

associated Kallirrhoe with the Ilissos. On the other hand, as early as the middle of the fourth century B.C. Isokrates seems to imply that Enneakrounos was located in a less reputable district of Athens, probably in the city centre. Pausanias explicitly and Alkiphron implicitly place Enneakrounos in the Kerameikos district. None of the above references, moreover, uses the name Kallirrhoe in connection with a location in the city centre.

Two later writers, the compiler of the *Etymologicum Magnum* and Hierokles, use the name Enneakrounos for a site on the Ilissos and seem, therefore, to disagree with the apparent separation of Kallirrhoe and Enneakrounos. The *Et. Mag.*, however, is not referring to the location at the time of compilation; its details indicate that the compiler was using Thucydides as a source and so the evidence lacks independent authority. Tarantinos, whom Hierokles quotes as his source of information for the proximity of Enneakrounos to the temple of Zeus, is possibly the medical writer of the first century B.C., Herakleides of Tarentum:³⁶ *Ταραντίνος δὲ ἱστορεῖ, τὸν τοῦ Διὸς νεῶν κατασκευάζοντας Ἀθηναίους Ἐννεακρούνου πλησίον εἰσελαθῆναι ψηφίσασθαι τὰ ἐκ τῆς Ἀττικῆς εἰς τὸ ἄστυ ζεύγῃ ἅπαντα.*

Building of the temple of Zeus began during the reign of Peisistratos' sons with the laying of the foundations and the erection of the first column drums. After the fall of the tyranny, work on the temple ceased. Construction was resumed by Antiochos Epiphanes during the years 174–65 B.C. but it was not until the time of the emperor Hadrian that the temple was finally completed.³⁷ If the identification of Tarantinos is correct, Hierokles' information must refer either to the time of Peisistratos' sons or the time of Antiochos. It could be argued that the verb *κατασκευάζειν*, which was used of the construction of the temple, implies more than the limited building activity of the Peisistratids and so refers to the more extensive construction of Antiochos. Herakleides Kritikos, however, used the epithet 'half-built' to refer to the Peisistratid building³⁸ and so the verb *κατασκευάζειν* could refer to the same stage of building. Furthermore, the fact that Tarantinos states that the temple was constructed by the Athenians suits better the Peisistratid building than the later building which was commissioned and funded by Antiochos and constructed under the supervision of the Roman architect Cossutius.³⁹ The passage of Hierokles, therefore, probably refers to the construction of the original building in the sixth century B.C. when Enneakrounos was still situated on the Ilissos. Thus neither the *Et. Mag.* nor Hierokles contradict the apparent differences in location between Kallirrhoe and Enneakrounos from the fourth century onwards.

The evidence, therefore, suggests that Enneakrounos was originally situated to the south-east of the city near the Ilissos. Before the middle of the fourth century B.C. the original fountain-house had disappeared, its name had been transferred to another fountain-house of comparable date in the city centre and the original site had reverted to its former name. The circumstances

which might have led to the disappearance of the original building and the transference of its name can be found in two events which occurred at the end of the fifth century and the beginning of the fourth century B.C. First, in his account of the civil war at Athens, which followed the accession of the Thirty Tyrants, Xenophon mentions how the successes of the democrats in Piraeus had forced the Thirty to flee to Eleusis and leave Athens under the control of the Ten.⁴⁰ Xenophon also states that at the time the democrats had become so bold that they had even ventured to make attacks upon the city walls and were planning to bring siege engines along the track which led from the Lyceum.⁴¹ As the Lyceum is situated to the east of the city there is strong evidence to suggest that the democrats were operating in the general area of the original Enneakrounos. Therefore, although direct evidence is lacking, the democrats might have taken the opportunity to damage or destroy a symbol of the first tyranny at Athens. Secondly, early in the fourth century B.C. major alterations were made to the water supply to the Agora. A new fountain-house was built in its south-western corner,⁴² the old aqueduct was replaced by a new, stone-built channel,⁴³ and extensive alterations were made to the south-eastern fountain-house (above n. 30). The combination of the two events could have brought about the change in the location of Enneakrounos and so account for the discrepancies in the texts.

