

associations of the former number were too painful. It seems in every way a fitting monument.³⁵

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³⁵ I would like to thank Peter Derow, George Forrest, Steve Tracy and the *J.H.S.* editor and referees for helpful comments on earlier drafts of this note.

The Francis-Vickers Chronology

Over the last few years the late E. D. Francis and M. Vickers (after this referred to as F. and V.) have been promulgating a revised chronology for Greek art from its later Geometric to its Early Classical phases. The subject is large and they have dealt with it in instalments, scattered over various journals. In *Table I* I give a list, though it may not be complete.

TABLE I

- I 'Leagros kalos', *PCPs* ccvii (1981) 97-136. FV.
- II 'Kaloi, ostraka and the wells of Athens', *AJA* lxxxvi (1982) 264. FV.
- III Burlington Mag. cxxiv (1982) 41-2 (review of B. S. Ridgway, Archaic style in Greek sculpture). FV.
- IV 'Signa priscae artis: Eretria and Siphnos', *JHS* ciii (1983) 49-67. FV.
- V 'Green goddess: gifts to Lindos from Amasis of Egypt', *AJA* lxxxviii (1984) 68-9. FV.
- VI 'Amasis and Lindos', *BICS* xxxi (1984) 119-30. FV.
- VII 'Hallstatt and Early La Tène chronology in C., S. and E. Europe', *Antiquity* lviii (1984) 208-11. V.
- VIII *JHS* civ (1984) 267-8 (review of F. Brommer, *The-sens*). FV.
- IX 'Persepolis, Vitruvius and the Erechtheum Caryatids', *RA* 1985, 3-28. V.
- X 'Greek Geometric pottery at Hama', *Levant* xvii (1985) 131-8. FV.
- XI 'Early Greek coinage, a reassessment', *NC* cxlv (1985) 1-44. V.
- XII *CR* c (1986) 285-6 (review of P. C. Bols, *Antike Bronzetechnik*). V.
- XIII *JACT Review* v (1986) 36-7 (review of J. Boardman, *Greek sculpture: the Classical period and The Parthenon and its sculpture*). V.
- XIV 'Persépolis, Athènes et Sybaris: questions de monnayage et de chronologie', *REG* xcix (1986) 239-70. (A rehash of XI). V.
- XV 'Dates, methods and icons' (in ed. C. Bérard, *Actes du Colloque: images et sociétés en Grèce ancienne* Lausanne [1987] 19-25). V.

Announced (the references to publication not always accurate)

- 'This other Herakles' (I, 125 n. 3).
- 'Oenoe, or, a tomb with a view' (I, 125 n. 16).
- 'New wine from Old Smyrna; Early Corinthian pottery and the Greeks' eastern neighbours'; (I, 125 n. 16; VI, 129 n. 44; XI, 19 n. 149). FV.
- 'The Agora revisited' (XI, 28 n. 222). FV.
- 'Heracles Lacedaemonius' (XI, 14 n. 105). V.
- E. D. Francis, *Reflections of Persia in Greek art and literature* (Waynflete lectures, 1983). (XI, 1 n. 2). F.
- 'Attic symposia after the Persian wars' (in ed. O. Murray, *Symptica*). (XI, 1 n. 2). V.
- 'The role of Darius the Great in the construction of the Artemisium at Ephesus' (in ed. M. J. Price, *Proc. of the British Museum Colloquium 'The Archaic temple of Artemis at Ephesus'*). (IX, 8 n. 34). V.

(F=Francis; V=Vickers; FV=Francis and Vickers.

For brevity I cite the published papers by the Roman numeral I have prefixed)

What F. and V. are attempting is roughly this. They accept the relative chronology based on stylistic sequences and on contexts, but they reject the absolute dates to which it has generally been attached, arguing that the fixed points—the connections with precisely dated events—have been misinterpreted or missed. In effect this means that dates from the eighth to the later sixth century according to the accepted system are to be lowered by some sixty years, after that there is a continuing convergence, and finally about the middle of the fifth century the old and the new scales agree.¹

To begin with the earliest fixed points. Greek Geometric pottery has been found at several sites in Syria and Palestine, some of it in promising contexts.² For Tell Abu Hawam and Megiddo the dating of the strata is disputed, so that for the present it is prudent to put them aside. It is, though, agreed that Hama was destroyed in 720 BC, and here three unstratified Late Geometric sherds are the problem. If, as the excavators thought,³ Hama was not reoccupied till the Hellenistic period, these sherds should not be later than 720 BC. That is unacceptable to F. and V., who cite evidence for some reoccupation and, though it seems to have been very limited, they argue that the three sherds could be later than 720 BC, the debris of settlement or—an ingenious resort—of some 'passing caravan'. Though statistically less probable than the orthodox opinion, that of F. and V. is possible. There is also the late Middle Geometric II sherd from stratum V at Samaria, which is usually thought to go down no later than to 750 BC: here F. and V. seem to conflate strata V and VI, so getting a terminal date of 722 BC,⁴ when Sargon sacked the city, and further—to give themselves more play—they doubt the sherd's position in the Geometric sequence.

Another tantalising context comes from Grave 325 (formerly 102) on Pithecusae.⁵ Here a blue paste scarab with the cartouche of the Egyptian king Bocchoris and said to be of Egyptian manufacture was found with three Early Protocorinthian pots, the latest of which—according to the accepted chronology—should not be later than 700 BC. Bocchoris died in or just before 712 BC after a short and disastrous reign, so that he is not likely to have been commemorated posthumously; the scarab is a poor thing, which in Pithecusae, where Eastern imports were fairly common, would be surprising as an heirloom; and the marks of wear are natural enough, if it belonged to the child in whose grave it was put. For these reasons it is generally supposed that the Bocchoris scarab was buried within a few years of its manufacture, so supporting the current dates for Early Protocorin-

¹ This is stated more explicitly in XV, 22, which I saw after this paper was written. Here conventional 575-50 becomes c. 490, conventional 550-25 becomes c. 480, conventional 525-500 becomes c. 475, and conventional 500-475 becomes c. 465 (all BC), so compressing 100 conventional years into 25 or not much more. I have not considered the probability of so rapid an artistic development and increase in production.

