

### **SOME QUESTIONS OF MEDIEVAL NAUTICAL TECHNOLOGY IN KAMENIATES' "SACK OF THESSALONIKI" (904 AD)**

The chronicle of Ioannis Kameniates which recounts the sack of Thessaloniki by the Arab fleet of Leo of Tripolis in 904 AD provides valuable information on Byzantine and Arab nautical technology of the early tenth century. The questions raised by Kameniates' narrative concern the type, size, and rig of the ships used by Byzantines and Arabs as well as the methods of warfare employed by the two adversaries.

The tenth century is one of the best documented periods in the history of the Byzantine navy and Kameniates' chronicle is on the whole a reliable guide on contemporary nautical technology. Some doubt has been cast on the authenticity of the chronicle as a genuine tenth century source.<sup>1</sup> However, even if we accept the view that the chronicle is a later (perhaps fifteenth-century) reworking of an earlier story, the text as it has come down to us contains a number of eye-witness observations that are unmistakably authentic tenth-century information and are invaluable as such. For example, the mention of the use of greek fire and the absence of any reference to cannon or gunpowder (both common since the fourteenth century), the detailed description of Arab and Sudanese warriors, the accurate reporting of the itinerary of Leo of Tripolis through the Aegean Sea, who exhibited particular care in avoiding confrontation with the Byzantine fleet, show that at least a core of the narrative must be an authentic tenth century work.<sup>2</sup>

Kameniates gives us significant information on the type and size of Arab and Byzantine ships. The general remark to be inferred from his narrative is that the ships of the two adversaries did not greatly differ. He informs us that the Arabs captured many Byzantine ships, both warships and merchant vessels, some of

which they hauled up from the bottom of the harbour by means of a winch-like machine<sup>3</sup>. Therefore, knowledge of both merchant ships and warships was shared between the two peoples. Kameniates himself was among those captured and along with other slaves boarded one of these ships, a Byzantine warship. He informs us that the ship had two “decks” (*καθέδραι*) and actually calls the ship a *dieres* (*διήρης*); the top deck (*τὴν ἄνω καθέδραν*) was occupied by the Arabs and the bottom one, which was “very dark and foul smelling”, was occupied by the slaves<sup>4</sup>.

This description of the Byzantine warship raises a few problems. It is certain that the ship had two “levels” or “banks”, since Kameniates calls it a *διήρης* which can only mean “a ship with two rowing levels”<sup>5</sup>; on the other hand, the term “deck” which Kameniates uses is misleading since it is highly improbable (and impractical for rowers in the hot Mediterranean conditions) that a ship would have closed decks, in the manner of later Western galleys. It is most probable, therefore, that by “bottom deck” Kameniates actually means the hold of the ship since only the hold fits the above description as being “very dark and foul smelling” and is an apt place for the prisoners to be hoarded on a long voyage<sup>6</sup>. In Kameniates’ terminology, the two banks (or “rowing levels”) of the ship could be designated by “top deck” and the hold by “bottom deck”. This is borne out by the fact that in a later passage he mentions that the Arabs spread hides over the ships thereby depriving the slaves of light;<sup>7</sup> this could only be the case if the sunlight penetrated the place where the slaves were placed from above, and the hold of the ship which presumably had no side-openings fits this description best.

It is interesting, in connection with the above, that the thirteenth Arab author and official in Mamluk Egypt Ibn al-Manqalī states that the lower bank in Arab ships sometimes served as a hospital.<sup>8</sup> It is doubtful here whether the lower bank or the hold of the ship is meant. Ibn al-Manqalī’s passage shows, however, that it was common practice among the Arabs to allocate the lower part of the ship to an auxiliary service, be that hospital facilities or slave-storage.

