

Naval Warfare: Its Economic and Social Impact on Ancient Greek Cities

Vincent Gabrielsen

Introduction

We possess a good number of studies that elucidate a variety of technical aspects of ancient Greek naval warfare: considerably more is known today about the innovations made in shipbuilding technology, the origin and development of naval powers, and the way fleets were manned and deployed, to mention only some of the main areas in which noticeable advances have been made.¹ Such fundamental topics, however, as the political, economic and social implications of naval warfare remain largely unexplored.² That neglect is all the more surprising in view of the improved possibilities which the newly-gained insights into the technical matters have provided for exposing and assessing the long-term consequences of a major transformation in the nature of naval warfare that had occurred by the early fifth century BC.

Navies in the proper sense, recent scholarship argues, began to emerge in the Greek world after the middle of the sixth century BC and were chiefly the result of two almost concurrent lines of development. First, the multi-purpose vessels with one or two banks of oars (particularly, the *triakontors* and *pentekontors*) gradually ceded their dominant place in fleets to a new, larger type of craft with three banks of oars and exclusively designed for warfare at sea, the trireme. Even though subsequent innovations led to structural modifications of this ship type and to the introduction of various new types (the quadriremes [*tetereis*], quinqueremes [*pentereis*], and

others, generally called 'polyremes'),³ the basic concept of the specialized warship remained that established by the trireme. Second, states took, in a competitive fashion, the decisive step to build fleets consisting (entirely or mostly) of publicly-owned ships. Thus possession of purpose-built, public vessels in large numbers is seen as the defining characteristic of the developed navy.⁴ If the cardinal points of that exposition are accepted (and our evidence strongly suggests that they should be), then in the period *c.* 550-470 BC a great part of the Greek world faced an entirely novel situation: challenges, needs and pressures of a new kind and an unprecedented scale began to leave their heavy imprint on the economic and social life of naval states. Henceforward *poleis* aspiring to possess and maintain naval establishments had to find ways to respond to economic demands, which even at the best of times exceeded the capacity of their own reserves, financial or otherwise.

In this paper I propose to treat what I believe are two important questions: (1) What were the fiscal systems used by Greek city-states in order to finance naval activity? (2) What was the impact of these systems on the social structure of the city-states involved? I shall focus on two particular *poleis* at two different periods of time: Classical Athens and Hellenistic Rhodes. Before dealing with each of these two naval powers separately, it may be useful to mention briefly some general but significant characteristics of ancient naval warfare.

Naval warfare and resources

Historical accounts of the Classical and Hellenistic periods amply confirm the validity of Thucydides' statement (1.143.5) 'sea power (*thalassokratia*) is indeed a great thing'. It is imperative, however, to avoid the tendency of earlier and more recent scholarship to impute to the word *thalassokratia* the modern, Mahanian-inspired concept 'control of the seas'.⁵ Whether it refers to the principal means by which a hegemonic power tried to keep rivals out of its declared sphere of influence, or to the endeavours of states which—styling themselves policemen of the seas—assumed the task of combating piracy, 'control of the seas' was hardly ever possible for a number of reasons, most of which are related to the peculiar features of ancient warships and the way they were used in naval warfare.⁶

First, fleets were comprised of oared vessels which for tactical purposes were primarily used as weapons, that is, as floating missiles supplied with a powerful bronze ram at their prow with which to puncture an enemy craft, often after performing the manoeuvres of *periplous* and *diekplous*.⁷ Indeed, the ram itself (and so the offensive capability of vessels) was already in existence on the pentekontors and other early, multi-purpose ships.⁸ But its full use in a universally followed (though not equally expertly practised) tactical concept became possible only after the invention of the man-driven torpedo, the trireme. Speed and agility were therefore essential qualities, and to achieve these qualities naval architects strove to construct fairly slender, light ships with, as far as practically possible, maximum oar-power.

Second, and in consequence, these men-of-war were filled to the brim with large rowing complements requiring a large daily intake of food and water, yet they had precious little space available for carrying the amount of provisions actually needed:⁹ the standard crew of the trireme of the Classical period numbered 200, of whom 170 were oarsmen; a slightly different type of warcraft, a quadrireme in the fleet of Hellenistic Rhodes, was manned by forty-six officers and ratings, to which perhaps three times as many oarsmen should be added.¹⁰ Third, lightness for the purpose of speed required that the ships were frequently dried on land so as to avoid their becoming waterlogged. Fourth, in addition to

making possession of great skill a vital prerequisite, handling these vessels posed exorbitant demands in terms of human energy. Simply, the ability of even a well-trained rowing crew to maintain the high speed needed in combat lasted for only a short period of time: as Nikias, the Athenian commander-in-chief of the expeditionary force to Sicily (415–413 BC), explained in a letter to his home government, 'the peak efficiency of a [rowing] crew is brief and few are the oarsmen who can both set the ship out and maintain their oarstroke' (Thuc. 7.14.1).

These four features alone limited severely the warship's radius of action ('action' here does not refer to the leisurely cruising under sail and reduced oar-power) and imposed the need of having not only a naval headquarters adequately supplied with infrastructural facilities and personnel, but also an extensive network of bases dispersed over strategically vital areas.¹¹ Once naval bases are defined as regional aggregations of three contiguous and interacting zones—(a) harbours with their naval installations, (b) adjacent settlements and (c) the cultivated or forested hinterland surrounding them—it becomes easy to appreciate a pronounced economic function which was intimately tied to their strategic significance: their ability to satisfy an ever-present demand for manpower, provisions and naval materials—not least ship-building timber—turned them into arterial systems of recruitment, logistical support and fleet maintenance. *Thalassokratia*, therefore, primarily referred to the successful endeavours of a naval state to possess and control the greatest number possible of conveniently situated bases from which operations could be mounted.

In the sphere of inter-state relations, all this came inevitably to add new impetus to traditional mechanisms of domination. Places which, because of their geographical location and resources, did offer the advantages just described, might try to use them to enhance their own diplomatic and military value. Most of them, however, constantly faced the grim prospect of either being forcefully reduced to subjection by a stronger naval state or—what in many instances amounted to the same—willingly becoming its allied dependencies. It was first and foremost a question of power. Political pressure or

armed violence were taken into use for appropriating another community's naval infrastructure and resources, human as well as material. The acquisition schemes fashioned in order to achieve these ends were admirably sophisticated and fiercely oppressive.

Understood this way, the concept of *thalassokratia* implies intense naval activity, primarily in order to defend existing bases and to acquire new ones, and intense naval activity, in its turn, requires command over enormous material and financial resources. It is to the theme of resources that I now turn.

Besides bringing a specific mode of warfare squarely within the venue of economic activity at large, that theme highlights the frequent correlation between the aims of naval warfare and the means that made its practice possible. 'If some city is rich in ship-timber', wrote a fifth-century Athenian, 'where will it distribute it without the consent of the power having the lead at sea? And if some city is rich in iron, copper, or flax, where will it distribute it without the consent of the leading sea power? In all these, however, I see the very materials of which also my ships are built.'¹² 'His ships', were, of course, those of the Athenian empire. Thucydides' account of how imperial Athens used raw muscle to appropriate the naval establishments of disaffected allies (e.g. Thasos in the 460s,¹³ Samos in 440-438¹⁴), or of how bitterly she fought over control of places renowned for their richness in silver-mines, timber and manpower (Eion and Amphipolis in Thrace¹⁵) offer concrete testimony to that effect. Yet much more valuable—because of the general validity of its conclusions—is Thucydides' incisive analysis of the intimate connection between two pairs of terms: 'naval power' (*nautike dynamis*) and 'preparedness' (*paraskeue*), on the one hand, and 'expenditure' (*dapanē*) and 'revenue' (*prosodos chrematon*), on the other.¹⁶

A dominant thread running throughout the part of his work which scholarship calls the *Archaeology* (but which properly is the section where he constructs the main interpretative framework of his historical account) is the function of financial resources in fuelling the development of naval power, as well as the use of naval power for the acquisition of further financial resources. These points are presented by way of treating a succession of Thalassocracies, from king Minos onwards.¹⁷ More importantly, they preface the ancient historian's

description of how Athens, by 431, had become so great a naval power, in control of such vast amounts of resources, that it brought fear to the Lacedaimonians—in Thucydides' view, the truest cause of the Peloponnesian War (1.23.6). Thus, in an important sense, the Thucydidean analysis is in accord not only with Plato's pronouncement that 'all wars are fought for the possession of wealth' (*Phd.* 66C), but also with Aristotle's conclusion that 'even the art of war is by nature an art of acquisition' (*Pol.* 1256b23).

A fourth-century Attic orator quite fittingly characterized the triremes with the adjective 'gluttonous' (*adephagoi trierei*),¹⁸ thereby indicating the great costs involved in keeping fleets of such ships afloat. Even when an inherent bias towards exaggeration is taken into account, there is much in the surviving source material to document clearly the sheer incidence and general magnitude of economic pressures. Quantifying these pressures with a tolerable degree of precision is, however, a different matter. What we really want to know are the total costs which naval states had to meet in three areas: (a) shipbuilding, (b) maintenance and (c) of having fleets in commission. Yet the sad truth is that we shall probably never be able to reconstruct anything near credible 'naval budgets', for even the evidence from classical Athens, the most richly documented city-state, fails to provide full or reliable information on these matters. Indeed, Thucydides and inscriptions give some figures that are useful pointers to the high level of expenses in only certain areas and in isolated years during the fifth century BC,¹⁹ but there are still substantial gaps. For instance, the total cost of the grand expedition to Egypt in the 450s, which ended in disaster, or the cost of the equally great (and likewise disastrous) expedition to Sicily in 415-413 BC.²⁰ Furthermore, not even qualified guesses can be ventured about the costs of such conspicuously large-scale shipbuilding programmes as that launched by Athens in 483/2, or that by Dionysius I of Syracuse in 399, or the one by Antigonos I in 315, or, again, those which led to the aggrandizement of the Ptolemaic and Seleucid fleets in the third and second centuries BC, not to mention a series of comparable, though not quite as large, enterprises carried out at numerous other places from the later part of the sixth century onwards.²¹

Some comfort comes from the series of fragmentarily preserved Athenian inscriptions known as the naval records. These documents, which generally cover the period 378-322 BC, are the published accounts of the Dockyard Superintendents, a board of officials responsible for the headquarters of the Athenian fleet (i.e. the harbours of Kantharos, Zea and Mounichia). Their meticulously arranged entries record the day-to-day administrative and financial business transacted by these officials, as well as the naval *matériel* in stock in discrete years.²² Still, while these valuable inscriptions document Athens' naval strength in terms of hulls and equipment, and together with the speeches of the orators (e.g., Lys. 21.1-10) give a good impression of the cash spent by private individuals, the trierarchs (cf. below), they have obvious limitations: above all, they are very little concerned with operational expenses and not at all with what can safely be regarded as one of the most onerous budgetary items: paying and maintaining crews. In this regard, moreover, fourth-century Athens is highly exceptional. No comparable material survives from Rhodes, the other city-state with which I am concerned here, nor, for that matter, from any other Classical or Hellenistic naval power.

