THE ORIGIN AND FUNCTION
OF THE *NAUKRAROI* AT ATHENS: AN
ETYMOLOGICAL AND HISTORICAL EXPLANATION

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The origin and function of the Athenian *naukrâroi* have long been disputed. Kahrstedt believed that they were groups of private citizens who were liable, as shipowners, to levies by the state at times of crisis, in the same way as hoplites had to provide their own equipment for warfare.[1] This interpretation makes statements in the *Athênaiôn Politeia* and Herodotos difficult to explain. In the *Ath. Pol.* (8.3) the ναύκραροι are described as officials of the naukraries; their chief concern was with revenues and expenses.[2] Herodotos (5.71) says that the Presidents (πρυτάνιες) of the naukraries expelled the supporters of Kylon from their place of refuge at the statue of Athena on the Akropolis. Though their descriptions of the powers of the *naukrâroi* are certainly not identical, both authors indicate that they have official status and important powers.

The ancient evidence for the early existence of the naukraries is strong. Their function was the collection of money for the purposes of the state. They were local divisions and before the time of Kleisthenes, no doubt, their *naukrâroi* were also the chief landowners.[3] Photios (s.v. ναυκραρία)

[1] *Studien zum öffentlichen Recht Athens* 246 ff. = *Staatsgebiet und Staatsangehörige* I (Aachen 1967, Neudruck d. Auflage 1934–36). For the earlier literature, see Hildebrecht Hommel, *RE* 16.2 (1935), s. v. Naukraria. For a recent treatment, see Julie Vélissaropoulos, *Les nauclères grecs. Recherches sur les institutions maritimes en Grèce et dans l'Orient hellenisé* (Geneva 1980) 12–21.

[2] ἦν δ' ἐπὶ τῶν ναυκραρῶν ἀρχὴ καθεστηκυῖα ναύκραροι, τεταγμένη πρός τε τὰς εἰσφορὰς καὶ τὰς δαπάνας τὰς γιγνομένας. διὸ καὶ ἐν τοῖς νόμοις τοῖς Σόλωνος οἷς οὐκέτι χρῶνται πολλαχοῦ γέγραπται· "τοὺς ναυκράρους εἰσπράττειν" καὶ "ἀναλίσκειν ἐκ τοῦ ναυκραρικοῦ ἀργυρίου." (The office of the *naukrâroi* was established over the naukraries. It was appointed for the collection of levies and the expenditures that occurred. For that reason, it is frequently written in the laws of Solon that are no longer in use that "the *naukrâroi* are to collect revenues" and "make disbursements from the naukraric fund.")

[3] Hesychios, s.v. Ναύκλαροι, says that they collected revenues ἀφ' ἑκάστης χώρας (from each district). (*Nauklâros* is probably from *naukrâros* through dissimilation and the influence

says that the naukraries were established by Solon; the scholiast to Aristophanes, *Clouds* 37, attributes this to Solon (or an earlier period), but the evidence of Herodotos for their existence in the seventh century must be preferred. It is clear that they were given the responsibility for the provision of cavalry and ships. Pollux, in a passage without date (8.108), says that each naukrary contributed one ship and two horsemen.[4] Borimir Jordan has recently restated the evidence for the existence in the sixth century of an Athenian war fleet composed, in part, of triremes.[5] He considers that the sacred ships were the original nucleus of the fleet, citing Androtion, who says that the expenses for embassies to Delphoi were met by the naukraric fund.[6] He argues elsewhere that the *prutaneis* did, as Herodotos maintains, have a part in the Kylonian affair because of their association with the treasury of Athena on the Akropolis.[7] It is probable that Jordan is right to see the *naukrâroi* as the oldest *tamiai* of the Athenian State, "older, probably, than the treasurers of Athena, who appear to have been created by Solonian legislation, and demonstrably older than their miscellaneous successors, the kolakretai, the treasurers of the other gods, and the apodektai."[8]

The association of the *naukrâroi* with ships was early, but it is clear that this was the result of their financial duties and not a primary function. As tax gatherers, they saw to the contributions deemed necessary for, *inter alia*, the provision of ships and cavalry. Their association with the treasury of Athena explains the statement in the scholia to *Clouds* 37 that they once τὴν πομπὴν τῶν Παναθηναίων ἐκόσμουν. Androtion's account of their payment for embassies to Delphoi can better be explained by their function as sacred treasurers rather than as naval officials.