Thus the evidence suggests that Thucydides was right and that the original Enneakrounos was situated to the south-east of the city in the vicinity of the Ilissos. By the late fifth century the original building had been destroyed and by the middle of the fourth century B.C. its name had been transferred to another Peisistratid fountain-house in the city centre. By the time of Pausanias' visit to Athens the site of the original fountain-house had been forgotten completely and he accepted the Enneakrounos in the Agora without question.

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⁴⁰ Xen. *Hell.* ii 4.24.

⁴¹ Xen. *Hell.* ii 4.27.

⁴² H. A. Thompson, *Hesp.* xxiv (1955) 52–4; Thompson–Wycherley (n. 20) 200–1.

⁴³ Thompson, *Hesp.* xxv (1956) 52–3.

Hesiod's Wagon: Text and Technology

ὄλμον μὲν τριπόδην τάμνειν, ὕπερον δὲ τρίπηχυν,
ἄξονα δ' ἑπταπόδην· μάλα γὰρ νύ τοι ἄρμενον
οὕτω·
εἰ δέ κεν ὀκταπόδην, ἀπὸ καὶ σφύραν κε τάμοιο.
τρισπίθαιμον δ' ἄψιν τάμνειν δεκαδώρω ἀμάξῃ,
πόλλ' ἐπικαμπύλα κάλα· φέρειν δὲ γύνην ὅτ' ἂν
εὕρης
εἰς οἶκον, κατ' ὄρος διζήμενος ἢ κατ' ἄρουραν,
πρίνινον· ὅς γὰρ βουσὶν ἀροῦν ὄχυρώτατός ἐστιν,
εὗτ' ἂν Ἀθηναίης δμῶδες ἐν ἐλύματι πήξας
γόμεφοισιν πελάσας προσαρῆται ἱστοβοῆϊ.

(Op. 423–31)

³⁶ See above n. 17.

³⁷ Travlos (n. 1) 402–3; Boersma (n. 20) 199 cat. no. 70.

³⁸ Ps.-Dicaearchus, *De Graecis urbibus* i 1 = Müller *FHG* ii 254 no. 59; Wycherley (n. 29) 160 quoting F. Pfister, *Die Reisebilder des Herakleides* (Vienna 1951) 44 ff., 72.

³⁹ Vitruvius, *De arch.* vii introd., 15.

Hesiod's instructions about cutting wood for a wagon or cart (*Op.* 424–7) have puzzled commentators since antiquity.* The latest editor of the *Works and Days*, Martin West, expresses surprise that he should recommend an axle as long as 7 ft (line 424), which West thinks would be liable to break under a heavy load. In his discussion of line 426 he rejects the view of the ancient Scholia and Proclus, that *ἀψίς* refers to one of four segments which are joined together to make the felloe of a wheel, and that the vehicle is sized by the diameter of the wheel. Instead West accepts the view of Thraemer and Mazon, that *ἀψίς* refers to the whole wheel, measured across its diameter. He also assumes that it must be a block-wheel, consisting of a solid disc, and he goes on to suggest that the dimension given for the *ἄμαξα* of ten palms (i.e. about 2.5 ft) refers to the length of the vehicle from front to back. As he says, the result is 'an oddly proportioned vehicle', which would in fact be 5 ft wide and 2.5 ft long.

The purpose of these notes is to argue that the ancient commentators are most probably right, and that the archaeological evidence agrees with this reading of Hesiod's instructions.

1. *The text*¹

Line 424: As West says, there is no reason to suppose that the length given is for more than one axle, as Gow suggested.² As Piggott shows below, an axle of 7 ft is not unreasonable for a vehicle of this period in Greece. At the same time, the fact that Hesiod is only giving the length of a single axle does not rule out the possibility that he may have been thinking of a wagon with two axles and four wheels, as we shall see. He is only concerned to give basic measurements, not to tell you in detail how to make an *ἄμαξα*.