Our difficulties in quantifying the financial pressures are compounded by two further factors. One is the circumstance—and this is important to remember in the following—that everywhere naval activity was financed partly by public, partly by private funds. The figures provided by our sources relate either to the first or to the second, but seldom, if ever, to both. For instance, a good indication of the expenses of a warship seem to come from an inscription recording the fact that in c. 200 BC the Rhodians set the cost of keeping a trireme in commission for one month at 10,000 drachmas (i.e. 330 dr. per day). That amount, however, appears in a clause of a treaty of alliance stipulating the financial obligations of an allied state (the Cretan city of Hierapytna).²³ We do not know if the ally concerned had to bear all or some of the relevant expenses, nor if that sum was normal or exceptional. It certainly exceeds the daily rate of 200 dr. which fifth-century Athens usually gave to a trireme crew (1 dr. per man: Thuc. 3.17.3). But any inferences that might be drawn from such a comparison are rendered hazardous by our inability to say whether the Rhodian amount expresses—as the Athenian one cer-

tainly does—only what was to be defrayed from public funds, excluding any additional outlays frequently taken care of personally by ship captains.²⁴

The other factor is the almost complete unpredictability of both the duration and the financial requirements of campaigns. In the Classical and Hellenistic periods fleets or squadrons were often dispatched to carry out a multiplicity of objectives on the basis of funding schemes only roughly calculated by their governments—and sometimes even without such schemes at all.²⁵ But as soon they left their home ports, the element of unpredictability increased for every mile they put behind their sterns. An illustration of the exigencies facing fleet commanders in such situations is provided by Demosthenes' censuring of the Athenians in 341 BC: 'For where else do you suppose that he [sc. a fleet commander] looks for the maintenance of his crews, if he gets nothing from you and has no private fortune to furnish their pay? To the sky? No, indeed; it is from what he can collect or beg or borrow that he keeps things going.' (Dem. 8.26).

So the decision of a state to build up a naval establishment was one thing—even if that state (1) quite unexpectedly came into possession of the cash needed to build ships (as Athens did from her silver-mining revenue in 483/2 BC),²⁶ or (2) proved capable of rerouting to that area any surplus accumulated in other spheres of economic activity (as Archaic Corinth is said to have done with her revenue from seaborne commerce),²⁷ or (3) succeeded in enlisting the financial support of another power (as Sparta managed to do via her rapprochement with Persia from 412 BC onwards,²⁸ or, finally, (4) activated the mechanisms of *Herrschaft* for appropriating the reserves of subjected territories (as Achaemenid Persia, imperial Athens, Alexander the Great, the Antigonids, the Ptolemies and other rulers are seen to have done). Quite another thing, however, was to ensure a constant and, if possible, steadily growing flow of resources with which to maintain naval supremacy. Funds, naval materials and manpower came to be three of the most highly prized commodities, and as such they caused those who had them and those who needed them to become interlocked into a variety of complex political and economic relationships.

Few, if any, city-states commanded public treasuries capable of funding such costly projects entirely on their

own. Therefore, two additional, and sometimes complementary, things were needed: (1) a reliable fiscal infrastructure by means of which domestic, private cash could be made available; and, to the extent one could muster the necessary amount of diplomatic skills or military power, (2) the deployment of acquisition schemes

designed for the purpose of gaining control over external resources. How exactly the first of these should be shaped was above all a political issue whose solution mainly hinged on the way a community, according to the prevailing ideology, had defined and arranged its internal power structure.

The Fiscal system of Classical Athens

The principal institution of this system is known as the trierarchy (Greek: *trierarkhia*), a substantive designating the duty or service performed by a trierarch (*trierarkhos*). The word *trierarkhos* is a compound of *trieres* (the Greek word for trireme) and *arkhon* (here, commander), but from early Classical times onwards it was universally used for a warship captain *tout court*, whether the ship in question was a trireme or a different kind of warcraft. Yet, even though virtually all Greek naval states had their ships captained by trierarchs, that position—and in particular the rules determining its appointment and responsibilities—was not everywhere part of the same institutional structure as that of Athens.²⁹ An understanding of the view taken by the Athenian democracy on three issues is crucial for our appraisal of the system introduced at Athens in order to make private cash available for financing naval activity: (a) whether—and if so, the mode in which—private wealth, possessed on a grand scale, should be subjected to the regulatory forces of redistributive mechanisms; (b) the kind of obligations to be carried by individuals *qua* members of a political community as well as the ways of rewarding the fulfilment of these obligations; and (c) who was legally entitled to exercise armed violence.

Attitudes towards the first two had already been formed by, and were being transmitted through, the old custom of *leitourgia*: properly, a useful service to the community as a whole, voluntarily performed by affluent individuals, that is to say, in response to a predominantly moral obligation to expend part of their wealth and time on the public good.³⁰ Democratic Athens adeptly reinforced and redefined aspects of that custom in accordance with the prevailing ideology in order to shape her peculiar liturgy system, one which remained in force throughout Classical times. In principle, that sys-

tem too held on to the view that private wealth and personal abilities should, regularly and out of a strongly-felt moral commitment, be put to public utility. In practice, however, it replaced ‘moral obligation’ with ‘statutory compulsion’, while at the same time it sought to maintain an element of volition by attaching to liturgical spending a set of rewards, mostly honorific ones. These are the main characteristics of the broader institutional framework into which naval commandership, alongside a number of other civic services,³¹ was transferred: the trierarchy became a liturgical obligation. Indeed, liturgies, including that of captaining a warship, were to be found in other states as well (cf. note 29 above). What gave the Athenian system its idiosyncratic style, however, was its being, ideologically and juridically, the product of a particular political regime.

To bring out the view taken by the Athenian democracy on the third issue mentioned above—the right to exercise armed violence—it is necessary to specify, at least cursorily, the meaning of a central concept: naval activity. This largely consisted of either one of two things. Anyone who wishes to become familiar with a *formal* sea battle can read through the chapters of Herodotus (and the verses of Aeschylus’ *Persae*) on the battles at Artemision and Salamis (480 BC), or those of Thucydides on the battles off the Sybota islands (433 BC), in the Crissaean Gulf (i.e. Phormio’s operations in 428 BC) or those of Xenophon on the battle at Argynousai (406 BC), or those of Diodorus on the engagement between the fleets of Demetrius Poliorcetes and Ptolemy at Salamis in Cyprus (306 BC), or any other account of similar engagements by these and other authors. But if one wants to be acquainted with *informal* naval warfare, then good descriptions, which are fairly representative of innumerable other such instances in our sources, are avail-

able in Xenophon's account of how, from their base in Aegina, the ships of the Spartan admiral Teleutias carried out a night attack on the harbour of the Piraeus, and in Diodorus' account of how small squadrons of Rhodian craft operated during Demetrius' siege of Rhodes in 305-304 BC.³²

A formal battle is usually a large-scale engagement of a limited duration between two opposing fleets; its beginning is clearly signalled, its end quite easily perceived by the combating parties. Informal naval activity, on the other hand, essentially consists of surprise attacks carried out by a small number of ships or fleets against other warships, merchantmen or some territory; they may or may not be connected with a formally declared war; to the same kind of activity, of course, belong attempts to offer protection from such assaults, as was for instance the case with squadrons of warships escorting merchantmen. Whereas the formal battle at heart is a forewarned measurement of relative strength between two contestants within a spatially limited scene of action—hence, in an important sense, resembling the hoplite phalanx fighting in land warfare—informal naval activity, in its psychology and techniques, is firmly rooted in a different concept, that of the raid. Already in the world depicted by the Homeric epics the raid mentality constituted *the* dominant structural element in what Aristotle was later to call an 'art of acquisition', and as such it turned peaceful trade and the forceful seizure of goods into interlapping activities, regardless of whether the practitioners were individual heroes or whole communities.³³ Historically, the formal sea battle, like the purpose-built warship, is a later phenomenon—which is why ancient historians were preoccupied with recording its first occurrence.³⁴ Yet the seaborne raid went on being a most widely-used mode of naval warfare, despite the fact that the right to practice it became a major political issue. Much of the history of ancient piracy can be written in terms of the stand taken by states on precisely that issue.

An Athenian warship captain who distinguished himself in the battle against the Persian fleet at Artemision in 480 BC was Kleinias son of Alkibiades. Kleinias, Herodotus reports (Hdt. 8.17; cf. Plut. *Alc.* 1), fought on his private ship and with a crew of 200 men, whom he provided from his own means. Several things

are remarkable about Kleinias. First of all, as the size of his complement strongly indicates, he was the owner of a relatively novel, extremely powerful, and highly expensive, purpose-built warship, a trireme. Secondly, by participating in the fighting with his own ship and crew he responded not so much to a statutory duty as to a moral obligation that emitted from his social and political status: as a member of the old Athenian aristocracy he was expected to display generosity and military valour and to defend his *polis* with his own weapons;³⁵ in so doing, he responded to the norms of the old *leitourgia* custom. Thirdly, on that particular occasion (in 480 BC) he definitely acted both *within* the formal naval establishment of his state and in the pursuit of its strategic aims, but the frequency of campaigns of that kind was hardly high enough by itself to justify the private possession of a regular warcraft. What, then, did Kleinias do with his trireme (and crew) when he was not busy defending his *polis*?

