The tersâne at Alanya and the galleys of Charles d’Anjou*

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Abstract
La tersana, o arsenale navale alla moderna Alanya, costruita intorno al 1229-1231, comprende cinque corsie costituite da gallerie volte, larghe ca. 7.5 m con un’altezza di 9.5 m; le gallerie ubicate più a sud sono di lunghessa diseguale compresa tra i 31 e i 38 m ca., mentre le due gallerie settentrionali sono entrambe lunghe intorno ai 40 m. Quest’ultima dimensione è con evidenza vicina alla lunghessa delle galee commissionate dal re di Sicilia, Carlo I d’Angiò (1266-1285) e fatte costruire in Provenza nel 1275.
È altresì notevole e da rimarcare che le dimensioni dei ricoveri per le navi Seljuq sono pressoché identiche a quelle degli arsenali (neoria) attestati archeologicamente sin dal periodo greco-classico. Tale circostanza indicherebbe una variazione davvero minima subita nel corso del tempo dalle dimensioni delle navi. Ma ciò è in aperto contrasto con tutte le evidenze, sia letterarie, che materiali, le quali, al contrario, documentano il profondo cambiamento cui sia le dimensioni, sia i tipi delle navi sono stati soggetti nel tempo. Donde in questo articolo si sostiene come dalla Grecia antica in poi, sino al tardo Medioevo, gli arsenali navali furono volutamente costruiti di ampie dimensioni tali da poter ricoverare navi di quasi tutte le dimensioni, e non furono riservate ad un particolare tipo di imbarcazione. Se ciò fosse vero, difficilmente dalle dimensioni di un arsenale si può risalire alle dimensioni delle navi in esso costruite o ricoverate.

The tersâne or arsenal at modern Alanya, on the east coast of the Gulf of Antalya, was built in circa AD 1229–1231 as part of the fortress of the Seljuq sultan ‘Alâ’ al-Din, who gave his name to the town of ‘Alâ’iyya. The tersâne survives more or less unchanged in its original form. Its overall maximum dimensions are approximately 57m by 40m. It comprises five shipsheds in the form of vaulted galleries, c. 7.5m wide with a height of 9.5m (figg. 1-3). The three southernmost galleries are of different lengths, ranging from c. 31m to c. 38m; the two northern galleries are both c. 40m long. In 1953, when Seton Lloyd and David Storm Rice carried out their survey of Alanya, the ground surface in the galleries was “clean shingle” and high water reached 4m inside the galleries. It is now difficult to estimate the original gradient of the slipways. Had it been as great as 1:10 it would have blocked at least the westernmost of the side arches that interconnect and ventilate the galleries, and a slope of 1:20 or 1:25 therefore seems more likely.

While preparing my talk for Ravello, I was struck by the fact that the galleys commissioned by the king of Sicily, Charles I d’Anjou (reg. 1266-85), would

* I am ashamed, disappointed and frustrated that administrative tasks have prevented me from writing up in full the talk that I gave at Ravello. I am also extremely grateful to David Blackman for allowing me to submit this brief note, and regret that his dogged persistence in pursuing me has been rewarded by this mere sop.

1. - Alanya tersane: sea elevation and sections (after Lloyd, Storm Rice).
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have fitted snugly into the northernmost two shipsheds at Alanya. Charles ordered the justiciar of the Terra d’Otranto, to use his “red galley” (galea rubea) 3, which had sailed from Provence 4, as a model to construct an unspecified number of new vessels. The dimensions of the red galley were carefully recorded in a written mandate issued at Brindisi on 18 February 1275. The new galleys were to measure 39.3m from stem to stern and 4.45m wide at the apostis, with a height at the sternpost of 3.58m (see Table). I reproduce here John Pryor’s schematic drawings of the longitudinal (fig. 4) and midships sections (fig. 5) of one of the galleys, within an outline indicating the dimensions of the Alanya shipsheds.

It is no great surprise that a galley built in Provence a little before 1275 should have been more or less the same size as the galleys that, some fifty years earlier, the tersâne at Alanya was presumably built to house – «Such light galleys, galee sottili, formed the main strike forces of all Christian maritime powers of the West during the twelfth, thirteenth and fourteenth centuries» 5 and, under the name of kadîrga, were the standard war galleys of the Ottoman navy until the end of the sixteenth century 6. These light, monorome galleys were, in John Pryor’s words, ‘really huge rowing shells’ (1988: 65). The apostis of the galleys of Charles d’Anjou would have risen scarcely a metre above the water line. They swamped easily, and could not have been safely kept at moorings outside the protection of a

| Overall length from stempost to sternpost: 18 cannae, 6 palmi | 39.30 m |
| Keel: 13 cannae, 3 palmi | 28.03 m |
| Width on floor: 11.25 palmi | 2.95m |
| Width of hull from bulwark to bulwark: 14 palmi | 3.67 m |
| Width of the apostis: 17 palmi | 4.45 m |
| Height of the sternpost: 13| 3 palmi | 3.58 m |
| Height of the stempost: 11| 3 palmi | 2.97 m |
| Height amidships: 7.75 palmi | 2.03 m |
| Width of the cursia, gangway: 2.5 palmi | 0.655m |
| Height of the forecast: 23 gubiti | 16.08 m |
| Length of the forecast yard: 34 gubiti | 26.72m |
| Height of the middle mast: 14 gubiti | 11.00 m |
| Length of the middle mast yard: 22 gubiti | 17.29 m |
| Length of the two steering oars: 23 palmi | 6.03 m |
| Number of oars: 108 | |
| Length of the oars: 26 palmi | 6.81 m |
| except for some at the bow and stern: of: 30 palmi | 7.86 m |
| Approximate deadweight tonnage: | 80 metric tons |