If the connection between the *naukrâroi* and ships is a later development, the etymological interpretation of the word as "ship-head" becomes suspect. Liddell-Scott suggest that *naukrâros* is rather to be derived from *naiô* "dwell" than from *naus* (compare one meaning of *naukrêros*: one who rented and sublet apartment houses). Since *naiô* is from a proto-Greek °*nas-yô* (from an Indo-European °*nes-yô* derived from the root °*nes* seen in *neomai* and *nostos*), lacking upsilon or digamma, a direct derivation seems implausible phonologically and the newer Liddell-Scott-Jones has dropped the suggestion.

of *naukrêros*.) In I. Bekker, *Anecdota Graeca* (3 vols., Berlin 1814–1821) 1.275.20–21, Kolias, a place in Attica, is called a naukrary. The account of Kleidemos (*FGrH* 323, F 8) implies that naukraries are local divisions although he wrongly dates their inception to the time of Kleisthenes.

  [4] Pollux also says that the functions of the *naukrâroi* included taxation (by demes) and expenditures.

  [5] *The Athenian Navy in the Classical Period* (Berkeley 1975) 6–9.

  [6] *FGrH* 324, F 36.

  [7] "Herodotos 5.71.2 and the Naukraroi of Athens," *CSCA* 3 (1970) 153–75.

  [8] Jordan (above, note 7) 173. See also his *Servants of the Gods* (Göttingen 1979) 56–63.

An alternative would be to derive the *nau-* of *naukrâros* from *nâos* "temple" which would fit well with what we know about the origins of the office. The word *nâos* is attested in the dialect form *neôs* (Attic), *nêos* (Ionic), *nâwos* (Lakonian), *nauos* = *nawwos* (Lesbian), and for Mycenaean by the adjective *na-wi-jo* (/nâwios/ or /nawwios/) used to describe bronze.[9] The various dialect forms of the word for "temple" go back to a proto-Greek °*nawwos* from still earlier °*naswos*, while the prefix *nau-* derives from °*nasu* by way of °*nahu* and °*naü* without the thematic vowel *-o-*.[10] Compounds involving athematic elements such as *nau-* derived from words of the thematic declension were more common at earlier stages of the Greek language. Thus the *thes-* of *thesphatos* and *theskelos* represents °*thes-os*, a prehistoric ancestor of *theos* "god." Since Linear B writes this word *te-o*, with the intervocalic *-s-* already changed to *-h-* or zero, these athematic formations with the *-s-* must date to a time anterior to the Mycenaean tablets.

The athematic *nau-* corresponding to thematic *nâ(w)os* is paralleled by Homeric *tanaupoda*, where the *tanau-* is from °*tanaw-os* but lacks the thematic *-o-*. So also the *stenu-* in the placename *Stenuklêros* corresponds to the adjective *stenôs* and noun *sténos* (from °*stenwós* and °*sténwos* respectively) in exactly the same way as the *nau-* in *nauklêros* and *naukrâros* does to *nâos/nâwos*. This can be represented schematically:

	Thematic			*Athematic*
°naswos>	°nawwos>	nâos		°nasu-> °nahu-> °naü-> nau-
		nawwos (Aeolic)		
°stenwos>		stenos		stenu-
		stennos (Aeolic)		
°tanawos>		tanaos		tanau-, tanu-

The use of an athematic stem *nau-* for *nâos* is incontestably attested in *naukoros* (= *neôkoros*, *nâokoros* "warden of a temple") in a Greek inscription from Lydia and in *nauphulax* from Epidauros.[11] As indicated above,

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[9] For a thorough discussion of *ka-ko na-wi-jo* (/chalkos nâwios/) "temple bronze," see the twin papers of Alex Leukart ("Autour de ka-ko na-wi-jo: quelques critères," pp. 183–87) and Stefan Hiller ("Ka-ko na-wi-jo, Notes on the Interdependence of Temple and Bronze in the Aegean Bronze Age," pp. 189–94) in *Colloquium Mycenaeum: Actes du Sixième Colloque International sur les Textes Mycéniens et Égéens tenu à Chaumont sur Neuchâtel du 7 au 13 Septembre 1975* (Neuchâtel 1979). A discussion follows on pages 194–95.

