

DENYS L. PAGE

Διευθυντοῦ τοῦ Κολλεγίου τοῦ Ἰησοῦ
ἐν τῇ Πανεπιστημίῳ τοῦ Cambridge

A PROBLEM IN HOMER'S ODYSSEY: THE ARROW AND THE AXES*

At the end of Nineteenth Book of the *Odyssey* Penelope tells Odysseus, whom she has not yet recognized, that she can no longer postpone surrender to the Suitors. These are her words, in the plainest English:

I will tell you another thing, and do you take it to heart: it is already on the way, that hateful morning which shall divorce me from Odysseus' house. For I shall now set up a competition, — those axes, which Odysseus used to stand in a line in his palace, like the supports for a ship's keel, twelve of them altogether. He would stand at a great distance and let fly an arrow through them. So now I am going to set this competition to my Suitors: whichever one most easily bends the bow in his hands and shoots through all twelve axes, that is the man I shall follow, turning my back on my father's house (Od. 19.570 ff.).

Odysseus encourages her to proceed: she must no longer defer the competition; resourceful Odysseus will arrive,

*before these men, handling this polished bow, draw
the string tight and shoot the arrow through the iron*
(19.584 ff.).

Later Penelope announces the competition to the Suitors in identical words (21.67 ff.); and Eurymachus says what a disgrace it would be if the Suitors should fail, whereas a vagabond beggar should

easily bend the bow and shoot through the iron
(23.318 ff.).

* Ὀμιλία γενομένη ἐν τῇ Φιλοσοφικῇ Σχολῇ τοῦ Πανεπιστημίου τῶν Ἀθηνῶν τὴν 6ην Δεκεμβρίου 1963.

Meanwhile Telemachus has prepared the ground:

First he set up the axes, having dug one long trench for all of them; and he made them straight to the line and piled up¹ earth on both sides of them. And all were astonished to see how neatly he set them up; for he had never seen it done before (21.118 ff.).

The exhibition-shot itself is described as follows:

From the very chair, as he sat, Odysseus shot the arrow, aiming straight ahead; and he did not miss the handle-tip of all the axes, but the shaft went clear through to the door (21.420 ff.).

The question has long been debated, what is meant by 'shooting through the axes' (if indeed that is what the words signify). Professor Woodhouse, in his entertaining book, *The Composition of the Odyssey*, expressed the opinion of the majority when he wrote: 'What « shooting through the axes » really was, what the axes were like to look at, how when set up they were « like oaken stays », — all this is a mystery towards the elucidation of which neither commentators nor archaeologists have been able to contribute much of value'. It may be so; but it seems a pity if so large a part of the story is to remain for ever unintelligible. Let us inquire once more, having first briefly defined the normal meaning of certain words, in particular πέλεκυς, στείλειη, and δρύοχοι.

(1) πέλεκυς: Throughout Greek literature this word regularly denotes the whole axe, not the head as distinguished from the handle. If the context should happen to require it, we should of course allow

1. νάσσω means 'pile', 'heap up' (ἐνήσσε, ἐσώρευσσε Schol.) in all the other places where it occurs: Ar. *Ecl.* 840, (Hippocr.) *nat. puer.* 24, Theocr. 9, 9, Hippolochus (saec. iv-iii) *ap.* Athen. 4. 130 B, cf. Alciphron 3. 11. 4 Benner. If you wanted to say 'heap down', 'press down', or the like, the verb was κατανάσσω (Hdt. 7. 36, cf. συννάσσω Reiske's conjecture in Hdt. 7. 60). I follow Gow and Scholfield in reading μάξαι (cod. R) for νάξαι (rell.) in Nican- der *Ther.* 952. I know no evidence for the sense 'press, squeeze down, stamp down' assigned to this passage by LSJ and by convention, earlier than Ar- ian *anab.* 6. 24. 4; though it must be admitted that the one sense might easily pass into the other. The adj. ναστός, 'heaped', seems to have been used in the sense 'solid' (as opposed to 'spongy') by Empedocles and Leucippus (*Vorsokr.*, Index s.v.), apparently also by Democritus and by (Hippocr.) *gland.* 16; hence presumably the use of ναστός as a kind of non-spongy cake, Pherecr. fr. 108. 5, Ar. *Av.* 567, *Plut.* 1142, Metagenes fr. 6. 3, Diphilus fr. 46, Lycophron 640.

that anybody might say 'axe' when he meant 'axe-head'¹; but we start from the position that it means the whole axe as usual.

(2) *στειλειή*: This noun occurs in masculine, feminine, and neuter forms². In all its forms, and in all the occurrences thereof, it means the handle of an instrument as distinguished from the head. The feminine form is no exception to the rule. It occurs in three other places only. In Antiphanes fr. 121 K. the meaning is very plain, for the *στειλειή*, 'handle', is being contrasted with the hole in the axe-head; in Apollonius of Rhodes 4.957 we read that Hephaestus leant on the *στελεή* of his hammer, — obviously on the handle³ of it, not on the hole on the head; and in Nicander *Ther.* 386 f. a snake is said to be of the thickness of the *στειλειή*⁴ of a mattock, — evidently again the handle, not a hole in the head. Thus the evidence of usage, including the testimony of so good a Homerist as Apollonius, is quite unambiguous: *στειλειή*, like the masculine and neuter forms, means 'handle' wherever it occurs; we shall never be satisfied with any explanation of our problem which renders the word as anything but 'handle'. No question would ever have arisen here, had not some ancient commentator on the *Odyssey*, baffled as we are by the description of the exhibition-shot, proposed a solution which interprets *στειλειή* not as the handle but as the hole in the axe-head into which the handle is inserted. This rendering is, as we have seen, contradicted by the evidence of usage; it occurs nowhere except in comments on this problem in the *Odyssey* and their posterity⁵. If we are told that we are confronted by a 'solid phalanx' of 'all the ancient commentators

1. Cf. *Od.* 9. 391, quoted by Stanford, *C.R.* 63 (1949) 3 ff.; *Od.* 5. 234 is a less convincing example (though *πέλεκυς* is followed by a separate mention of its handle, *στειλειόν*, it is the *πέλεκυς*, the axe as a whole, which is *ἄρμενον ἐν παλάμῃσι*).

