

## ***Ships, Sailors and Maritime Activity in Constantinople (1436-1440)***

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In 1436, the Venetian merchant Giacomo Badoer arrived in Constantinople on Dardi Moro's galley with his servant and a horse after a short voyage of 30 days (82,2-3). The circumstances were favourable in the aftermath of a conflict in which Venetians had fought against Genoese and afterwards Greeks against Genoese who were forced to retreat with their fleet and return to Italy.<sup>1</sup> Badoer was experienced and well versed in markets, exchange, ships, freight and the ways of maritime trade. His account-book<sup>2</sup>, which is very well preserved, throws light on the role that Constantinople continued to play in Mediterranean trade, on relations between Black Sea ports and Romania, and on shipping routes which linked the imperial capital to all the major eastern and western ports and not only to Venice and Genoa, in the last days of the Byzantine Empire. The city and its port formed a bridge-head for navigation and continued to attract a large number of Levantine, Armenian, Turkish, Jewish and Greek merchants as well as westerners, Sicilians, Pisans, Genoese, Anconitans, Florentines, Provençals and Venetians. The latter appear

<sup>1</sup> P. Schreiner, "Venezianer und Genuesen während der ersten Hälfte des 15. Jahrhunderts in Kostantinopel (1432-1434)", *Studi Veneziani*, XII (1970), p. 366. Benjamin Arbel, "Colonie d'oltremare" in *Storia di Venezia dalle origini alla caduta della Serenissima*, IV, *Il Rinascimento, politica e cultura* a cura di Alberto Tenenti e Ugo Tucci, (Rome 1996), pp. 947-985, provides a good general study on Venice's relations with Constantinople.

<sup>2</sup> *Il libro dei conti di Giacomo Badoer*: testo a cura di Umberto Dorini e Tommaso Bertelé (*Il nuovo Ramusio*, III), Istituto Poligrafico dello Stato 1956, pp. XV-857. *The numbers in brackets in the text refer to the pages of the printed book.*

frequently in the book: they were Giacomo's principal partners and had dealings with both Genoese merchants and Tuscan bankers<sup>3</sup>.

### The Ships and their Captains

*A Merchant Fleet Limited to a Few Types of Ships.* For maritime trade only a few types of ship were used. A *balonier* from Ancona, captained by Benvenuto de Filippo, transported cotton from Phocaea to Ancona (638). Badoer sent a *grippo* to Janisari *chontra la nave* (709), which probably ought to be interpreted as the act of partially unloading goods carried on a ship which did not waste time putting in at Constantinople. In the ports of Constantinople, Agatopolis or Trebizond many barges, barks and dinghies were used to ply between the quayside and the ship; a bark even made several voyages to Scutari. Small tonnage shallow-draught ships, galleys and *fustes*, also used the services of these vessels (516): a galley towed a service boat called a *barcha di galia* (18 and 22). These vessels were run by the Greeks, e.g. la *barca* Papa Sciepofilacha from Agatopoli.

Of the eastern vessels<sup>4</sup>, the *griparia* enjoyed great success. Deriving from the *grippo*, the *griparia* was a small ship widely used for short voyages near Corfu and the Ionian Islands, and for the most part captained by Greeks, as was the *griparia* of *paron* Polo de Loredo who

<sup>3</sup> In this article we have kept the Venetian diction of surnames as transcribed by Badoer: and so Zorzi Zorzi seems preferable to Giorgio Giorgio. The Justiniani family's name may be spelled Giustignan or Zustinian, and in this case we have followed our source. As far as Italian (non-Venetian) names are concerned, we have kept Badoer's usage, hence Anzolo for Angelo, although he was Tuscan. Moreover, we have kept the weights and measures used by the source, and invite the reader to consult J. C. Hocquet, "Weights and Measures of Trading in Byzantium in the Later Middle Ages. Comments on Giacomo Badoer's Account Book", *Studien zur Gewerbe- und Handelsgeschichte der vorindustriellen Zeit*, (Steiner Verlag, in the press).

<sup>4</sup> Concerning the state of maritime activity in the Byzantine Empire at the end of the Middle Ages, cf. H. Ahrweiler, *Byzance et la mer. La marine de guerre, la politique et les institutions maritimes à Byzance aux VIIe-XVe siècles*, (Paris, 1966); H. Ahrweiler, "Istanbul, carrefour des routes continentales et maritimes, XVe-XIXe siècles", *Bulletin de l'Association Internationale d'Etudes du Sud-Est européen*, XII (1975), pp. 9-26; N. Oikonomides, *Hommes d'affaires grecs et latins à Constantinople (XIIIe-XVe siècles)*, (Montreal 1979); a. E. Laiou, "The Byzantine Economy in the Mediterranean Trade System", *Dumbarton Oaks Papers* 34-35 (1981), pp. 177-222.

lived on Corfu (102). In 1437, a *griparia* brought from Gallipoli 11 sacks of wool purchased in the different *casali* of the straits (126); 3 *griparie* loaded 3 sacks of Gallipoli wax (384). Dimitri Tofilato's *griparia* brought from Salonika 977 *mezene* of salted pork and pork fat, 478 *cantars* in all (650). The *griparia* belonging to Zorzi Doscaropolo of Eno loaded 6 *caratelli* of tender caviar from La Tana (9 June 1438), which was resold to three buyers from the Bazaar (350 and 134.8). Giacomo Badoer also received caviar, spices and fish-glue sent from La Tana by the merchant Zuan da Siena on Termo da Sarzana's *griparia* (707). On 12 September 1438, master Pietro *varoter's* (furrier) *gripa* arrived from Brusa with a *tangi* of white fleeces for Giacomo Badoer.