[10] °*naswos* may be connected, like °*nas-yô*, with °*nes*, °*nos*, with the primary meaning "home"/"place of safety." The *a* vocalism may represent a reduced grade of the vowel in an original preaccentual position. Compare στάνει· <σ>τείνεται, συμβέβυσται (Hesychios), related to *stenu-*, *stenwos*. For *naü*, compare the development *esu-> ehu-> eü-*(so often in Homer)> *eu-*.

[11] *naukoros*: Buresch, *Aus Lydien* 58; *nauphulax*: *IG* 4² (1). 402 (pl., Epidauros, 2nd century A.D.).

nauklêros, in the meaning renter/subletter, probably also belongs here, for *nâwos* originally meant both "house" and "temple," as did *woikos*.

In Mycenaean, *nau-* (or *naü*?) occurs in *na-u-do-mo/ naudomoi/* on the Pylos tablets Na 568 and Vn 865.1. Are we to take these *naudomoi* as shipwrights or temple-builders?[12] The interpretation of the *naudomoi* as shipwrights, though it has gained wide acceptance, is in fact highly improbable. In Classical Greek, compounds with *-domos* refer to building permanent, fixed structures of brick or stone: *purgodomos, oikodomos, lithodomos, pêlodomos, teichodomos, toichodomeô* (cf. Mycenaean *to-ko-do-mo = /toichodomoi/*) and *nâodomos* itself, as an adjective modifying *technê* in an inscription from Arycanda.[13] Shipwrights, by contrast, are called *naupêgoi*, from *naus* plus *pêgnûmi* "fasten." This verb is used to describe building mobile structures, hence the compounds *aspidopêgos* "shield-maker," *klinopêgos* "bed(stead)-maker," and *harmatopêgos* "wheelwright," "chariot-maker" (cf. Mycenaean *a-mo = /harmo/* "wheel") as opposed to the fixed structures referred to by *-domos* compounds. Thus we are safe in concluding that the *nau-* of *na-u-do-mo* refers to temples and not ships. Further evidence of this is the connection of these *naudomoi* with bronze, paralleling the close connection between bronze-working and temples in the Aegean Bronze Age.[14] The temple-bronze (*ka-ko na-wi-jo = /chalkos nâwios/*) of Pylos tablet in Jn 829 is a case in point and there is much archaeological evidence.[15] Knowing that these *naudomoi* are temple-builders, we can now set up the following set of correspondences:

Athematic	*Thematic*
naudomos (Mycenaean)	nâodomos
naukoros	nâokoros, neôkoros
nauphulax	nâophulax

[12] Shipwrights say Chadwick (*Documents in Mycenaean Greek* [Cambridge 1973²] 562) and Margareta Lindgren in her fine book *The People of Pylos* (Part II [Uppsala 1973] 100). Temple-builders say M. D. Petruševski ("Golemoto otkritie na M. Ventris [La grande découverte de M. Ventris]," *Živa Antika* 5 [1955] 387–401) and Luigia Stella (*La civiltà micenea nei documenti contemporanei* [Rome 1965] 255–56).

[13] G. Kaibel, *Epigrammata Graeca ex lapidibus conlecta* (Berlin 1878) 409.4

[14] One *sa-mu-ta-jo* appears both as a bronze-smith (Jn 389) and as a *na-u-do-mo* (Vn 865). Lindgren (above, note 12) 100 says that the lack of a place designation means that the *naudomoi* are at Pylos (Epano Englianos). This is a strange place for shipwrights; according to Carl W. Blegen and Marion Rawson, *The Palace of Nestor at Pylos in Western Messenia* (Princeton 1966), vol. I, part 1, p. 30, the Palace is 9 km to the north-northeast of the nearest point on the Bay of Navarino and 5.7 km as the crow flies due east of the Ionian Sea. Blegen and Rawson add that "the path for walkers who wish to visit the sandy beaches is a good deal longer." We assume Mycenaean shipwrights were not masochists who enjoyed dragging their handywork across miles of rough country. The Pylian shipyards were surely on or near the beach.

[15] Hiller (above, note 6) 189–94.