2. For the gender-variation without sense-variation, a longish list of examples might be quoted (*ἄκρη ἄκρον*, *δρεπάνη δρέπανον*, *κοίτη κοίτος*, *al.*).

3. Schol. *ad loc.* (p. 299 Wendel) *στελεῖν* τῇ λαβῇ.

4. Cod. Π has the more commonplace *στειλειόν*, rightly rejected by Gow and Scholfield.

5. Schol. V on *Od.* 21. 422 ἀπὸ πρώτης γὰρ ὁπῆς τῶν πελέκων διηνεκῶς ἦλθεν; Sch. H on 19. 578 δηλονότι διαβιάσει τοῦτο εἰς τὰς τρύπας τῶν πελέκων; Schol. A on *Il.* 23. 851 οὐστυνας ἐφεξῆς ἰσάντες ἐπὶ τινὰ βαθμὸν ἐγυμνάζοντο οἱ τοξόται πέμποντες διὰ τῶν τρητῶν αὐτῶν τὸ βέλος, δι' οὗ ἐμβάλλεται αὐτοῖς ὁ *στειλειός* (v.l. *σηλιά*); similarly Eustathius 1531. 35 and elsewhere. Hence the lexica: Hesych. *στειλει(ι)ή* τοῦ πελέκους ἢ ὁπῆ εἰς ἣν ἐντίθεται τὸ ξύλον; Et. M. 728. 53 *στειλειά* τὸ τμήμα τοῦ πελέκους δι' οὗ τὸ στελεὸν ἐνέιρεται, ἣν τρήμην Ἀττικοὶ λέγουσι; Moeris 254.

and lexicographers, that is, the whole weight of Alexandrian and Graeco-Roman learning¹, we reply that there is no solid phalanx except of parrots; no weight of learning, only a few repetitions of someone's attempt to make sense of this passage in the *Odyssey*. We are obliged to interpret στελεῖη as 'handle', since there exists no evidence in the world that it was ever used by any ancient author in any other sense².

(3) δρυόχοι: Telemachus set the axes up ἔξειγς, δρυόχους ὥς, in a row, like the stocks on which a ship-builder lays the keel. The word is rare, but the meaning is certain enough³. It means 'keel-supports',

1. Stanford, *l.c.*

2. Aeneas Tacticus 18. 10 (p. 42 Schoene) is best left out of the discussion, because of the lacuna (some 30 letters) which precedes στελεᾶ ἐμβάλλεται; the following neuter στελεῶν suggests that στελεᾶ was neuter plural.

Stanford does not strengthen his case by calling Antiphanes an 'irresponsible comic poet' and Apollonius 'often misguided'. Antiphanes was not so irresponsible as to use στελεῖα, if it meant 'hole', in a context where the sense depends on its *not* meaning 'hole'; and it would be remarkable if the learned Apollonius made precisely the same mistake.

3. δρυόχοι. In view of the evidence from usage (see below) it is safe to ignore certain aberrations: (a) 'axes' (Et. M.); (b) 'axes with wooden handles' (Schol. V on *Od.* 19. 574); (c) 'the holes of iron axes, into which the handle is inserted' (Hesych.); (d) 'rings set on rods fixed in the ground, through which arrows are shot' (Et. M.). We have then to choose between two interpretations, both suitable to *Od.* 19. 574:

(i) Stocks, trestles, or the like, a row of blocks or pegs set level in the ground in a straight line, on which the keel was laid at the start of ship-building: Schol. V on 19. 574 κυρίως μὲν τοὺς πασσάλους ἐφ' ὧν τὴν τρόπιν ἱστᾶσι τῶν καινουργουμένων πλοίων; Schol. BHQ *ibid.* ξύλα εἰσὶν ὀρθὰ ὑποκάτω τῆς τρόπιδος κτλ.; Eustathius *ad loc.* κυρίως πάσσαλοι ἐφ' ὧν στοιχηδὸν διατεθειμένων ἡ τρόπις ἱσταται κτλ.; Schol. Ap. Rhod. 1. 723 (p. 60 W.) ἐν οἷς καταπίσσειται ἡ τρόπις ξύλοις; Schol. Plat. *Timae.* 81 B (p. 289 Greene) τὰ στηρίγματα τῆς πηγνυμένης νεῶς δρυόχους φασίν (= Suid. s.v. ii p. 143 Adler): Et. M. 228. 36 ἄμεινον δὲ ἀκούειν δρυόχους ξύλα ὀρθὰ ἐφ' ὧν ἡ τρόπις ἐρείδεται τῆς πηγνυμένης νεῶς, ἥγουν στηρίγματα.

(ii) The ribs (already fitted into the keel): Schol. Ap. Rhod. *l.c.* δρυόχους οὖν τὰ ἐγκοιλία τῆς νεῶς; cf. Schol. BHQ on *Od.* 19. 574 τινὲς δὲ δρυόχους φασίν τὰ πρῶτα πηγνύμενα ξύλα εἰς ναυπηγίαν; Pollux 1. 85 (i. p. 27 Bethe) μέρη δὲ νεῶς δρυόχον, τρόπις, κτλ.; Apoll. Soph. 60. 23.

The beginning of the entry in Suid. *l.c.*, πάνταλοι οἱ ἐντιθέμενοι ναυπηγουμένης νεῶς, may be a slightly distorted fragment of the same explanation as that given by Schol. V and Eust. on 19. 574 in favour of (i) above.

The former of these alternatives is clearly the favourite, a choice confirmed by the criterion of usage:

(a) δρυόχους τιθέναι when metaphorical means 'lay foundations': Ar.

blocks or trestles on which a keel is laid in the shipyard. The ancient commentators describe this common apparatus as a row of blocks or pegs or supports, — ξύλα, πάσσαλοι, στηρίγματα, — set level at intervals on the ground in a straight line; simple devices answering to this description may be seen on many a coast all over the world. We shall reject all solutions of our problem which do not set the axes out in a straight line spaced at intervals in such a way that they resemble some kind of stocks on which you might lay a keel.

Thesm. 52 δρυόχους τιθέναι δράματος ἀρχάς. If you want to stress the first step in ship-building, you will refer either to the placing of the trestles on which the keel is laid or to the laying of the keel; not to the more advanced stage at which the trestles are in place, the keel laid, and the ribs already attached.