He very probably used it to honour another kind of obligation, one at least as strong as that to defend his own community: to fight on the side of an influential foreign connection with a view to fulfilling such vows of reciprocal allegiance as those ensuing from established guest-friendships (*xenia* relationships).³⁶ Again, if driven by political ambition to carve out for himself and his house an offshore, semi-private dominion, the sort of small-scale 'tyranny' which the elder Miltiades appears to have set up for himself in the Thracian Chersonese, personal command over naval resources was indispensable.³⁷ Finally, he almost certainly used it entirely on his own behalf as an independent raider.

The principal word expressing that vocation is *leisteia*, which can retain its traditional rendering 'piracy' (*piraterie*, *pirateria*, *Seeraub*, etc.) as long as we remember three important things. That it referred to a behaviour deeply entrenched in the economic, political and social structure of ancient communities. That the shades of meaning—often pejorative ones—imputed to it by Classical and Hellenistic sources, were strongly coloured by current perceptions about who was and who was not entitled to practice the violent seizure of territory, property and persons by using the sea as a primary means. And, finally, that the distinction often made in our sources and consistently drawn by modern scholar-

ship³⁸—viz. between (a) illegitimate, privately-conducted, gain-motivated maritime aggression and (b) legitimate, ‘political’ maritime aggression committed either during a declared war by the main participants and/or their allies and privateers, or in connection with duly declared retaliatory reprisals—is really an artificial one, and so broadly irrelevant, precisely because legitimacy and illegitimacy were political constructs which could be manipulated by those possessing the necessary amount of power.

The instance concerning the seizure by an Athenian trireme of a merchantman from Naukratis in 355 BC will suffice to illustrate the latter point. The plunder, on high seas, of goods worth 57,000 drachmas from the citizens of a community currently not at war with Athens was a gain-motivated predatory act conducted in private by the two captains who commanded a public warship and the three ambassadors who sailed with them. By contrast, the formal decision of the Athenian political authorities, when they later learnt of the incident, to regard the seizure of Naukratian property as not illegal on the grounds that the cargo of the merchantman ‘at the time was not friendly (viz. to the Athenians)’ was simply the public *justification* of the act, one intimately connected to the view taken by the Athenians that by law the loot was state property. That the Athenian state quite arbitrarily defined the legal nature of the seizure (and, in a formal sense, ultimately became the plunderer) does not alter the fact that the capture of the merchantman was an act of gain-motivated maritime aggression, pure and simple.³⁹

An allegedly Solonian law-clause provides explicit evidence to the effect that Archaic (as opposed to Classical) Athens legally recognized the corporate existence of ‘those going away for plunder (or booty: *leia*)’.⁴⁰ But even without that specific testimony we would still find the same point amply documented in the major implication underlying the inter-communal arrangements concerning the right of seizure (*sylan*),⁴¹ namely that *leisteia* was not always looked upon disapprovingly by states. Closer to the point is Thucydides’ remark (1.5.1-3 ff.) that ‘in earlier times both the Greeks and the Barbarians who dwelled on the mainland [sc. of Asia Minor] near the sea, as well as those on the islands, (...) turned to *leisteia*, under the lead of their most powerful men,

whose motive was their private gain and the support of their weaker followers (...) for this occupation did not as yet involve disgrace, but conferred something even of glory.’⁴² True, especially from Classical times through to the grand-scale Roman anti-pirate campaign that was launched in 102 BC and beyond,⁴³ *leisteia* was constantly condemned and often fought, but that did not keep people from practising it.

By far the most noteworthy thing about Kleinias, however, is the virtual disappearance of his kind from the Athenian record after about 480 BC. The process of harnessing the independent raider all the more to communal decisions and actions had, as the movements of the Younger Miltiades suggest, already begun previously. Operating on his own accord and very probably with his own ships in 493 BC, Miltiades raided Lemnos, captured the island, and then ‘handed it over to the Athenians’—private gains were turned to public property.⁴⁴ His expedition to Paros in 489 BC had indeed all the characteristics of a raid which, according to Herodotus (6.132-133), was undertaken out of purely personal motives. Yet this time Miltiades could employ the force of seventy ships as well as the appropriate amount of funds and manpower only after the Athenian assembly had issued an authorization to that effect, and only after he himself had assured his home authorities that his personal venture against some place (whose identity he did not disclose) would be beneficial to (i.e. it would ‘enrich’, Hdt. 6.132) all the Athenians. In 480 BC, Kleinias fought side by side with other ship captains, or trierarchs. But the majority of these trierarchs commanded *public* triremes and had been appointed by the state to perform an obligation prescribed by the law of democratic Athens.

By that time, Athens had come into possession of an unprecedentedly large fleet, about 200 triremes, most of which had been built through the so-called Themistoclean programme of 483/2. To meet the high costs accruing from the maintenance and operation of that fleet a particular fiscal mechanism was designed by incorporating naval commandership into the orbit of liturgical obligations. Henceforward, what was needed on board every ship was a rich man who could aid the public treasury by making cash payments on the spot: wealthy Athenians were required, for one year at a time, to captain and finance a trireme. Hence, the independent

raider gave way to a state appointee whose primary qualification was the thickness of his purse. The raid mentality, however, persisted. What really changed in Athens is that its practice in naval warfare was deprivatized to become the prerogative of the state.

Not long after the introduction of the new fiscal system came the second measure needed for achieving *thalassokratia*. In 478, the Athenians were recognized as the leading member of the newly-founded Delian League, whose members came under an obligation to provide either ships for the common fleet or cash for the League fund kept at Delos. What initially united these under Athenian leadership was 'a pretext': to exact revenge from the Persians by ravaging the Persian king's territory, certainly also through pillaging and piracy.⁴⁵ There was no doubt in Thucydides' mind that that step signalled the beginning of the Athenian rule (*arche*) over a steadily growing number of allies (1.96-98). The process leading to a further increase in Athens' naval power in the course of the fifth century can, among a host of other measures, be followed (a) in the massive conversion of ship contributions to monetary payments of tribute (*phoros*), (b) in the use of these funds on primarily Athenian war operations (while from 454 onwards the goddess Athena was allowed to skim 1/60 of the incoming amounts of *phoros*), and (c) in the series of confiscations of the fleets belonging to disaffected allies. The general outcome, which is what matters here, is summarized by Thucydides (1.99.3): 'For because of this reluctance [of the allies] to face military service, and in order to avoid being away from home, most of them assessed themselves to pay a corresponding sum of money instead of supplying ships. Consequently, the Athenian fleet grew strong with the money which the allies themselves contributed, while whenever the allies revolted they were ill-prepared and inexperienced for the war.' To finance naval activity fifth-century Athens had managed to direct towards herself an immensely rich flow of external resources by imposing on her subjects collectively the function of an extra-*polis* treasury.

So the years around 480 represent a significant turning-point. In the military sphere, Athens became a naval power in possession of a large public fleet. In the political sphere, the bodies of government (Assembly and Council) took total control of that fleet, which practi-

cally meant that the state ensured for itself total monopoly over the exertion of armed violence at sea. In the economic sphere, two parallel developments occurred: the creation of a fiscal system, the trierarchic institution, as well as Athens' subsequent control over an extra-*polis* treasury, guaranteed the uninterrupted availability of revenue (*prosodos chrematon*) with which to meet naval expenditure (*dapane*); at the same time, a hitherto vital field of private economic activity was dispelled from the polity structure as the pursuit of gain by using the sea was snatched from the independent raider to become the prerogative of the state. Finally, in the social sphere, the old-fashioned naval raider died out. The Athenian democracy gradually tamed the aristocratic warrior by turning him into an honourable tax-payer. The story of the latter process, which runs on to the fourth century, is too long to be told in full here, but its main themes are: (1) the enormous drain on Athens' financial reserves caused by the expenses of the Peloponnesian War; (2) the loss of imperial tribute even before the defeat to Sparta in 404 BC—which was not followed by the loss of the will to embark on new power-political projects relatively shortly afterwards; and, as a consequence of these, (3) the need to squeeze harder the domestic tax-potential (i.e. the rich Athenians) by privatizing an ever-growing part of naval expenditure. It is to the fourth century that we must turn in order to see the effects of all these, especially that produced by the growing privatization.

One cannot but empathize with Apollodoros, the son of an ex-slave (Pasion) who had become one of the wealthiest citizens of Athens. In 362 BC, when Athens was about to send a naval squadron to the northern Aegean, he was required to discharge three obligations: (1) to pay his share of the extraordinary war-tax (*eisphora*) levied in order to finance the expedition; (2) together with 299 others—who like him were the richest men of Athens—to pay in advance the whole amount of that tax-levy (a *proeisphora*) and then try to recoup his money from a number of *eisphora*-payers; and (3) to captain a ship of the expeditionary force.⁴⁶ Even though he tried to perform these duties as conscientiously and lavishly as possible, he was hit by almost every disaster imaginable; that he ultimately proved unable to recoup his advance money (i.e. the *proeisphora*) was among the lesser ones (50.9).