² The best discussion is by J. N. Coldstream in *Greek Geometric pottery* (London 1968) 302-313: it should be noted that one or perhaps both of the sherds from Megiddo have since been assigned to stratum IV and not V (P. J. Riis, *Sukas* i [Copenhagen 1973] 144-6; cf. Coldstream, *AJA* lxxix [1975] 155). For F. and V.'s criticisms see X, 131-6.

³ E. Fugmann, *Hama* ii 1 (Copenhagen 1958) 269; G. Ploug, *ib.* iii 1 (1985) 13.

⁴ Still in a letter K. M. Kenyon, without further explanation, dated the end of stratum V c. 750-20 BC (P. J. Riis [n. 1] 146-8).

⁵ Coldstream (n. 1) 316-7.

thian and consequently for Late Geometric. F. and V. do not comment on this context, but it is easy to supply their objections. Even so, there is again some probability in this fixed point.

Ancient writers give dates for the foundations of several early Greek colonies, most notably Thucydides for those in Sicily,⁶ but (as F. and V. say)⁷ they have no primary value, since we do not know how they were arrived at. It is, though, reassuring that the relative sequence appears to be confirmed generally by the finds—for Italy, Cyrenaica and Massilia as well as Sicily⁸—so that it is not incredible that the absolute dates too may be fairly accurate. Perhaps a little inconsistently V. allows Thucydides as witness for lowering the foundation of Massilia to about 540 BC:⁹ but Thucydides' list of sea powers (in which this event is mentioned) cannot be wholly in chronological order, since Polycrates' naval expansion should be later than the exodus of the Phocaeans, while a geographical division seems logical enough, and it would be astonishing if Herodotus, when recounting the disastrous naval victory of the Phocaeans of Alalia,¹⁰ did not mention a more or less contemporary success of their compatriots at Massilia.

After he became king of Egypt Amasis gave Naucratis to Greek traders to live in, so Herodotus says.¹¹ The easiest interpretation of this statement is that he thought the foundation of the Greek settlement not earlier than the 560s, though the finds—according to the conventional chronology—put it back to about 620 BC. V. (here writing alone) notes this point incidentally, but (with his partner) makes more of a comparison of transport amphoras.¹² Petrie in 1888, they observe, remarked a similarity between amphoras sealed with the stamp of Amasis and others found in the 'oldest stratum' of Naucratis; but, Petrie is referring to decoration and not shape (which here is the criterion of date), the stratification of Naucratis is elusive,¹³ to say the least, nor (when one considers the disposal of the finds) is it very likely that we have a complete series of the amphoras from that site. Still, the external evidence—

⁶ vi 3–5.

⁷ X, 136–7 (though this is hardly a fair-minded statement).

⁸ For Sicilian and Italian evidence see Coldstream (n. 1) 322–7, sustained by later reports; the most troublesome question is the interval between Gela and Selinus. In Cyrenaica Aziris is noteworthy since the finds support Herodotus' statement that it was short-lived (iv 157–8: J. Boardman, *BSA* lxi [1966] 150–2). For Massilia the date usually accepted is Eusebius'.

⁹ XI, 21 n. 173. Thuc. i 13; cf. Paus x 8.6 and Isocr. vi 84.

¹⁰ i 165–6. It is sometimes argued that Herodotus meant that Amasis only reorganised Naucratis, but the wording is against such an interpretation. For ἔδωκε Ναυκρατίην πόλιν ἐνοικῆσαι compare δίδωσι χῶρους ἐνοικῆσαι in ii 154. To take πόλιν predicatively with ἐνοικῆσαι is wanton, especially when one considers Herodotus' usage in adding πόλις to the name of a city (e.g. Βουτυῶν πόλιν in ii 152); and though, as M. M. Austin has pointed out (*Greece and Egypt in the Archaic Age* [PCPS Suppl. 2 (1970)] 29–33, but note 59 n. 5) Herodotus refers to Naucratis in one place as a πόλις, but in another as an ἐμπόριον, I doubt if he intended a distinction. That is not to say that Amasis did not reorganise Naucratis and that this might have misled Herodotus; and if the finds from the Hellenion are not earlier than 570 BC (J. Boardman, *The Greeks overseas*² [London 1980] 120) there is evidence for some expansion under Amasis.

¹¹ ii 178.

¹² XI, 18–19; cf. X, 137.

¹³ E. Gjerstad (*LAAS* xxi [1934] 67–84) was perhaps the last student to try to use it.

that is Herodotus' statement—here favours F. and V.

Meşad Hāshavyahu in Palestine, about 10 miles south of Tel Aviv, was a fortress that appears to have had a short occupancy, and here the excavators found some East Greek sherds, Hebrew ostraka and local pottery of a kind known as 'Persian'.¹⁴ The East Greek sherds, on the accepted chronology, are of the end of the seventh century; the ostraka were given a similar date for reasons not entirely dependent; and 'Persian' pottery has been so little studied that Palestinian specialists were not troubled by its occurrence before the Persian period. So the garrisoning of Meşad Hāshavyahu has been connected with the hostility between Josiah of Judah and Psammetichus of Egypt around 609 BC. This does not suit F. and V.,¹⁵ who want a date some sixty years later. So, making play with the 'Persian' pottery, they have Meşad Hāshavyahu a fortress of Cyrus's on his southern frontier. One may wonder whether its location might not have been too far to the rear, if (as Herodotus implies)¹⁶ the Egyptian defences began on the Delta; but till the 'Persian' pottery is sorted out, F. and V.'s interpretation remains theoretically possible.