As for the size of Byzantine and Arab ships, Kameniates states that there were 200 Moslems and 800 Christian slaves in a Byzantine warship,<sup>9</sup> and more than 1.000 (Moslems and slaves) on another ship, which however was nearly in danger of sinking from the weight (*ὡς τοσοῦτον ἀπέχειν βαπτισθῆναι τὴν ὀλκάδα ὅσον μιᾶς παλαιστῆς τὸ μέτρον ἐστίν*, “so that the ship was only one *palaiste* away from the water”<sup>10</sup> - the measure *palaiste* is equivalent to four fingers’ breadth, or a little more than three inches). Unfortunately, in neither of the passages does Kameniates provide the information of how many rowers there were. It seems, however, that a complement of 200 men (rowers and soldiers) was almost standard in both Arab and Byzantine ships, a number which agrees with the Byzantine sources (Leo VI’s 10th-century *Naumachica* and Constantine Prophyrogennitus’ 12th-century *De cerimoniis*).

Kameniates' perceptive observations also shed some light on the rig of Byzantine and Arab warships. It was a characteristic of Arab and Byzantine warships that they were equipped with superstructures to enhance the fortification of the ships and the effective waging of battle from the deck. Leo VI mentions<sup>11</sup> that the forecastle (*ξυλόκαστρον*) was the wooden construction *περι τὸ μέσον τοῦ καταρτίου* (which is usually translated "half-way up the mast"<sup>12</sup> but is very improbable). It has been suggested that this should be corrected to *περι τὸ μέσον τῶν καταρτίων* ("half-way between the masts") or *περι τὸ μέσον κατάρτιον* ("around the middle mast")<sup>13</sup>. These readings, however, point to the fact that there must have been more than one mast. The second emendation of Leo's text (i.e. of a forecastle situated around the mast) is favoured by a thirteenth century arabic translation of Leo's guide by Ibn al-Manqalī who translates the same passage as: "in every ship there is a forecastle by the mast".<sup>14</sup>

The fact that there was indeed more than one mast is corroborated by Kameniates who speaks of *κατάρτια* ("masts"), in the plural, which are moreover *διὰ μέσου προβεβλημένα* ("projecting from the middle [of the ships])<sup>15</sup>. Furthermore, the fact that the foremast slings (*κατὰ πρόραν ἐξάρτια*) are specifically mentioned<sup>16</sup> shows that a foremast existed which must have been placed as far forward as possible in the ship.

A celebrated passage in the narrative describes the way in which the Arabs joined the ships together and constructed a kind of makeshift wooden tower in each ship in order to reach the fortified walls of Thessaloniki which had been especially strengthened (and thus were higher) in anticipation of the Arab siege. The passage provides significant information on matters of nautical construction (e.g. that the ships possessed big and sturdy steering oars, that the mast amidships was the biggest, the foremast slings are specifically distinguished) all of which have been dealt with at some length by Dolley<sup>17</sup>. The passage also indicates, however, the tactical plan of the Arabs which was to approach the city walls with the stern of the ships and construct the towers well aft (this points to the fact that the ships were probably higher aft). It is very interesting that we find an exact parallel of the same tactical plan in the way the Crusaders took Constantinople after the siege of 1204. Villehardouin, one of the chroniclers of the siege, informs us that the Crusaders "devised further that the ships that carried the scaling ladders should be bound together, two and two, so that two ships should be in case to attack one tower"<sup>18</sup> and Robert de Clari tells us of a similar method being employed, namely, that the Crusaders used bridges swinging from the masts of the ships to approach and fight the Byzantines on the city walls.<sup>19</sup> Thus, this piece of evidence shows us that three hundred years after the sack of Thessaloniki by the Arabs the Crusaders used similar methods of fighting to capture Constantinople; in this way Kameniates' narration of the Arab plan acquires even greater credibility.

A point which should be particularly clarified, in itself remotely connected with nautical technology but clearly showing the nautical contact between Arabs and Byzantines, is Kameniates' use of the adjective "black" for Arab soldiers and the actual presence of blacks in the Arab army.