When the warship which he commanded as trierarch had carried out the crossing from the island of Thasos to the Thracian coast, Apollodoros found the shore too hostile to attempt a landing, all the while he had to endure a violent storm. 'So', he says, 'we were forced to ride at anchor all night long in the open sea, without food and without sleep' (50.22). His rowing crew, in total dismay, unfed and exhausted after the crossing, was unable to engage in battle should they be attacked (a reminder of the importance of bases). On a reasonable estimate, the daily amount of food needed by Apollodoros' crew to satisfy their basic energy requirements totalled about 300 to 400 kilograms, most of which would consist of grain; as for water, another indispensable item, they needed one hundred gallons (c. 545 litres) or more.⁴⁷ Initially, his complement consisted of conscripted Athenian sailors, but these he dismissed already before the fleet departed from the Piraeus, because they were too few and too inexperienced. Instead, he hired a full complement of skilful but expensive specialists from the open market (50.7-8); from this point on his troubles started for good. For in spite of the fat wages Apollodoros paid them, his crew deserted ship four times, and each time he had to hire fresh manpower by offering higher pay. On top of this, the trierarch appointed to succeed him the following year failed to arrive from Athens, with the result that Apollodoros had to serve an extra term—and spend more money; all the while, as he complained later, not only was his own life at risk, but at home his farm was being neglected, his wife fell ill, his children were still minors and his mother breathed her last shortly after he reached harbour (50.59-62). In the end, he was compelled to raise loans from five different creditors in order to meet the running expenses of his obligation. And indeed these expenses did not include any compensatory payments—usually in the order of 5,000 drachmas or more—which his government would demand of him, in the event his ship was damaged or lost.⁴⁸

Apollodoros would have confirmed the point which, according to Thucydides (1.121.3), a Corinthian representative made before a Peloponnesian assembly held at Sparta already in 431 BC: 'For by contracting a loan we (the members of the Peloponnesian League) can use the inducement of higher pay to entice away from the Athe-

nians their foreign crews: for the strength of the Athenians consists of hired hands rather than their own citizens.' In his own speech to the Athenians in the same year, one also reported by Thucydides (1.143.1-2), Pericles confidently emphasized the naval skills of Athenian citizens and the loyalty of the foreign sailors serving in the Athenian fleet. Either of these remarks highlights the virtual inability of even such a large city-state as Athens to respond to the demands for manpower without resort to recruitment of foreign labour, free or slave.⁴⁹

Surely, Apollodoros would also have subscribed to the fourth-century orator's characterization of triremes as 'gluttonous' (cf. p. 74 above). How gluttonous triremes could be is shown by another example from the latter half of the fourth century: Konon son of Timotheos, and grandson of the victor at the battle of Knidos, had in a ten-year period spent about 70,000 drachmas on several trierarchies; a large part of that sum (which seems astronomical when compared to the one and a half to two drachmas per day earned by a skilled labourer) consisted of compensatory payments for damaged or lost ships.⁵⁰ Granted, not all trierarchs incurred so great expenses. But even when—as in most cases—the level of outlays was lower, the very frequency of their recurrence was high enough to produce a cumulative financial burden which, in combination with the liabilities incurred from other civic obligations, forced this class of people to adjust their economic action according to their financial circumstances and responsibilities, mainly in two ways. Negatively, by minimizing expenditure on personal extravagance and conspicuous consumption, or through the hypothecation of their property in order to obtain loans. And positively, by expanding or intensifying their economic operations—be it as rentiers, contractors of silver-mines, investors in trade, or producers of marketable agricultural goods—in order to generate the surplus capital needed.⁵¹

Finally, Apollodoros would have tacitly agreed with the complaints made by other Athenians about the burdensome liturgies, the trierarchies, the tax-paying groups (*symmories*) and the personal dangers to which they were exposed when sailing aboard a trireme.⁵² In the 330s and 320s, privatization of naval costs had reached hitherto unheard of levels. All those liable to these fiscal demands had of course two options which they sometimes used.

One was to try to evade their obligation entirely by claiming lack of financial resources on the scale required (a claim usually accompanied by attempts to conceal their property),⁵³ though this they could do only at the risk of being challenged to the dreaded *antidosis*, the exchange of properties.⁵⁴ The other was to find a substitute

who, for a sum of money, agreed to take over part of their duty and captain the ship on their behalf. Yet resorting to either of these means removed the fourth-century Athenian trierarch even farther away from his precursor, the independent raider.

Hellenistic Rhodes

In 227 BC, Rhodes was hit by a severe earthquake that caused the great Colossus and the larger part of the city walls and naval dockyards to collapse.⁵⁵ Historically, however, that catastrophe is more significant for the improvement it brought than for the damages it caused. Polybius explains how the Rhodians, through a tremendous amount of skilful diplomatic footwork, ‘made such an impression on the cities, and especially on the kings, that not only did they receive presents beyond measure (i.e. material aid amounting to far more than the extent of the actual damage) but they even made the donors feel under obligation to them.’ (5.88.4). Of the gifts listed by Polybius to have been given on that occasion those featuring most prominently are the very commodities by which Rhodes could maintain its primacy as a trading centre and as a naval power: notably, cash, grain and naval materials. Ptolemy III Euergetes gave pine timbers (probably from Cyprus) for the construction of ten quinqueremes and ten triremes, 3,000 pieces of sailcloth and tow weighing 3,000 talents, in addition to a consignment of corn to feed the crews of ten triremes. Antigonos III Dason offered high quality Macedonian timber (probably roof-timbers cut to size for the repair of the dockyards), and substantial amounts of pitch, tar, iron and lead. The gift of the Syrian king Seleucus II Kallinikos included ten ready-built quinqueremes provided with complete sets of gear, shipbuilding timber and 1,000 talents each of raisin and hair. If we add the gifts—of the same or similar kind—which were given by many other donors, but which Polybius saw no need to record in detail, then we can appreciate the degree to which the Rhodians proved able to boost their naval establishment by capitalizing on the catastrophe.

Two comments seem necessary. First, what this whole affair really documents is not the *creation* of a net-

work of external suppliers, but rather the inducement of traditional suppliers to make synchronized, ad hoc and exceptionally large contributions of valuable commodities—thus relieving the recipient city of the economic pressures which it would otherwise have had to lift itself in connection with a refurbishment of its naval establishment; and, as it may already have been noticed, virtually all of the commodities concerned in this instance are identical to those which a fifth-century Athenian had said could be acquired by his state by virtue of ruling over an empire (cf. 74 and note 12). Second, all these givers hurried to respond to the Rhodian appeal out of an obvious self-interest in the maintenance of a first-rate naval power which, besides operating a vast trading-network of its own, was willing to service their separate economic needs. In the Hellenistic period Rhodes had assumed the leading position which was previously held by Athens among crack fleets of the eastern Mediterranean. Rhodian naval supremacy and, above all, its overly benevolent function towards a large number of trading communities is emphasized by Polybius’ account of the conflict between Rhodes and Byzantion in 220 BC—especially by his statement ‘the Rhodians had the lead at sea’⁵⁶—and by other authors, too. In the context of 305/4 BC, Diodorus (20.81) writes:

The city of Rhodes had a powerful navy and enjoyed the finest government in Greece, and so was an object of competition between the dynasts and kings, as each sought to win it over to his friendship. (...) It had reached such a peak of power that it took up on its own, on behalf of the Greeks, the war against the pirates and cleared the sea of that scourge. (trans. Austin 1981, no. 39).

Again, referring to Hellenistic times, Strabo (14.2.5 [652-53]) says:

It (i.e. the city of Rhodes) is also remarkable for its good order (*eunomia*) and for the care it devotes to the rest of its administration and especially to naval matters; as a result it controlled the seas for a long time and destroyed piracy, and became a friend to the Romans and to those of the kings who were well disposed both to the Romans and to Greeks. (trans. Austin 1981, no. 92).

Archaeological evidence and inscriptions add to that picture by way of firmly documenting the existence of a huge naval infrastructure which, in addition to an extensive system of dockyard facilities at home, comprised a far-reaching web of naval bases abroad.⁵⁷ There is absolutely no doubt that the Rhodians too drew on their domestic capital in order to finance such a prodigiously expensive structure and particularly their fleet. Yet it appears that they did so primarily by resorting to schemes that bear little resemblance to those used in Classical Athens. The specific character of these schemes depended on whether or not the political regime was susceptible to an ideology prescribing three things: (a) the enforcement of redistributive mechanisms mainly based on compulsion; (b) the complete nationalization of the practice of armed violence at sea; and, consequently, (c) the denial to individuals of the right to use naval activity as a venue to private enrichment, and hence also as a form of production.

Indeed, at Rhodes, too, public warships were captained by appointed trierarchs who also had financial obligations. Furthermore, though there is no explicit evidence to document such a thing, the trierarchy might have been one of the liturgies which wealthy citizens were expected to undertake. But even so, it would be completely unwarranted to assume that the liturgies there were subject to the same rules and institutional setting as those of Classical Athens. In fact, there are distinct indications to the effect that the Rhodian naval organization differed from that of Classical Athens in certain important respects. One of these is that at Rhodes there existed a *formal* substitute for those trierarchs who

either were not able or did not wish to command their vessel in person—the officer bearing the title *epiplous*.⁵⁸ At Athens, on the contrary, not only was the obligation of wealthy men appointed to serve as trierarchs formally inalienable, but such substitutes were, from an official point of view, nonexistent—to which should be added that, at least on one occasion, the trierarchs who had transferred the active part of their duty to a substitute risked being collectively charged with treason and desertion because their evasive action was believed to have been the cause of a naval defeat.⁵⁹

More generally, though no less importantly, what fails to surface in a voluminous body of inscriptional evidence from Rhodes is anything to indicate the use of such compulsory mechanisms as those known from Classical Athens (including the organization of tax-payers and trierarchs into symmories and the antidosis procedure). In the Rhodian material, references to extraordinary taxes in the form of *eisphorai* and *proeisphorai* are staggeringly few, date from the very end of the Hellenistic period, and appear in contexts that are not even remotely associated with the navy or military activity at large.⁶⁰ Absent too are such, and similar, schemes from the exceptionally detailed literary record that chronicles an entire year's severe military crisis, i.e. Rhodes' siege by Demetrius in 305-304 BC (Diod. 20.83-100.5). What does surface, instead, with a frequency that makes the total lack of evidence for compulsory mechanisms even more conspicuous is a different mode of utilizing private cash for communal purposes: the publicly solicited voluntary contributions (*epidoseis*).⁶¹ Even though the projects attested so far to have been funded that way do not include military operations (but see Diod. 20.88.3), the preponderance of such schemes in our source material is still of significance, inasmuch as it suggests that the Rhodians generally preferred voluntarism to compulsion.

