What remains of the inscribed surface is approximately trapezoidal in shape and carries traces of three lines of text; in the first only the lower tips of the letters survive and these cannot be securely interpreted, but in the second five complete letters (ave. 0.025 m . high) can be read, although they have suffered from slight surface chipping, and in the third the upper two-thirds of five letters survives and these also can be read perfectly well. The inscription was firmly and deftly, if lightly, cut, with trenches $c$. o•oor deep, very slightly triangular in profile and showing some tendency to broaden a little on the base line. Judging from the position of the last letters in ll. 2, 3, it seems probable that each line ended with a completed word. Although the technique may not be as fine as that displayed in inscriptions no. i i and 12 in the Lydian corpus, ${ }^{1}$ it can stand comparison with that of nos. $1,2,3$ and others, despite the smallness of the fragment. It would be reasonable to date it, with the rest of the Lydian corpus, in the fifth or fourth century b.c.

As is normal in Lydian inscriptions the lettering runs retrograde. Line 2 can be read with certainty (although the horizontal bar of T is lost as a result of a chip to the left of the vertical):

$$
\text { ]ânṭa } \lambda
$$

Line 3 gives with certainty:

## ]talid

There may be another vertical before $T$ (it could only represent I), but the condition of the stone here is too bad for confidence: a further possible vertical to the left of $\lambda=\mathrm{d}$ is too close to that letter to be regarded as anything but a crack in the stone.

This is of course too fragmentary to give intelligible sense. ]ântad is an oblique case of a noun in the singular number-perhaps the dative of a personal or divine name (cf. śansa but with $T$ ), or a locative dative indicating the place of an object or of part of a tomb. ]talid suggests the neuter singular of a possessive adjective indicating a patronymic, in the nominative or accusative case (cf. atalid, atraśtalid, etc.), but might also be a verb in the third person singular.

The inscription is nevertheless of very great interest historically. Aphrodisias stands in the valley of the Morsynus, about 30 km . south of the Maeander into whose middle reaches the Morsynus itself flows. The discovery of a Lydian inscription there indicates that the population of the whole Maeander valley, and to some extent also of the slopes of the mountains to the south of it, included Lydian-speakers at a comparatively late date (fourth century b.c., on the latest likely dating). ${ }^{2}$ Its evidence is reinforced by the presence
${ }^{1}$ I have followed the standard numeration for Lydian inscriptions, accepted also by R. Gusmani, Lydisches Wörterbuch (Heidelberg, 1964) 249 f. ; for photographs see W. H. Buckler, Sardis vi part ii: Lydian Inscriptions (Leiden, 1924).
${ }^{2}$ On various aspects of the prehistory and the
of Lydian ceramic material in archaic contexts recently examined on the site. Several small vessels of the so-called Lydian ware ('black-on-red') were, for instance, found during excavation near the cella of the temple of Aphrodite. Other types of Lydian pottery were also represented there, and sporadically elsewhere, by numerous sherds. Moreover in ig68 a large painted vessel, krater-like in shape, was unearthed at the northern foot of the 'acropolis' mound; it should be tentatively dated to the late seventh or more probably sixth century в.с.

Clearly the boundary between Lydian- and Carianspeakers was a good deal farther south than the political line between Lydia and Caria as it is commonly shown in atlases of the ancient world. ${ }^{3}$

It should also be noted that on any basis this is the earliest written document so far found in Aphrodisias and the earliest evidence for the exploitation of the marble quarries which, eventually, formed the basis of the city's standing and wealth.

Onofrio Carruba
Pavia
protohistory of Lydia see O. Carruba, 'Lydisch und Lyder' in Mitteilungen des Instituts für Orientsforschung viii (1963) 398 f.
${ }^{3}$ Cf. PW A, xiii, col. 2122 f., W. M. Ramsay, The Historical Geography of Asia Minor (London, 1890) map opp. p. 104. As indicated by J. and L. Robert in La Carie ii (Paris, 1954) I8 ff., the problem involved was already apparent in antiquity. Strabo xiii 629 comments on the difficulty of precise definition of the regions of Phrygia, Caria, Lydia and Mysia, the confusion being enhanced because the Roman provincial subdivisions did not follow ethnic boundaries; and a number of cities are attributed by ancient authors now to one, now to another (cf. on Tabae, Robert l.c.). In fact Ptolemy v 2. 18 describes Aphrodisias as Lydian and Steph. Byz. s.v. as Lydo-Carian, although it was-and is-normally regarded as a Carian city and became the metropolis of Caria. It is satisfactory that there is now archaeological evidence to confirm this literary tradition of a Lydian element in the population. (Note by J. R.)

## A Note on a Seven-stringed Lyre

In a review in $\mathcal{F H S}$ lxxxix (1969) 127 Dr M. L. West gives as an example of 'a certain innocence on matters of literary history' the belief that sevenstringed lyres 'came in' in the seventh century b.c. Since the emphasis in the context is upon rigorous down-dating (the eighth Homeric Hymn is there reasonably declared not to be pre-Hellenistic), what Dr West seems to be saying is that seven-stringed lyres were not in use amongst the Greeks before about 600 b.c. I hope that I do not misunderstand Dr West's contention: the purpose of this short note is to suggest, with the greatest respect and deference, that another view of the matter may perhaps be permissible.