Old Smyrna, Herodotus tells us, was captured by Alyattes of Lydia at some unspecified date in his long reign (618–560 BC),¹⁷ though the excavators' conclusion that it was around 600 BC is accepted generally.¹⁸ This conclusion is based on pottery found in a destruction level. For F. and V. this destruction should belong to the 540s and so they attribute it to Harpagus.¹⁹ Admittedly Harpagus used siege mounds when attacking Ionian cities and there is a siege mound at Old Smyrna; but Alyattes could have used one, nor do we know that Harpagus needed such a device against the Smyrnaeans. More germane, if the destruction was Harpagus's, is the absence of evidence of Alyattes' capture, unless it was the cause of damage about 700 BC (conventional time),²⁰ but that, even scaled down, would be inconveniently early for F. and V. Their more positive argument, that container amphoras from the destruction deposits are similar to others from Tell Defenneh sealed with Amasis's cartouche, seems to backfire: the Smyrna example they cite is early in the series, the Amasis ones late.²¹

V. has an interesting reconstruction of the career of Phanes,²² who appears in history in 525 BC, and assigns

¹⁴ J. Naveh, *IEJ* x (1960) 129–39; xii (1962) 27–32, 89–113. See also *BSA* lxiv (1969) 14; J. Boardman (n. 10) 115; P. J. Riis, *Madridrer Beiträge* viii (1982) 251.

¹⁵ X, 137; XI, 20.

¹⁶ ii 30.

¹⁷ i 16. Other dates for his accession are 609 (Eusebius) and 605 or 604 (Marmor Parium).

¹⁸ J. M. Cook, *BSA* liii–iv (1958–9) 25–7; lxxx (1985) 25–8. See also *BSA* lxiv (1969) 13–14 and Diagram 2 for another way of arriving at this date. E. Langlotz (n. 25 [1975]) 20–2 prefers 580 BC on historical grounds and because he accepts a lower dating of Corinthian pottery; but this would be difficult to maintain, if the interpretation of Meşad Hāshavyahu is correct. There is an interesting report from Tell Batashi of a Corinthian pot, conventionally dated c. 620 BC, from a stratum with a terminal date of c. 590 BC (*AJA* xci [1987] 275): if this is valid, it does not decide between Langlotz and the more orthodox, but tells strongly against F. & V.

¹⁹ X, 137; XI, 19. A further treatment is promised.

²⁰ J. M. Cook (n. 17 [1958–9]) 14; *The Greeks in Ionia and the East* (London 1962) 71. E. Akurgal, though, does not mention this in *Alt-Smyrna* i (Ankara 1983).

²¹ So P. Dupont kindly informs me.

²² XI, 19–20.

to him the coins with the legend $\phi\alpha\epsilon\nu\omicron\varsigma$ or the like and the device of a stag. Because of its cricked neck—the scale is too small for detailed comparison—V. considers the stag contemporary with late Wild Goat style pottery usually ascribed to the early sixth century, but now to be down-dated to the 520s. Yet, even if V. has the right Phanes, the crick is not peculiar to Wild Goat pottery: it occurs later in the Enmann class²³ and on Clazomenian sarcophagi.²⁴

With the middle of the sixth century fixed points become less rare, absolute dating more meaningful and chronological study intenser.²⁵ First there is the organisation of the Panathenaic festival in 566 BC, according to Pherecydes and Eusebius. It is assumed by the orthodox that the earliest of the surviving Panathenaic amphoras, which were prizes at games attached to the festival, are little if any later. F. and V. have not dealt with this fixed point though, to be fair, it is not a very secure one.

Another fixed point for the mid-sixth century has been detected in the first colossal Artemisium at Ephesus.²⁶ According to Herodotus most of its columns were given by Croesus, whose reign was from 560 to 546 BC, and there is some sort of confirmation in the fragments of column mouldings which preserve the letters $\beta\alpha$ and $\kappa\rho$ usually taken to be the relics of $\beta\alpha\sigma\iota\lambda\epsilon\upsilon\varsigma$ and $\kappa\rho\omicron\iota\sigma\sigma\omicron\varsigma$.²⁷ There was also relief sculpture on the columns, some scraps of which survive; to judge by style these are of various dates and, though one cannot be sure that any of them came from Croesus' columns, yet if most of the columns were his, the likelihood is that some do. By this reasoning the earliest sculpture from the Artemisium should not be later than about 550 BC. This is much too early for V., again on his own, and he tackles the problem with characteristic adroitness.²⁸ First, Croesus' columns were gold miniatures, since they occur in a list of objects of precious metals and later, after the temple was destroyed, were worth selling,²⁹ while $\beta\alpha$ and $\kappa\rho$ can be restored as $\beta\alpha\sigma\iota\varsigma$ and $\kappa\rho\eta\eta\iota\varsigma$. Secondly, Macrobius (citing Alexander Aetolus) says that Timotheus wrote a hymn for the dedication of the temple,³⁰ probably about 400 BC, and since Pliny says it took 120 years to build³¹ it must have been started about 520 BC. Thirdly, Theodorus of Samos made a ring for Polycrates,³² tyrant of Samos from c. 535 to c. 522 BC, and designed the royal bedroom

for Darius,³³ who became king of Persia in 522 BC, so that 520 BC is a likely date for his work on the foundations of the Artemisium. Fourthly, Theodorus and Rhoecus were jointly the architects of the first colossal Heraeum at Samos, which is generally agreed to be earlier than the Artemisium; and since (as V. hopes sometime to show) the finds from the destruction level of this Heraeum may be no earlier than 479 BC instead of the 520s, as has been supposed, its construction may well be credited to Polycrates. Finally, if the Artemisium was begun in 520 BC, its sponsor or one of its sponsors is likely to have been Darius, whose support of his subjects' religions is well known.

