants.
Stoa of Hadrian: exterior.
W. end.
interior.
Mausoleum.
and railway station.
Propylon Gate, etc., at the gate itself.
Wall of Themistocles.
Street of Tombs: general view.

[For individual monuments see catalogue of Gezer Reliefs' handbook.]

ATHENS: BYZANTINE.

Metropolis Church.

from S.E.
from S.
E. end, details.
from N.
interior door to nave: from the marbles.
S. aisle, from the nave: from W. general view.
details of N. half.
from S.
from S.W.
Kapnikarea Church: E: end.
St. Theodore.
St. Saviour.
Asylum Monastery: from Brit. School.
Architectural fragment (Byzantine).

ATHENS: TURKISH.

Farthemon from E. (magnifying).

Guard house by T. of Niko Apteros.
Mosque near Hadrian's Stoa.

ATTICA.

[Exclusive of Athens, for which see above.

BEKERRIA.

" Tatoi; general view.
View from Acropolis.
### PENTEKION
- General view from W.
- S.W. from Smyrna
- Convent
- Quarries
- View near summit: looking upwards
- View from summit towards Athens
- Marathon

### PHALERON
The Bay, with New Phaleron, looking N.E.
The Bay from Athens, looking N.E.
Old Phaleron

### PYLE
- View near Attica to S.
- General view from N.
- Near view: tower and wall
- east lower
sutrama

### SACRED WAY
- Rhodos: looking N.W. along road to Eleusis (2 views)
- Pass of Phaleron
- Tombs of Agrippina, and marble arches
- Convent

### SALAMIS
- and Kyparissia over Peiraios
- View from entrance of Peiraeus, looking E.
- View from entrance of island.
- Bay of Salamis
- Panorama, S.W.; from slopes of Aygaleo (16 views in all)
- Kynouria: from mainland from Xerxes' Seat!
- View from N.E. angle of the bay looking E. towards Kynouria and the Arsenal
- Island of St. George, Kontouri Hill, etc.
- Greek section, and opening to Bay of Eleusis
- Kifissia in distance, opposite the arsenal
- W. end of the bay: narrow part
- View from Eleusis, looking S.W.

### SOURION
General view of Cape Colonna
- Temple: near view
  - from E.
  - S.
  - N.
  - from interior from E.
- View from Temple

### THORIKOS
Theatre (2 views)

### ZEA
- General view from E., with Peloponnese and Salamis
- Harbour
- Theatre (2 views)
- orchestra and stage
- seats

### MEGARIS
- Megara: Easter Tuesday dance, 1880 (6 views)
- Skirrman Rocks, general view, looking W.
- near view, looking W.

### PELOPONNESE
(Principal Districts, and Sites within each, in alphabetical order.)

### ACHAIA
- PATRAE
  - General view: another view
  - Vostitza
    - Three views
    - Carract factory

### ARCADIA
- ALPHEOS
  - Site of Karytaina

### ASEI
- (Fransoyri) distant view
  - Aympelea
  - another view
  - walls

### KORITAS
- Site of Gortys
  - KARYTAENA
  - Distinct view from S.
  - Castle: view from E.
    - from interior of town
    - Frankish bridge: from E.
  - Gorge of Alabones
  - Pinn of Magaloportes: from castle

### LYKOSURA
- Temple of Despotus

### MANTINAEA
The battlefield
River Ophidii
MEGALOPOLIS.
General view of the plain: from Kary-terrasse
Mount (from N. W.
Temenos of Zeus Soter: theatre in distance
looking S. W.
Theatre: general view from back of stage building
looking across semicircle
from W. wing
meatal
stage
walls
Excavations (several views)
Modern village: market place
(street and other views)

TIBERIA.
The battle-site: general view
Temple of Athena Aia
leads by steps (Athena N. M.)

ARGOLIS.

ARGO

EPIDAURUS.
General view from summit of temple
Theatre: distant view
general view from front, N.
orchestra and cavea: from top
spectators from below
part of the ring
stage building: in front
in profile
Temple of Asklepios: foundation
Temple of Artemis: Theatre: distant view
nearer view
Corinthian capital
Details of moulding
Roman Odeon (theatre behind)
Oleopon bridge on road to Nauplia

HYLIAE (Akhaiaolimnae).
General view
bit of wall

MYCENE.
Plan of lower town and Acropolis:
Schaeffer's Plan (see Smith's Catalogue)
General view: from near Phoinix
Acropolis: general view from the W.
S. side, with Chondros ravine
wall and tower below Lion Gate
Lion Gate: outside
inside
shaft-graves and Circle
near view
Gate of the Circle

Galley looking to Wall, in N. wall
Posterii Gate
Acropolis: Palace walls
staircase
meatal
necropolis, from door-way
Treasury of Klytaemnestra
interior
Completely closed
Treasury of Atlas: before excavation
interior
drum
real
inner door

