

A NEGLECTED MEDIEVAL SIDELIGHT ON THE GREEK TRIREME

IN his recent book,¹ Professor J. S. Morrison has brought to a happy conclusion a quarter of a century and more of inspired research into the problem of how the oars of a classical trireme were arranged.² The essence of his solution of this perennial problem is that the fifth-century Athenian trireme had her oars and benches alike disposed at three different levels, each rower having his own oar, and each oar its separate thole set at a distance of feet, not inches, from its neighbours. The evidence is marshalled with such mastery that it may be thought unlikely that there will ever be any general recrudescence of the *di* (or *al*) *scaloccio* and a *zenzile* (or *alle sensile*) theories that were as fashionable once as they are seen now to have been unhistorical. In his inquiry, however, Professor Morrison has wisely confined himself to the ancient sources, and no more than touched upon the analogy of the Byzantine *dromon*, the direct descendant of the classical trireme and to some extent the parent of the *a zenzile* galley. Other protagonists, and notably Tarn,³ have been far from sharing his discretion, and there is still room perhaps for a brief note calling attention to the possibility that the *dromon* of the Middle Ages may shed indirect light upon the trireme of fifteen hundred years earlier.

Material that seems completely new to the controversy is furnished by the anonymous treatise on naval matters *Παρά Βασιλείου Πατρικίου καὶ Παρακοιμωμένου* hereafter cited as *Anon PBPP* from the edition of A. Dain,⁴ which seems to have been composed in or near Constantinople early in the second half of the tenth century.⁵ Its ill-digested preciousness makes it a far from easy source to use, and its obscurity is often heightened by its compiler's gallant attempts to reconcile the evidence of his own eyes with a strictly Sudean terminology. For all this the treatise does include a fairly full description of the hull of a tenth-century Byzantine warship of the line, and it is significant that the author should assume that the only essential advance that had been made on the classical trireme was the omission of one of the banks of the latter's oars.⁶ The critical passage is one that describes the midships planking in the following terms:

12 'Η δὲ σανὺς δι' ἧς αἱ κῶπαι ἐξέρχονται θυρεόν, καὶ ὅθεν μὲν ἐκδέδενται σκαλμός, ὧ δὲ ἐνδέδενται τροπωτήρ. Τὸ δὲ ἐπὶ τῶν σκαλμῶν ἐπισκαλμὸς. Δι' ὧν δὲ ἤρτηται ἡ κώπη τρήματα. Τὸ δὲ πρὸς αὐτῷ τῷ σκαλμῷ δέρμα ἄσκιμα, τὸ παρ' ἡμῖν μανικέλλιον. 13 Ταύτης δὲ ἄνωθεν τῆς εἰρεσίας περίτονον, εἴτα πάλιν θυρεόν, ἔνθα ἡ ἄνωθεν εἰρεσία. Ἄνωθεν δὲ πάντων ἡ ἐπηγκενὶς, τὸ ἄρτι λεγόμενον καταπατητόν.⁷

¹ J. S. Morrison and R. T. Williams, *Greek Oared Ships 900-322 B.C.* (Cambridge, 1968).

² The cardinal paper is still J. S. Morrison, 'The Greek Trireme', *The Mariner's Mirror* xxvii (1941), pp. 14-44. Most of the intervening literature is admirably surveyed in L. Casson's *The Ancient Mariners* (London, 1959), while also to be consulted with advantage is R. C. Anderson's *Oared Fighting*

Ships (London, 1962).

³ Cf. Casson (1959), p. 257, and in illustration the disastrous last sentence of the article 'Trireme' on p. 925 of the 1949 edition of the *Oxford Classical Dictionary*.

⁴ A. Dain, *Naumachica* (Paris, 1943), pp. 61-8.

⁵ *Ibid.*, pp. 57-9.

⁶ *Anon PBPP*, 2, 7 (Dain (1943), p. 65).

⁷ *Ibid.* 2, 12, and 13 (p. 65).

which may be rendered:

The plank through which the oars come out is the *thureon*, and on it is fastened the thole to which in turn is attached a leather thong [for the oar]. The part above the tholes is the *episkalmis*. The things through which each oar is taken are the ports. The thing by the thole is a leather skin, with us called a *manikellion*. Above this bank of oars is a waling-piece, then another *thureon*, and above this the upper bank of oars. On top of the lot is the long plank now called a *katapateion*.

On this evidence it is difficult—if not impossible—to avoid the conclusion that the *dromon* was a true bireme with oars and benches alike disposed at two levels and with an oar on each side for each bench and a thole for each oar. The interpretation is not without importance inasmuch as there have been attempts to read into what is in fact an unambiguous allusion in the *Tactica* of Leon VI support for the quite untenable hypothesis that the *dromon* was an a *zenzile* galley.