Line 426: The original sense of *ἀψίς* is 'fastening' (cf. *ἄπτω*). In Homer it is used once, in the plural, of the meshes of a net (*Il.* v 487). It is natural, therefore, to take it as referring here to the 'fastening' of the wheel, i.e. either the whole felloe or a segment of it. As West notes, the sense 'segment of a felloe' seems certain at *Trag. adesp.* 611 (*ap.* [Plut.] *consol. Apoll.* 103f): *τροχοῦ περιστεύχοντος ἄλλοθ' ἤτέρα ἀψίς ὑπερθε γίγνεται, ἄλλοθ' ἤτέρα*. The extension of the word's use to refer to an arc, or arch (e.g. *Pl. Phdr.* 247b, *Arist. Mete.* 371b28), presumably derives from this sense. At *Hdt.* iv 72.3–4, however, *ἀψίς* must refer to the whole felloe (*ἀψίδος δὲ ἡμισυ . . . καὶ τὸ ἕτερον ἡμισυ τῆς ἀψίδος . . .*), and this may also be the case at *Eur. Hipp.* 1233 (cf. Barrett). We find a parallel development with the English word 'felly' or 'felloe'. This is derived from a verb meaning 'to fit together', and is said to be 'so named from the pieces of the rim being put together' (Skeat, *Etymological Dictionary of the English Language* s.v.). As Mair observed (*Hesiod* 157), it originally denoted one of the curved pieces of wood which were dowelled together to form the circumference of the wheel, and only later the whole circumference.

τριπίθαμος means 'of three spans'. If we assume

* We should like to thank Dr J. J. Coulton for some helpful comments on the problems discussed here.

¹ The best discussion which I have found is by P. Waltz, *REA* xiv (1912) 225–38.

² 'Hesiod's wagon', *JPh* xxxiii (1914) 145–53.

standard Greek measurements (four palms to a foot, three palms to a span), this gives us a *ἀψίς* of 2.25 ft. This is obviously too small for the total circumference of the wheel. West would like to take *ἀψίς* as referring to the whole wheel, measured across its diameter. But there is no evidence that *ἀψίς* alone was ever used to mean 'wheel'.³ If we follow the most natural interpretation, and take it as a segment of the felloe, then we must still ask how many segments there would be. With only two, the circumference would be 4.5 ft. This would give a wheel considerably smaller than is suggested by the archaeological evidence.⁴ It therefore seems more likely that there are four *ἀψίδες*, giving an outer circumference of 9 ft (see *FIG. 1*).

What then does Hesiod mean by a 'ten-palm (i.e. 2.5 ft) wagon'? If we follow the ancient commentators, and take 2.5 ft as the inner diameter (i.e. measured by the length of the spokes), the inner circumference will be c. 7.85 ft. The difference between this and the outer circumference could then be due simply to the thickness of the felloe, which need not have been slender. For example, if this were 0.185 ft, the total diameter would be 2.87 ft, and the outer circumference then c. 9 ft. It is, however, also possible, as the ancient commentators suggested, that there was some overlap between the segments of the felloe, or that they were joined by tenons.

Consequently, this interpretation fits Hesiod's dimensions in a reasonable way. It would also give us a vehicle of a more satisfactory shape than West's wagon. But are there any grounds for assuming that when Hesiod speaks of a ten-palm *ἄμαξα* he is referring to the size of the wheels?⁵ The etymology of *ἄμαξα* suggests that it originally meant a pair of wheels together with their axle, and was used to denote the permanent fixture of wheels to a wagon or cart, in contrast to *ἄρμα* ('joined structure'), where the wheels were stored separately.⁶ Gow pointed out that in Homer the word might still retain its reference to the wheeled framework or *chassis*, *ἀπήνη* being the proper word for the whole vehicle. Hence, Gow suggested that Hesiod was referring to the width of the *chassis*. But his theory was linked to the assumption that there were two axles of only 3.5 ft each, which is unnecessary (as Piggott shows), and the resulting vehicle would also be very narrow. West's explanation in terms of length gives us one that is too short. We are left with the alternative of taking the size of the wheels as the dimension by which the *ἄμαξα* is measured. There seems to be no reason why this should not be the case, and this also gives us a close correlation between the two dimensions which Hesiod mentions for *ἀψίς* and *ἄμαξα*, i.e. both referring to the wheels.