(b) ἐκ δρυόχων metaphorically means '(fresh) from the stocks': *Plat. Timae.* 81 B καὶνὰ τὰ τρίγωνα οἷον ἐκ δρυόχων; the image is of a ship freshly launched from its cradle, and this example is decisive in favour of (i) above. In *Polybius* 1. 38. 5, αὐθις ἐγνώσαν ἐκ δρυόχων εἰκοσι καὶ διακόσια ναυπηγείσθαι σκάφη, the meaning is plainly 'from the very beginning', and again the sense 'foundation-blocks', 'stocks', is far the more natural.

There is no certain example of the alternative in usage. *Procopius Bell. Goth.* 4. 22 writes ξύλα σύμπαντα ἐς τὴν τρόπιν ἐναρμοσθέντα ἅπερ οἱ μὲν ποιηταὶ δρυόχους καλοῦσι, ἔτεροι δὲ νομέας ('ribs'); this only shows what Procopius thought the word meant in 'the poets'; it is clear that he and his contemporaries did not use the word in that sense. It may however be thought that (ii) makes at least as good sense in *Plutarch de fort. Rom.* 321 E (2 ii p. 60 Teubner) οὕτω τὴν Ῥώμην ὁ μὲν πρῶτος ἀρχὼν καὶ δημιουργὸς ἐξ ἀγρίων καὶ βοτήρων ὥσπερ ἐκ δρυόχων κραταιῶν συνιστάμενος οὐκ ὀλίγους πόνους ἔσχε (the whole context is relevant, from 321 D ὥσπερ γὰρ ὀλκὰς onwards).

The epigram of Archimelus quoted in *Athen.* 5. 209 C, πῶς δὲ κατὰ δρυόχους ἐπάγη σανίς, is indecisive; κατὰ δρυόχους may mean 'on the stocks' or 'on the ribs'. Indecisive also is the epigram quoted by *Suid. l.c.* τὸν δ' ἔτι θείης | εὐστοχὸν ἐν πόντῳ, τὸν δὲ κατὰ δρυόχους (if the text were reliable, there would be an obvious contrast between a ship at sea and a ship still 'on the stocks'). In *Ap. Rhod. l.c.*, δρυόχους ἐπεβάλλετο νηὸς, the sense is uncertain (probably ὑπεβάλλετο should be read).

The conclusion is clear enough. Usage, especially that of the earliest examples, is our sole reliable criterion. We find that the meaning 'stocks' is certain in Plato, highly probable in Aristophanes, and perfectly appropriate in Polybius. Of the alternative, 'ribs', or 'keel with ribs', there is no likely example earlier than Plutarch. We shall therefore understand the *Odyssean* phrase in the sense 'like keel-supports'. The axes are planted in a row, forming a straight line, like the blocks set at intervals in a line for the laying of a keel. The points of resemblance are (i) that the objects are spaced at intervals; (ii) that they are all erected to exactly the same height; (iii) that the row is a straight line; and therefore (iv) that, regarded as a whole, the line of axes looks like something on which you might lay the keel of a ship.

(4) πρώτη στείλειη: This is capable of two different meanings, 'first handle', and 'handle-tip'¹.

(5) διοϊστεύσαι σιδήρου: Both noun and verb are ambiguous. The verb may signify either 'shootthrough' i.e. 'penetrate', or 'shootover', i.e. from one end of a line to the other (not necessarily penetrating anything except the air). In Pindar *Nem.* 6.40 πέτεται διὰ θαλάσσης means 'fly in a line over the sea', not 'through the sea'; the usage is common and in the only other Homeric context (*Od.* 12.102) the verb διοϊστεύειν plainly means 'shoot across an intervening space', not 'shoot through' something. As for the noun, it may be taken literally to mean 'the iron' of the axes, or more broadly 'the iron axes' as a whole.

Let us now begin with the explanation prevalent throughout antiquity. Twelve axe-heads, without handles, are to be set up on edge in a line, with their holes facing the archer, who shoots through them as through a discontinuous tunnel (Fig. 1). This was the best that the ancient commentators could do. They must have known, as we do, that στείλειη means the handle, not the hole in the axe-head; but we should sympathize with them, if the problem were indeed solved by this device. The fact remains that the shot cannot be reconciled with the description in the text. For what sense can now be made of the words 'He did not miss the πρώτη στείλειη of all the axes'? It must mean either 'he did not miss the first hole of all the axe-heads', a sentence which it would be lenient to describe as ludicrous; or 'he did not miss the tip of the hole of all the axes', an expression which may well be judged unintelligible. There is no point whatsoever in any reference to the top of the hole, or to the bottom of the hole, of 'all twelve axes'. It has been asserted in defence of the ancients that 'the arrow would drop slightly in its trajectory, no matter how strongly it was shot, so that Odysseus must shoot as high up as possible in each hole': but nobody cares about parabola or gravitational fall over so short a distance; and if we did care, we should aim not near the top of all the holes, or indeed of the first hole, but near the bottom of the first hole, directing the arrow slightly upwards through the tunnel. And I ask whether anybody seriously believes that such an aim could be described in these words, 'he did not miss the tip of the hole of all twelve axes'? The hard fact is that the adjective πρώτη is