We know that the Egyptian army contained a large number of black Sudanese soldiers; indeed, the last ruler of the Ikhshidid Arabs of Egypt, Kafur, was black.<sup>20</sup> Sudanese soldiers were renowned for their skill in archery and their general fighting prowess and were regularly employed in military campaigns. Therefore, Kameniates mentions blacks in his narrative because he actually saw blacks among the Arab army and not because the Byzantines used the adjective "black" "proverbially, as a symbol of darkness" to characterize warriors that they particularly feared, as Kazhdan suggests.<sup>21</sup> There is no doubt from Kameniates' narration and from contemporary historical evidence<sup>22</sup> that the army of Leo of Tripolis actually numbered black Sudanese soldiers among its ranks; in fact Kameniates' narrative is a corroborating source for the presence of such soldiers in the Arab army of Leo of Tripolis.

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- 1 Especially by Kazhdan (1978).
- 2 See also Christides (1981), 8, 10.
- 3 Kameniates, 61. 3.
- 4 Kameniates, 73.12, 74.7.
- 5 Concerning double-banked dromons see Dain, *Naumachica* 5.2. 6-7, Casson (1986), 151 n. 44.
- 6 Kameniates, 60.7.
- 7 Kameniates, 69.3.
- 8 Ibn al-Manqalī, *Al-Aḥkām*, p. 22, n. 2. This piece of information if found in Christides (1984b), 143.
- 9 Kameniates, 67. 1.
- 10 Kameniates, 76.6.
- 11 *Naumachica* 7.
- 12 Dolley (1948), 51.
- 13 *ibid.*
- 14 Ibn al-Manqalī, *Al-Aḥkām*, ed. M. 'Abd al-Raim (typescript), Cairo, n.d., 21. The translation of this passage appears in Christides (1984a), 44. See also Christides (1984b), 138 ff.
- 15 Kameniates, 32.5.
- 16 Kameniates, 32.5.

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- 17 Dolley (1949), (1950).
- 18 Villehardouin & de Joinville, *Memoirs of the Crusades Villehardouin & de Joinville* (transl. Sir Frank Marzials), Westport CT: Greenwood, 1983 (repr.; first ed. London: Dent, 1908), 60-1.
- 19 Robert de Clari, 44, 46. See also Villehardouin & de Joinville, op.cit., p. 61 n. 1.
- 20 Christides (1984a), 189-90; see also the same author's article "milāḥā" in *EI*<sup>2</sup>.
- 21 Kazhdan (1978), 308.
- 22 For example, in the Egyptian army, and it is a fact that Crete had normal trade relations with Egypt in the tenth century. Especially for Fatimid-Byzantine relations see Goitein (1967), (1973); van Doorninck (1991).

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είδώς γάρ ὡς ἄπαν περικλύζεται τὸ κατὰ νότον μέρος τῆς πόλεως ἀπὸ τῶν θαλασσίων ὑδάτων, ἐκείθεν δὲ προσπίπτοντος τοῦ πολέμου εὐχερῶς ἔχειν τοὺς βαρβάρους πᾶν ὅτιοῦν βούλονται· ἂν ἐν αὐτῷ διαπράξασθαι, μηδενος κωλύοντος | αὐτοὺς ὑπεράνω τῆς οἰκοδομῆς γενέσθαι τοῦ τείχους διὰ τὸ πρόσγειον καὶ χθαμαλωτάτην εἶναι τὰς τε νῆας μᾶλλον ὑπερανέχειν ἐκ τοῦ κατὰ πρῦμναν μέρος, καὶ ἀπὸ μετώρου δύνασθαι τοὺς ἐν ταῖς ἐπάλξεσιν ὄντας καταπιτρώσκειν, ἐβουλεύσατο φραγαμὸν τινα καὶ τετεχνημένην ἐπέδραν ἐν αὐτοῖς ἐγκρύψαι τοῖς ὕδασι.