The most significant difference between Classical Athens and Hellenistic Rhodes, however, lies elsewhere. Notably, in the fact that a considerable part of the latter state's fleet consisted of private ships whose owners put them at the service of the state; in other words, a system akin to that known to the Athenian Kleinias. Aristotle reports that (at some fourth-century date) the Rhodian trierarchs successfully carried out an oligarchic revolution, primarily because under the democratic govern-

ment they had been unable to recover money owed to them by the state.⁶² The transactions alluded to here cannot have represented simply the reimbursement of captains for expenses they had incurred while serving on public ships, since in that case trierarchic service would not have entailed any monetary outlays at all—a construct which is out of the question because it misleadingly reduces the financial obligations of trierarchs to the provision of short-term loans. In addition, the situation described here is completely the reverse of that prevailing in Classical Athens, where much too often it is the trierarch who was deeply in debt to the state.⁶³ Rather, Aristotle refers to a system, according to which the trierarchs took upon themselves an obligation that elsewhere fell entirely on the state: to provide ships and gear (and probably crews, too) in return for a fixed sum of money. A good part of the Rhodian fleet consisted of privately-owned ships chartered by the state.

Intimately connected to that system of partly public, partly private ships—and so reflective of it—are the types of vessels used in the Rhodian naval establishment. They fall into two general categories. One was comprised of an unknown number of relatively large types of craft which were primarily designed for deployment in formal sea battles. Their structural characteristics placed them—alongside some other, even larger denominations (the ‘polyremes’) which crop up in other fleets in early Hellenistic times—in the class of ships called *kataphracts* (‘fenced-in’ or ‘armoured’ vessels, provided with a superimposed fighting-deck and protecting screens along the sides forming an oarbox). Ships of that category in the Rhodian navy consisted of triremes, quadriremes and quinqueremes, that is, three different versions of the specialized (or purpose-built) warship. The other category was made up of a variety of smaller craft, whose structural features set them apart from the *kataphracts* and gave them a generic appellation of their own: *aphracts* (light, ‘unfenced’ ships without an oarbox or screens).⁶⁴ The presence of this latter kind of craft in the fleet of Rhodes (and in those of other states) is a reminder of the fact that the almost complete transition—one best documented in Classical Athens—from multi-purpose galleys to the purpose-built warship was far from a universal phenomenon. A number of navies retained, or frequently enlisted the services of, a contingent of vessels

that performed a wider range of functions, of which employment in formal sea battles was generally not the principal one.

Most, if not all, of these functions subsumed under the concept of the raid. Still towards the end of fifth century BC, the Rhodian federal fleet counted a number of multi-purpose pentekontors.⁶⁵ The ‘double-banked’ galleys (*dikrotoi*) mentioned by Hellenistic sources are either that or a closely similar kind of ship.⁶⁶ Another type which is attested to in the same period as a unit in an expeditionary squadron is the ‘oared vessel of two banks’ (*epikopon ploion dikroton*), probably a merchant galley that was used as a naval auxiliary after it had been beefed up with a second bank of oars and had its prow armed with a ram.⁶⁷ Furthermore, it seems likely that Rhodes possessed also some triremes of the *aphract* version.⁶⁸ But by far the greatest in importance and numbers among the Rhodian contingent of *aphract* vessels were the *triemioliai*, after which came a lesser number of an akin ship-type, the *hemioliai*.⁶⁹ Our sources often describe the *hemiolia* as a type of craft preferred by pirates, the *triemiolia* as the type favoured by those chasing pirates,⁷⁰ but perhaps we should steer clear of such stereotyping and accept that the pirates themselves also used *triemioliai* (and other types of ships) whenever convenient. Much more relevant is to note that, since the tactics of the pirate and his chaser were basically identical (and therefore both of them opted for craft that was swift and structurally suitable for sudden raids and surprise attacks), the main—but not the sole—functional characteristic of the *hemioliai* and the *triemioliai* was predatory action, regardless of whether the target was the pirate’s prey, the pirate himself, or enemy craft at large.

How great an emphasis the Rhodians laid on that characteristic is indicated by two peculiar features of their naval organization. One concerns the varying composition of their fleets according to the nature of military operations in which they were engaged: while their *aphract* ships—and especially the *triemioliai*—were seldom deployed in large-scale, formal battles and then only in insignificant numbers, such craft constituted the standard units in raiding expeditions.⁷¹ The other is that nine times out of ten the Rhodians fought no formal battles but chased pirates.⁷² The close link between the design of ships and the purposes for which these were

used was not a new one. Thucydides (1.10.4) distinguishes between two kinds of vessels: (1) the *kataphract* ships of the developed navy (*kataphract* at that time referring to purpose-built warships supplied with a raised deck above and a protective leather screen at the sides); and (2) the older types ‘that were fitted out pirate-style (*leistikoteron*)’, that is, fast, *aphract* vessels.⁷³ It thus appears that the functional nexus between *aphract* vessels and raiding activity (see e.g. Diod. 20.97.5), and the frequent dissociation of both from the purpose-built warship, had already been firmly established in the fifth century BC.

In many places, the raid mentality never really lost its close affinity to private ship-ownership, be that the possession of a merchant galley, a multi-purpose *aphract* vessel, or even a specialized warship. In 412 BC, the Rhodian Dorieus, a celebrated Olympic victor and member of the prominent Ialysian family of the Diagoridai, made his political come-back from his place of exile (Thurii) by joining the Spartan fleet with ten triremes he owned in private.⁷⁴ His possession of fighting vessels placed him within a long-lasting tradition adhered to by men of comparable status, both at home and abroad. In the Homeric catalogue of ships, Rhodes is represented by nine vessels, made up of three groups, with one group belonging to Ialysos, one to Camiros, and one to Lindos—the three separate political communities that in the fifth century BC merged (through a political *synoikism*) to form the federal state of Rhodes.⁷⁵ These ships were owned by aristocratic families. In addition to the Athenian Kleinias, famous predecessors of the Rhodian Dorieus are to be found in such independent raiders as Philippos son of Boutakides from Kroton, who in 510 BC participated in the campaign of the Spartan Dorieus on his own trireme and crew, or Phaylos, another prominent citizen of Kroton, who in 480 BC took his own ship to the battle of Salamis, or the Phocaeon Dionysios, who after the battle of Lade took off with his own ships to Sicily where he enriched himself by operating as a full-time raider.⁷⁶

Classical Athens’ clear break with that tradition—seen already in the law ordaining that goods violently seized by the use of public warships were state property, Dem. 24.12—is neatly illustrated by the political incident caused by one Makartatos. In the early fourth cen-

tury he sold his plot of land in order to raise money with which to purchase a trireme. Then, having hired a complement, he sailed off to fight as a privateer on the side of a Cretan city which at that time seems to have been on unfriendly terms with Sparta. This is the sole known instance of private ownership of a warcraft at Athens after 480 BC. And even though Makartatos was acting outside the naval organization of his *polis*, the mere fact that an Athenian citizen used a regular warship for a purpose likely to endanger Athens’ relations to Sparta sufficed to upset the Athenians so greatly as to put the matter on the agenda of the assembly: Athens did not tolerate independent naval action of that kind.⁷⁷ Other city-states, however (perhaps including Classical Sparta and some of its Peloponnesian allies),⁷⁸ armed themselves by resort to a mixed system of public and private ships, with some of the private ones belonging to their own citizens, some to foreign privateers: Makartatos offered precisely that sort of service, and so also did (to mention but one other example) the *c.* 1,000 part-time merchants, part-time-privateers who, in addition to *peiratai*, joined Demetrius’ forces during his siege of Rhodes in 305–304 BC.⁷⁹ The motive which our sources give for the former group’s participation in the siege—i.e. the private gain likely to accrue from plundering wealthy Rhodes (Diod. 20.82.4)—shows that the line separating the merchant, the privateer and what we call a pirate was often thin enough as to be nonexistent.

In contrast to the Athenian Makartatos stands Hannibal, the daring Carthaginian who (for some reason unknown to us) was nick-named ‘the Rhodian’. Acting *within* the naval organization of his country during the First Punic War (264–241 BC), he created havoc among the Roman contingents with his private warship, an exceptionally fast quinquereme—which after his capture was used by the Romans as the model for a brand-new fleet.⁸⁰ Almost certainly, his outstanding skills in seamanship, especially as a blockade runner, were acquired in the same way as those of the Athenian Kleinias: by operating, for most of the time and with his state’s condonation, as an independent raider. At some early second-century date, the Rhodian admiral Epikrates, who currently held command over a fleet of ships from Rhodes, the Nesiotic League and Athens, issued an ordinance to the effect that those among his forces who car-

ried out piratical raids against the enemy may not launch their attacks from Delos but must use their own harbours as bases. Epikrates neither condemned nor prohibited the practice itself; he only sought to spare Delos from becoming the target of reprisals.⁸¹ Granted, that occurred during a time of armed conflict, but there is nothing peculiar (or overly significant) in the fact that warfare provided a justification for acts of violence that frequently were committed in peacetime as well. Whenever piratical activity comes under fire in our sources, it frequently takes the form of exasperated outbursts of condemnation pointedly targeted at the Cretans, the Ozolian Locrians, the Aetolians, the Acarnanians, the Tyrrhenians, the Cilicians and the Illyrians.⁸² Yet, on that matter, many more states actually continued to hold an opinion very similar to that which the Illyrian Queen Teuta tersely expressed in her response to an official Roman complaint (230 BC) about the assaults of her subjects' vessels on Italian shipping: 'so far as concerned private activities, it was not customary for Illyrian rulers to preclude their subjects from augmenting their fortunes at sea.'⁸³

In about 260 BC, the commanders and crews of three Rhodian *triemioliai* put up a dedication to Athena at Lindos. They had just returned from one or more operations against Tyrrhenian pirates, and to thank the goddess for the successful completion of their mission they offered her part of the booty (*laphyra*) which they had captured from the pirates as 'the first fruits' (*aparcha*).⁸⁴ It is pointless to try to decide whether that mission was a private or public one: it simply was both. The dedication was a private one, as also in all likelihood were the ships involved. No official authorization of that (or any other known) mission is recorded, and none may have been needed, since the task accomplished by these units was fully in accord with Rhodes' policy to pose as the protector of trade and as a dedicated combatant of piracy. Moreover, 'booty', as the clause of a treaty from c. 200 BC makes clear,⁸⁵ often comprised not only the pirates' capture (persons and valuables), but also the pirates themselves and their ships. If, as seems certain, the commanders of these three *triemioliai* themselves kept the remaining and greatest part of the booty, then their action must, indeed, be viewed as a substantive mode of

'augmenting their fortunes at sea'. And, inevitably, this view could also be applied to their ability, as proprietors of multi-purpose craft or even regular warships, to engage in various fields of economic activity—be it the non-violent pursuit of their own trading interests, or the offer of protection to Rhodian and foreign shipping against raiders, or, whenever opportune, the violent appropriation of wealth belonging to others.