If there is evidence that the first element of *naukrâros* was already in use in Mycenaean Greek, there is even better attestation for the second. *-krâros* in Classical Greek is found only in *naukrâros*, but in Mycenaean an uncontracted, athematic form *-krâôr* occurs in the dative singular *-ka-ra-o-re* /krâôrei/ and dative plural *ka-ra-a-pi* (/krâarphi/ or with heteroclitic declension /krâatphi/ < /krâapphi/ from °*k(a)râ-n̥t-phi*) with the literal meaning "head."[16] On Ta 722.2 *ka-ra-a-pi* stands as an independent word in the phrase *e-re-pa-te-jo ka-ra-a-pi re-wo-te-jo/elephanteiois krâapphi lewonteiois/* "(decorated with) ivory lions' heads." On tablet Ta 707, like Ta 722 part of the Pylos furniture series, the compound *se-re-mo-ka-ra-o-re* occurs, usually translated "with the head of a Seiren(?);" its plural *se-re-mo-ka-ra-a-pi* appears on Ta 708. On Pylos Mn 1412 a place called *o-no-ka-ra-[o-re]* is mentioned; the restoration is confirmed by]*-no-ka-ra-o-re* on Na 1038. Chadwick translates this as "Asshead" (cf. *Kunos kephalai*).[17] On Ta 714, *se-re-mo-ka-ra-o-re* is written over an erasure which may have read *qo-u-ka-ra-o-re* "with an ox's head," a short form of which, *qo-u-ka-ra*, occurs twice on Ta 711.[18]

The elements of the compound *naukrâros* were both present in the Greek language in Mycenaean times. Then they were in active use, while in the Classical period both the prefix *nau-* "temple" and the suffix *-krâros* "head" had fallen into disuse and appeared in only a few fossil formations in the first case and but one in the second. The compound *naukrâros* is clearly to be dated to the Mycenaean period or shortly thereafter; it could not have arisen in the Greek of the alphabetic age. That the functions of the *naukrâroi* existed in Mycenaean times can be seen from Pylos tablet Jn 829, which concerns temple-bronze being contributed by religious officials for making weapons. (Pylos was preparing to defend itself from the attack that was to destroy it.) This is precisely what the early Athenian *naukrâroi* did: they used temple treasuries to meet public expenses, including those connected with defense—ships and horses. Such officials could also gather contributions for such treasuries in more peaceful times. It seems we have in the Pylos tablets records of

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[16] Carl D. Buck and Walter Petersen, *A Reverse Index of Greek Nouns and Adjectives* (Chicago 1945; Hildesheim/New York 1970) 317, list *naukrâros* as the only formation in *-krâros*. So do Paul Kretschmer and Ernst Locker, *Rückläufiges Wörterbuch der griechischen Sprache* (Göttingen 1944, 1963). For Mycenaean *-ka-ra-o-re* and *ka-ra-a-pi* see L. R. Palmer, *The Greek Language* (Atlantic Highlands 1980) 278–79.

[17] Chadwick (above, note 12) 564; Ernst Risch, "Mykenisch *seremokaraoi* oder *seremokaraore?*" *Studi micenei ed egeo-anatolici* 1 (1966) 53–66.

[18] Chadwick suppresses this reading in the 2nd edition of *Documents* (pp. 502, 578), following Emmett L. Bennett, Jr. and Jean-Pierre Olivier, *The Pylos Tablets Transcribed*, part I (Rome 1973) 231. It seems strange that the scribe would write *se-re-mo-ka-ra-o-re*, as Bennett and Olivier now maintain, then erase it, then write it again. Even if we accept the suppression of *qo-u-ka-ra-o-re*, we have the two occurrences of the short form *qo-u-ka-ra* mentioned above as a third example of "head" compounds.

peacetime as well as wartime contributions, neither of which was in all probability voluntary.[19]

Historical and philological evidence then point in the same direction: the Athenian *naukrâroi* represented an old, possibly Bronze Age institution which survived into the Classical period. Their original function as guardians of the temples, like that of similar officials at Mycenaean Pylos, gave them control of temple treasuries, thus making them important in the gathering of public funds and in their disbursement, whether for religious or for military purposes.

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[19] Especially the *dosmos* tablets of Pylos (the *Es* series), for which see Pia de Fidio, *I Dosmoi pilii a Poseidon: Una terra sacra di età micenea* (Rome 1977).