Of these arguments only Timotheus' dedicatory hymn seems safe. That Croesus dedicated miniature gold columns is unlikely: models of columns were not common dedications,³⁴ so that one would expect Herodotus to have been more specific, and though the other objects in his list were of precious metals, he specified the fact in every instance. Further, big drums of marble were not worthless and Strabo's $\pi\rho\tau\epsilon\pi\epsilon\upsilon\omicron\varsigma$ $\kappa\iota\omicron\nu\omicron\varsigma$, which implies replacements, comes in a context of rebuilding the temple. As for $\beta\alpha\sigma\iota\varsigma$ and $\kappa\rho\eta\eta\iota\varsigma$, one can only admire V's ingenuity. To return to Timotheus, his hymn may be accepted, but its date is unknown,³⁵ nor need it be relevant, since Pliny evidently confuses the earlier and the later Artemisium and his 120 years may refer to the building of the later temple,³⁶ for which the help of all Asia ('factum a tota Asia') is more compatible with political circumstances. Next Theodorus, whose ring was owned by Polycrates (though, to be captious, not necessarily made for him). That he designed Darius's bedroom is an imaginative conflation. Athenaeus describes the bedroom of the Persian kings (not particularly named) and attributes only a gold krater to Theodorus, whose authorship of the famous golden vine, presumably that given by Pythius to Darius and perhaps in Sardis in the time of Croesus, is added by Himerus through—it seems more than possible—his faulty reading of Athenaeus;³⁷ but there is nothing to suggest that Theodorus worked directly for Darius. On the other hand Herodotus records a silver krater at Delphi, given by Croesus and allegedly the work of Theodorus,³⁸ so that he should have been active about the time when work on the Artemisium is conventionally thought to have begun: V. has missed this passage. On the date of the building of Rhoecus's Heraeum V. offers no evidence except its appropriateness to Polycrates' notions of grandeur, insufficiently exhibited by the conventional chronology,³⁹ but the

²³ *BSA* xlvii (1952) pl. 30.

²⁴ R. M. Cook, *Clazomenian Sarcophagi* (Mainz 1981) pls. 8.5; 9.2; 10.2; 11.2; 15.2; 34.3.

²⁵ The fundamental study is still E. Langlotz, *Zur Zeitbestimmung der strengfigurigen Vasenmalerei und der gleichzeitigen Plastik* (Leipzig 1920): there are minor modifications in his *Studien zur nordostgriechischen Kunst* (Mainz 1975) 17–26. See also J. Kleine, *Untersuchungen zur Chronologie der attischen Kunst von Peisistratos bis Themistokles* (*Ist Mitt. Beih.* 8 [1973]) and R. Tölle-Kastbein, *AA* (1983) 573–84. Kleine accepts the conventional chronology with some internal adjustments. Tölle more mechanically assumes a median age for Leagros when *strategos* in 465 BC and lowers the conventional chronology symmetrically between 590 and 440 BC with a maximum displacement of 15 years at 515 BC.

²⁶ Langlotz (n. 25 [1920]) 12–16; [1975] 22–3.

²⁷ *Hdt.* i 26. Another fragment, found more recently, has $\epsilon\beta\alpha\sigma\iota$ (A. Bammer, *Anat. St.* xxxii [1982] 72).

²⁸ *XI*, 9–17.

²⁹ Strabo xiv 640.

³⁰ *Sat.* v 22. 4–5 (Page, Timotheus fr. 778).

³¹ *NH* xxxvi 14.

³² *Hdt.* iii 41.

³³ *Ath.* xii 514 f. with Himerius, *Or.* xxxi 11.

³⁴ For this information I thank C. G. Simon, who has studied dedications in Greek and particularly East Greek sanctuaries.

³⁵ Diodorus (xiv 46.6) puts the *floruit* of Timotheus in 398/7 BC and this might be the date of the hymn; but he is said to have been born around 460 BC and to have died in his nineties. That Alexander Aetolus says he was paid in 'sigloi' for the hymn is, though, (as V. says) an argument for putting the performance after 412–11 BC, when Persia resumed suzerainty of Ephesus.

³⁶ So W. B. Dinsmoor, *The architecture of ancient Greece* (London 1950) 224.

³⁷ *Ath.* xii 514 f, 539d; *Him. Or.* xxxi 11; *Hdt.* vii 27; Pliny, *NH* xxxiii 51. There is an excellent discussion with all the relevant references in P. Jacobsthal, *Ornamente griechischer Vasen* (Berlin 1927) 102–10 and especially n. 172.

³⁸ i 51.

³⁹ The excavators of the Heraeum, as V. emphasises, note that offerings in the sanctuary fall off in the time, as they suppose, of

conventional students give Polycrates the next Heraeum, and to suppose that Rhoecus' was destroyed by the Persians in the time of the Athenian empire⁴⁰ implies remarkable reticence by ancient authors. Again, the reticence of ancient authors is remarkable, if Darius was the sponsor of the Artemisium—Herodotus in particular gives credit to Midas, Croesus and Amasis for their benefactions to Greek sanctuaries; still this is not essential to V.'s argument.

Some time, conceivably, there may be help from the tomb of Alyattes near Sardis, which should be of about 560 BC, but at present the pottery found in it cannot be classified precisely enough.⁴¹ At Sardis itself there are destruction deposits, which the excavators assign to the mid sixth century;⁴² but tiresomely the city was sacked in both 546 and 498 BC, so that considered in isolation these deposits cannot yet be used as primary evidence.

The conventional chronology has two fixed points at 525 BC. One is the Siphnian Treasury at Delphi, which Herodotus says was being built shortly before the Samian exiles raided Siphnos in 525 BC.⁴³ F. and V. transfer it to the 470s,⁴⁴ so lowering the dates of Late Archaic art by some fifty years. Their arguments are that we should trust not Herodotus, but Vitruvius, who puts the invention of Caryatids (which appear in the Siphnian treasury) after 479 BC; that Siphnos was then still prosperous enough to build a treasury; that the subjects of its sculptures suit a memorial of the Persian invasion; and that their style is close to that of the Eretria pediment, which also should be of the 470s. The continued prosperity of Siphnos is likely enough, though inconclusive, but the rest is at best very dubious, as J. Boardman has explained efficiently.⁴⁵ V., though, has now made the modification that the treasury is not that of Siphnos (so that Herodotus is exonerated):⁴⁶ this has the merit of possibility, but gives no positive evidence about its date.

Daphnae was a frontier fortress on the east of the Delta of Egypt, presumably at what is now called Tell Defenneh. Here Petrie excavated a large building and recorded a concentration of fine Greek pottery in his rooms 18 and 29.⁴⁷ According to the conventional dating this pottery is of the middle and third quarter of the sixth century, and here there is support from sealings of transport amphoras found in the same two rooms, most bearing the name of Amasis (who reigned from 569 to 526 BC) and the rest earlier. I once suggested that

Polycrates. The Artemisium of Samos, though, seems then to have been at its most flourishing (*AAA* xiii [1980] 305–18).

