them into a passive line offshore for that would have been suicidal in the face of superior Athenian naval skills. What they must have attempted instead was to form blocklines at the cove harbor entrances in order to carry out their strategy which had been so successful the day before.

When Thucydides says that 'most' of the Peloponnesian ships reached their stations facing the enemy, he may be implying that their lines were not yet complete or completely organized when the Athenians struck them. Whether there were still gaps, or whether the hastily arranged Peloponnesian ships were simply overwhelmed by the assault, it is understandable that the entire formation would collapse once Athenian ships penetrated the lines at any point because stationary blockline triremes would find themselves highly vulnerable to attack from the rear by others underway. ${ }^{22}$ Unable to resist effectively once the position was compromised and pursued 'in the narrow space' (I4.I) between the blockline locations at the cove harbor entrances and the nearby land, the Peloponnesian ships fled to friendly shores so that their crews could escape capture. ${ }^{23}$

Unfortunately, Thucydides' disjointed description of the battle seems more a set of notes than a complete narrative and will not allow a single definitive interpretation. Some speculation is necessary in order even to arrive at a coherent, much less a plausible solution. But the narrative's sudden and complete rout more likely depicts the piercing and subsequent abandonment of a blockline position than an open water naumachia; and the cove harbor entrances provide both a tactical rationale for the battle and a unique location where the Spartan blocking strategy, so carefully described by Thucydides, can be carried out.

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22 See Thuc. ii 9 I for a discussion of the vulnerability of ships at rest near ships in motion.
${ }^{23}$ There need be no contradiction between Thucydides' description of a harbor that 'is not small' (I4.I) and a pursuit there 'in the narrow space' (I4.I) because whatever the harbor's size, the battle could have taken place near shore, leaving little room for pursuit. If in fact it did occur at the cove harbor entrances, Thucydides himself describes these as narrow straits near which land would necessarily be found and the space for pursuit would naturally be constricted.

## WALWE. and .KALI.

Twenty electrum coins, of similar early Anatolian lion-head types, are stamped with the legend walwe.

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The following special abbreviation will be used: Weidauer $=\mathrm{L}$. Weidauer, Probleme der frühen Elektronprägung, Typos iv (Fribourg 1975).
or some part of it. ${ }^{1}$ This legend, retrograde, was situated on the die between two facing lion heads. Although extant coins of this kind, none larger than 'thirds', reproduce only one lion head (facing either left or right), traces of the opposing snout on seven of the twenty coins permit reconstruction of the type. ${ }^{2}$ The legend itself is often incomplete-or else absent altogether. However, as Weidauer points out, the location of extant letters in relation to the lion head seems to indicate that it began with the initial digamma and was not longer than six letters. ${ }^{3}$ One of these twenty coins was found in the Central Basis deposit of the Artemision at Ephesos; a majority of the twenty are die-linked. This is therefore a particular series, struck some time probably around $600 \mathrm{BC} .{ }^{4}$ The coins appear to be of Lydian origin and issued by the state: for the digamma had for a long time been largely vestigial in East Greek alphabets (but was used in Lydian); ${ }^{5}$ the lion was probably the royal symbol of Lydia; ${ }^{6}$ and many other
${ }^{1}$ These are fully published by Weidauer $25-7$, nos. $91-113$ :
twenty-three coins in all, but the legend is completely missing from 104, 106 and 107 as a result of minting procedures (see n .2 below). However, these three coins are reverse die-linked with coins of the WALWE . series. There are also four coins (Weidauer nos. 76-8, 84) of a different lion-head series which are reverse die-linked with coins of the walwe series.
${ }^{2}$ The explanation of this phenomenon here cannot be that the dies were designed to mint staters, and thus on smaller coins the type would only partly be reproduced. For as Weidauer observes $(46-7)$, on smaller denominations the lion heads are in fact smaller. Weidauer concludes from this that the incomplete types are not the result of any minting process but had 'a specific purpose'-which is left unspecified. One explanation might be suggested. Having planned to strike coins with two lion heads, it was discovered that if both heads were to appear on the round flan the heads would have to be quite small in relation to it. The mint adopted the odd but more impressive solution of fully reproducing only one. This problem was resolved by the time of the earliest gold and silver coinage (the 'Croesids') by producing the oblong flans (stamped with lion and bull) that are characteristic of it.
${ }^{3}$ Weidauer p. 60, and see J. H. Jongkees, Acta Orient. xvi (1938) 254-5.
${ }^{4}$ In advance of the publication of the BM symposium (March 1984) on the date of the Ephesian Artemision, I shall not discuss that controversial issue. Most scholars have accepted a date $c .600 \mathrm{BC}$ or a little later for the initial construction and the Basis Deposit; M. J. Price (Studies in numismatic method presented to Philip Grierson [Cambridge 1983] I-4) suggests a date possibly as late as $c .575$ for the Deposit, which implies a date somewhat earlier for the walwe . series. Price also believes (Studies in honor of Leo Mildenberg, edd. A. Houghton et al. [Wetteren 1984] 22I n. 25, and see also Weidauer 107) that 'both on typological and on stylistic grounds' the walwe. series belongs late among the various issues of electrum coinage (which he thinks continued through the reign of Croesus [c. 561/0-c. 547/6]). Price's basis for this argument (and see Studies Grierson 2) is a stylistic and typological resemblance between this series and the Lydian bimetallic 'bull and lion' coinage, dated 'not much before the middle of the century' (ibid. n. 9), or after Croesus' fall (Studies Mildenberg, passim). However, the inconsistency between a date close to 550 or after 546 , and a date before $c .575$, must discourage the use of typological and stylistic observations as a criterion for dating. Since the question of chronology is largely irrelevant to this article, I shall not discuss the arguments of $M$. Vickers ( $N C \operatorname{cvl}$ [1985] 1-44) that coinage may have begun not earlier than the 540 s . (However, see my comments in $A J A$ 1987 [nn. I, 42].)
${ }^{5}$ See L. H. Jeffery, The local scripts of archaic Greece (Oxford 1961) 325-7, 345, 359-61, 289 and Weidauer 60-61. The point was first made by J. P. Six, $N C^{3}$ x (I890) 205.
${ }^{6}$ See J. G. Pedley, Sardis in the age of Croesus (Norman, Okla. 1968) 72 and n. 56 below; for an overview of lions at Sardis, see G. M. A. Hanfmann and N. H. Ramage, Sculpture from Sardis (Cambridge, Mass. 1978) 20-22.
coins of similar types have been found in Lydia, including a fragment at the mint in Sardis. ${ }^{7}$