1. LSJ s.v. πρότερος B I i; Ebeling, *Lex. Hom. s. v. πρώτος* (2); *Hom. II.* 6. 40, 16. 371, 20. 275 f., 22. 66.

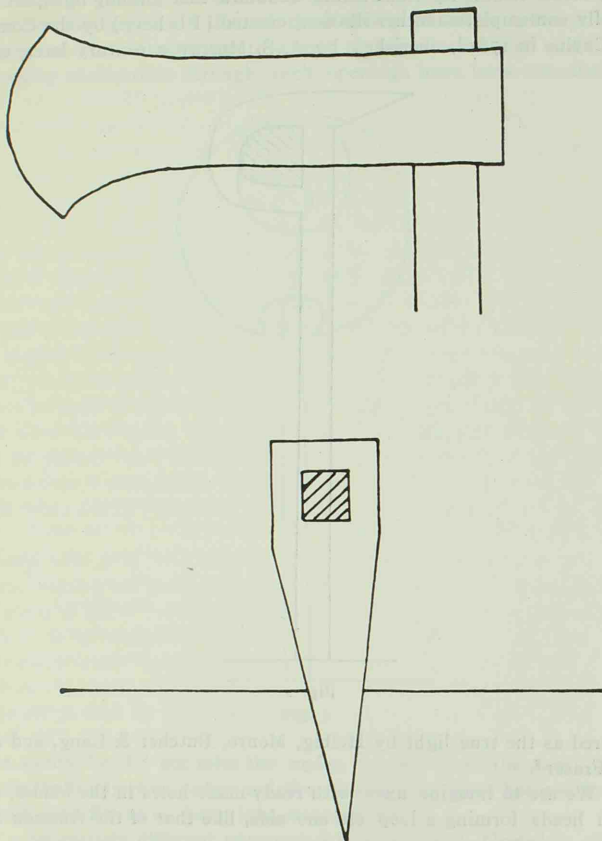


Fig. 1.

never going to make any sense so long as *στειλειή* is taken to mean 'hole in the axe-head'. If it means 'handle', *πρώτη στειλειή* may very well mean 'handle-tip'; but before we follow that guiding light, let us briefly contemplate another illusion, created (I believe) by the Comte de Caylus in 1781¹, cherished by A. S. Murray a century later, and

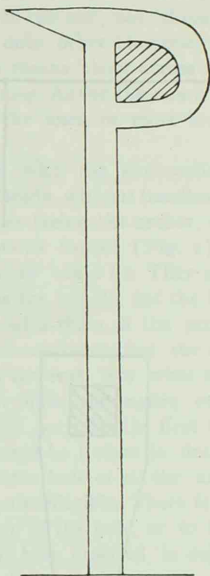


Fig. 2.

revered as the true light by Helbig, Monro, Butcher & Lang, and A. D. Fraser².

We are to imagine axes with ready-made holes in the blades, or with heads forming a loop on one side, like that of the Amazon on

1. Quoted by A. D. Fraser, *Classical Weekly* 26 (1932-3) 25 ff.; I have not yet seen this work of the Comte de Caylus.

2. Helbig, *Hom. Epos* (1887) 348 ff.; Monro, *Odyssey* (1901) on 19. 571 ff.; Butcher & Lang, *Translation*, n. on 19. 578; Fraser, *l.c.*

the archaic metope at Selinus (Fig. 2). Odysseus is to shoot through the loops of twelve such axes in a line. I linger only a moment in this now desolate region. A line of these abnormal axes could not have suggested the comparison to a row of keel-stocks; nor could the shooting of an arrow through such openings have been described by

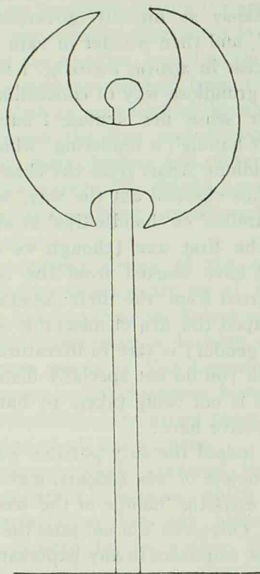


Fig. 3.

the words 'he did not miss the πρώτη στείλει of all the axes'. Once more, both adjective πρώτη and the noun στείλει have become not so much superfluous as downright meaningless.

An entirely different approach was made by A. Goebel in 1876¹. He rightly insisted that στείλει means 'handle', not 'hole', and he suggested a shot through the tunnel formed by a line of recurved axe-heads of a type known (by us, not at that time by Goebel) to be

1. Goebel, *N. Jb.* 22 (1876) 169 ff.; *Lexilogus* 1 (1878) 448. ff.

characteristic of Minoan Crete (Fig. 3). It is obvious that if no more than this is meant, that the arrow passed between the blades, we should still be leaving the words *πρώτης στείλειῃς* unexplained; let us therefore look at them again more closely. The poet said *‘πελέκεων οὐκ ἤμβροτε πάντων | πρώτης στείλειῃς’*: there are two ways of analysing the grammar, the way of reason and the way of chaos. Choosing the way of chaos, we take *πελέκεων* as directly governed by *οὐκ ἤμβροτε*, ‘he did not miss the axes’, and then wonder in vain what account can be given of the genitive case in *πρώτης στείλειῃς*. I have heard it called a ‘genitive absolute’, a grandiose way of concealing the gloomy truth that it satisfies neither sense nor syntax. I have seen it translated ‘*starting from the first handle*’, a rendering which would enrich the language with a new idiom. Apart from the chaotic grammar, if *πρώτης στείλειῃς* is to be thus elbowed out the way, what need was there for any mention of ‘handles’ or ‘handle-tips’ at all? The arrow might be said to start from the first axe (though we were in no danger of thinking that it might have started from the second or third); but why tell us that it started from the first *handle*? The ὄβρις of arbitrary grammar has reaped the ἀη of miserable sense. This word for ‘handle’ (of whatever gender) is rare in literature; the handle of an axe is something which you do not specially distinguish (particularly when, as here, the axe is not being taken in hand) unless there is a motive: what is the motive here?

The correct way, indeed the only possible way, is to take *πρώτης στείλειῃς* as the direct object of *οὐκ ἤμβροτε*, making the genitive case of *πελέκεων* depend on *στείλειῃς* ‘handle of the axes’. What is actually said, therefore, is that Odysseus ‘did not miss the handle-tip of all the axes’; and we shall not acquiesce in any explanation which leaves the handle-tip of any of the twelve axes untouched. It was clearly necessary for Goebel to take a further step; and indeed he took it, though heavy of heart: — the arrow, he said, must actually have brushed the top surfaces of all the handles as it passed down the line of axe-blades¹.