⁴⁰ V.'s interpretation of Paus. vii 5.2, though what Pausanias saw was presumably the ruins of the unfinished later temple.

⁴¹ For the identification see Hdt i 93. The pottery is published in *Abh. Berl. Akad.* 1858, 556 and pl. 5.

⁴² For what it is worth, a radiocarbon date of 570 BC ± 50 years comes from carbonised grain found in a destruction deposit which also yielded two Attic cups, dated according to the conventional chronology to the mid sixth century (C. H. Greenewalt jr in *VII. Kazi Sonuçları Toplantısı* [Ankara 1985] 300–1, fig. 3; the cups are published more fully by N. H. Ramage, *AJA* xc [1986] 419–24, pl. 27).

⁴³ iii 57–8.

⁴⁴ IV, 54–67 (III is a trailer); cf. also IX, 9–12.

⁴⁵ *JHS* civ (1984) 162–3. Boardman also deals with the Eretria pediments (F. and V. IV, 49–54), the dating of which by itself is not vital to F. and V.'s general chronology.

⁴⁶ IX, 9 n. 36.

⁴⁷ W. M. Flinders Petrie, *Tanis* ii (London 1888) part 2, 47–96; *CVA British Museum viii passim* for the fine pottery, pp. 59–60 for a discussion.

the closure of the deposit was a result of the Persian invasion of 525 BC, but this would be too early for F. and V., though so far they seem not to have published their opinion on Tell Defenneh except for the comparison, already mentioned, of transport amphoras: presumably they would connect it with their Egyptian revolt of 485 BC,⁴⁸ though the sealings would need some explanation.

Before leaving Egypt, two other instances of cartouches are worth mentioning, both probably of Apries, who was king from 589 to 569 BC. The first is a faience helmet aryballos,⁴⁹ an outlier of a class assigned (on the conventional chronology) to about the first quarter of the sixth century. The second is painted on a fragmentary black-figure pot, East Greek or related, which I should date vaguely to the middle or third quarter of the same century.⁵⁰ These two cartouches are not official marks and so need not have been applied during Apries' reign; but as a general rule the longer the interval postulated, the less probable it is. Perhaps too a sherd from Old Smyrna is relevant, if the name—*ουης*, written beside one of the figures depicted on it, is correctly restored as *Καμβουης*.⁵¹ Cambyses died in 522 BC and one would not expect him to have been commemorated by a Greek much later. Nor should the sherd itself be much later, if one uses the conventional dating.

From the third quarter of the sixth century, according to the current chronology, till the third quarter of the fifth there was a fashion for *καλος* inscriptions on Attic fine pottery, and some of the *καλοι* so recorded have been identified reasonably as historical personages. F. and V. concentrate on Leagros,⁵² whose conventional decade of 510–500 BC they would lower to 480–70 and, though some of their arguments are slippery, they do show that the evidence is indecisive for the date of Leagros' birth, fifteen years after which both they and their opponents have him become *καλος*. Since the Pseudo-Themistoclean letter is suspect, the only reliable date for Leagros is that of his *strategia* in or about 465 BC and, if the age limits for that office were sixty and thirty, he might have been born at any time from 525 to 495 BC.⁵³ So Leagros does not help with absolute chronology, since thirty years is too big a margin to be useful in that period, nor do the other *καλοι*: the chronological usefulness of these names is, I think, only for synchronisms, in that pots with the same *καλος* name are likely to be more or less of the same date.

⁴⁸ Cf. X, 137 on Oren's fort (for which see E. D. Oren, *BASOR* cclvi [1984] 7–44).

⁴⁹ J. Boardman (n. 10) 127, fig. 149; V. Webb, *Archaic Greek faience* (Warminster 1978) 124–5 (no. 840).

⁵⁰ Boardman (n. 10) 138, fig. 164. Boardman's date, it should be noted, is 525–500 BC.

⁵¹ J. M. Cook, *BSA* lx (1965) 136–7 (no. 137) fig. 16, pl. 40.

⁵² I. F. Canciani has already discussed F. and V.'s chronology for the late sixth and early fifth centuries on the basis of evidence from Attica and Rome (edd. E. Böhr and W. Martini, *Studien zur Mythologie und Vasenmalerei* [Mainz 1986] 59–64): our emphases are a little different, but the conclusions similar.

⁵³ R. Tölle-Kastbein (n. 25), observing that the traditionalists give Leagros the maximum age in 465 and V. and F. the minimum, proposes a compromise—that he was then forty-five. Incidentally, there is no explicit ancient authority for these limits and Pericles must have been over sixty when last *strategos*. Nor for that matter are the age limits for being *καλος* known precisely, though the fairly frequent *ὁ παῖς καλός* is indicative.

Herodotus reports that after their defeat at Leipsydion, which usually is put in 513 BC, the Alcmaeonids took over the contract for building or completing the new temple of Apollo at Delphi and finished the front in marble.⁵⁴ It is reasonably inferred, though nowhere stated explicitly, that the work did not take long and therefore that the sculpture, at least of the east pediment, should have been carved between 513 and around 505–500 BC. Some specialists think it should be earlier, but others (with whom I agree) are content with this dating.⁵⁵ F. and V. have not commented, but could argue that the date we have here is only a vague *terminus post quem*.