Both the text of this legend and its meaning have long been controversial. During most of the last century, on the basis of one specimen (Weidauer 94), the legend was read кızyкe-a form of Kyzikos. ${ }^{8}$ In 1885 Hofmann reported readings of three coins of this type by the Dutch numismatist J. P. Six; Six himself published similar readings in $18900^{9}$ Six deciphered the main legend $F \alpha \lambda F \varepsilon \mathrm{I}$ (or $F \alpha \lambda F \varepsilon \alpha$ ). He further argued that marks on Weidauer 94 (in fact traces of the snout of the missing left lion head) could represent the letters $\varepsilon$; he reconstructed the legend $F \propto \lambda_{F} \varepsilon \mid \alpha T E S$ or $F \alpha \lambda_{F} \varepsilon \alpha T \varepsilon \rho ;$ and he advanced the now famous hypothesis that this was a Lydian form of the name Alyattes. Although the last four letters of Six's reading have never been accepted, the first five were confirmed by numerous subsequent specimens of this type. ${ }^{10}$ Only the sixth letter has remained in doubt. In 1926 the Lydian epigraphist W. H. Buckler published a new specimen (Weidauer 9 I$)^{11}$ with what appears to be the legend 1ㅋ11Aㄱ. Buckler interpreted the last letter of this as the Lydian śs, a possible nominative ending. Thus he read 'walwesh'. ${ }^{12}$ Against this hypothesis, J. H. Jongkees objected that the Lydian's ( 3 or less commonly 3) nowhere has a straight lower stroke; ${ }^{13}$ this objection is strengthened by Gusmani's demonstration that the curved $s$ [the basis of Buckler's hypothesis] was in fact a later form: the archaic s' is angular ( $S$ or $\}$ ). ${ }^{14}$ The

[^0]reading 'walwesh' can therefore be eliminated. Jongkees also pointed out that the upper stroke of the Lydian L is often curved: thus he read 'valvel'. The final letter in 'valvel', he suggested, might be a genitive-dative (or dative-locative) ending $-\lambda$, or else a shortened form of the adjective ${ }^{*}$ valvelis. ${ }^{15}$ Either form could reflect a nominative substantive *valves. Based on Weidauer 91, Jongkees' reading is now commonly accepted. ${ }^{16}$ However, the legend on yet another 'third' (Weidauer 95), published in 1967, is reported to end with a T : thus 'walwet'. ${ }^{17}$ Gusmani has now acknowledged this a possible reading, ${ }^{18}$ and on the basis of published photographs it seems that T might also be the final letter of Weidauer 91 and 92. Therefore, the identity of this final letter-whether L or T -must still be uncertain.