Goebel’s argument is lucid and logical. His conclusion is unavoidable; and it is also plainly unacceptable. The motif is intrinsically

1. ‘Zu dem Ende musste der Pfeil dicht über das in die Rundung noch mit einem kurzen Stücke hineinragende obere Ende des Stieles einer jeden Axt hinstreifen’; and again ‘der Pfeil streifte bei sämtlichen Äxten oben den Stiel oder das Stielende’.

improbable: it is a far-fetched and over-subtle notion, that an ordeal by bow and arrow should consist in this, — shooting so as to graze the top surfaces of a line of axe-handles. Moreover it is a commonplace in tales of this kind that the act must not only be performed, it must also be seen to have been performed. Let one of the Suitors exclaim 'Missed the lot by half a millimetre!', and we are confounded; we cannot possibly refute him. You could watch the arrow, however strongly shot; but you could not observe whether it just had or just had not brushed the surface of the handles. I used to think that if Goebel was right there must be something missing from the description, — that Odysseus must have shot an arrow which brushed the surfaces of the handles as it passed down the line *and tipped each axe over to the ground*. A pretty shot, most pleasing and picturesque; but, if the fact was so, why was it not stated? We should have to argue (not unreasonably) that the poet is describing a traditional feat which he did not fully understand.

We reject the axe-head theory of the ancients, the loop and handle-tip theories of the moderns; are we at the end of our tether? On the contrary, the best is yet to be. Before we come to it, consider an ingenious and novel interpretation, lurking unnoticed or despised, *obiter dictum* in a dozen words by Van Leeuwen in his edition of the *Odyssey*¹: *ergone summa capita duodecim bipennium in aula erectarum heros sagitta perforavit?* — the arrow penetrated and passed clean through the handle-tips of all twelve axes.

The world has almost wholly ignored this; and the world is wrong. Despite the apparent objections which leap so nimbly to our minds, this is a better solution than any hitherto considered; and it has certain merits unnoticed by its author. It leaves nothing in the text unexplained, and it really is a very pretty shot. Among our first objections may be the allegation that the shot is impossible; and I shall now say a word on this topic, in relation both to Goebel's brushing of handle-tips, which requires absolute straightness of line, and to Van Leeuwen's penetration-shot, which demands stupendous strength in the archer.

Let it be frankly admitted that whereas the Goebel-shot is at least theoretically possible, the Van Leeuwen-shot can have no other home than fairy-tale or folk-lore. The Goebel-shot is possible on two assumptions: that there is no parabola or gravitational fall over the

1. *Odyssea* (1917), notes on 19. 573-9 and (p. 590) on 21. 422.

short distance; and that it is possible for an arrow to skim over such surfaces without deflection. It is likely that both assumptions would be tacitly made by the Homeric audience. The feat is little (if at all) beyond what is possible with an arrow shot from a heavy bow over a very short distance; and what we need here is a truly wonderful shot beyond the capacity of all except the hero. We are not interested in parabola or gravitational fall or deflection; we do not care whether the shot is in fact just possible or just not possible for an exceptionally strong and skilful archer.

Tales of marvellously accurate archery are beloved of all ages and sorts of men; except the champion archer, who knows what nonsense most of them are. The English champion C. J. Longman¹, who collected and examined reports from all over the world, writes that 'the feats which have been accredited to the American Indians, and many other races, would be marvellous if performed by men armed with the finest modern small-bore rifles aided by range-finders, telescopes, and windgauges'. Gordon Grimley² reminded us in 1958 that at the Olympic games early in this century the elect native archers of Africa, Japan, the Americas and elsewhere, faced with a target 4 ft. by 6 ft. at 42 yards range, recorded only two hits. Californian Indians, who had lived by the bow, when tested in 1911, more often missed than hit a 4 ft-square target at 40 yards³. Nevertheless the expert target-archer has been known to attain an accuracy of the sort we are looking for. I say nothing of William Tell, for his achievement was eclipsed in 1955 by François Perréard, who 'repeatedly shot an apple off the top of his eight-year old son's head at 25 metres'⁴ — that was a truly marvellous, and very dangerous, exercise; of which camera-films may (or might then) be seen. And we must reckon that what matters is not the truth but what people will readily believe: listen to this, for example, — 'In the reign of Henry IV, in shooting-matches, 300 yards was the common target, and the ordinary mark was a straight willow hazel-rod, as thick as a man's thumb, and 5 feet in length; and such a mark as this a really good archer held it shame to miss'. That is nonsense; but it is not quoted from travellers' tales or mediaeval gos-

1. In the *Badminton Archery* (Badminton Library of Sports and Pastimes: *Archery*, by C. J. Longman and H. Walrond, 1894) p. 86. See also Wallace McLeod, *AJA* 66 (1962) 13 with references n. 2.

2. *The Book of the Bow* (1958) 35.

3. *Ibid.* 35-36.

4. *Ibid.* 217.

sip. It stands in the *New American Cyclopaedia*, 1861, under the title *Archery*. If such stuff can be believed by a modern author and printed by sober encyclopaedists for the misleading of you and me, let us not listen to any complaint that the accuracy of the Goebel-shot would have strained the credulity of its audience. Suffice it to say that 300 yards, here called 'the common range', was about the extreme limit of distance (no question of aiming) for the greatest of nineteenth-century archers, Mr. H. A. Ford¹; as for that hazel-rod 'an inch or so broad', you might as well tell a modern golfer that in former days men 'held it shame' to take more than one stroke a hole².

Goebel is credible; not so Van Leeuwen. No audience familiar with archery would believe for one moment that an arrow could penetrate twelve pieces of wood in succession. If you choose your wood soft enough and you bow heavy enough you can indeed shoot clean through a board an inch thick. Dr. Saxton Pope³ made some experiments and reported in 1925 that 'shooting a blunt arrow from a 75-pound bow at a white-pine board an inch thick, the shaft will often go completely through it'. But let the wood be anything but soft, and the strongest shot will do no more than pierce it, so that the point emerges on the other side. One very seldom quotes an English King in a paper on Homer: there survives a manuscript note by Edward IV, dated 14 May 1450, recording an experiment made by archers of his Guard, — 'they shot at an inch-board, which some pierced quite'⁴; the board was of 'well-seasoned timber', but there is no telling whether 'pierced quite' means 'passed clean through' or merely penetrated in the more limited sense. We must allow for the same ambiguity when Giraldus Cambrensis tells us that Welsh bowmen once pene-

1. Longman 428 ff.: 'I agree in the main with Mr. Ford's opinion that 300 yards is about as far as the average man can expect to reach, though an archer of exceptional physique can cover another 50 or 60 yards'; Ford shot a little over 300 yards, using a 68 — pound bow. Grimley (45 n.1) reports a distance of 651 yards in California (1957), — presumably with a metal bow.