³ At *Eur. Ion* 88 (*τὴν ἡμερίαν ἀψίδα*) LSJ give the sense 'disc'. But as the phrase refers to the rising sun, the poet may well have been thinking of an arc or segment here. At *A.Pl.* iv 191 (Nicaenetus) *κύκλος ἀψίδος* is used of a potter's wheel, but this looks like a rather vague poetic periphrasis.

⁴ Cf. H. L. Lorimer, 'The country cart of ancient Greece', *JHS* xxiii (1903) 132–51, and J. Wiesner, *Fahren und Reiten*, *Arch. Homeric* i f (1968).

⁵ Contemporaries would presumably understand what was meant, as (for instance) in the case of a 'three-litre Bentley', which might well baffle scholars of a later age!

⁶ Cf. Kretschmer, *Glotta* ix (1918) 216–17, xii (1923) 216–17. For the chariot cf. *Il.* v 722 ff., and M. Ventris and J. Chadwick, *Documents in Mycenaean Greek*² (Cambridge 1973) 371.

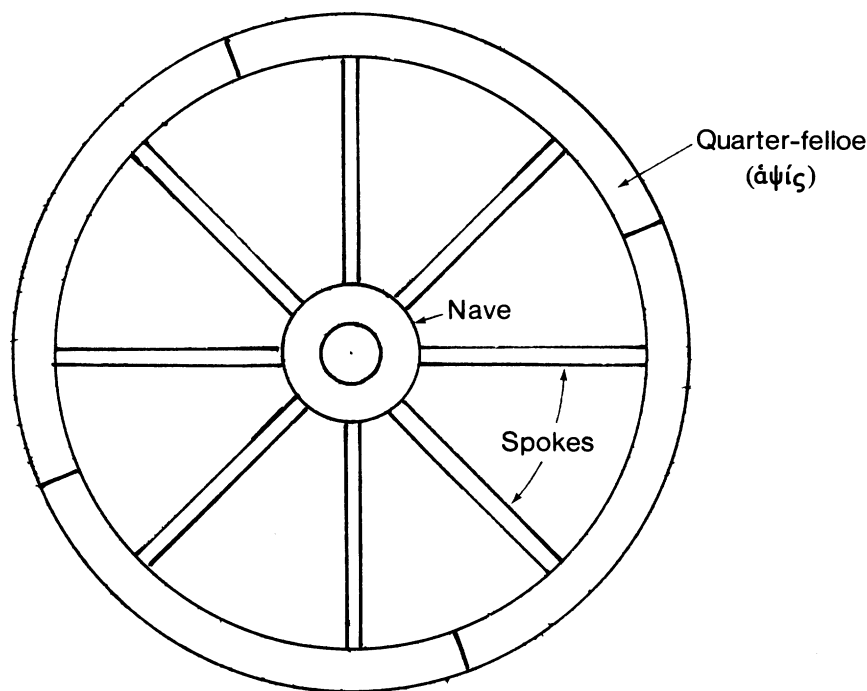


FIG. 1

It must, however, be admitted that at *Op.* 456 Hesiod says that the foolish man fails to realise that you need a hundred pieces of wood for an ἄμαξα. However exaggerated this may be, it seems most likely that he has in mind the body-work here, as well as the *chassis*. This does not prevent us from taking ἄμαξα in the earlier passage in its more original sense. This would be especially likely to survive in a technical, and doubtless traditional passage of this kind. But we should perhaps consider whether any alternative explanation, referring the phrase δεκαδώρω ἀμάξει to the body-work, would be possible. As far as I can see, there is no very convincing possibility here. Thraemer and Mazon suggested the height of the sides. But this would tend to vary more than other dimensions, and it is hard to see why it should be chosen to size the vehicle as a whole (*cf.* also West). The height of the floor is another possibility, but again it is not easy to see why this should be chosen. References to width or length can be ruled out for the reasons already given above in the case of the *chassis*.

I conclude, then, that there are good reasons for thinking the ancient commentators to be right. It is even possible that some ancient scholars (whether of the Hellenistic period or later) may have had a reasonable idea of what a Hesiodic wagon would have looked like, since ancient Greek wagons do not seem to have changed very much during the classical period.

It remains to ask whether Hesiod is talking of a vehicle with two or four wheels. As Gow pointed out, in Homer Priam's ἀπήνη is called τετράκυκλος (*Il.* xxiv 324), and so are ἄμαξαι in the *Odyssey* (ix 241 f.). The constellation called ἄμαξα (*Il.* viii 487, *Od.* v 273) also suggests a four-wheeled wagon. In Geometric art at least some of the vehicles represented must be four-wheeled.⁷ In the case of Hesiod's ἄμαξα, the dimensions

⁷ *Cf.* Gow (n. 2) 146–7, Wiesner (n. 4) 5 ff.

of the wheels would tend to suggest a wagon with four wheels, rather than a cart with two, since with the axle less than 1.5 ft above the ground, the body-work on a single-axled cart would tend to bump against the ground.⁸