Let us ignore the seven-stringed musical instrument shown on the Ayia Triadha sarcophagus, because evidence from the Late Bronze Age may be thought too remote to be relevant to early Hellenic musical practice. Let us also leave aside ancient opinions associating Terpander with the seven-stringed lyre (Strabo 618 ) and assigning him to the first half of the seventh century в.c. (Athenaios ${ }_{35} \mathrm{E}$ ). Dr West may well regard the putting of trust in such testimonies as evidence of incorrigible amateurism. There remains, nevertheless, a contemporary witness to the existence of seven-stringed lyres amongst the Greeks of the seventh century b.c.
In $\mathcal{F H S}$ lxxi (195I) 248 , fig. 8 , there is illustrated a fragment of a Subgeometric dinos of the first half of the seventh century b.c. from the excavations at Old Smyrna. ${ }^{1}$ On the piece is painted a seven-stringed lyre. The lines representing strings are carefully distinguished and spaced. It would be extravagant to assert that the artist could not count, or that he was suffering from hallucinations, or that he was imagining a type of instrument never seen by himself or his customers. In short, a tentative suggestion may be made-with due deference and hesitation: scholars, including those whom in this particular matter Dr West would, it seems, classify as innocents, 'can seriously argue' that seven-stringed lyres were reintroduced to Greece or 'came in' well within the first half of the seventh century b.c.
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${ }^{1}$ See also J. N. Coldstream, Greek Geometric Pottery (London, 1968) 297; cf. (for a possible connexion with Terpander) G. M. A. Hanfmann, $H S C P$ lxi (1953) 16 and Renate Tölle, Frühgriechische Reigentänze (Waldsassen 1964) 71-72. Mr Coldstream has kindly drawn my attention to another representation of a sevenstringed lyre on a Subgeometric vase-from Pitane: see E. Akurgal, Orient und Okzident (Baden-Baden, 1966) 202.

## The Bowshot and Marathon

In a searching analysis of 'The Campaign and the Battle of Marathon' ( $7 H S$ lxxxviii [1968] 13-57) Professor N. G. L. Hammond has paid me the compliment of mentioning my discussion of the range of the ancient bow ( 17 n .27 ). The evidence had suggested to me that the bowshot was 'at least $160-175$ metres, but not as far as $350-450$ metres'. These results, in Hammond's words, fail to
'take into account the nature of the target. For instance his lower figure is based on the firing of incendiary arrows (his $\mathrm{T}_{\mathrm{I}}=$ Hdt. viii 52.1 ), which needed no power of penetration, and the higher figure is based on unarmoured horses at that distance being out of range (his T2 Hdt. ix 22-23), which is almost equivalent to the extreme range
because a horse is easily stung into action by an arrow.'
The near equivalence of 'out of range' and 'within extreme range' may raise an eyebrow; but let it pass. On the essential point we agree: in Herodotus ix 2223, two stades is beyond effective bowshot.
So far as the terminus a quo is concerned, the Persian fire arrows shot from the Areopagus must have had some power of penetration; for they were useless unless they stuck to the wooden wall. Moreover, the target was twenty-eight metres higher than the launching-point; if the line of flight were projected downwards to the level of the archers, the cast would have been greater. Again, Herodotus says that the Persians wound hemp around their arrows. Hollow heads for incendiary arrows ( $7 S A-A$ iii [1960] 22-24) were apparently a later invention; at any rate piles from this assault on the Acropolis are all typical Iranian war-heads (Hesperia ii [1933] 341-342; iv [1935] 114-117). The tinder binding-bulky enough to keep a spark through the trajectory, and then to kindle the barricade-would interfere with the smooth flow of air past the shaft and curtail the range. It follows that, if a fire arrow from the Areopagus could reach the Acropolis 155 metres away, a war arrow from the same bow would carry even further. There are uncertainties, admittedly, but it seems unwise to jettison the testimony of Herodotus viii 52.I on these grounds.

Another expedient might dispose of this evidence. Herodotus states that the Persians, i¢óusvo on the Areopagus, besieged the Acropolis. But ('of course,' in refuter's parlance) i $\zeta \varepsilon \sigma \theta a \iota$ means 'to encamp,' 'to use as headquarters and observation post'; one may $i \zeta \varepsilon \sigma \theta a \iota$ in one place, and be active elsewhere; see for example Herodotus iv 203.2, viii 71.2. Moreover, a convenient parallel presents itself. At the siege of Corinth in 1205, the Frankish counterfort of Mont Escovée held 'de bons arbalestiers' (Longnon, Chronique de Morée, paragraph 192). They were 1200 metres away from the citadel, far beyond crossbow range; to employ their weapons they will have left their fastness and approached nearer. In like manner at the siege of the Acropolis the barbarian archers will have crept up to fire the barricade from a closer, but unspecified, distance.

The explanation is neat; the chief objection is the very location of the Areopagus, It seems designed by nature to serve as the emplacement for artillery against the Acropolis, particularly if the defenders lack the means of reply (the canonical references here are Aesch. Eum. 688 and Ulrich Köhler, Hermes vi [1871] 105).
Professor Hammond concludes:
'McLeod's suggestion that the Greeks at Marathon were under fire for 200 or even 300 yards (p. 13) is an exaggeration.'

The Persians, he says, will have held their fire until the Greeks were well within bowshot; until, in fact, they 'came within a range at which an arrow could