2. The books abound with yarns, scorned by the champion archers. Most of the alleged feats are as incredible as that of Hiawatha; 'Strong of arm was Hiawatha; he could shoot the arrows upward, shoot them with such strength and swiftness that the tenth had left the bowstring ere the first to earth had fallen'. — The indefatigable Longman could only manage to get the third off the string as the first fell to the ground.

3. *Hunting with Bow and Arrow* (1925), quoted by Grimley 77.

4. Quoted by Longman *l.c.*

trated a portal of oak *palmaris fere spissitudinis*¹. I think we must admit that the Homeric audience would readily accept the passing through a single axe-handle; they would know that it would not penetrate a second, and twelve successive penetrations would appear to them much more unrealistic than tales about one-eyed giants or men turned into swine. You could not be quite sure that there never was a Circe or a Cyclops, but you knew from your own experience that the penetration of twelve axe-handles by a single arrow was a physical impossibility.

This is by no means a fatal objection to Van Leeuwen's theory; and we have not yet mentioned the greatest of his virtues. For is it not true that a penetration shot of this general type is a traditional feature of this legend at large? Here is an obvious question to ask; yet, until recently, only one man (so far as I know) had ever answered it; and he, not being of our profession, went his way unlistened to. It is well-known that some of the tales told in the *Odyssey* recur, in more or less the same form, in universal folk-lore; and some of the Odyssean tales become first intelligible in the light of fuller versions to be found elsewhere. What then of the Arrow and the Axes? The Odyssean account is obscure and elliptic, all men agree; let it then be asked, are there other versions of this motif, such that we can supply from them the links missing in the *Odyssey*?

Extraordinary feats with bow and arrow are common enough in saga and fairy-tale and what passes for history; but this particular motif, — the shooting of an arrow through a series of objects as a test of skill or a proof of identity or otherwise to win a woman, — seems to be very rare. I see no example in Aarne-Thompson's *Types of the Folk-Tale* or in Stith Thompson's *Motif-Index of Folk-Literature*. There is indeed almost no firm ground anywhere except on the path pioneered by W. Crooke² in 1908 and broadly paved by Gabriel Germain³ in 1954. Crooke drew attention to the fact that the only close

1. See Longman 107 and 430, Grimley 63, Oman, *Art of War in the Middle Ages*² (1953) 119, n. 2. Longman himself shot a steel-tipped arrow at 6·7 yards at a gate of seasoned timber one inch thick: the tip came through on the other side.

2. *Folk-lore* 19 (1908) 154.

3. *Genèse de l'Odysée: le fantastique et le sacré* (Presses Universitaires de France, Paris 1954). I had thought that the observations about the parallels of the Mahābhārata and Rāmāyana, and the remarkable conclusion to be drawn from them, were my own: I am very much obliged to Professor Dodds

parallels to the Odyssean episode are to be found in tales from India :

First, the story of Rasalu, in which certain 'giants brought out the seven (iron) griddles, each of which weighed 35 tons, and setting them up in a row one behind another they challenged Rasālu to pierce them'; we guess that he will, and he does (*Romantic Tales from the Panjab*, by C. Swynnerton (1903) 212 ff., with illustration).

Secondly, a passage from the Pali book *The Jātaka*, wherein the hero pierces 'a hundred boards joined together' (*The Jātaka*, trs. H. T. Francis, V (1905) 68 f.).

It is Crooke's third example, to be conjoined with a fourth, which strikes a familiar note and compels our close attention. — This motif, the piercing of objects in succession with an arrow, in order to establish a claim to a woman's hand, — a motif extremely rare in universal folk-lore — recurs in both the old Sanskrit Epics, the Mahābhārata and (with one modification) the Rāmāyana.

In the former the king's daughter is won by Prince Arjuna; like Odysseus, he is in disguise; like Odysseus, he bends a bow unbendable by others; like Odysseus, he performs a wonderful exhibition-shot. A target is fixed, and a disk pierced by five holes is set revolving in front of it; Arjuna must shoot five arrows, one through each of the holes in the disk as it revolves in front of the target :

*To the helmed son of Pandu, Arjun, pride of Kuru's race,
Drupad longed to give his daughter, peerless in her maiden grace,
And of massive wood unbending Drupad made a stubborn bow;
Saving Arjun, prince or chieftain might not bend the weapon low;
And he made a whirling discus, hung it 'neath the open sky,
And beyond the whirling discus placed a target far and high.
«Whoso strings this bow», said Drupad, «hits the target in his pride,
Through the high and circling discus, he shall win Panchala's bride».*

*Godlike Arjun, born of Indra, filled with Vishnu's matchless might,
Bent the wondrous bow of Drupad, fixed the shining darts aright,
Through the disc the shining arrows fly with strange and hissing sound,
Hit and pierce the distant target, bring it thundering on the ground.*

(From the Epitome in the Temple Classics (1898) by Romesch Dutt; section 17 ff.).

for referring me to Dr. Germain's fascinating book, in which precisely the same parallels and conclusion are drawn, but on much wider and deeper foundations.

In the *Rāmāyana* the king promises his daughter Sita to the man who can bend and string a massive bow (5000 men were needed to bring it on the scene). Rāma bends it, strings it, — and then deliberately breaks it in two: in this story, the exhibition-shot has been transferred from this courtship-ordeal to a different context. — Sugrīva asks Rāma for protection against his brother Valin; prepares a line of seven trees in the forest; and requires Rāma to prove his quality by shooting an arrow clean through the tree-stems. Rāma 'took his formidable bow and an arrow, full of pride' and

*To prove his might, his arrows through
Seven palms in line uninjured flew.*

(*Rāmāyana* I i trs. R. T. Griffiths (*sic*; properly Griffith) in *Hindu Literature* (World's Great Classics, 1900) p. 177).