The meaning of walwel(-et?) is no less controversial. Two hypotheses need not be criticized here. Buckler suggested that 'walwesh' might refer to the river Ales, near Colophon, reported to have been captured by Gyges. By this means that monarch wished to advertise his conquest. Against Buckler, Jongkees argued that 'valvel' should be associated with certain theophoric names (in particular $\beta \alpha \lambda \beta 10 \alpha(s)$ or $\beta \alpha \lambda \beta \alpha-$ oupa), and should therefore refer to a deity. This he suggested was the Magna Mater, since the lion was her symbol. Neither of these ideas has ever been supported, or is tenable. ${ }^{19}$ Otherwise, discussion continues to focus on Six's hypothesis, that walwel(-et?) refers to Alyattes. Three main arguments are used to support this hypothesis: (a) 'Alyattes' and walwet (-et?) are similar; (b) the lion was probably the royal symbol of Lydia; (c) no one but the king would have put his name on Lydian coins. ${ }^{20}$ Three main arguments are used against it: (a) for phonological reasons any linguistic connection between these two words is doubtful; (b) if Alyattes thus marked his coins it is hard to explain why no later king continued the practice; (c) the letters kali on two other coins, published in 1966 and 1968, reverse dielinked with two walwel(-Et??) coins, and issued around the same period, ${ }^{21}$ are inconsistent with the name either
${ }^{15}$ This is followed by Gusmani, Lydisches Wörterbuch (Heidelberg
1964) 220 .
${ }_{16} \mathrm{Cf}$. Gusmani ibid. (n. Is); Weidauer 6I; D. Kagan, $A J A$ lxxxvi (1982) 358; M. J. Price, Studies Grierson (n. 4 above) 2. The reading 'valvel' is not mentioned by Kraay (n. 12, cf. n. 17 below).
${ }^{17}$ H. von Aulock, Syll. numm. gr. (Berlin 1967) no. 8204, Pl. I i. Von Aulock's reading is accepted by Kraay, Gnomon 1 (1978) 212. Unfortunately it is not discussed by Weidauer, though she knows the publication and reproduces a blurred copy of its photograph.
${ }^{18}$ Lydisches Wörterbuch, Ergänzungsband ii (Heidelberg 1982) 106. It is curious that Gusmani in fact seems to be ignorant of Weidauer 95 and von Aulock's publication. His interpretation of the final letter apparently rests only on the observation that it seems to differ from the third letter and therefore cannot be 1. (This argument was discredited by Weidauer 61.)
${ }^{19}$ Against Buckler see Jongkees (n. 3) 252; against Jongkees see Weidauer 62 with Gusmani, Kadmos viii (1969) I58-6ı.
${ }^{20} C f$., e.g., Seltman (n. 12) 25-6; Robinson (n. 12) 163 and $N C^{6}$ xvi (1956) 4; Pedley (n. 6) 74-5.
${ }^{21}$ For reff. to these 'kali' coins, see nn. 43 and 45 below. Because the reverse punch on the 1966 coin seemed less worn than the same punch when used on one coin of the walwe. series, M. Thompson concluded that the 1966 coin was part of an earlier issue. Weidauer objected to this (p. 106) that the same punch was used on the 1968 coin and shows no greater wear than on the two die-linked walwe. coins (Weidauer nos. 97, 99). This suggests that the mint was striking both series at the same period.
of Alyattes or of his predecessor Sadyattes or successor Croesus. ${ }^{22}$ According to the alternative hypothesis now common, 'valvel' and 'kali .' might be the names of mint-masters or moneyers. However, we may note that so prominent a display of the names of mere moneyers-the king's servants-on a royal coinage is unparalleled and possibly hard to accept. ${ }^{23}$ Opponents of the identification with Alyattes now seem to be in a majority. Yet in the most recent discussion of these issues, Hanfmann forcefully advocates the royal connection: ${ }^{24}$ despite Gusmani 'Valvel' could still be 'Alyattes', and 'Kal-' might either refer to Ardys (whose Lydian name is obscure) or mean 'of the king' (cf. Hesychios' gloss of koalddein, 'king in Lydian', and the [as yet unintelligible] Lydian Kualdn?, Qldan-).

A new approach to this question can now be suggested, in the light of the recent discovery by $F$. Steinherr and H. Otten that the Luwian word 'walwi' means 'lion'. ${ }^{25}$ Their argument is based on a comparison of Hittite and Luwian texts written variously in three of the different writing systems of secondmillenium Anatolia: Sumerian logograms, Anatolian 'Hieroglyphic' logograms (possibly invented for writing Luwian) and Hittite and Luwian syllabic cunciform. ${ }^{26}$ The meanings of most Sumerian and many Hieroglyphic logograms are known, but these logograms are not phonetic; their pronunciation, and also the meanings of words written in cuneiform, are determined by comparison between words written entirely in cuneiform syllables and those written in a combination of cuneiform syllables and logograms. Thus for example, the pronunciation of the Sumerian logogram Lú (='man') and the meaning of Luwian 'ziti' were established by means of comparisons between, i.a., Walwa-Lú-iš and Walwi-ziti. ${ }^{27}$ 'Walwi' itself is shown to be of Luwian origin by its frequent association with Luwian prefixes and suffixes. ${ }^{28}$ Various
${ }^{22}$ Cf., e.g., E. Babelon, Traité des monnaies grecques et romaines ii. I (Paris 1907) cols. 44-6; Buckler (n. 11) 36-8; Jongkees (n. 3) 251; Gusmani (n. 15) 220-1, (n. 18) 106 with ref.; M. Thompson (n. 45 below) I-4; L. Breglia, AIIN xviii (1971) 16; Kraay (n. 12) 24, (n. 17) 213; R. R. Holloway, RIN lxxx (1978) 8, iI.
${ }^{23}$ For the identification with mint-masters, see, e.g., Kraay (n. I2) 24-5; Kagan (n. 16) 358; Gusmani (n. 15) 220; J. H. Kroll, ANSMusN 26 (1981) 5; cf. Jongkees (n. 3) 254. For a general (and sceptical) discussion of possible mint-masters' names on ancient coins, see A. Furtwängler, RSN lxi (1982) s-30. The monograms of abbreviations of the names of some type of official on a few royal coinages of the Hellenistic Greek world (see Furtwängler 9-12) scarcely constitute a parallel. On these coins the king's name, in full, is always a prominent feature.