The vital sentence, however, in the *Anon PBPP* passage just reproduced is that which contains the phrase τὸ ἄρτι λεγόμενον καταπατητόν. From other sources it is known that the *katapateion* was, as its etymology would suggest, a gangway running the length of the midships rail,¹ and it is a reasonable interpretation from the whole of the evidence that it projected outboard. The question that still confronts us concerns the old name for this ‘catwalk’ at right angles to the side of the vessel, the particular *epegkenis* ‘now called a gangway’. In this connection it is very noticeable that the one really controversial piece of classical terminology which the *Anon PBPP* omits is that formerly much debated noun *parodos*.² Is it going beyond the evidence to suggest that the old name of the *epegkenis* (= strake?), called in the tenth century a *katapateion*, had been in fact the *parodos*? In appearance if not in primary function there would have been a remarkable coincidence between the *dromon*’s outboard fighting gangway and the no less projecting *apostis*—to use a Venetian term—of the trireme for which Professor Morrison argued so cogently in one of his earliest papers.³ Both structures, too, would have had the same secondary end in that they would have protected to some extent the oars worked from thole-pins set in the planking of the hull proper, an important consideration when it was a favourite ramming manoeuvre to strike a glancing blow along the side of an enemy ship in the hope of shearing away or snapping off a proportion of her oars. On this telling the Byzantine *dromon* should be thought of as being essentially a cut-down trireme, a ‘razee’ to adapt a rather more recent term, in which the *parodos* had lost its thole-pins and seats and been converted into a fighting gangway pure and simple.

A possible objection to this theory could be thought to be provided by another passage in the *Anon PBPP* where it is stated that in cutting down the trireme it had been the oars at the thalamian and not the thranite level that had been discarded.⁴ On closer inspection, however, the objection will be seen

¹ Cf. R. H. (= M.) Dolley, ‘The Warships of the Later Roman Empire’, *Journal of Roman Studies* xxxviii (1948), pp. 47–53.

² On which see now Morrison and Williams (1968), p. 15, which virtually assumes—and rightly so—that *parodoi* are side gangways running the length of the waist.

³ Cf. J. S. Morrison (1941), pp. 23, 27, 31, etc.

⁴ *Anon PBPP*, 2, 7 (Dain (1943), p. 65)—καὶ θαλάμιοι δὲ ἔστιν ὅτε εἰ ἔχει τρεῖς εἰρεσίας ἢ ναῦς. ‘And then [below the rest] it is the “chambermen” if the ship should have three banks of oars.’

to be far from real. The thranite rowers had been the élite of the sailors in classical Athens, and in the same way it was the upper-bank oarsmen who would constitute the cream of the manpower available for the propulsion of the Levantine fleets of the tenth century. It would have been only natural for the two classes to be equated, and especially since the Byzantines appear to have discarded the clumsy *katastroma* introduced by Kimon in favour of a less top-heavy vessel open to the sky.¹ There was in consequence little now about the situation of the lower-bank oarsmen to suggest the *thalamos*, while it is notable that the upper-bank rowers had been transferred to *thranoi*, benches proper and not thwarts, that ran from the uppermost wale or *peritonon* to the Byzantine innovation of the *sterea*, the *corsia* of the Venetian galley, a gangway running down the centre of the ship.² In contrast the lower-bank oarsmen continued to sit on true thwarts running from one side of the ship to the other, and were now the only oarsmen to be so seated, so we cannot well be surprised that the *Anon PBPP* should style them the *zugioi*.³

To sum up. The *Anon PBPP* provides good evidence that in the tenth century there were educated men who took it for granted that the classical trireme had had three superimposed banks of seats and oars exactly as we now see in Professor Morrison's 1941 reconstruction. In itself this may be thought to provide an argument of no little value inasmuch as the new evidence goes far to discount the tendentious and generally unsatisfactory testimony of the *Suda* on the vexed problem of the *parexeiresia*.⁴ Possibly more decisive, though, is the extent to which this tenth-century source establishes once and for all that the *dromon* was not a prototype of the later medieval *a zenzile* galley. To the Venetians alone, it would seem, there must go the credit for the discovery of that most ingenious principle. One may end in consequence with the possibly salutary reflection that if the *a zenzile* galley had been known to the ancients, it is unlikely—to put it no more strongly—that the Byzantines would have ignored the discovery and built biremes of the type with oars on two levels that they undoubtedly did.

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¹ Cf. Dolley (1948), p. 50.

² It is likely that the inboard ends were dovetailed into the *sterea* and the outboard into the *katapateton*, the tops of the ribs being tenoned into morticed sockets in the bench a foot or so above the *peritonon* which received the thranite tholes. In this way the thrust of the oars would have been spread over the whole frame of the ship, and the *katapateton* would have shielded the oars from the glancing blow described above.

³ *Anon PBPP*, 2, 7 (Dain [1943], p. 65)—

καὶ οἱ μὲν ἐπὶ τοῦ θράνου καθήμενοι θρανῖται λέγονται, οἱ δὲ εἰς τὰ ξυγὰ ξύγιοι. 'And the men sitting on the bench are called benchers, and those on the thwarts thwartmen.'

⁴ On which see Morrison (1941), p. 23 and, definitively, Morrison and Williams (1968), pp. 281–3. For assistance with the Greek passages in this paper I am grateful to my colleague, Dr. D. W. Gooding—but this is not to imply his endorsement of all or any of the conclusions.