Line 427: The first three words of this line are treated by West as a separate sentence, and he seems to take this as looking forward to what follows (wood for a plough), although he does not explain what he thinks the construction of this sentence should be. He dismisses in a summary way the view of the ancient scholars, that the words go with what precedes and refer to the curved pieces of wood needed for the felloes (i.e. understanding τάμνειν). This view has been accepted by many modern scholars also.⁹ It surely deserves more serious consideration. It is, in fact, likely that the pieces of wood used for the thick felloes of the wheels of an ἄμαξα would be naturally bent, rather than requiring to be artificially curved, as in the case of the rim of a chariot-wheel (*Il.* iv 486; *cf.* also *Ar. Thesm.* 53). The word used for the rim of a chariot-wheel in Homer, ἵτυς, is connected with ἰτέα (*cf.* Latin *vitus, vico*, etc.), and this suggests a more pliant and slender felloe than that used for a wagon. It would be better, therefore, to punctuate with a comma at the end of line 426, rather than a full stop (as West does).

N.J.R.

2. Archaeology and technology

Richardson has discussed the textual problems involved in Hesiod's account of wood for wagon-build-

⁸ *Cf.* Waltz (n. 1) 227.

⁹ *Cf.* Waltz (n. 1) 231, Wilamowitz, Sinclair, Solmsen *ad loc.*, and W. Nicolai, *Hesiods Erga* (Heidelberg 1964) 99 n. 233.

ing, and argued that we have to deal with an axle, wheel-felloes, and the complete vehicles of which they formed components. I offer here some comments on the technology and archaeology of wheeled vehicles in prehistoric Europe, which go to support the inferences from the text.¹⁰

The whole passage (420 ff.) deals with the husbandman's task of selecting and cutting timber from the adjacent woodland in autumn or early winter: in medieval European woodmanship a distinction was made between timber (*meremium*), 'big stuff suitable for planks, beams and gate-posts' and wood (*boscus*), which comprised poles, brushwood and the products of coppicing.¹¹ Hesiod is writing about timber in this sense, and English wagon-makers and wheelwrights of the last century had their timber felled in winter. They too, as in all pre-industrial carpentry for buildings, ships or vehicles, looked for and took advantage of natural curvature in their timber, as Hesiod advises. An interesting social and economic point is that the passage implies that the farmer cuts down the timber (and possibly stores and seasons it) and takes it as raw material to the skilled carpenter (430) who then makes the plough or the vehicle: the situation may have been the same with iron and the blacksmith, as *Il.* xxiii 830–5, and recent practice in some African societies may suggest. Even if a maul or a pestle and mortar could be knocked up on the farm, wagon building was a highly developed skill with two millennia of tradition behind it in the Europe of Hesiod's time, and demanded specialized craftsmanship.