The Ionian revolt, which began in 499 BC, caused widespread damage which should be recognisable in the archaeological record. For Miletus, destroyed in 494 and not refounded till 479 BC, no useful deposits have yet been found or anyhow published.⁵⁶ There may, though, be an indirect piece of evidence from the Fikellura style of pottery, if (as P. Dupont has argued⁵⁷ and, I think, convincingly) its place of manufacture was Miletus: Fikellura appears to have faded out around 500 BC⁵⁸ on the conventional chronology, but if it continued to the 460s, as F. and V.'s revised dating would require, there should be a sharp interruption in 494 BC and such an interruption is not obvious. More positive evidence comes from Clazomenae.⁵⁹ Here excavation of the mainland settlement shows traces of a general destruction about the end of the sixth century of conventional time and no reoccupation for the next hundred years. There may also be indications of an earlier general destruction in the middle of the sixth century, again by conventional reckoning. Reasonably enough the excavator, G. Bakir, connects the second destruction with the suppression of the revolt in the 490s and the first with Harpagus's conquests in the 540s. F. and V., I suppose, would put the first in the 490s and for the second invoke a forgotten Persian attack in the 460s, perhaps the one V. has proposed for the burning of the Heraeum at Samos.⁶⁰

To punish the Ionians' allies a Persian expedition crossed the Aegean in 490 BC. Eretria was demolished successfully, but so far only the pedimental sculptures of the Apollo temple are relevant, if one can be sure whether they are earlier, as is commonly supposed, or later, as F. and V. have it,⁶¹ than the Persian sack. A few days afterwards came the battle of Marathon, with the burial there of the Athenian dead under one mound and their Plataean allies and some slaves under another, so Pausanias says:⁶² it seems excessively scrupulous to deny

⁵⁴ v 62; later writers, except the Scholiast to Dem. xxi, support him on the date (see F. Jacoby, *FGRH* III B 449–54 on F. 115).

⁵⁵ A good discussion in B. S. Ridgway, *The Archaic style in Greek sculpture* (Princeton 1977) 205–10.

⁵⁶ As F. and V. say (I, 113). W. Voigtländer has indeed published a fragmentary red-figure askos in the early style of Duris as coming from a destruction deposit of 494 BC (*Ist Mitt.* xxxii [1982] 87, fig. 45 no. 286); but without more particulars it would be imprudent to rely on this single piece.

⁵⁷ *Dacia* xvii (1983) 19–43.

⁵⁸ *BSA* xxxiv (1933–4) 90, with details of contexts in the catalogue.

⁵⁹ I owe this information and permission to use it to the kindness of G. Bakir.

⁶⁰ XI, 14.

⁶¹ IV, 49–54. J. Boardman's rejoinder ([n. 45] 161–2) seems to me valid, but a final decision is not possible yet.

⁶² i 32.3.

that the Athenian mound is the big one near the battlefield which contained multiple burials and late Attic black-figure pottery as well as one red-figure piece, appropriate to a terminal date of 490 BC on the conventional chronology.

Marathon may have provided another fixed point in the Athenian treasury at Delphi. According to Pausanias it was built from the spoils of the battle;⁶⁴ but an adjacent base with an inscription saying that it supported a trophy for that battle may be later than the treasury, since it is not united structurally and has clamps of a more advanced type. So the date of the treasury's sculpture can reasonably be disputed, as indeed it is.⁶⁵ F. and V. put it in the 470s and 460s making it a memorial of Marathon, but belated.⁶⁶

In 480–79 BC the invading Persians devastated Attica comprehensively, but deposits sealed by their activities are hard to find or, if found, to identify independently. I have not enough knowledge of the Agora at Athens to judge how far those of the deposits there that by conventional dating terminate at 480 BC are so dated on account of their contents rather than because they belong to a horizon of general destruction.⁶⁷ The Acropolis may once have offered clearer evidence, but the recording of excavation was so defective that now it is impossible to be sure when most of the fifth century pockets of debris were sealed or in detail what was found in which.⁶⁸ For the pottery this means that we cannot by context distinguish between the casualties of the Persian sack and those of later (or earlier) clearances.⁶⁹ But expensive dedications, such as marble statues, were not discarded as readily and the fourteen fragmentary korai from a pit near the Erechtheum⁷⁰ are too numerous for it to be likely that all of them suffered casual damage, and one must look for some general catastrophe,⁷¹ so, since in the relevant period the only

⁶³ For the finds in the Athenian mound see V. Stais, *A. Delt* vi (1890) 123–32 and *AM* xviii (1893) 44–63; *CVA Athens* i pls 10–14 (18–22); *ABV*, Index I s.v. 'Marathon'; and more informatively C. H. E. Haspels, *Attic black-figured lekythoi* (Paris 1936) 89–93, 139–40. The solitary red-figure fragment was used by E. Langlotz (n. 25 [1920] 38–41) in his formulation of what is now the conventional chronology: D. J. R. Williams has kindly told me that he considers it the work of Onesimos himself and of the 490s. Another, smaller mound, about two miles west of the Athenian, has been claimed for the Plataeans (S. Marinatos, *AAA* iii [1970] 164–6, 357–66; D. Callipolitis-Feytmans, *AAA* iv [1971] 99–101): it contained black-figure pottery of the same stylistic stage as that from the Athenian mound, though to judge by illustrations rather less depraved, but excavation was incomplete and the identification may be doubted (P. G. Themelis, *ADelt* xxix A [1974] 244).

⁶⁴ x 11.

⁶⁵ A lucid discussion with references by E. B. Harrison in *Agora* xi 9–11.

⁶⁶ III, 42.

⁶⁷ *Agora* xii 2, 383–99 lists deposits. They seem, though, more numerous about 480 BC (conventional time).

⁶⁸ Langlotz, it should be noted, was aware of this (n. 25 [1920] 98–100). For information about the deposits on the Acropolis see W. B. Dinsmoor, *AJA* xxxviii (1934) 416–41.

⁶⁹ Langlotz perhaps is too confident about Ross's fragmentary plate (n. 25 [1920] 99).

⁷⁰ P. Kavvadias *EA* 1886, 75–9; W. Doerpfeld *AM* xi (1986) 72–9.