ὑφάψαντες γάρ πανταχοῦ φῶτα, καὶ πάσας αὐτῶν τὰς νῆας κατὰ δύο συζεύξαντες ἑτέραν τῆς ἑτέρας ἐχομένην, καὶ τισὶ κάλοις στιβαροῖς καὶ σιδηραῖς ἀλύσει τὰς ἑκατέρων πλευράς ἐν ἀλλήλαις συσφιγνάντες πρὸς τὸ μὴ ῥαδίως ἀφίστασθαι, ἀνέλικυσαν διὰ τῶν κατὰ πρῶραν ἀπηωρημένων ξαρτίων τὰ διὰ μέσου προβεβλημένα ξύλα, ἃ τοῖς ναυπιλλομένοις κατάρτια καλεῖν ἔθος. εἶτα τοὺς τῶν ἑκατέρων νηῶν αὐχένας ἐν τούτοις διὰ τῶν εἰς τὴν κεφαλίδα στρεφόμενων σχοινίων μέσον που τοῦ ἀέρος μετεωρήσαντες, τὰς τε σπάθας αὐτῶν ἐκ τοῦ κατὰ πρῶραν μέρος καὶ πέρα τῆς τῶν νηῶν διαμέτρου προβεβληκότες, ξένον τι καὶ παρηλλαγμένον παουργέυμα διὰ τοῦ τοιοῦτου τεχνάσματος ἐτεκτήναντο. ὕψου γάρ, ὡς ἔφη, τῶν αὐχένων μετεωρηθέντων, ἐβαλλον ἐν αὐτοῖς ἐπιθέτες μακρὰ τινα ξύλα στιχηδὸν ἄλλο κατ' ἄλλο, καὶ τὸν διὰ μέσου τόπον γεώσαντες τῇ σεσοφισμένη ταύτῃ μηχανῇ, τὰ πέρατά τε πάντοθεν σανίσι καταφραζάμενοι, καὶ τὰ ἄκρα τῶν αὐχένων ἐν τοῖς κατὰ πρῦμναν μέρεσιν ἄλλοις στιβαρωτάτοις δεσμοῖς ἐνασφαλισάμενοι, πύργους τινὰς τῶν εἰς τὴν χέρσον ἐν τῷ τείχει καθισταμένων χρεωδεστέρους τῇ ἐπινοίᾳ ταύτῃ κατετεχνάσαντο, ἐν οἷς ἐνόηλους τινὰς βαρβάρους ἐπανεβίβασαν, βώμη σωμάτων καὶ τολμηρὰ φύσεως ἀνεσταλαμένους, πῆ καθ' ἡμῶν ὑστάτην καὶ τελευταίαν ἐπιβουλήν ἐνεργήσαντας. ἐπέτρεπον γάρ τοὺς μὲν αὐτῶν βάλλειν τοῖς τόξοις κατὰ τῶν ἐνδοτέρων τοῦ τείχους ἐστῶτων, τοὺς δὲ τοῖς χειροπληθέσι λίθοις· ἄλλους πυρὶ τι, καὶ αὐτῷ τετεχνημένῳ καὶ τισιν ὄστρακίνοις σκεῦσι προηυτρεπισμένῳ, καθοπλίσαντες κατὰ τῶν ἀντιπρόσωπων αὐτῶν ἐρχομένων προσέταττον ἀκοντίζειν. ταῦτα δὲ πάντα ἦν αὐτοῖς ἐνεργῆ τε καὶ ἐπιτηδεῖα διὰ τὸ μὴ μῆτι περί γῆν αὐτοῖς εἶναι ποιεῖν, ἀλλὰ τῷ προλεχθέντι κακούργῳ τεχνάσματι ὑψηλοτέρους αὐτοῖς καὶ αὐτῆς τῆς οἰκοδομῆς γενέσθαι τοῦ τείχους

ἐκαστῇ γάρ αὐτῶν συζυγίᾳ ἐπεφέρετο τὴν σεσοφισμένην ἐκείνην τῶν ὑλοσυνθέτων πύργων κατασκευήν, πολλὰ τῷ μέτρῳ τὴν τοῦ τείχους οἰκοδομὴν ὑπερβαίνουσαν, ἀνωθεν τε τοὺς βαρβάρους ἐξαλλομένους καθάπερ τινὰς ἐξοιστημένους ταύρους, καὶ τὸν ὀλέθρον ἅπασιν ἐπισειόντας.

1. As he [Petronas] knew that the entire southern part of the city is surrounded by the sea and that if the battle were to start in that part it would be easy for the barbarians to do whatever they wished there, since no one would obstruct their climbing over the construction on the castle wall (for it is close to the shore and low in height) and as the ships' sterns would be much higher they, being at a certain height, would be able to lethally wound the men in the bulwarks, he decided to hide some kind of obstacle and well-prepared trap in the water.