This last factor has bearing on the type and quality we are to assume for Hesiod's vehicle. By the earlier first millennium B.C. the wheelwright's and carriage-builder's craft had reached a high degree of sophistication not only in the ancient Near East and the Aegean but in much of continental 'barbarian' Europe, with an ancestry stretching back to c. 3000 B.C. for disc-wheeled ox-wagons and c. 1500 B.C. for spoked-wheeled, horse-drawn, chariots. For Greece, we have very little archaeological evidence between that for Mycenaean chariotry and the four-wheeled horse-drawn vehicles represented on Geometric pottery and by the iron nave-bands for spoked wheels surviving the funeral pyre in graves 13 and 58 of the Kerameikos cemetery.¹² But we cannot assume that even Boeotia lagged so far behind Europe north of the Alps as not to share in the prevailing standards of craftsmanship which by the seventh and sixth centuries B.C. were to produce the fine spoked-wheeled wagons of Hallstatt C and D from Czechoslovakia to the Rhineland. Disc wheels seem improbable in the context in view of the use of *áψίς*, though they continued in use throughout European prehistory: we are dealing with timber for axles, and evidently wheels with a felloe, and spokes and nave which rotated upon it.

Hesiod's 7-ft length of timber would be necessary to make what in wheelwrights' terminology is strictly an 'axle-tree', consisting of a central relatively massive and

square-sectioned 'axle-bed', to which the body of the wagon is fixed, worked to a pair of cylindrical 'arms' at its ends on which the wheels turn. Archaeological evidence from vehicles surviving in graves from the second millennium B.C. in Europe shows that the gauge or wheel-track (centre-to-centre of the wheels) was by the seventh and sixth centuries B.C. settling down to a consistent average of about 1.20–1.40 m from slightly larger proportions (1.60–1.40 m) in earlier contexts, and at 1.426 m, or 4 ft. 8½ ins, this was fixed as the 'standard gauge' for the first English railways by parliamentary acts early in the last century. The chariot-burials of the eighth to seventh centuries B.C. in Cyprus similarly have vehicles with a gauge of 1.30 m.¹³ A wheel turning on its axle needs to have a tubular hub or nave to keep it vertical, and again in continental Europe, the overall length of such naves (often metal-sheathed, and so measurable even when the wood has decayed) is around 40–45 cm. As the wheels turn on the axle, the arms of the axle-tree must therefore project beyond the outer end of the nave to allow for a vertical peg, a linch-pin, to be inserted in the axle beyond the outer end of the nave to allow the wheel to rotate freely but securely behind it. A reasonable estimate for this projection would be about 15 cm on each side. The length for our complete axle-tree will then add up as follows:

Wheel gauge	1.30–1.40 m
Outer half of two 40–45 cm naves	0.40–0.45 m
Axle projection beyond naves	0.30 m

The total overall length will therefore be 2.0–2.15 m, and seven feet is 2.13 m. Hesiod and archaeology concur. As Richardson stresses above, an axle is in question, and the eventual vehicle may have one axle and a pair of wheels (a cart) or two axles and four wheels (a wagon). With him, I prefer the latter probability. The body-work of the vehicle is another matter: for this we have little archaeological evidence west of Transcaucasia, where the seventy pieces of morticed wood making up a second millennium B.C. covered wagon¹⁴ support Hesiod's reference in line 456 to the need for one hundred pieces of wood to make the whole vehicle.

