olive oil were also features of Greek life not shared to the same degree by other early cultures and of course they long antedate the first Protocorinthian aryballoi. Small flasks, presumably for the domestic or toilet use of oil, were being made throughout the earlier Iron Age of Greece, and their predecessors were the Bronze Age stirrup jars, the smallest of which closely match later Greek lekythoi and aryballoi in capacity and have similar orifices for shaking out the heavy liquid, not pouring it. We cannot, of course, say that the oil was scraped from the body, although the function of some Bronze Age 'razors' and 'toilet knives' might be called into question here. However, any such attempt to project back the Classical practice into the Bronze Age or even the earlier Iron Age is not supported by the Homeric poems in which a different toilet use of oil is described - anointing the body after a water bath and before dressing, with no suggestion that the oil was removed, but rather that a gleaming, oiled skin was admired.

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'Epoiesen' on Greek Vases

A relatively very small but by absolute reckoning considerable number of painted Greek pots have signatures on them. These signatures are almost always painted and indicate either the maker $(\epsilon \pi o i \eta \sigma \epsilon v)$ or the painter $(\epsilon \gamma \rho a \psi \epsilon v)$. The relevant statistics are these. Most of the signatures are on Attic products of the century from 570 to 470. Makers' signatures are about twice as common as painters'. Sometimes both kinds of signature occur on the same pot, but (so far as I know) only three times are the maker and the painter the same man.¹ In two instances the signature gives the names of two makers.²

The meaning of $\tilde{\epsilon}\gamma\rho\alpha\psi\epsilon\nu$ is certainly 'painted', but in Greek as in English usage 'made' ($\hat{\epsilon}\pi ot\eta\sigma\epsilon\nu$) can refer to an owner of a workshop or a manual worker. Most students who have published their opinion take the 'making' of a pot to refer to manual work and, since double signatures show painting distinguished from 'making', they interpret $\hat{\epsilon}\pi ot\eta\sigma\epsilon\nu$ as shaped. Their reasons seem to be two. First, the shaping of much Attic pottery of the later sixth and earlier fifth centuries is so excellent that they expect the shapers to have been quite as deserving of recognition as the painters. Secondly, the examination of shapes³ suggests strongly that some pots signed by the same 'maker' were shaped by the same shaper, and so far no exceptions have been observed (or, if observed,

¹ Exekias twice (ABV, nos. 1 and 13); Duris once $(ARV^2, no. 256)$.

² ABV 163-4 (Glaukytes and Archicles) and 230 (Anacles and Nikosthenes): both are Band cups.

have not been made public). The first reason is subjective and not supported by other evidence; but the second has some force, though the sample of signed pots so far examined is small. Even so, the arguments against the interpretation of 'maker' as shaper are more direct. First, it is hard to imagine how two shapers could have collaborated on one Band cup. Secondly, since the signatures are regularly painted and apparently by the same hand as any other inscriptions on the pot (which sometimes are a considered part of the painted decoration), it is a fair conclusion that the signatures were done by the painter:⁴ but if both painters and 'makers' were operating in another man's workshop, it is strange that painters' signatures are much rarer than those of 'makers'. Thirdly, there is the case of Euphronios. This name is recorded in the signatures of a painter who was active in Athens at the end of the sixth century, in 'maker's' signatures of the earlier fifth century and in the inscription of a marble dedication probably of or just before the 470's, found on the Acropolis of Athens and designating the donor as a potter:⁵ since Euphronios is not a common name, it is generally and reasonably accepted that painter, 'maker' and dedicator were the same man and that Euphronios changed from painting to 'making'. Yet if 'making' means shaping, it is surprising that a painter of remarkable quality should have chosen to become a not very remarkable shaper,⁶ unless the shape of a vase was valued much more highly than its painted decoration; and then, one may wonder, since evidently he knew how to shape, why he ever took up painting in the first place. On the other hand, to prosper enough to be able to make expensive dedications as Euphronios did, implies the ownership of a sizable workshop.⁷ Fourthly, as Mr B. F. Cook pointed out to me, the number of surviving signatures of Nikosthenes as 'maker' seems excessive, if the signed pots (decorated by several painters) are his own handiwork.⁸ Fifthly, there is I think a semantic objection to interpreting enoinger as 'shaped' in those signatures. For shaping the word that comes first to mind is $\pi \lambda \acute{a} \tau \tau \omega$. As for $\pi o \iota \tilde{\omega}$, one would expect from the general use of that verb that to the buying public, who read the signatures, the 'making' of a painted

⁴ Similarly the much less frequent incision of signatures was done after painting.