(17, 4-5)

2. They lit lamps on every side, and yoked all their ships together in pairs, one alongside the other, binding the sides of each pair with stout hawsers and chains and so lashing them that they might not easily be parted. Then by means of the foremost slings they hoisted aloft those poles projecting from their middle which in nautical parlance are called yards. Next they used tackle to hoist to the masthead the steering-oars of the vessels, their blades running forward and outboard of the ships. In this way they acquired a new and different contrivance by this trick. Having, as I said, hoisted aloft the steering-oars, they laid across long planks side by side, placing them so as to bridge over the intervening space in this most ingenious contrivance. The ends [of the platform] were provided with a screen of planks, and the [inboard] extremities of the steering-oars were made fast by more very strong chains carried well aft. By this fabrication they constructed towers, more useful than the ones in land, on the castle walls. On those towers they mounted armed barbarians, distinguished for their bodily strength and natural audacity, to perpetrate the last and final attack against us. Some of them could thus hit with bows those who were inside the castle walls, and some with hand-held stones, while others with a kind of prepared fire which was placed within clay jars, and they ordered them to throw it on the face of anyone coming towards them. And all this was effective and well-suited, for they were not doing this being on the ground but, with the afore-mentioned evil trick, they were standing higher than even the construction on the castle wall itself.

(32, 5-11)

3. And each pair of those [ships] bore that pre-figured construction of towers made of wood, which exceeded by far the height of the construction on the walls, and on top the barbarians, in a frenzy like raging bulls, about to bring destruction to all.

(34, 2)

οι οὖν βάρβαροι συναγα-  
γόντες τὰς νῆας τῆς πόλεως, αἷς ἐχρῶντό ποτε πρὸς τὸ τὸν σίτον ἐπι-  
κομίζεῖν οἱ καθ' ἡμᾶς ἔμποροι, ἐτι δὲ καὶ δις ἤμεν βυθίσαντες κατὰ τοῦ  
πορθμοῦ τοῦ λιμένος σοφισμασί τινα ἀνεκλύσαντες (β καὶ ἐνήργησαν διὰ  
τικῶν στροφίγγων τοῖς ἐκείσε προβόλοις ἐπιτετηθευμένων καὶ τὴν  
ἐπίνοιαν ἐργῶδη δεικνύντων, ἐλισσομένων τινὶ τεχνάσματι καὶ διὰ τῶν  
ἀπηωρημένων κάλων ἀνεκλύοντων τὸ ὑποκείμενον), οὕτως οὖν καὶ  
ἄλλων νηῶν πληθῶν εὐπορήσαντες εἰσεκόμισαν ἅπαντας, ὡς μηδένα  
πῶποτε τῶν εἰς τοῦτο τεταγμένων παραλειφθῆναι.

ἡμᾶς  
δὲ πάντας τοὺς ἐν τῇ καταλλαγῇ τηρουμένους ἐτι διεσπαρμένους ὄντας  
συναγαγόντες οἱ βάρβαροι καὶ τινα πολεμικῆ νηὶ τῶν ἐκ τοῦ λιμένος  
ἀκασπασθειῶν ὑφ' ἐν εἰσενεγκόντες καθιέρξαν ἤμεν δὲ πάντες, ὡς  
εἰρηται, ἐν μιᾷ νηὶ Ῥωμαῖα πολεμικῆ, ἣτις ἦν διήρης, ὧν τὴν μὲν ἄνω  
καθέδραν οἱ λαχόντες εἶναι μεθ' ἡμῶν βάρβαροι ἑαυτοῖς ἐκληρώσαντο,  
τὴν κάτω δὲ ἡμῖν ἐπαφῆκαν, σκότους πολλοῦ καὶ δυσωδίας πλήρη.