NAUPLIA.
Panorama (2 views)
General view: from N.
from the anchorage
Main Gateway
Street leading from the Square to the Gate
Princial Square
Easter Market
Isthmus Bridge: from S.
Palmyra fortress
Nemesis: Temple of Zeus

TIRYN.
General view: W. side of Upper Citadel
from Lower Citadel
West wall: looking N.
East Gallery: view from entrance, looking N.
South Gallery
Staircase to Postern: from wall, looking N.
from without
Main Entrance: external Ramp, Flanking Towers
the inner doorway
Upper Gate and Temple from N. from the Bath:
Tomb
View, N.W. from the Bath-room
Anta-base from Great Propylaeum, showing saw-cuts

COINTH.
Acro-Corinth and Temple from N.
Entrance
Old Fortifications
View from the top: looking S. W.
Temple from E.
S.
N. W.
N. E.
Isthmian Canal from railway bridge
looking E.
looking W.
Isthmian Canal: E. and from Kalagnosti
and Kalagnosti looking S.
view from water level.
looking W. (2 views).
ELIS (including Tripheus)

PHIGALEIA

Temple from S.E.
  - S.
  - S.W.
  - W.
  - N.
  - N.E. (2 views)
  - N.W.
  - E.
  - S.W.
  - S.
  - S.E.

Olympia

Panorama (from three points)
General view of Butto from Museum
View with Klisos River
Heraion from S., with Kronos Hill
  - S.E.
  - W., from Kronos Hill
  - N.
Temple of Zeus from N.E.
  - N.
  - S.E.
Treasures: painting wall behind temple
The Palaestra
The Echo Pit
Station: N.W., entrance
  - E., goal

LACONIA

ECROTAS

Source at Kophidapia
View from Sparta towards Paros
  - "Vryzas"
  - "Taygetus"

SYTHEION

Harbour

MISTRA

Distances from Sparta
Ruins: approach from Sparta
From Parnassus
  - looking to N.
  - Church of Parnassus
  - of Zoictheros Pege
Ruins called the Parnassus Palace
  - Casino (interior of entrance)

PARNON

View from Sparta, up Enrrotas valley

SELLASIA

Salinus valley

SPARTA

General view, looking S.
Looking W., with Taygetus


Market-place: looking towards Taygetus
Roman Ruins: N. of the Modern Town
Theatre: supporting wall
  "Tomb of Leonidas"
Museum: the "Taygetes relief"
  "An Amazon, etc.

TAYGETOS

View from Market-place of Sparta
Gorge in the range
Langada Pass: entrance at Trypi
  looking E., Paros in distance
  Three views in perspective
  View from summit, Mt. Kithimeno
  Mt. Pogilia

MESSEVIA (for Thebys see Elis)

Ithome

General View
Walls of Krymonatous
Aeolus Gate
  - interior
Kathikolo Monastery

PYLOS AND SYPHACTERIA

Panorama: from Neaokastro (modern Pylos): (2 views)
  - from the bay
Pylos: from Sylvania, looking N
  (Palaeokastro): N.
  - S.E., from Speida
  - S.W., "Braekas"
  - rocks (2 views)
  - Wall L.: distant view
  "near view"
  - wall behind L. (in Grundy's map)
Sylvania: cliffs
  - Wall BB: N.W. corner
  - S., W., corner
  - Wall CC
  - D
  - south end: from the bay

WESERN GREECE

Ithaka

Valley: modern town from the sea
Bay: entrance
Domos Bay: "Hemion of Thlosys" from S.
Mount Aetos: from Peroetos Bay, looking S.
  "Castle of Vlyssas" looking up the slope

ITALY

Crotone

Colonnade of temple, from the N.
Pompeii: wall of sanctuary
METAPONTUM.
Doric temple "Chiesa di San Marco"
Doric temple "Pavola dei Palladini,"
looking N.

P. ESTUM.
General view of the temples
Temple of Poseidon
from S.W.
from S.E.

TARENTUM.
Archaic Doric column.

SICILY.
AGRIGENTUM.
General view, looking N.W. from Temple of Zeus
Cyclopean wall

MESSANA.
General view of harbour and strait from W.

TANAGRA.
Palermo and Monte Pellegrino from E.

SYRACUSE.
Panorama: N. S.W.W. from Great Harbour
Town and Great Harbour from Euryde
Anapae River:
appears between
Foundations of W. end wall by the cemetery.
Ortygia from within the harbour.
and Small Harbour from N.
Fountain of Archimedes:
general view near view
Temple of Asclepius:
apses in cliffs on S. side
cliffs on S. side, E. of Eurydice
from E., general view
from N.
Latomies:
"del Capo Lucia"
Old rock-cut road, with tombs, above Theatre
Theatre, from below
auditorium from W.
stage buildings from W.
Romae Amphitheatre.

TAMARINA.
Roman Theatre: overlooking stage.
"A book that is shut is but a block"

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