24 Sardis from prehistoric to Roman times (Cambridge, Mass. 1983) 78. In 1980 E. Pászthory could still speak of lion-head coins 'of the Alyattes type' (Metallurgy in numismatics i, edd. D. M. Metcalf and W. A. Oddy [London 1980] 151).
${ }^{25}$ F. Steinherr, Die Welt des Orients iv (1968) 320-s; H. Otten, ibid. v (1969) 94-5. J. Nougayrol, Le palais royal d'Ugarit iv (Paris $1956=$ Mission de Ras Shamra ix) 267 had suggested the identification, but without argument.
${ }^{26}$ For a succinct discussion of the methods used to decipher Hittite and Luwian see E. Laroche, Dictionnaire de la langue louvite (Paris 1959) ${ }^{10}-15$; on the different Anatolian writing systems see A. MorpurgoDavies and J. D. Hawkins, $A S N P^{3}$ viii. 3 (1978) 776-8.
${ }^{27}$ See F. Steinherr, Orientalia xx (1951) 108, 112-13 and reff.
${ }^{28}$ See Laroche (n. 26) s.v. 'walwi', and cf. ibid. s.vv. '-ziti', 'Piha-', 'Mula-', 'takiti-'; with id., Les noms des Hittites (Paris 1966) nos. 1486, 972, 817, 12 10.
proper names with Luwian cuneiform components include the Sumerian logogram UR . MAH, 'lion', ${ }^{29}$ or the Hieroglyphic Luwian logogram leo. ${ }^{30}$ Steinherr's hypothesis was based on the identification of PihaUR . MAH (Laroche Noms 976.1) and Piha-leo (976.2) with Piha-walwi (972), and UR . MAH-Lú(-in) (1758) and LeO-LÚi (1758.4) with Walwa-Lú-iš (I486) and Walwi-ziti (1486) ='Lion-Man'. ${ }^{31}$ This hypothesis was then proved by Otten, who could equate LÚ $^{\text {MES }} \mathrm{UR}$. MAH ('lion-men': mEš = pl.) with ${ }^{\text {ú..MES }}$ walwalla ('-alla'= agent suffix), by their identical appearance alongside sAI.MES hazgara, female cult functionaries. ${ }^{32}$ Otten's equation also showed that 'walwa' was in fact the Hittite pronunciation of UR . MAH: that is, 'walwa/i' meant 'lion' not only in Hieroglyphic and cuneiform Luwian, but in Hittite as well.

We must now ask what significance this word has for our Lydian coins. Five main languages are known to have been current in Anatolia during the first half of the second millenium: Hattic and Hurrian, both non-IndoEuropean, the former largely replaced by Hittite and the latter brought into southeastern Anatolia (Cilicia) by invasion c. 2100 bC; Palaic (limited to the northern region around Paphlagonia), Hittite (in the central plateau) and Luwian, all three Indo-European and closely related. ${ }^{33}$ According to Hittite sources, the Luwian population was centered at two different areas, Arzawa and Kizzuwatna. ${ }^{34}$ Kizzuwatna has long been shown to be Cilicia Campestris, invaded by the Hurrians c. 2100 bc. ${ }^{35}$ Arzawa, used in the narrower sense ('Arzawa proper'), was located in western Anatolia: either in the south and south-west (Lycia) ${ }^{36}$ or in the center (Lydia). ${ }^{37}$ Arzawa in the broader sense included Arzawa proper, three areas (Mira, Šeha River Land,

[^1] that the Luwian pronunciation of UR.MAH was '-neši'.
${ }^{32}$ On the meaning of ${ }^{\text {SAL . MES } S=\text { female pl.) }}$ hazgara ( $=$ [cult functionaries]) see Friedrich (n. 29) 68; on the nature and activities of these male and female cult functionaries, see L. Jakob-Rost, Orientalia ${ }^{2}$ xxxv (1966) 420.
${ }^{33}$ To be quite precise, Luwian itself consists of three closely related languages: cuneiform Luwian, Hieroglyphic Luwian, and Lycian: see E. Laroche, BSL lxii (1967) 64 and J. D. Hawkins, A. MorpurgoDavies and G. Neumann, NAWG vi (1973) 143-97.