So, in Hellenistic Rhodes, the political regime (whether democratic or oligarchic) appears to have been resilient to the ideological prescriptions mentioned above (p. 82): neither the enforcement of redistributive mechanisms based on compulsion, nor the total nationalization of armed violence, nor, again, the denial to individuals of the right to enrich themselves through naval activity seemed workable propositions there. Rather, the regime in Hellenistic Rhodes chose to respond positively to a different ideological construct, one that recommended that the increasing financial burdens imposed by naval warfare be met by allowing certain key aspects of the traditional power-structure, including the aristocratic habit of private ship-ownership, to run their course. Consequently, the long-term impact of that choice on the socio-political sphere was of a fundamentally conservative nature: for one, the fiscal system remained anchored to the old, pre-Classical (and non-Athenian) notion of the *leitourgia* custom; for another, not only was the independent raider allowed to live on, but his dealings continued to be an acceptable mode of economic activity that was largely in harmony with the interests of his state. Throughout Hellenistic times, a large part of the Rhodian fleet remained in the hands of a limited but overly dominant group of families which, in addition to having monopolized almost all higher functions of the state, formed a nearly close-ended and powerful naval aristocracy. Hence, while the fourth-century Athenian warship captain appears all the more often in the pitiful guise of the begrudging tax-payer, his Rhodian counterpart is frequently seen in inscriptions as publicizing his naval exploits with a self-assertiveness and pride that prove him to be a far more worthy successor of the Athenian Kleinias.

Department of History, University of Copenhagen

Bibliography

- Austin, M.M. 1981. *The Hellenistic World from Alexander to the Roman Conquest: A Selection of Ancient Sources in Translation*. Cambridge: Cambridge University Press.
- Berve, H. 1937. Miltiades: Studien zur Geschichte des Mannes und seiner Zeit. Berlin: forlag?
- Blackman, D.J., Knoblauch, P. and Giannikouri, A. 1996. Die Schiffshäuser am Mandrakihafen in Rhodos, *AA*, 371-426.
- Blinkenberg, C. 1938. *Triemiolia. Étude sur une type de navire rhodien*. Det Kgl. Danske Videnskabernes Selskab, Archæologisk-kunsthistoriske Meddelelser II.4 (Lindiaka, VIII). Copenhagen.
- Bravo, B. 1980. Sylân. Représailles et justice privée contre des étrangers dans les cités grecques, *ASNP* 3rd ser., vol. 10.3, 675-97.
- Brulé, P. 1978. *La piraterie crétoise hellénistique*. Annales littéraires de l'Université de Besançon 223. Paris.
- Casson, L. 1986. *Ships and Seamanship in the Ancient World*, 2nd ed. Princeton, N.J.: Princeton University Press.
- Casson, L. 1991. *The Ancient Mariners*, 2nd ed. Princeton, N.J.: Princeton University Press.
- Casson, L. 1995. Merchant Galleys, in Gardiner and Morrison 1995, 117-26.
- Coates, J.F., Platis, S.K. and Shaw, T.J. 1990. *The Trireme Trials, 1988. Report on the Anglo-Hellenic Sea Trials of 'Olympias'*. Oxford.
- Davies, J.K. 1969. Demosthenes on Liturgies: A Note, *JHS* 87, 309-33.
- Dell, H.J. 1967. The Origin and Nature of Illyrian Piracy, *Historia* 16, 344-58.
- de Souza, P. 1998. Towards a Thalassocracy? Archaic Greek Naval Developments in Fisher N. and van Wees, H. (eds.), *Archaic Greece: New Approaches and New Evidence*, 271-93. London and Swansea: Duckworth.
- de Souza, P. 1995. Greek Piracy, in Powell, A. (ed.), *The Greek World*, 179-98. London and New York.
- Figueira, T.J. 1991. Athens and Aegina in the Age of Imperial Colonization. Baltimore and London: Johns Hopkins Univ. Press.
- Gabrielsen, V. 1986. *Phanera* and *Aphanes Ousia* in Classical Athens, *C&M* 37, 99-114.
- Gabrielsen, V. 1987. The Antidosis Procedure in Classical Athens, *C&M* 38, 7-38.
- Gabrielsen, V. 1994. *Financing the Athenian Fleet: Public Taxation and Social Relations*. Baltimore and London: Johns Hopkins University Press.
- Gabrielsen, V. 1997. *The Naval Aristocracy of Hellenistic Rhodes*. (Studies in Hellenistic Civilization, 6). Aarhus: Aarhus University Press.
- Gardiner, R. and Morrison, J.S. (eds.) 1995. *The Age of the Galley: Mediterranean Oared Vessels since Pre-classical Times*. (Conway's History of the Ship). London: Conway Maritime Press.
- Garlan, Y. 1978. Signification historique de la piraterie grecque, *DHA* 4, 1-16.
- Garlan, Y. 1989. *Guerre et économie en Grèce ancienne*. Paris.
- Gauthier, P. 1972. *Symbola. Les étrangers et la justice dans les cités grecques*. Nancy.
- Gomme, A.W. 1933. A Forgotten Factor in Greek Naval Strategy, *JHS* 53, 16-24.
- Haas, C.J. 1985. Athenian Naval Power before Themistocles, *Historia* 34, 29-46.
- Hansen, M.H. 1974. The Sovereignty of the People's Court in Athens in the Fourth Century B.C. and the Public Action against Unconstitutional Proposals. (Odense University Classical Studies, 4). Odense: Odense University Press.
- Hassal, M., Crawford, M. and Reynolds, J. 1974. Rome and the Eastern Provinces at the End of the Second Century BC, *JRS* 64, 195-220.
- Herman, G. 1987. *Ritualised Friendship and the Greek City*. Cambridge: Cambridge University Press.
- Holladay, A.J. 1988. Further Thoughts on Trireme Tactics, *G&R* 35.3, 149-51.
- Hunt, P. 1998. *Slaves, Warfare and Ideology in the Greek Historians*. Cambridge: Cambridge University Press.
- Jackson, A.H. 1973. Privateers in the Ancient Greek World, in Foot, M.R.D. (ed.), *Warfare and Society. Historical Studies in Honour and Memory of J.R. Western*, 241-53. London.
- Kallet-Marx, L. 1993. *Money, Expense, and Naval Power in Thucydides' History 1-5.24*. Berkeley: University of California Press.
- Lazenby, J.F. 1987a. The Dieklous, *G&R* 34.2, 169-77.
- Lazenby, J.F. 1987b. Naval Warfare in the Ancient World: Myths and Realities, *IHR* 9, 438-55.
- Lewis, N. 1960. Leitourgia and Related Terms, *GRBS* 3, 175-84.
- Lewis, N. 1965. Leitourgia and Related Terms (II), *GRBS* 6, 227-30.
- MacDonald, B. 1984. *Leisteia* and *Leizomai* in Thucydides and in I.G. I (3rd edn.) 41, 67 and 75 *AJPh* 105, 77-84.
- McKechnie, P. 1989. *Outsiders in the Greek Cities in the Fourth Century BC*. London and New York: Routledge.
- Meiggs, R. 1982. *Trees and Timber in the Ancient Mediterranean World*. Oxford: Oxford University Press.
- Meijer, F. 1986. *A History of Seafaring in the Classical World*. New York: St. Martin's Press.
- Migeotte, L. *Les souscriptions publiques dans les cités grecques*. (Hautes Études du monde Gréco-Romaine, 17). Geneva and Quebec.
- Momigliano, A. 1944. Sea Power in Greek Thought, *CR* 58, 1-7.
- Morisson, J.S. 1974. Greek Naval Tactics in the Fifth Century B.C., *IJNA* 3.1, 21-26.
- Morrison, J.S., 1991. The Greek Ships at Salamis and the Dieklous, *JHS* 111, 196-200.
- Morrison, J.S. and Coates, J.F. 1986. *The Athenian Trireme: The History and Reconstruction of an Ancient Greek Warship*. Cambridge: Cambridge University Press.
- Morrison, J.S. and Coates, J.F. (eds.) 1989. *An Athenian Trireme Reconstructed: The British Sea Trials of 'Olympias', 1987*. (BAR International Series, 486). Oxford: British Archaeological Reports.