Nobody can read the stories of Arjuna and Rāma without noticing the close similarity in outline and in detail to the Odyssean episode. The courtship of the lady; the disguise of the prince; the bending of the bow; the miraculous exhibition-shot, — these and other features were evidently common to the old Greek and to the old Indian Epics; very seldom attested elsewhere¹. It is obviously probable that the two streams have a common source, — that the whole story of the bride-winning by bow-ordeal originated in that remote period when the Indo-Europeans were a more or less undifferentiated people; and that it became the common heritage of both Indian and European branches of the family. In the *Odyssey*, as in the Indian Epics, we read the latest version of a tale which had been told in the step-

1. Germain quotes other Indian versions, especially the Buddhist hagiography *Lalita Vistara* ('le trait transperce les 5 boucliers, les 7 arbres, le sanglier de fer'). Professor A. T. Hatto has referred me to F. Coxwell, *Siberian and other Folk-tales* (London 1925): 'The bride said to Aleyka, «What can you do? Show me your powers». He sang this answer, «Upon this isle took thirty poplars root, | but all will fall so soon as I shall shoot»... He lifted an arrow and at a shot from his bow thirty black poplars fell; the arrow had cut down twenty-nine of them, and was embedded in the thirtieth tree'. He refers me also to W. Fleischer, *Das usbekische Heroische Volks-epos*, in Paul Braune, *Beitr. z. Gesch. d. deutschen Sprache und Literatur*, Bd. 80 (Ost) 14 ff. (the returning hero strings a bow as proof of identity). See now also Wallace E. Mcleod, *AJA* 66 (1962) 13 ('Minamoto Yoshiie, a Japanese hero of the 11th century, shot through three sets of armour as they hung from a tree'). No doubt the list could be further extended; so far there is nothing much west of India.

pe-lands of central Asia a millenium and a half before the time of Homer¹.

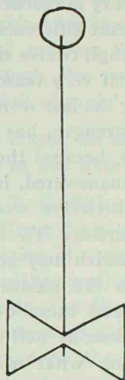
The ordeal of Rāma, whose arrow 'through seven palms in line uninjured flew', compels us to take seriously the suggestion of Van Leeuwen, that Odysseus' arrow actually penetrated the twelve axe-handles in succession. The story is essentially the same in both versions; and there is no significant difference between shooting through seven trees and shooting through twelve upright axe-handles. Agreed, the feat is impossible — for that very reason, perhaps, it is not precisely described in the *Odyssey*; the last word, which would have proved a bowshot of supernatural strength, has not been spoken. If I am still dissatisfied, it is mainly because there is a single fundamental question which is still left unanswered, indeed unasked: why *axes*? If you are to shoot through twelve wooden objects in a line, why choose (of all things) axe-handles? To this I add a second rather frivolous-sounding question, which may nevertheless prove helpful, — what are twelve axes doing in the palace anyway? If we could give an explanation which answered these questions and all the other questions too, we shall have done as well as we shall ever do.

We asked at the beginning what *πέλεκυς* means, and answered, 'an axe'. That answer seemed safe enough; on reflection we see that it was seriously misleading. An axe, according to Webster's Dictionary, is 'a cutting tool, ...it consists of an edged head fixed to a handle'. Very well; but the Greek word *πέλεκυς* means both this and something very different, — not only a cutting-tool but also a cult-object. In Minoan and Mycenaean palaces axes were hung on walls, perched between bulls' horns, stuck into pillars. And shrines of the Geometric period tell a similar tale; miniature bronze and iron axes, offerings of piety, have been found in the temples of Hera at Olympia, of Orthia at Sparta, of Artemis at Lousoi in Arcadia; in Delphi, in Cyprus, and elsewhere² (Fig. 6). Whether the Odyssean shot

1. Germain's book as a whole makes a very strong case in favour of this conclusion (which he himself explicitly draws).

2. Olympia: *Olympia* iv (1890) 71, and *Bronzen von Olympia* 470. Sparta: *The Sanctuary of Artemis Orthia at Sparta* (1929) 199. Lousoi: *Jahreshefte d. oest. arch. Inst. in Wien* iv (1901) 49. Delphi: *Fouilles de Delphes* v (1908) 120. Cyprus: G. M. A. Richter, *Greek, Etruscan and Roman Bronzes* 1935-1936. See also Robinson, *Excav. at Olynthus* x (1941) 341 with bibliography; Reinach in Daremberg-Saglio s. v. *securis*; Blümner, *Technol.* ii (1879) 200; *B.S.A. v* (1899-1900) 108; Cook, *Zeus* iii 646 ff.

is an heirloom from the remotest past (as we believe) or an invention of the Ionian Epic, the audience will think it very natural that the royal palace should be well-equipped with these cult-objects; and they will know, what we have waited long to learn, that there is one great difference between the household-axe and the cult-axe, — a difference



[VOTIVE AXE on wall: Boeotian Geometric sherd
Blinkenberg, *Arch. Stud.*, p. 46, fig. 28].

Fig. 4.

which explains why axes should be selected to compose a target for the exhibition-shot.

So far as I know, no household-axe or battle-axe has survived with handle intact; naturally, since the handle was made of perishable material. But there are many pictures of such axes in Black-Figure and Red-Figure painting, especially in scenes of the birth of Athena¹. In all that I have seen, the axe consists of a head and a handle, and there is nothing peculiar about the handle. It is quite otherwise with the cult-axe. Few of these have survived with the handle intact for the whole of its length; but of these few quite a high proportion have a most pleasing peculiarity. — The base of the handle is pierced, and often enough rounded into a ring, for suspension. Fig. 4 shows an example from a Geometric Boeotian sherd²; a votive axe, hanging on

1. For a large and convenient assembly see Cook, *Zeus* iii (1940) 656 ff.

2. Published by Blinkenberg, *Archaeologische Studien* (1904) 31 ff. Cf.

the wall. Stand twelve such axes in a line upside down (the usual posture for cult-axes hanging on the wall), and Odysseus will have a target which leaves nothing in the text unexplained; moreover we shall understand why axes, — these, and no other objects — were chosen for the target: the heads make a firm base; the rings make a

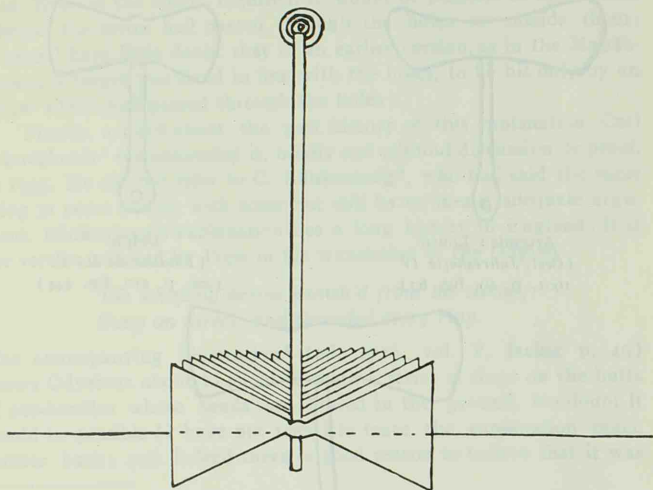
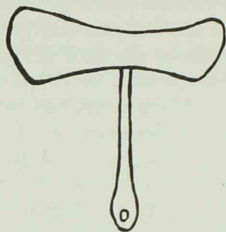


Fig. 5.