34 Indeed, in the Hittite lawcode 'Luwiya' is once used interchangeably with 'Arzawa': Catalogue des textes hittites (Paris 1971) Law 291 no. 19A/B, with S. Heinhold-Krahmer, Arzawa (Heidelberg 1977) 2I-2, 318 .
${ }^{35}$ See S. Smith, JEA 8 (1922) 45-7; A. Goetze, ZAssyr xxxvi (1925) 305-8, Kizzuwatna (New Haven 1940).
${ }^{36}$ See A. Goetze, Journ. Cun. Stud. xiv (1960) 47; T. R. Bryce, AnatSt xxiv (1974) 103-16; Heinhold-Krahmer (n. 34) 3-4, 333-4, who points out that the evidence is still insufficient to determine the exact location of Arzawa.
${ }^{37}$ See Fr. Cornelius, Orientalia xxvii (1958) 394-5, Anatolica i (1967) 62; J. Garstang and O. R. Gurney, The geography of the Hittite empire (London 1959) 84-5; above all, J. G. Macqueen, AnatSt xviii (1968) 169-85, especially 174-5 (accepted by J. Mellaart, ibid. 187).

Hapalla) that are equally difficult to locate in absolute terms, and Wiluša, which may have been the Troad (Ilion). ${ }^{38}$ Thus, during the second millenium Luwian was either the language of the area later known as Lydia, or at any rate the most widely spoken language in western Anatolia. The Lydian language itself, which is not attested before the late eighth century, is little known, and its immediate origins are uncertain. But it was undoubtedly Indo-European and closely related to the other Indo-European languages of Anatolia; moreover, recent work has emphasized its similarity with the languages of western Anatolia, the three branches of Luwian. ${ }^{39}$ Precursors for names such as Lydia and Sardis have suggested that Lydian was possibly a postBronze Age development. ${ }^{40}$ It is also possible that Lydian was a separate branch of Anatolian, like Luwian, Palaic and Hittite, and that Arzawa did not include but extended around the area later known as Lydia. In either case, the close relationship between Lydian and Luwian, and the proximity and possible identity of Lydia and Arzawa, make it not difficult to accept the opinion of both Steinherr and Gusmani that the Lydian coin legend walwel(-ET??) is related to Anatolian 'walwa', 'lion'. ${ }^{41}$ Neither linguist mentions the lion heads depicted on these coins; both interpret the coin legend as a proper name of the 'Lion-Man' type. In fact, the lion heads on these coins both confirm the relationship between walwet (-ET?') and Anatolian 'walw-', and indicate that WALWEL(ET?) is not a proper name. We have already mentioned several reasons why this coin legend cannot easily be the proper name of a Lydian king, or the proper name of anyone else (such as a mint-master). Just so, we cannot accept as coincidence the inclusion on these coins both of lion heads and of some proper name 'Lion-'. We cannot suppose that the Lydian king happened to have a mint master with the old Anatolian name 'Lion-', and allowed that particular person to mark his name on these coins, when already for some time the Lydian king had been issuing lion-headed coins, and the lion was probably his royal symbol. There is, I think, a single, and simple, alternative. Consistent with the lion heads stamped on these coins, and cognate with Anatolian 'walw-', walwel(-Et?) is itself some form of the Lydian word for lion. ${ }^{42}$
To explain this legend on the coins there are in general two possibilities, whether one assumes that the

[^2]legend was inspired by the lion head, or the lion head by the legend. That is, the coins may have been marked 'lion' because they showed a lion profile. (So, for example, it is easy to imagine that these coins were called 'lions'.) Or the lion head itself may have symbolized something that was expressly referred to (on one series of coins) by means of this legend.