- Morrison, J.S. and Coates, J.F. 1994. *Greek and Roman Oared Warships, 399-31 BC*. Oxford: Oxbow.
- Morrison J.S. and Williams, R.T. 1968, *Greek Oared Ships, 900-323 BC*. Cambridge: Cambridge University Press.
- Murray, W.M. 1989. *Octavian's Campsite Memorial for the Actian War*. (Transactions of the American Philosophical Society, 79:4). Philadelphia.
- Nowag, W. 1983. *Raub und Beute in der archaischen Zeit der Griechen*. Frankfurt.
- Ormerod, H.A. 1924. *Piracy in the Ancient World: An Essay in Mediterranean History*. Liverpool: University Press of Liverpool.
- Osborne, R. 1991. Pride and Prejudice, Sense and Subsistence: Exchange and Society in the Greek City, in Rich, J. and Wallace-Hadrill, A. (eds.), *City and Country in the Ancient World*, 119-45. London and New York: Routledge.
- Perlman, P. 1999. *Krêtes aei lêistai?* The Marginalization of Crete in Greek Thought and the Role of Piracy in the Outbreak of the First Cretan War, in Gabrielsen, V. et al. (eds.), *Hellenistic Rhodes: Politics, Culture, and Society*. (Studies in Hellenistic Civilization, 9), 132-61. Aarhus: Aarhus University Press..
- Pugliese Carratelli, G. 1939-40. Per la storia delle associazioni in Rodi antica, *ASAA* n.s. 1-2, 147-200.
- Rauh, N.K. 1998. Who were the Cilician Pirates?, in Swiny et al. (eds.), *Res Maritimae. Cyprus and the Eastern Mediterranean from Prehistory to Late Antiquity*. Proceedings of the Second International Symposium 'Cities on the Sea', Nicosia, Cyprus, October 18-22, 1994, 263-83. Atlanta.
- Rodgers, W.L. 1937. *Greek and Roman Naval Warfare: A Study of Strategy, Tactics, and Ship Design from Salamis (480 B.C.) to Actium (31 B.C.)*. Annapolis, Md.: Naval Institute Press.
- Rougé, J. 1981. *Ships and Fleets of the Ancient Mediterranean*. Middletown, Conn.: Wesleyan University Press.
- Segre, M. 1936. Dedicativa votiva dell'equipaggio di una nave rodia, *Clara Rhodos* 8, 227-44.
- Semple, E.C. 1916. Pirate Coasts of the Mediterranean, *Geographical Review* 2, 134-51.
- Shaw, T.J. (ed.) 1993. *The Trireme Project: Operational Experience 1987-1990. Lessons Learnt*. (Oxbow Monographs, 31). Oxford: Oxbow Books.
- Starr, C.G. 1989. *The Influence of Sea Power on Ancient History*. New York and Oxford: Oxford University Press.
- Strauss, B.S. 1996. The Athenian Trireme, School of Democracy, in J. Ober and C. Hedrick (eds.), *Démokratia: A Conversation on Democracies, Ancient and Modern*, 313-26. Princeton, N.J.: Princeton University Press.
- Strauss, B.S. 2000. Democracy, Kimon, and the Evolution of Athenian Naval Tactics in the Fifth Century B.C., in P. Flensted-Jensen et al. (eds.), *Polis and Politics. Studies in Ancient Greek History presented to Mogens Herman Hansen on his Sixtieth Birthday, August 20, 2000*, 315-26. Copenhagen: Museum Tusulanum Press.
- Wallinga, H.T. 1993. *Ships and Sea-Power before the Great Persian War: The Ancestry of the Ancient Trireme*. Leiden: Brill.
- Wees, H. van 1992. *Status Warriors: War, Violence and Society in Homer and History*. Amsterdam: J.C. Gieben.
- Welwei, K.W. 1974. *Unfreie im antiken Kriegsdienst, I: Athen und Sparta*. Wiesbaden.
- Whitehead, I. 1987. The Periplus, *G&R* 34:2, 178-85.
- Ziebarth, E. 1929. *Beiträge zur Geschichte des Seeraubs und Seehandels im alten Griechenland*. (Hamburger Beiträge aus dem Gebiet der Auslandskunde, 30). Hamburg.

Notes

- 1 Morrison and Williams 1968; Rougé 1981; Morrison and Coates 1986, 1989 and 1994; Meijer 1986; Casson 1986; Wallinga 1993; Coates, Platis and Shaw 1990; Shaw 1993; Gardiner and Morrison 1995.
- 2 See, however, Momigliano 1944; Lazenby 1987b; Starr 1989; Gabrielsen 1994; Strauss 1996 and 2000.
- 3 Murray 1989; Morrison and Coates 1994.
- 4 See now the lucid paper of de Souza (1998), whose dating of the emergence of the public, purpose-built warship and definition of the latter are followed here; Wallinga 1993, 13-32; a useful summary is given by Starr 1989, 21-28.
- 5 The modern concept of 'control of the seas', developed by Alfred Thayer Mahan, *The Influence of Sea Power upon History 1660-1783* (Boston, 1890) was followed by Rodgers (1937, xiv, 117-20, 127-29) and continues to be employed.
- 6 Further reasons are given by Starr 1989, 4-6.
- 7 Morrison 1974, 1991; Whitehead 1987; Lazenby 1987a; Holladay, 1988; Wallinga 1993, 73-74.
- 8 The pictorial evidence is discussed by Casson 1986, 49-74. First mention of the use of the ram in our literary sources: Hdt. 1.166.2 (battle off Alalia [in Corsica], dated to ca. 546 BC).
- 9 Thucydides (1.48.1) notes that the Corinthian fleet off Corcyra in 432 BC had taken three days' supplies. This seems to be something exceptional.
- 10 Classical trireme: Morrison and Coates 1986, 107-18. Rhodian quadrireme: Segre, 1936, 228.
- 11 Gomme 1933.
- 12 Ps.-Xen. *Ath. Pol.* 2.11-12.
- 13 Thuc. 1.101.3.
- 14 Thuc. 1.117.3; cf. 1.99 and 1.19: 'The Athenians, on the other hand, after a time deprived the subject cities of their ships and made all of them pay a fixed tribute, except Chios and Lesbos.' Cf. Hornblower, *Comm* 1, 57, ad loc.

- 15 Thuc. 1.98.1, 1.100.2-3, 4.108.1; cf. Hdt. 5.23.2, 5.126.
- 16 Kallet-Marx 1993, 1-20.
- 17 Thuc. 1.1-23. Cf. Kallet-Marx 1993, 21-36.
- 18 Lys. fr. 39 (Thalheim), quoted by Harpokration s.v. 'adephagous triereis'.
- 19 E.g. Thuc. 2.70.2, 3.17.3; 2,000 talents spent on the siege of Potidaia, 431-429 BC; *IG I³* 363 (ML 55): c. 1,400 talents were spent on the campaign against Samos (440 BC); *IG I³* 364 (ML 61): 26 talents to the squadrons sent to aid Korcyra in 433/2 BC. See further Kallet-Marx 1993.
- 20 Thuc. 1.110.4 (Egypt), 7.87.5-6 (Sicily).
- 21 Athens: Hdt. 7.144.1-2; Thuc. 1.14.1-2; [Arist.] *Ath. Pol.* 22.7. Dionysios I: Diod. 14.41-43.4. Antigonos I: Diod. 19.58.1-6. On the Ptolemaic fleet, see e.g. Diod. 20.49.1, with Meiggs 1982, 133-34; H. Hauben, *RDAC* (1987) 213-26.
- 22 *IG I²* 1604-32, to which should be added a few other fragments published elsewhere.
- 23 *SIG³* 581, lines 70-73.
- 24 Thuc. 6.31.3; Lys. 21.19; [Dem.] 51.6.
- 25 Pritchett (*GSW* 5.495-97) discusses the exceptional case documented by *IG II²* 207, where on its dispatch an Athenian fleet is provided by the home authorities with grain purchased from a Persian Satrap; cf. also *ibid.* 485-99.
- 26 Hdt. 7.144.1-2; [Arist.] *Ath. Pol.* 22.7.
- 27 Thuc. 1.13.4-5.
- 28 Thuc. 8.18, 8.43.3, 8.80.2-3; Xen. *Hell.* 1.1.24-25, 2.1.10-12, cf. Thuc. 2.65.12.
- 29 Trierarchs at Samos (Hdt. 6.14.2, 8.85), Aegina (Hdt. 7.181, 8.93), Naxos (Hdt. 8.46), Sparta (Thuc. 4.11.4), Rhodes (Arist. *Pol.* 1304b29), Teos and Lebedos (*SIG³* 344.66), Priene (*ibid.* 1003.29) and Egypt (R. Bagnall, 'The Ptolemaic Trierarchs', *CE* 46 (1971) 256-62). A.W. Gomme's surmise, from Thuc. 4.11.4, that the trierarchy at Sparta was similar to that at Athens is unwarranted (*HCT* 3. 448, ad loc). In Herodotus *trierarkhos* perhaps means simply the captain of a warship (e.g. 6.14.2). Cf. *OCD³* s.v. 'trierarchy'.
- 30 Lewis 1960, 1965.
- 31 Davies 1969.
- 32 Teletias: Xen. *Hell.* 1.5.21-24. Rhodian squadrons: Diod. 20.84.5-6, 88.4-6, 93.2-5.
- 33 E.g. Hom. *Od.* 3.73ff. (= 9.252 ff., *Hymn to Apollo*, 452 ff.), 14.224-359. Good discussions of the central passages from Homer's *Iliad* and *Odyssey* are offered by Ormerod 1924, 72-74, 87-94, Nowag 1983; Pritchett, *GSW* 5.320-21; van Wees 1992; de Souza 1995 and van Wees 1992.
- 34 Thuc. 1.13.4 (battle between the Corinthians and the Corcyraeans), with 1.13.6 (battle between the Phocaeans and the Carthaginians), cf. *FGH* Timaios F 71, which is to be distinguished from the battle off Alalia (ca. 546 BC) between the Phocaeans and the joint forces of the Tyrrhenians and Carthaginians reported by Hdt. 1.166-67.
- 35 For the possession of ships by Archaic aristocrats, see Haas 1985.
- 36 *APF* no. 600 (V), pp. 15-16; more generally, Herman 1987, 97-105, 128-30.
- 37 The elder Miltiades: Hdt. 6.34-36. The five ships employed in 493 BC by the elder Miltiades' nephew and successor (as a tyrant in the Thracian Chersonese), Miltiades (the Younger) son of Kimon (Hdt. 6.41), were almost certainly his private possession. In view of Hdt. 6.39 (the same Miltiades was in 516 sent on a trireme—the first Athenian trireme mentioned by our sources—to the Chersonese by Hippias and Hipparchos), these ships were probably triremes: D.M. Lewis in *CAH IV²*, 298, but cf. de Souza 1998, 285-86. On the character of these colonizing projects, see Berve 1937, 26-36; Figueira 1991, 133-37, with appendix D, pp. 260-62.
- 38 Ormerod 1924; Ziebarth 1929; Jackson 1973; Brulé 1978, 128-31; MacDonald 1984; Garlan 1978, 1989; McKechnie 1989, 101-41; de Souza 1995. Even Pritchett, who in his detailed presentation and discussion of the relevant material (*GSW* 5.312-63, cf. 245-97, 363-98) writes (319) 'It is well to heed the warning of Jacoby (*FGH* 3B Suppl.2 p. 322) that the difference between naval warfare and piracy is in the eyes of the beholder' (with his comment, p. 319, on Y. Garlan's [1978] typology of brigandage), distinguishes throughout between 'privateers' (i.e. 'politically motivated enemies') and 'freebooters' (312 n. 441). See, however, Davies in *CAH VII²*, part I, 286.
- 39 Dem. 24.11-14, 120; quotation from section 12. The particulars of this case are as follows: (i) after they had been plundered the merchants made a petition to the Athenian authorities, claiming that the seizure of their property was unlawful; (ii) the Assembly rejected their claim on the grounds that at that time the cargo of the merchantman 'was not friendly' (*hos apecheirotonesasth' hymeis me philia einai tote*, 24.12)—the further explanation, that the Athenians, even though not at war with Egypt, were on friendly terms with Persia, from which Egypt was at the time in revolt (Ormerod 1924, 62; Pritchett, *GSW* 5.384), is not what the text says; (iii) at the same time, and in accordance with Athenian law, the seized property was considered to be the property of the Athenian state; (iv) even so, the loot continued to be in the possession of the three ambassadors who together with the trierarchs had carried out the seizure; (v) but later, when a decree appointed a commission of inquiry and directed all citizens to give information about the holders of sacred or public money in private hands, Euktemon laid information that the trierarchs held public property worth 9 1/2 talents; (vi) subsequent proceedings involved treatment of the matter by the Council and then by the Assembly, where the ambassadors lodged a protest against Euktemon's information, declaring that the money was in their possession; (v) following this (and in the same meeting), Euktemon made a proposal to the effect that the state collects the money from the trierarchs, who can then take legal steps to make the ambassadors accountable for it. Cf. Pritchett, *GSW* 5.119 n. 113, 383-84, and Hansen 1974, no. 13, pp. 32-33, and 50-51. A similar case concerns the seizure of five talents from a merchantman from Kyzikos by Meidias in his capacity as captain of the Athe-