⁷¹ The pedimental figures from Eleusis (F. Willemsen, *AM* lxxix [1954] 33–40 and N. Himmelmann-Wildschütz, *MWPr* 1957, 9–10) are presumably from a single building and so accidental destruction cannot be ruled out, though their conventional date suggests that the Persians were responsible.

such catastrophe we hear of is the Persian sack, it is generally accepted that these korai were carved not later than 480 BC. This does not fit F. and V.'s chronology, which requires the latest korai to be of the 470s and 460s.⁷² So for their catastrophe they postulate rioting by democrats in 462/1 BC in support of Ephialtes' reforms—rioting on a scale that one might expect to have earned mention by some ancient writer.⁷³ A subsidiary argument is that, if the damage was done by the Persians, the Acropolis korai should show signs of burning; but, as the spikes for 'meniskoi' prove, they stood originally outdoors and when destroying an outdoor statue it is handier to use a sledgehammer than build a fire round it.⁷⁴

If one allows that the Persian destruction of Athens has provided no certain fixed point for archaeologists, it is hard to deny one at Megara Hyblaea. This city was destroyed in 483 and not refounded till 340 BC and the excavation was unusually thoughtful. Here on the conventional chronology there is a clear break in the pottery sequence in the first quarter of the fifth century.⁷⁵ F. and V. have overlooked this.

The *Marmor Parium* records for 477/6 BC that statues of the Tyrannicides were set up at Athens and copies and part of a cast from the original group have been identified convincingly. V. objects that the *Marmor* is not a reliable source,⁷⁶ and in this he is right: if it had dated the Tyrannicides some twenty or thirty years later, as I suppose V. would do, one may be sure that most students would have dismissed the statement without a qualm. However, there is for the 470s a securely dated original statue which V. has not noticed. This is the Delphi Charioteer, which according to the inscription on its base commemorated a victory in 478 or 474 BC and must have been made very soon after.⁷⁷ Stylistically the Charioteer looks slightly more advanced than the Tyrannicides, though comparison of an original with copies needs caution. It is certainly less advanced than the sculptures of the temple of Zeus at Olympia, usually put in the 460s, since in or just after 457 BC the Lacedaemonians placed a shield at the top of one of the pediments:⁷⁸ admittedly the pedimental figures could have been inserted later, but the metopes—not so different in style—must by then have been in position. After that, in the 440s and 430s we have the sculptures of the Parthenon, on the dating of which F. and V. have not—at least yet—expressed doubt.

⁷² XI, 22–33.

⁷³ F. and V. do not limit rioting to the Acropolis, but see its effects in the burial of funerary sculpture in the countryside (XI, 28). For the sculpture from the city wall they have a parallel explanation, that it was incorporated not by Themistocles in 479/8 BC but because of a Spartan scare in 462/1 or perhaps still later (XI, 29–30). One may well wonder if the Persians left any archaeological trace of their visit.

⁷⁴ XI, 26. Incidentally a building, if of stone, can be burnt without its sculpture, especially if external, being exposed to fire: this is relevant for the Eretria pediments.

⁷⁵ G. Vallet and F. Villard, *Mégara Hyblaea* ii (Paris 1964) 116–22, pls. 107–14. Among finds from the inhabited area they noted only two sherds, both sporadic finds, which belong to the period when the site was derelict. Admittedly, one or two later graves are recorded (A.–B. Follmann, *Der Panmaler* (Bonn 1968] 23 and n. 108); but, though there was no city, the land is likely to have had occupants.

⁷⁶ XI, 30.

⁷⁷ *FD* iv 5, 26–31 (F. Chamoux).

⁷⁸ Paus v 10: confirmatory fragments of the inscription have been found (*Inscr. Olymp.* no. 253).

Supplementary indications may lurk in a deposit of ostraka from the Ceramicus at Athens.⁷⁹ Some of the sherds are from stylistically locatable red-figure pots and, though time must be allowed for a pot to get broken, in general one would expect it not to be much older than the writing on it. But we do not know much about who were candidates for ostracism and when, and of course these ostraka have not yet been published fully. Here F. and V. have been refreshingly cautious.⁸⁰

In another approach F. and V. have not been so circumspect, accepting avidly the current fashion of interpreting such subjects as Amazonomachies and Centauromachies on works of art made after the Persian wars as commemorative of those wars.⁸¹ Yet it still has to be determined how far and even whether these subjects are symbolic and, if so, at what point in the artistic sequence there is an evident transition to the symbolic from the traditional, since they appear in art well before wars with the Persians. Another possible explanation is that Amazons and Centaurs gave a welcome variety to battle scenes; and to say (as F. and V. do) that Amazons were equated with Persians, because to Persians the biggest insult was to be called womanly, is not so happy, given the characteristic unwomanliness of Amazons. At present, anyhow, it is futile to give a date to any particular work because of such symbolism.

F. and V. also claim that their chronology conforms more closely than the conventional one to the statements made by ancient writers.⁸² For my part I doubt if ancient writers on art had much knowledge of what happened before the later sixth century; after all our information on the political and military history of that time is scrappy and contradictory enough, and the history of art was later in becoming a subject of study. Even so, F. and V. seem quite as cavalier as their opponents in rejecting what is inconvenient. For Herodotus, the earliest author quoted, they accept him on Naucratis, ignore his connection of Theodorus and Croesus, have doubts of his ascription of coinage to Lydia,⁸³ and before they changed their tack rejected him on the Siphnian treasury. The orthodox in general reject only Naucratis, though some (but not all) are disbelieving too over the Alcmaeonid temple at Delphi. Thucydides is less useful as a source; but F. and V. dismiss, while the orthodox mostly accept, his dates for the Sicilian colonies, and on the foundation of Massilia the text allows the different interpretations.⁸⁴ Still, F. and V. have more faith than most students in Vitruvius, Libanius and Cedrenus. On the dates of early sculptors, as recorded by Pliny and Pausanias, they are again eclectic. It is true that Pliny says that Dipoenus and Scyllis were the first sculptors to become famous,⁸⁵ but two chapters later he traces the origin of sculpture back as far as the first Olympiad in 776 BC. Nor is there difficulty on the conventional chronology in having

⁷⁹ *BCH* xcii (1968) 732–3, figs. 5–8; *ADelt* xxxiii B1 (1968) 28–9, pl. 19; U. Knigge, *AM* lxxxv (1970) 1–5.

⁸⁰ I 100–1.

⁸¹ E.g. IX, 13–16.

⁸² I, 98.

⁸³ XI, 4–9 and more definitely 21. Herodotus in fact says that the Lydians were first to coin gold and silver (i 94): as Croesus was the last king of an independent Lydia, the intended date cannot be later, but could be earlier, than him.