ὡς γὰρ βιαίως οὕτως ἐξ ἀλλήλων  
δισαιρεθέντες φύρδην ταῖς δόκασιν εἰσῆχθησαν, εὐρείαις τε οὖσαις καὶ  
ἱκαναῖς πλήθεσι πολλοὺς ἐξαρκεῖν, οὐ κατάστοιχα, οὐδ' ὡς ἂν τις εἴποι,  
ἐν αὐτάρκει τόπῳ τοῦ σωματικοῦ ὄγκου τῶν εἰσελθόντων ἕκαστος τὴν  
καθέδραν ἐλάβανεν, ἀλλ' ὡς ἔτυχεν ὅπασ' κατενεχθείς, τοῦτο μόνον  
ἀπεκλήρωτο, μὴ δυνηθεὶς ἐν δόλαις ταῖς ἐφεξῆς ἡμέραις ἕως μιᾶς παλα-  
στῆς τόπον ἐφευρεῖν, ἵν' ἀνακλιθεὶς ἀνάπαυσιν δῶ κἂν βραχέϊαν τῶ  
σώματι.

θυλάκων ἀψύχων δίκην ταῖς σελίσιν ἀλλήλοις ἐπικαθήμενοι, καὶ τοῖς  
ζύλοις, οἷς ἐνηρτήμεθα, τιτρωσκόμενοι τε καὶ συνθλιβόμενοι, ἀνεκδιή-  
γητόν τινα καὶ ἀρηρτοῦν ὑφιστάμεθα τὴν ἀνάγκην, οὐδ' ὅπως οὖν  
συστραφεῖναι ἢ τινας ἑαυτοῖς μεταδοῦναι σχολῆς συγχωρούμενοι, ἀλλ'  
ἢ μόνον τὰς κεφαλὰς ὑψοῦντες μικρὸν, εἰ που κἂν ἐλευθέρου ἀέρα ταῖς  
ρίσιν ἐφελκώσωμεν καὶ μὴ πρὸ παντός ἄλλου δεινοῦ τῆ τῶν παρόντων  
ἀνοσθυμιάσει τὴν πνοὴν ἐπαφήσοιμεν.

ταῖς νυξὶν ἐφήπλουσαν τὰς δερματίνιας δέρρεις διὰ πασσῶν  
τῶν νηῶν καὶ πάντας εἰσὼ τοὺς δυστυχεῖς ἡμᾶς ἐναπέκλειον, ὥσπερ  
καὶ πρὸς τὸν αὐτὸν σκοπὸν ἐπὶ τῶν ἄλλων νηῶν ἐπαφῆσαν.

4. And the barbarians, having gathered the ships of the city which our merchants once used to carry the wheat, and having even heaved up, by some contraption they thought-out, those ships which we had sunk at the entrance to the port (which they did by turning-wheels set up on the wall bulwarks - showing a tedious effort - and which they turned by some means, lifting up the ship with its brails hanging out). Having in this way acquired many more ships they boarded everyone in, so as not to leave anyone who was destined for this purpose [slavery] outside. (61,3)
5. And all of us who they kept for exchange and who were still scattered, the barbarians gathered and imprisoned on a warship of the ones they had hoisted up from the port [...] and we were all, as was mentioned, in a Greek warship which was two-banked (dieres). The top deck the barbarians who happened to be with us chose for themselves while the bottom one, which was very dark and foul-smelling, they left to us. (73,12 / 74,7)
6. In this way having been violently separated from each other they [the prisoners] were thrown mixed up in the ships which were wide and could fit lots of people. Nor, as someone could imagine, did each one of those who were brought in take his place according to his bodily size and was allotted the appropriate space, but at random was every one thrown in and that was his only gain, for in all the days that were to come he could not find even a little space to lie down and give his body some, even a short, rest. (60, 7)
7. Like lifeless bags we were sitting one on top of the other on the seats and being squeezed and pricked by the wood on which we were tied, we suffered the unspeakable and indescribable hardship without being able to turn around or to stretch and rest, but only by lifting our heads a little could we, perhaps, breathe some free air so as not to let our last breath not from some other evil but from the present stink. (68, 9)
8. At nights they spread covers of hide over all the ships and shut - poor us - all of us inside, so as to deprive us of light, too, together with everything else.