Some light on the significance of walwel(-ET?) may be shed by two other coins. As I have mentioned, in 1966 and 1968 two 'sixths' were published, both with opposing-but perhaps more savage and toothierlion heads of which only one is fully reproduced on the flan. Both coins are reverse die-linked with coins of the walwel(-et?) series, and both show a legend that includes the letters KAL. In publishing the second of these coins, Kraay stated: 'the name can certainly be read as KA $\wedge$ - followed by another letter which may be $B, \wedge, M$ or $N$ '; and he referred to the legend of the first coin as KA $\wedge$-. ${ }^{43}$ With few exceptions later scholars have reported the legend on these two coins as either 'Kali-' or (more commonly) 'Kalil'. ${ }^{44}$ This has sometimes led to rather desperate searching for nouns beginning with K which this word might be. (I have mentioned Hanfmann's 'koalddein', 'Kualdn?', 'Qldan-'.) In fact, however, on both coins there is certainly a letter preceding K. In the original publication of the first coin Thompson wrote: 'The ans hecte has 1AX between two doubtful letters, the first consisting of a vertical stroke and perhaps a diagonal to the right $(Y)$, and the last of a vertical stroke and perhaps a diagonal to the left $(\mathrm{V}) \cdot{ }^{45} \mathrm{~A}$ similar initial stroke is clearly visible on the photograph of the coin published by Kraay, and both strokes are indicated in the drawings and photographs published by Weidauer. ${ }^{46}$ What is this initial letter? In the supplement to his $L y d i s c h e s$ Wörterbuch Gusmani has tentatively identified it as an archaic Lydian R ( $P$ ). ${ }^{47}$ This seems consistent with the photographs, though on the basis of Thompson's description, upsilon or even iota is possible. The identity of the final letter is also uncertain. In 1976 Kraay amended his list of possibilities from $B, \wedge, M$ or $N$ to $\Gamma, M$, or $P .{ }^{48}$ This seems to me only partly justified. On the basis of Gusmani's description of the archaic Lydian alphabet, ${ }^{49} \mathrm{~N}$ clearly continues to be possible, as does $\Lambda$; on the basis of photographs, $P$ seems unlikely. Thus (perhaps) $\wedge, M, N$ or 「. By printing the legend '. . kalil. .' Weidauer implies that more than one letter preceded K and that two letters followed what she regards as $\Lambda$. Neither assumption is justified. To the contrary, any such reconstruction would extend the legend well beyond the borders of the coin as established by the lion head: the 1968 hekte (Weidauer ins) shows this particularly well. We should therefore report ' kali .'.

We therefore find two series of coins, both issued

[^3]around the same time and by the same mint, with contrasting legends. Though it might be tempting to hypothesize some Lydian animal name '. Kall ' for the possibly wilder beast on the two recent hektes, these letters are in fact consistent with the standard legend on Lydian seals, ending in -L- and the suffix -IM, from the Lydian verb 'to be'. ${ }^{50}$ (Thus for example, 'manelim' $=$ '(I) am of Manes'.) Just so, though Gusmani was unaware of the Oxford hekte published by Kraay, he nonetheless restored the legend on the earlier coin rKali $(\mathrm{m}) .{ }^{51}$ The iota and traces consistent with $m$ are visible on the Oxford coin, and the ending -kas is not uncommon among western Anatolian proper names. ${ }^{52}$ Gusmani cites no instance of the name 'Rkas', and none is known. The identity of the initial letter must remain uncertain. Therefore, I suggest that the legend be restored. кalim and translated '(I) am of kas'. The analogy with seals may at first sight seem difficult, since a seal at least sometimes designates ownership ${ }^{53}$ but cannot on circulating currency. However, it is not difficult to imagine that these seals served to indicate the original owner, and hence the source, of the bullion in question, and an explicit parallel exists for the use of seals on early electrum coinage: ФAN $\ulcorner E\urcorner$ OS EMI CHMA, on the coinage possibly of Ephesos. ${ }^{54}$

In the light of this reconstruction, walwel (if we accept a final L) might be shortened form of *walweиıм: '(I) am of the lion' (*walwe's). It can sometimes happen on Lydian seals that the -IM suffix is omitted, at least when the noun is joined with a following substantive (it is not here). ${ }^{55} \mathrm{Or}$, as in the case of the missing lion heads, the restricted size of coin flans may have led to the omission of this suffix. This reading has the merit of corresponding with the KALIM reading as it has been reconstructed. The identity of the 'lion' is unclear. Since that beast was probably the royal symbol of Lydia, walwel might well refer to the king himself. Identification with lions by Eastern royalty was apparently common; Herodotos reports (i 84) that the Lydian king Meles actually sired a lion. ${ }^{56}$ It is also possible that the lion refers in some way to the king's realm. So for example, lion statues stood in front of the royal mint at Sardis; ${ }^{57}$ it is conceivable that the reference is to them,

[^4]even if we cannot specify how. On this interpretation, the lion head symbolizes what the legend makes explicit, that these were coins of the king.

Alternatively, walwel might be the Lydian dative or locative singular (this form ends in -L ) of a noun such as *walwes: 58 'at the lion [mint?]', or variously 'to', 'for' or 'of the lion [king? mint?]'; it might reflect a shortened form of an agent suffix cognate with Hittite -alla (cf. ${ }^{\text {LÚ. MEs }}$ walwalla, p. 205 above): 'by the lion [king? mint?]'; finally, walwel or walwet might be a shortened form simply of the Lydian word for 'lion', in the nominative case. The legend would thus make explicit the coin type; and as the lion was probably the royal symbol of Lydia, so these coins were identified as the royal issue.