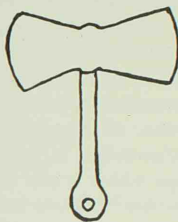
challenging target; and just these suitable objects, cult-axes, are sure to be abundant in the royal palace. The resemblance of the bases to keel-stocks is obvious enough (Fig. 5); and the description 'did not miss the handle-tips of all twelve axes', is now for the first time wholly intelligible. The man who shoots through the handle-tips of all the axes is the one man whose action can be properly so described; he may also be said to shoot 'through the iron', for the cult-axis (unlike the household-axis) is normally made of bronze or iron wholly, the handle as well as the head. The arrow which passes through the handle-holes is indeed passing *through the iron*.

Reinach *l.c.* fig. 6272. Actual examples with handle-tips rounded or flattened and pierced for suspension have been found at Lousoi, Sparta and Delphi.

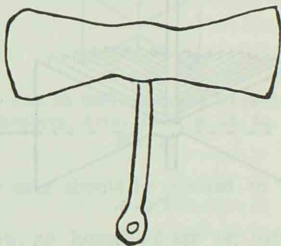
And let there be no complaint about impossibility. The Homeric audience will be satisfied with a shot of extreme difficulty and delicacy; it will care nothing for parabola or gravitational fall; it will perhaps be offended by a gross and patent impossibility, but there is no such question here. Suppose the twelve axes placed at yard inter-



Artemis : Lousoi
(*Oest. Jahreshefte IV*
1901, p. 49, fig. 67).



Delphi
(*Fouilles de D., V*
1908, p. 210, fig. 444).



Ortheia : Sparta
(*Artemis Orthia* 1929, p. 199. Plate LXXXV K).
Fig. 6.

vals, and suppose the holes to be only a little greater in diameter than the arrow-shaft: the shot is then technically possible at the limit of a Circus Strong-Man's power. If you could string a 100-pound bow, you could probably shoot in a straight line for a dozen yards. I must add, on the authority of a champion archer, that it 'would indicate marvellously strong shooting', even if the rings were as much as four inches in diameter and the distance only twelve yards¹. But 'marvel-

1. Longman 72: if the axes were a yard apart, 'in twelve yards the arrow would only fall 4 inches by gravitation'.



lously strong shooting' is just what we are looking for; it would never occur to us to calculate diameters or any other dimensions; we would go so far as to allow that the holes may be only just large enough to admit the passage of the arrow; but the truth is that we do not concern ourselves with that or any other such detail.

There would be no doubt that the feat had actually been performed. Even at the speed required, it would be possible to distinguish whether the arrow had passed through the holes or outside them; though I have little doubt that in an earlier version, as in the Mahābhārata, a target was fixed in line with the holes, to be hit only by an arrow which had passed through the holes¹.

Finally, a word about the past history of this explanation. Carl Schuchhardt² recommended it, briefly and without discussion or proof, in 1935. He did not refer to C. Blinkenberg³, who had said the same thing 31 years earlier, with some but still by no means adequate argument. Blinkenberg's explanation has a long history in England: it is the version adopted by Pope in his translation of the *Odyssey*:

*The whizzing arrow vanish'd from the string,
Sung on direct, and threaded every ring.*

The accompanying illustration⁴ (ed. 1726, vol. V, facing p. 49) shows Odysseus about to shoot through a series of rings on the butts of axe-handles whose heads are buried in the ground. No doubt it would be possible (I have not tried) to trace the explanation much further back; and indeed there is good reason to believe that it was

1. So also Fraser *l.c.*: he takes *θύραζε* to mean simply 'out at the other end' (not 'to the door'), quoting Il. 21. 29, 237, *Od.* 5. 410.

2. *SB d. preuss. Akad. d. Wiss., Phil.-Hist. Klasse* (1935) 186 ff., approved by Wüst, *RE* 17. 2 (1937) 1988: 'in den ligurischen Felszeichnungen kommen vielfach Beile vor... Sie haben meist den langen Stiel des Kriegsbeils und am Stielende regelmässig einen Ring zum Aufhängen'; see his *Abbildung* *l.c.*

3. *L.c.*; Professor Dodds has drawn my attention to the fact that Blinkenberg's explanation is adopted in the tenth edition (1911) of Ameis-Hentze-Cauer's *Odyssee* (on 19. 574). I confess that I had not consulted that edition, only earlier and later ones in which this explanation is not given.

4. When I gave this paper as a lecture to a conference at Oxford in 1961 I had not looked at any of the early (illustrated) editions of Pope's translation. I am obliged to Professor H. N. Rydon for a timely reminder (in a letter to the *London Times* dated 11 August 1961). He quotes a 'tailpiece to Book XXI' in the edition of 1760; the first edition has a full-page woodcut ('P. Fourdrinier sculp.', clumsily enough).

current in remote antiquity: *The Etymologicum Magnum* s.v. δρύχοι has an entry concerned with Odysseus' exhibition-shot: 'Some understand large rings attached to uprights fixed in the ground, to shoot through'¹; surely an explanation very similar to that which I have given.

DENYS L. PAGE

1. The significance of this was seen by Blinkenberg l.c.: δρύχους τοὺς πελέκει· οἱ μὲν κρίκους ἀκούουσι τινὰς μεγάλους ἐπ' ὀβελίσκων κειμένους, οὓς καταπηγνύσθαι εἰς τὴν γῆν ὥστε δι' αὐτῶν τοξεύειν.