* The three major measurements used in the Angevin chancyery orders were the canna, gubitus, and palmus. A canna equalled eight palmi, and a gubitus three palmi. The Neapolitan palmus of the thirteenth century was equal to approximately 0.262 metres. See H. Doursther, Dictionnaire universel des poids et mesures anciens et modernes (Brussels, 1849), p. 375.

Table 1. - Pryor 1988:66, Table 3.

There was not much of a harbour at Alanya in Seljuq times, before the modern quays were built, nor did the rocky shore beneath the fortress offer a wide beach onto which galleys might be drawn – small wonder that ‘Alâ’ al-Dîn should have built a tersâne to protect his modest war fleet.

What is at first sight remarkable, however, is that the dimensions of his shipsheds should be so close to those of the sheds known archaeologically from classical Greece. On the one hand, this would seem to indicate minimal variation in the dimensions of the ships themselves. On the other, all the evidence, both literary and material, suggests that the dimensions and the types of ships varied hugely over time. On further reflection 7, however, it makes perfect sense that, while the dimensions of ships did indeed change over time and according to type, they should have done so within the walls of a structure that remained comparatively stable for millennia. An Athenian trireme, such as the reconstructed Olympias 8, a liburna of the early Roman empire 9, a Macedonian bireme dromôn (Pryor, Jeffreys 2006: 205, fig. 20), a monorome Angevin gallea (Pryor 1993: 65), and almost the whole range of other vessels – warships, transports, and merchantmen – built from antiquity to the sixteenth century AD, could all have bedded down comfortably side-by-side in either the shipsheds at Naxos or the tersâne at Alanya. Only the titanic hexeres and penteres of the first century BC could not have fitted lengthways and, in common with the shorter teteres, their stern-towers would have prevented them from being drawn into the galleries at Alanya 10. What this seems to suggest is that, from ancient Greece until the late middle ages, shipsheds were deliberately built on sufficiently generous lines to accommodate ships of almost all dimensions, and were not reserved for the construction and housing of a particular type of vessel. If so, the corollary is that the mere dimensions of a shipshed can tell us very little about the dimensions
and type of the vessels that were built or housed within it. As Seton Lloyd and David Storm Rice re-marked of the galleries at Alanya, nearly seven hun-dred years after they were first built, «They are still the centre of the Alanya ship-building trade, and the fishermen’s boats are both launched from and laid up in the galleries» (1958: 16).

Notes

1 The modern name Alanya is said to have been coined by Atatürk himself in 1933 after the name of the town was mis-transcribed from a telegram transmitted in Morse code to his yacht by the Mayor of ‘Alā’iyya.

2 Lloyd, Storm Rice 1958:16-18; for the date: p. 55, Inscrip-tion no. 4. A recent study (Dağgülü 2009) makes a slight contribu-tion to our knowledge of Alanya.

3 Were the hulls of the ships in the dockyard at Naxos and of Charles d’Anjou’s Provencal galley both painted red because lead tetroxide was used to protect their timbers from the ravages of ship-worm? It would be nice to think so, but Charles also had a – slightly larger – “white galley”.

4 Filangieri 1959:126-9. A preliminary description of the gal-leys was made by John H. Pryor in Pryor 1988:64-6, from where the table and illustration reproduced here are taken. More de-tailed versions of the midships section, but not of the longitudi-
nal section, have since been published by Pryor, but we have preferred, to demonstrate our point, the simpler version of 1988; and the overall beam and height measurements are the same. A fuller account of the galleys of Charles I appeared in Pryor 1993, and the author kindly informs me that he is currently preparing a revised study. I am extremely grateful to Professor Pryor for his kind assistance and for referring me to the discussion of the galleys in Chiggiato 1991, which I have not been able to consult.

5 Pryor 1988: 64. To the essential bibliography there cited, should now be added: Gardiner 1995, especially F.M. Hocker: 86-100, and J.H. Pryor: 101-16, esp. 111-15; and Pryor, Jeffreys 2006, esp. 434-44 (see 434 n.19, which explains that this super-sedes all previous discussions by Pryor).


7 One has to reflect on something during the longeurs of a university committee.

8 Morrison, Coates, Rankov 2000: 208, fig. 61.

9 As reconstructed by John Coates, in Gardiner 1995: 140.

10 See the silhouettes of these ships drawn to the same scale for comparison by John Coates in Gardiner 1995: 141.

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RICOVERI PER NAVI MILITARI NEI PORTI DEL MEDITERRANEO ANTICO E MEDIEVALE

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Ravello, 4-5 novembre 2005

a cura di
David J. Blackman e Maria Costanza Lentini