Finally, the question has been raised why only one Lydian king issued coins marked with a legend. The discovery of the two KALIM coins, in addition to those marked walwel(-ET?), may supply at least part of the answer to this. Clearly a distinction is being established between two roughly simultaneous issues of one mint. One may speculate as to why this was done: whether, for example, the king allowed an important subordinate to have coins marked with his own name and, not to be outdone, therefore marked his own coins with a royal legend. Whatever the reason, once the .кalim issue was complete, walwel(-Et??) was no longer needed on Lydian royal coins.

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${ }^{58}$ On this case ending, see Gusmani (n. 15) 43. It should be noted that Gusmani does not cite this as a possible interpretation of 'valvel'.

## The Scythian ultimatum (Herodotus iv 131, 132)

Shortly before Darius abandoned his futile pursuit of the elusive Scythians, there came to the Persians a messenger from the Scythian chiefs (iv I31, I32):





















 $\beta \alpha \lambda \lambda о ́ \mu \varepsilon v o$ ו.


[^0]:    ${ }^{7}$ See in particular the well-known hoard containing coins only of this type, found at Gordion in Lydian territory: A. R. Bellinger, Essays
    in Greek coinage presented to Stanley Robinson, edd. C. M. Kraay and this type, found at Gordion in Lydian territory: A. R. Bellinger, Essays
    in Greek coinage presented to Stanley Robinson, edd. C. M. Kraay and G. K. Jenkins (Oxford 1968) 10- Is. One of these Gordion coins [no. G. K. Jenkins (Oxford 1968) 10-15. One of these Gordion coins [no.
    I $104=$ Bellinger pl. $1.27=$ Weidauer 104], though heavily worn and missing its legend, is die-linked with Weidauer 103, one of the three missing its legend, is die-linked with Weidauer 103, one of the three
    other WALWE. coins found in an unstratified context during Hogarth's excavations at the Artemision. For the Sardis fragment see $S$. excavations at the Artemision. For the Sardis fragment see S .
    Goldstein, BASOR ccxxviii (1977) $54^{-7}$ and fig. 8, Sardis from prehistoric to Roman times (Cambridge, Mass. 1983) 40 and fig. 60. prehistoric to Roman times (Cambridge, Mass. 1983) 40 and fig. 60.
    Virtually all scholars agree that these lion-head coins are Lydian. This is not the place to argue the thesis that virtually all early coins were issued by governments or states. (However, see Part II of my article. 'The origin of electrum coinage', $A J A$ [1987].)
    ${ }^{8}$ The earliest such reading I have traced is that by T. E. Mionnet, Description de médailles antiques, grecques et romaines ii (Paris 1807 ) 528 no. 84, Pl. 35 no. 168 (this is ignored, e.g., by Six [n.5] 205; Jongkees [n. 3] 251 n .1 ; Weidauer 59). Mionnet is followed by D. Sestini, Descrizione degli stateri antichi (Florence 1817) 51-2 and J. Brandis, Das Münz-, Mass- und Gewichtswesen in Vorderasien (Berlin 1866) 177 and Munz-, Mass- und Gewichtswesen in Vorderasien (Berlin 1866) 177 and
    n. 1, though Mommsen (Geschichte des römischen Münzwesens [Berlin 1860] 20 n .73 ) had doubted the attribution and thought the legend I860] 20 n .73 ) had doubted the attribution and thought the legend
    possibly Lycian. In the light of Brandis' publication B. V. Head ( $N C^{2}$ xv [1875] 266) assigned to Kyzikos a second specimen of the walwe. type (Weidauer no. 97).
    ${ }^{9}$ K. B. Hofmann, $N Z$ xvii (1885) 2-3, cf. xvi (1884) 32; Six (n. s) 202-210.
    ${ }^{10}$ See Weidauer's summation of the evidence (p. 60).
    ${ }^{11}$ JHS xlvi (1926) 36-41.
    ${ }_{12}$ This reading has been accepted, e.g., by E. S. G. Robinson, JHS lxxi (1951) 163; C. Seltman, Greek coins ${ }^{2}$ (London 1955) 25-6; Pedley (n. 6) 74; it is still cited (in the form 'Walwes-') as one of two possible readings by C. M. Kraay, Archaic and classical Greek coins (London 1976) 24. ${ }_{13}{ }^{13}$ Jongkees (n. 3 ) 254 .
    14 R. Gusmani, Oriens Ant. xiv (1975) 271, ASNP ${ }^{3}$ viii. 3 (1978) 835, 847. This point had been suggested by Jongkees on the basis of the single example of an archaic $s$ known at the time of his article. is not the place to argue the thesis that virtually all early coins were

[^1]:    ${ }^{29}$ See J. Friedrich, Hethitisches Wörterbuch (Heidelberg 1952) 299; and see Laroche Noms (n. 28) for UR.maH names with Luwian cuneiform prefixes Piha- (976.I), Ali- (34), Hapati- (284), Lila- (697), Muwa- (839.2). Numbers given in the text for Anatolian names are taken from this work.
    ${ }^{30}$ See Steinherr (n. 25) 322-3 for a list of Hieroglyphic seals that include the logogram leo (including Piha-leo and leo-ziti). This logogram (Meriggi $88=$ Laroche, Les hieroglyphes hittites [Paris 1960] no. 97, p. 6I) is very clearly a picture of a lion.
    ${ }^{31}$ At Noms (n. 28, s.v.) Laroche withdrew his earlier suggestion