⁵ IG i² 516. A. E. Raubitschek, Dedications from the Athenian Akropolis 255–8, no. 225.

⁶ Beazley ingeniously suggested failing eyesight (*Potter and Painter* 34); but if he is right, it did not destroy Euphronios's commercial success.

⁷ References in Beazley, op. cit. 21-5.

⁸ Nearly 120 are listed in ABV and ARV^2 . If Nikosthenes shaped all these pieces and also the unsigned cups attributed to the same shaper as one or other of the signed cups, then it would seem that he filled the needs of several painters: yet, so J. V. Noble tells me, on average the shaping of a pot needs about as much time as the painting.

³ H. Bloesch, Formen attischer Schalen.

pot would have comprised the painting as well as the shaping.⁹ If so, where painting is expressly distinguished from 'making', 'making' cannot mean shaping and must refer to ownership.

Some students, not altogether happy about the equation of 'maker' and shaper, concede that the shaping of the pots may often have been done by the owner. Whether or not this would have been practicable in a busy workshop with all the interruptions of prospective customers, it hardly affects the lexical meaning of inolyoev in instances where painting and 'making' were distinct. In small workshops, where the owner worked with little or no assistance and did the shaping and painting himself, no distinction was needed between ownership and manual work, and the use of *expayer* rather than έποίησεν in some early signatures may only indicate that painting was more highly regarded than shaping; but from about 570 at the latest, when (with the François vase) double signatures first appear,¹⁰ larger workshops evidently existed and so the use of *inoinger* must have become restricted primarily to the sense of ownership.

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⁹ On this I am obliged for advice to Dr J. Chadwick.

¹⁰ ABV 77.

'Planets' in Simplicius De caelo 471.1 ff.

In four of the last five numbers of the 7HS, Doctors D. R. Dicks¹ and D. O'Brien² have disputed about Simplicius De caelo 471.1 ff. (DK 12A19), which runs (in part, 471.2-6): καὶ γὰρ ἐκεĩ [i.e. ἐκ τῶν περὶ άστρολογίαν] περί τῆς τάξεως τῶν πλανωμένων καί περί μεγεθών και αποστημάτων αποδέδεικται 'Αναξιμάνδρου πρώτου τὸν περὶ μεγεθῶν καὶ ἀποστημάτων λόγον εύρηκότος, ώς Εύδημος ίστορει την της θέσεως τάξιν είς τούς Πυθαγορείους πρώτους ἀναφέρων. In his History of Greek philosophy (i 93), Professor Guthrie translates the latter part of this as follows: '(. . . speaking of the planets) "Anaximander was the first to discuss their sizes and distances, according to Eudemus, who attributes the first determination of their order to the Pythagoreans."' Guthrie, Dicks and O'Brien all agree that $\pi \lambda \alpha \nu \omega \mu \epsilon \nu \omega \nu$ is accurately translated as 'planets'; they also evidently agree that Anaximander would not have distinguished the planets from the fixed stars, at least in this matter;³ and consequently Guthrie (op. cit. i 95) finds Simplicius' statement about Anaximander 'confusing'; Dicks finds it

I must thank Professor F. H. Sandbach for his helpful comments on an earlier draft of this note.

¹ *JHS* lxxxvi (1966) 30 and lxxxix (1969) 120.

² *JHS* lxxxviii (1968) 120 n. 44 and xc (1970) 198.

⁸ So, explicitly, Guthrie op. cit. i 94-5 and Dicks in JHS lxxxvi (1966) 30.

'nonsensical';⁴ and O'Brien speaks of Simplicius' 'rather ragged context', and supposes that Eudemus was actually speaking, not of planets, but of sun, moon and stars,⁵ i.e. that Simplicius has quite misrepresented his source.