SOME QUESTIONS OF MEDIEVAL NAUTICAL TECHNOLOGY IN KAMINIATES' "SACK OF THESSALONIKI" (904 AD)

ΙΩΑΝΝΟΥ ΤΟΥ ΚΑΜΙΝΙΑΤΟΥ ΕΙΣ ΤΗΝ ΑΛΩΣΙΝ ΤΗΣ ΘΕΣΣΑΛΟΝΙΚΗΣ

κατὰ μόνην τὴν ναῦν ἐνθα ἤμεν  
ἡμεῖς ὀκτακοσίων αἰχμαλώτων | ψυχῶν ἀριθμὸς ἦν, δίχα τῶν ἐν αὐτῇ  
βαρβάρων, διακοσίων καὶ αὐτῶν ὄντων

πολλῶ γὰρ πλείω χιλίων ψυχῶν  
ἔφασκον εἶναι κατὰ τὴν ναῦν ἐκείνην, ἐκ τε τῶν βαρβάρων καὶ τῶν  
αἰχμαλώτων τῶν ἐν τῇ Κρήτῃ κατ' αὐτὴν εἰσενεχθέντων καὶ τῶν ἐκ τῆς  
ρήθειας προστεθέντων αἰτίας, ὡς τοσοῦτον ἀπέχειν βαπτισθῆναι τὴν  
ὀλκάδα ὅσον μᾶς παλαιστῆς τὸ μέτρον ἐστίν.

καὶ ταῖς ἀπὸ τῶν πετροβόλων  
καταφοραῖς, ὧν καὶ αὐτὸς μόνος ὁ διὰ τοῦ ἀέρος ἐγγινόμενος βοῆζος  
ἐκατασιν τοῖς βαρβάροις ἐναπειργάζετο.

οἱ μὲν γὰρ αὐτῶν τοῖς τόξοις, ἕτεροι δὲ χειρο-  
ποιήτω βροντῇ τῶν λίθων ἐκέχηντο· ἄλλοι τοῖς πετροβόλοις ἐγκαθή-  
μενοι τὰς ὑπερμεγέθεις ἐκείνας τῶν πετρῶν χαλάζας μετωρίζοντες ἔπεμ-  
πον. | κατὰ μόνης τῆς ρηθείσης πύλης ἑπτὰ παρέστησαν πετροβόλους  
πάντοθεν περιπεφραγμένους, οὓς διερχόμενοι τὴν Θάσον πρὸς τὴν  
τοιαύτην χρεῖαν προπαρεσκεύασαν. καὶ μὴν ξυλοσυνθέτους τινὰς  
κλίμακας ἀντικρὺ τούτων τῶν τείχει προσπελάσαντες ἀνέναι δι' αὐτῶν  
ἐπειρῶντο, τοῖς ἀπὸ τῶν πετροβόλων ἀφιεμένοις λίθοις τὸ ἀσφαλὲς ἑαυτοῖς  
συντηρούμενοι

John Caminiates: On the Sack of Thessaloniki (A.D. 904) [3]

9. In the ship that we were, alone, the number of prisoners was eight hundred souls, without the barbarians on board who were two hundred in number.

(67, 1)

10. It was said that in that ship there were more than a thousand souls, both barbarians and prisoners who boarded her in Crete as well as those from the aforementioned cause [saving another ship] so that the ship was nearly in danger of sinking.

(76, 6)

11. And [the barbarians were hitting us] with hurls of stones from the stone-throwing machines (*petroboloi*), the whistling noise of which alone, carried by the air, drove the barbarians to a frenzy.

(26, 6)

12. Some of them [the barbarians] used bows while others a man-made roar of stones; others sitting on the stone-throwing machines (*petroboloi*) were throwing from above this great hail of stones [...] against the mentioned gate alone they set up seven stone-throwing machines covered all over, which they prepared for this use when they were passing from Thasos. Also, by bringing wooden ladders opposite them, they tried to climb up the castle walls, covering themselves safe from the stones hurled by the stone-throwers.

(29. 3-6)