[^2]:    ${ }^{38}$ See Heinhold-Krahmer (n. 34) 30, 81-2 and 35I-2, with reff. to Cornelius and Garstang and Gurney, and C. Watkins in Proc. Symp. on Trojan War, ed. M. Mellink, forthcoming.
    ${ }^{39}$ See A. Heubeck, 'Lydisch', in Altkleinasiatische Sprachen, Handb. d. Orient. i.2.2 (Leiden and Cologne 1969) 419-24; Gusmani (n. 18) s-8; N. Oettinger $Z V S[=K Z]$ xcii (1978) 74-92. Oettinger derives Lydian and *Palaic-Luwian (ancestor of Luwian and Palaic) from '*Urwestanatolisch'.
    ${ }^{40}$ See Pedley (n. 6) 26.
    ${ }^{41}$ Steinherr (n. 25) 324; Gusmani, loc. cit. (n. 18).
    42 That this would have been recognized as the meaning of the coin-legend is reinforced by the continued use of one branch of Luwian-Lycian-in western Asia Minor down through the Hellenistic period: see Ph. H. J. Houwink ten Cate, The Luwian population groups of Lycia and Cilicia Aspera during the Hellenistic period (Leiden 1961).

    There was apparently no Indo-European word for 'lion': see A. Walde and J. B. Hofmann, Lateinisches etymologisches Wörterbuch ${ }^{4}$ (Heidelberg 1965) 785; A. J. Van Windekens, Orbis xxiv (1975) $211^{-}$ 13.

[^3]:    ${ }^{43}$ C. M. Kraay, Report of the visitors [of the]Ashmolean Museum 1968, 43-4.
    ${ }^{44}$ Cf., e.g., Price (n. 16) 5; Holloway (n. 22) 8, in; Kagan (n. 16) 358 ('kalil': probably the name of a moneyer).
    ${ }^{45} \mathrm{M}$. Thompson, $A N S M u s N$ xii (1966) I-4.
    ${ }^{46}$ At AIIN xviii (1971) 16 L . Breglia refers to the 1966 coin as 'segnato ]Kal[' (N.B. the capitalization); at $A S N P^{3}$ iv. 3 (1974) 659 she refers to it simply as 'segnato Kal'.
    ${ }^{47}$ Gusmani (n. 18) 86.
    ${ }^{48}$ Kraay (n. 12) 24.
    ${ }^{49}$ Gusmani (n. 14).

[^4]:    ${ }^{50}$ Gusmani, Kadmos xi (1972) 47-5I and (n. 18) 58 s.v. '-im', cf. Die Sprache xvii (1971) 1-6.
    ${ }_{51}$ Gusmani (n. 18) 86.
    ${ }^{52}$ See L. Zgusta, Kleinasiatische Personennamen (Prague 1964) 662.
    ${ }^{53}$ See, e.g., M. Balmuth, Studies presented to George M. A. Hanfmann, edd. D. G. Mitten et al. (Cambridge, Mass. and Mainz 1971) 5-6 and reff.
    ${ }^{54}$ See P. R. Franke and R. Schmitt, ФANEOE-ФANOI EMI $\Sigma H M A$, Chiron iv (1974) i-4. for the attribution to Ephesos, see Weidauョr 68 (now widely accepted). Kraay $A C G C_{23}$ had made a case for Halikarnassos.
    ${ }^{55}$ See Gusmani, Kadmos xi (1972) 49, 5 I.
    ${ }^{56}$ On the (possible) identification with lions by Assyrian kings, see E. D. Van Buren, Anal. Orient. xviii (Rome 1939) 6; R. Koldewey, Die Königsburgen von Babylon (1931-2, repr. Osnabrück 1969) i pp. 7, 9, 20-1, ii pp. 5, 9 (N.B.: Nebuchadnezzar stamped clay bricks used for his buildings with lion-seals); E. Porada, BullMFA xlviii (1950) 2-8; and $c f . \mathrm{H}$. Frankfort, The art and architecture of the ancient Orient (Harmondsworth 1958) 104 fig. 41. (Assurnasirpal's tunic). For a similar motif in Achaemenid Persia, see R. Ettinghausen, Oriens xvii (1964) 161-4. The appelation 'lion' is common in the NT: see $i$ Macc. 3:4-7 for Judah as lion. For further reff., see Sardis from prehistoric to Roman times (n. 24) 184 and n .6 above.
    ${ }^{57}$ See A. Ramage, BASOR cxci (1968) 11-2, cic (1970) 16-22; Sardis from prehistoric to Roman times (n. 24) 34-7.