The sense of the crucial *áψίς*, as Richardson shows, is most probably that of a quarter-segment of the felloe of a spoked or similarly constructed wheel, in order to give the reasonable measurement of ten palms for its diameter. The spoked wheel in earlier antiquity is a type best known from chariots or other light vehicles in the ancient Near East from early in the second millennium B.C., and in continental Europe and Greece from the middle of the millennium (as in Mycenaean representations from Shaft Grave times onwards), but these normally had a felloe made from one or more pieces of bent wood, as in surviving chariot wheels from Egypt and China (two-piece) up to Celtic examples (one-piece). Such bent felloes for chariot wheels seem to be implied for Homeric vehicles in *Il.* iv 486. The chariot, however, was a light, fast, bent-wood structure built for speed with horse traction, and not a heavy-duty farm wagon with ox draught, where sturdier wheels with segmental felloes were demanded. Such a felloe is represented in prehistoric Europe by a North German find of about 1100 B.C., and the wheels of four-wheeled wagons of the seventh to sixth century in continental

¹⁰ Main refs in S. Piggott, *Bull. Inst. Arch. U. London* xvi (1979) 3–17.

¹¹ O. Rackham, *Trees and woodland in the British landscape* (London 1976) 23.

¹² A. M. Snodgrass, *The Dark Age of Greece* (Edinburgh 1971) 432; H. Müller-Karpe, *JdI* lxxvii (1962) 102–3. See also the recently discovered model cart from Lefkandi (c. 900 B.C.): *BSA* lxxvii (1982).

¹³ V. Karageorghis, *Excavations in the necropolis of Salamis I* (Nicosia 1967) 50–1.

¹⁴ S. Piggott, *Proc. Prehist. Soc.* xxxiv (1968) 289.

Europe have on occasion very massive complex wooden segmental fellos (as in contemporary Cyprus and Assyria).¹⁵ A quarter-segment felloe would imply eight spokes, as these are normally two to each segment, and this would be perfectly reasonable: one might compare *Il.* v 723. The felloe could be of almost any thickness.

There is, however, a possible alternative wheel form, the cross-bar wheel, first identified and discussed by Hilda Lorimer in connection with Greek vase-paintings of two-wheeled country carts: she drew attention to the Hesiod passage in this context.¹⁶ This type of wheel has recently been shown to have an ancient Near Eastern ancestry. It occurs in prehistoric Europe, where an example has survived from an Italian context of the second millennium B.C. This is constructed with two half-felloes, and it is about 85 cm in diameter.¹⁷ Another example, of the early sixth century B.C., has recently been published from Gordion in Asia Minor, and this appears to have had a felloe in six segments.¹⁸ A normal radially spoked wheel with four felloe segments would, however, fit the Hesiodic dimensions better.

Taking the first three words of line 427, about cutting curved pieces of wood, in relation to the felloe-segments would be perfectly reasonable, as we saw, and an eye for suitably curved timber was part of the traditional woodman's and carpenter's expertise.

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¹⁵ G. Kossack in J. Boardman *et al.* (edd.) *The European community in later prehistory* (London 1971) 143–63.

¹⁶ Lorimer (n. 4) 136 ff.

¹⁷ M. A. Littauer and J. Crouwel, *Antiq.* li (1977) 95–105.

¹⁸ E. L. Kohler, in *From Athens to Gordion* (Philadelphia 1980) 89, fig. 32.

An Unpublished Arula in the Ashmolean Museum: a minor contribution to Hellenistic chronology

PLATES Xb–XII

In 1899 E. Oldfield, Librarian and Fellow of Worcester College, gave a small altar to the Ashmolean Museum, where it joined an already growing collection of fine terracottas.¹ Little is known about its history and how it came into the possession of the donor. Taranto, where such small altars occur most frequently,² was thought to be their place of origin, though they have also been found in Greece and Asia Minor, mainly in Hellenistic contexts.