- nian 'sacred' ship *Paralos*: Dem. 21.173 with Pritchett, *GSW* 5.335, who rightly remarks: 'What is not clear is why a merchant ship of Kyzikos was regarded in Athenian courts as an enemy one.' In his critique of Ormerod's (1924, 62) use of Dem. 24.11-12, McKechnie (1989, 115) misses the important point that the Athenian trireme, even though a public vessel, was used for a private purpose.
- 40 Cited by the Roman jurist Gaius in the *Digest* 47.22.4.
- 41 Gauthier 1972; Bravo 1980; Pritchett *GSW* 2, ch. 8, and 5.68-152; J.K. Davies in *CAH VII*², part I, 287-90.
- 42 Cf. Hornblower, *Commentary*, I, 23, ad loc.
- 43 Ormerod 1924, 208-47, for a discussion of the Roman campaigns against piracy, initiated by Marcus Antonius the Orator in 102 BC. For the Roman 'Piracy Law' of 100 BC, see Hassall, Crawford and Reynolds 1974. Piracy as a chronic phenomenon in the Mediterranean: Semple 1916.
- 44 Hdt. 6.137-38, with 6.41.1-2. Cf. Figueira 1991, 138.
- 45 Thuc. 1.96.1, with S. Hornblower in *The Athenian Empire*. Laktor 1, 3rd edn. (London, 1984), 28, and Hornblower, *Comm*, I, 144, ad loc.
- 46 [Dem] 50.4, 8-9. All subsequent references in the text are to that speech.
- 47 For the calculations underlying these estimates, see Gabrielsen 1994, 120 with n. 36.
- 48 Gabrielsen 1994, 139-45.
- 49 Welwei 1974, 65-104; Hunt 1998, 40-41, 83-101.
- 50 For details, see Gabrielsen 1994, 222 with n. 4.
- 51 Osborne 1991, argues for the impact of liturgical expenditure on agricultural production.
- 52 E.g. Isoc. 8.128.
- 53 Gabrielsen 1986.
- 54 Gabrielsen, 1987.
- 55 For this and what follows, see Polyb. 5.88-90.4, with Meiggs 1982, 144-45.
- 56 Polyb. 4.45.9-47.7, 4.49.1-52.10, quotation from 4.47.1-2.
- 57 For the dockyards in the city of Rhodos, see Blackman, Knoblauch and Yannikouri 1999. For those at Eulimna (mod. Alimnina), see *Delt* 35 (1980) Chron. 561-63. Overseas bases: *SIG*³ 581.10.11 (Hierapytna on Crete, ca. 200 BC); *Clara Rhodos* 2 (1932) 170, no. 1, cf. M. Segre, *RFIC* n.s. 10 (1932) 452-53 (Aigila [mod. Antikythera], first half of the third cent. BC). Cf. Gabrielsen 1997, 37-42.
- 58 Segre 1936, 231-33; Casson 1986, 307 and n. 29.
- 59 [Dem.] 51.8-9. On Athenian practices, see Gabrielsen 1994, 95-102.
- 60 *Eisphora*: *Clara Rhodos* 2 (1932) 202, no. 34. *Proeisphora*: *I.Lindos* 384b.14, 384d.13, 449.11, 482.12; *TCSuppl.* 216, no. 101e.11; *NuovoSER* 175, no. 29.14; *ASAA* 2 (1916) 147, no. 20; Pugliese Carratelli 1930-40, no. 14.4. All these inscriptions date from after the end of the first cent. BC.
- 61 The relevant documents are conveniently assembled in Migeotte 1992.
- 62 Arist. *Pol.* 1304b27-31.
- 63 In addition to the naval records (*IG II*² 1604-32), see e.g. [Dem.] 47.20-25.
- 64 For *kataphracts* and *aphracts*, see Casson 1986, ch. 6, and his General Index, svv.
- 65 Thuc. 6.43.1.
- 66 *I.Lindos* 707; Ael.Arist. 43.539-40 (Dindorf). App. *Mithr.* 25 and Plut. *Luc.* 2.3.
- 67 *ASAA* 2 (1916) 143, no. 12; Casson 1986, 133 n. 127, and 1995, 119-23.
- 68 Polyb. 16.2.10, 16.7.4, with Gabrielsen 1997, 185 n. 8.
- 69 On these two types, and particularly the *triemiolia*, see Blinkenberg 1938; Casson 1986, 127-31; Gabrielsen 1997, 86-94.
- 70 Theophr. *Char.* 25.2; *I.Lindos* 88. Cf. Casson 1986, 127-31.
- 71 For instance, of the Rhodian contingent of about 30 ships in the battle of Chios (201 BC) only seven were *triemioliai*: Polyb. 16.2.10. This should be compared to the numerous instances in which that type of ship is used in raids: Diod. 20.93 and the inscriptions in Blinkenberg 1938, and Gabrielsen 1997, 189 n. 42, with pp. 92-94.
- 72 Casson 1991, 139.
- 73 Casson 1986, 88 with n. 58; cf. Hornblower, *Comm* I, 35-36, ad Thuc. 1.10.4.
- 74 Paus. 6.7.4; cf. Thuc. 8.35.1-4, 44.1-4, 84.2; Xen. *Hell.* 1.5.19; Diod. 13.38.5, 45.1.
- 75 Hom. *Il.* 2.653-56.
- 76 Philippos: Hdt. 5.47. Phaylos: Plut. *Alex.* 34.2, cf. Hdt. 8.47. Dionysios: Hdt. 6.17.
- 77 Isae. 11.48.
- 78 Thuc. 4.11.4: Brasidas urges his Spartan co-trierarchs to not 'spare the timber' (i.e. their ships) and attempt a landing on the rocky shore. Hornblower (*Comm* II, 164, ad loc) remarks: 'in a Spartan context the word [*sc.* trierarch] does not have the financial implications which it sometimes has in Athens'. If so, a most probable reason for the Spartan trierarchs' reluctance to damage their ships is that these were privately owned. Anyhow, before the acquisition (with Persian money) of her own fleet Sparta could either requisition ships from her allies, or encourage piracy, Thuc. 2.69.1 with Hornblower, *Comm* I, 355.
- 79 Diod. 20.82.4-83.3, 97.5. At 20.82.4 and 83.1, the ships of the merchants/privateers and of the *peiratai* are called *poria*; but at 20.97.5-6, the ships of the former group (or some of them) are specified as *keletes*, and those of the latter group (or some of them) as *aphracts*.
- 80 Polyb. 1.46.4-47.10, and 1.59.8.
- 81 *IG XI*(4) 751 = *SIG*³ 582.
- 82 On the Ozolian Locrians, Aetolians and Akarnanians, see Thuc. 1.5.3. See furthermore Brulé 1978 and Perlman 1999 (Cretans); Dell 1967 (Aetolians); Ormerod 1924, 190-247 and Rauh 1998 (Cilicians).
- 83 Polyb. 2.8.8; cf. J.K. Davies in *CAH VII*², part I, 287.
- 84 *I.Lindos* 88.
- 85 *SIG*³ 581.55-58.