⁸⁴ Though V. does not admit it (VII, 209).

⁸⁵ *NH* xxxvi 9. V. and F. I, 98; on Dipoenus and Scyllis see also VI, 119–22.

Rhoecus and Theodorus pioneers of bronze casting. As for the statement that the oldest bronze statue was said to be by a pupil either of Diponeus and Scyllis or of Daedalus,⁸⁶ Pausanias evidently was uncertain and generally one may wonder how much accurate information was likely to have been available in the Chalkioikos at Sparta. The perusal of Overbeck's *Schriftquellen* is disillusioning.

Digressing briefly from art to dendrochronology, one can only sympathise with V.⁸⁷ The 26 years deducted from Central European dates before 310 BC were soon afterwards more than reinstated by the insertion of an extra 71 years in the series.⁸⁸ Still it would be surprising if this is the last revision of the tree-ring calendar.

V. has also proposed a bold lowering of dates for some early issues of coins.⁸⁹ On this I offer no comments, since I know too little about numismatics and it is not related intimately with the general revision of absolute chronology. Here, it seems to me, F. and V. have not proved their case. For the fifth century the positive evidence of the Marathon mound, Megara Hyblaea and the Delphi Charioteer confirm the conventional system. For earlier times, admittedly, we are dealing not with certainties, but probabilities: even so, on this basis F. and V. have the advantage only with the external evidence for the foundation of Naucratis, while in most other instances theirs is, taken by itself, the less likely solution and it must be remembered that by the middle of the sixth century the fixed points belong to an interlocking system. All considered the cumulative improbabilities of F. and V.'s revised chronology make it much less credible than the conventional one.

This is not to condemn their work as worthless. The conventional absolute chronology is much less sure than is often supposed and anyhow in the seventh and eighth centuries, since there are no historical correlations to disturb, it is not yet of importance except for the convenience of expressing relative dates numerically. There is too a continuing need for minor modifications of the relative chronology, for example that of much East Greek pottery; and stylistically determined sequences are always liable to be too rigid. It is a pity that because of F. and V.'s impetuous and not always impartial exposition⁹⁰ some useful criticisms they make may be overlooked.⁹¹

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Postscript

Since this paper was submitted to *JHS*, three relevant studies have appeared. J. Boardman, *AA* 1988, 423–5 shows the difficulty for

⁸⁶ iii 17.6; on which V. in XII, 286.

⁸⁷ VII.

⁸⁸ J. R. Pilcher et al., *Nature* cccxii (1984) 150–2.

⁸⁹ XI *passim*.

⁹⁰ Note for example, XII and XIII, professedly reviews but in fact propaganda, and such statements as 'Mon collègue E. D. Francis et moi-même avons pu montrer . . .' (V. in edd. F. Lissarague and F. Thelamon, *Images et céramiques grecques* [Rouen 1983] 29) and 'If, as is in fact the case, stronger arguments exist . . .' (V. in ed. H. A. G. Brijder, *Ancient Greek and related pottery* [Amsterdam 1984] 97).

⁹¹ J. N. Coldstream kindly read the early part of this paper and J. Boardman and A. W. Johnston the whole of it. I am very grateful to them for improvements they have made.

genealogy of F. and V.'s compression of the periods of Attic Black-figure and early Red-figure pottery. P. Amandry, *BCH* cxii (1988) 591–610 defends the authenticity of the Siphnian Treasury. F. and V., *BSA* lxxxiii (1988) 143–67 publish their heralded 'The Agora revisited'; but in effect this is concerned with relative and not absolute chronology, except for the notion that square water-shafts were the work of Persian invaders.

Hesiod's Father

In this note it is assumed that the bibliographical remarks in the *Works and Days* are true or anyhow true enough.

Hesiod's father started at Cyme in Aeolis. For a time he tried the sea—for trade, to judge by 631–4, where trade is regarded as the only object of seafaring. After that, to flee from poverty, he migrated to Ascra in Boeotia, where he came into possession of a farm, prosperous enough when divided between his sons to allow each of them a reasonable livelihood (37 for division; 298–307 for implication that Perse's share too was in land).

Hesiod does not say how his father obtained his farm at Ascra. The most popular explanation is that he reclaimed waste land, but there are objections. First, Hesiod does not mention reclamation as a way in which a landless man could become landed or a landed man enlarge his property, though he approved enlargement, but by purchase (341). Secondly, the property which Hesiod and Perse inherited must have been a good one, since it could support at least ten persons,¹ and to bring waste land to so productive a condition would have been a remarkable achievement for a man who started poor and so could not buy or hire help; if Hesiod's father did this, it would have made an excellent example of the benefits of hard work to hold up to his idle son. Of other methods of acquiring land taking it by force is very improbable and a poor man could hardly have purchased it, nor is so valuable a gift very likely. Perhaps then Hesiod's father married an heiress, the only child of a fairly prosperous farmer. This is, of source, speculation, but certainly no more so than citing the *Works and Days* as evidence for unclaimed land of fair quality in the neighbourhood of Ascra.

One may speculate further, though this does not affect the previous argument. If Hesiod's father married an heiress, how did he manage to do so? Poor men do at times make good marriages; but though sexual attraction can be enough, it helps if they have some social qualification. A qualification of sorts, according to the *Odyssey* (xvii 302–6), was recognised for *aidoi*, and perhaps Hesiod's father had some skill in their art. Not much is known about *aidoi*. According again to the *Odyssey* there seems to have been an *aidos* among the retainers of Odysseus (i 153–4 etc.), Agamemnon (iii 267), Menelaus (iv 17) and Alcinoos (viii 43–4 etc.), but those were great kings, while the *basileis* round Ascra were much lesser magnates, who might not have had the means or even the desire to keep a permanent *aidos*; Hesiod himself, it may be noted, successful enough to win a competition at Chalcis, presumably practised

¹ Hesiod's share, to judge by his recommendations, could support the owner, presumably a wife and perhaps children, two or more male slaves (469–71, 502, 607–8) and a female one (602–3). Perse's share presumably had a similar potential.