The story of these small altars, which were used for burning incense, is a complicated one. Excavations in the Athenian Agora may have shed some new light on their possible provenance, but no satisfactory conclusion has been reached concerning either their popularity during the Hellenistic period or the choice of subjects

¹ C. E. Vafopoulou-Richardson, *Greek Terracottas* (Oxford 1981) 40–1, pls 42–3, much restored.

² P. Willeumier, *Mél. d'arch. et d'hist.* xlvi (1929) 71, pl. 2.1–2; *id.*, *Tarente, des origines à la conquête romaine* (Paris 1939) 435, pl. 41.1–4.

for their decoration.³ One should add that this class of altars is believed by some to have owed its original inspiration to Attica, whence they were widely exported to be copied in other Hellenistic centres. Their iconography is closely associated with that of relief bowls of a kind which, as recent research has shown, also appeared in Attica during the second half of the third century BC. In 1934 H. A. Thompson proposed a date for the beginning of 'Megarian' bowls of c. 275 BC. The basis for this was an analysis of Hellenistic deposits in the Athenian Agora, one of which (his Group B) he dated on numismatic grounds to c. 275 BC, and another (his Group C containing Megarian bowls with figured scenes) to c. 200 BC, likewise on the basis of numismatic evidence. From that he drew the conclusion that production of the bowls began shortly after 275 BC.⁴ This dating is no longer acceptable, for recent studies of the numismatic evidence⁵ and of the information to be derived from a study of the stamped amphora handles,⁶ seem to suggest that Thompson's Group B should date from around 240 BC. Consequently, the bowls with figured scenes (Group C according to Thompson's classification), which are nearest to our class of altars, appear in the first quarter of the second century BC,⁷ but betray signs of a well-established practice. These bowls were copying in clay the forms and effects of metal ware, just as our arula may echo wooden or stone house-altars.⁸ However an unpublished arula of this type in Boston (65.1318, PLATE Xb) may suggest an additional source of inspiration. It is said to come from Asia Minor, and it must be Pergamene: both the smoked gray colour of its clay and the hard gray lustre glaze of its surface point in this direction. It is, in fact, this lustrous glaze which gives it such a convincing metallic quality. Could one therefore postulate that just as the bowls were copying metalware these arulae were also cheap imitations of a more delicate and expensive class of objects originally made of metal and most probably of silver?

Our altar stands on a plain rectangular plinth, decorated on its top with an egg and dart moulding (PLATES XI–XII). The idea of underlining or framing a composition with a decorative architectural motif was also fashionable among the mosaicists of Delos.⁹ All four sides are preserved and decorated with reliefs showing different subjects common to this type of arula: a young girl crowning a trophy; Poseidon, trident in hand, resting his hand on the shoulder of Amynone, who holds a hydria; Leto in the presence of her son Apollo Kitharoidos; and finally a maenad kissing Dionysos, who is supported by a satyr. All these reliefs, technically speaking, despite some blurring of detail, seem to be from early impressions, since they have preserved their original height. Late copies which were made by means of contact impressions in clay, have

³ G. Siebert, *Recherches sur les ateliers de bol à reliefs du Péloponnèse à l'époque Hellénistique*, BEFAR (Paris 1978) 240–6.

⁴ H. A. Thompson, 'Two centuries of Hellenistic pottery', *Hesperia* iii (1934) 311–476.

⁵ J. H. Kroll, *AthMitt* lxxxix (1974) 202–3.

⁶ V. R. Grace, *AthMitt* lxxxix (1974) 193–200.

⁷ K. Braun, *AthMitt* lxxxv (1970) 183.

⁸ C. G. Yavis, *Greek Altars* (Saint Louis 1949) 171–5; M. Nilsson, 'Griechische Hausaltäre', *Festschr. B. Schweitzer* (Stuttgart 1954) 218–21.

⁹ *Délos* xxvii, pl. 20.