All three scholars evidently assume that by $\pi\lambda\alpha\nu\omega\mu\epsilon\nu\omega\nu$ Simplicius means the five bodies which we agree with the Greeks in calling 'planets', i.e. Mercury, Venus, Mars, Jupiter and Saturn; and of course the word can mean this.⁶ But in many places οί πλάνητες, οί πλανώμενοι ἀστέρες and similar phrases denote all the heavenly bodies that change their positions relative to the fixed stars, i.e. the five bodies just mentioned plus the sun and moon. Thus when Aristotle says (Cael. 292b31-3a2), contrasting the fixed stars with the other heavenly bodies: $\eta \mu \hat{\epsilon} \nu \gamma \hat{a} \rho$ πρώτη [sc. φορά] μία οἶσα πολλά κινεῖ τῶν σωμάτων τῶν θείων, ai δè πολλαὶ οὖσαι ἕν μόνον ἑκάστη· τῶν γάρ πλανωμένων έν ότιοῦν πλείους φέρεται φοράς, he is clearly including all the heavenly bodies except the fixed stars among $\tau \tilde{\omega} \nu \pi \lambda \alpha \nu \omega \mu \epsilon \nu \omega \nu$; and other authors, who speak of 'seven planets',7 are similarly counting the sun and moon among the planets, as well as the five listed above.

Simplicius De caelo 454.15-18 refers to both meanings of $\pi\lambda\dot{\alpha}\nu\eta\varsigma$ (he seems, I would suggest, to regard the wider meaning as the primary one): $\delta \tau a \nu \delta \epsilon \lambda \epsilon \gamma \eta$ τούς δὲ πλάνητας μὴ στίλβειν [Aristotle Cael. 290a19f] καίτοι τοῦ ήλίου ένὸς ὄντος τῶν πλανήτων καὶ στίλβοντος, η τούς άλλους παρά τὸν ηλιόν φησιν η πλάνητας ίδίως λέγοι ἂν τοὺς πέντε τοὺς παρὰ τὸν ἥλιον καί τὴν σελήνην. At 280.28–31 he envisages only the wider meaning, saying that one meaning of ouparos is τὸ πλανώμενον . . . ἐν ῷ σελήνη καὶ ἥλιος καὶ τὰ ἄλλα άστρα τὰ πλανᾶσθαι λεγόμενα. At 471.2-6, too, he is using $\pi \lambda a \nu \omega \mu \epsilon \nu \omega \nu$ in this wider sense, as is surely clear from the words that follow my original quotation (471.6-10): τὰ δὲ μεγέθη καὶ τὰ ἀποστήματα ἡλίου καὶ σελήνης μέχρι νῦν ἔγνωσται ἀπὸ τῶν ἐκλείψεων τὴν άφορμήν της καταλήψεως λαβόντα, καὶ εἰκὸς ἦν ταῦτα καί τὸν ἀΑναξίμανδρον εύρηκέναι, καὶ Ερμοῦ δὲ καὶ 'Αφροδίτης ἀπὸ τῆς πρὸς τούτους μεταπαραβολῆς, ώνπερ τὰ μεγέθη καὶ τὰ ἀποστήματα ὑπὸ τῶν μετὰ 'Αριστοτέλην πλέον ήκριβώθη: sun and moon, like Mercury and Venus, are clearly included among $\tau \dot{a}$ πλανώμενα.8

⁴ .7HS lxxxvi (1966) 30.

⁵ *JHS* lxxxviii (1968) 120 n. 44.

⁶ cf., for example, Aristotle Metaph. 1073b17-23 (ήλίου καὶ σελήνης contrasted with τῶν πλανωμένων ἄστρων), and passages that refer to 'the five planets' (e.g. Geminus p. 10.3-4 Manitius; Cleomedes p. 182.1-2 Ziegler; Aëtius ii 7.7 [DK 44A16]).

⁷ See, e.g., von Arnim *Stoicorum veterum fragmenta* ii p. 168.32–3 (from Stobaeus *Eclogae* i p. 184.8 ff. Wachsmuth); Cleomedes p. 30.17–18 Ziegler; Aëtius ii 32.2 (DK 41.9).

⁸ Aristotle *Cael.* 291229–b10, on which Simplicius is commenting, is clearly referring to *all* the heavenly bodies, i.e. including sun and moon.