*Griparias* ventured on longer voyages: Chiriacho Sachi's *griparia* came from Trebizond<sup>5</sup> and delivered some cross-bow shafts on 18 August 1437 (39), but this *griparia* became the *nave* master Chiriacho *trabexondeo* when the shafts were unloaded on 12 August (184), which appears fairly unlikely unless we accept a copying error on the part of Badoer or the use of the word *nave* in the generic meaning of a ship. In 1437 Zuan Graso de La Canée's *griparia* loaded a case of 25 pieces of Crepon *voile* sold to the Turk Saliat, 27 *fardi* of linen and 13 *fardi* of Alexandria linen for which Giacomo paid the captain a high freight fee of 19 gold ducats or 60 perp. (39, 106).

Franzesco degli Albizi from Florence bought jointly with Giacomo Badoer various goods which they sent to Rhodes and Alexandria on Zorzi de Scarpanto's *griparia*, in which Zuan Jarachi was *partecipe* (488), for a total sum of 1,054 perp. 6 car. for copper, salted ox-hides, tallow and 7 sacks of washed wool. The copper was sold at Damascus (489), the wool at Beirut and the tallow at Rhodes. The captain received 48 duc. 14 asp. for freight. The *griparia* returned with 306 sacks of ash (488, 677), like the ship of Lio Muzino (489) or Lio Magrigno of Rhodes (630).

One of the most eminent families in Venice, the Contarinis,

<sup>5</sup> A. Bryer, "Shipping in the Empire of Trebizond", *The Mariner's Mirror*, LII (1966), pp. 3-12, published a plate of a *griparia* (in 1932), a common term in the Mediterranean. In the Black Sea it denotes a medium-tonnage vessel used for coastal trade or for fishing, with a single mast built *à carvel* and sailing with lateen sails (p.11).

remained faithful to a type of vessel called a *galiaza* which ought not to be confused with the heavy *galeazza* of the end of the following century with five oarsmen at each oar which proved to be so valuable in the armada of John of Austria and Sebastiano Venier at Lepanto. A "large galley" seems to me to be a more fitting term for this fifteenth-century *galiaza* (517), and a boat with oars of course, but we do not know whether it was a Black Sea vessel. In 1439 Marin Contarini captained the *galiaza* which carried some *montonine* to Jeronimo Badoer in Venice (766). Some wax was loaded onto the *galiaza* captained by ser Pandolfo Contarini (517) of ser Marin (310). The Contarini *galiaza* is the subject of account c.212 which also quotes Francesco de Toma's *galiaza* (426). I would hesitate to draw a conclusion that the Greeks had *griparias* and the Venetians used large galleys. The registers do not give us any further information about these two ships. Finally, Crisuli Petener's *naveta* loaded a cargo at Constantinople for Caffa on 4 September 1436 (45).

*The Captains and the Crew* The barks that carried various cargoes which Cristofal Bonifatio loaded at Brusa had Greek captains: Crisodi, Maguzo de Pera (109), Statopira and Vasilico (452). The *nave* captained by Jani Tepefto of Constantinople plied the Trebizond route (102). Captains were for the most part recruited on Candia (Crete) and the Cretan masters preferred to captain large-tonnage ships. These circumstances explain the Venetian Seignior's interest in Crete. On 12 June 1436, Zorzi Andromiti, known as Palapano, loaded some wax which was sent to Venice from Candia (42, 46-9), as well as some copper and fleeces which he had to deliver to Candia to be forwarded to Alexandria one year later in June 1437 (112, 18; 123, 20) and some wax to be left on Candia to be forwarded to Venice (145, 25-30). The following year, on 14 June 1438, he transported a bale of six pieces of cloth to Candia for ser Antonio de Mezo (295). This captain, who knew this route so well, ran a veritable parcel post! Zuan Graso de la Cania arrived with 13 *fardi* of Alexandria linen after the galleys had set sail on 18 November 1436 (39, 23) and a case of Crepon *voile* (104, 3, 13).

Nicolò Langadioti, the captain of a *nave*, transported some musk in a lead casket and in some bladders for Francesco Trivixan at Venice (172-4, 282, 333). Zuan Langadioti, captain of another *nave*, on 10 February 1438 took 13.5 ducats for Troilo Contarini to Candia (168), a bill of exchange and a female Zicha slave (358). To this same Troilo Contarini at Candia Zorzi Mavrigha of Candia, captain of a *nave*, delivered a piece of satin on 3 September 1439 (229, 23; 598, 17) and he returned on 16 October 1439 with 17 *botti* of wine sent by Marco Filomati (645, 8): one *botte* was sent off at once on a *nave*, 3 *botti* were sold to the consul of Ancona, and 13 to Nicolò Zanpani (707, 2-7). Cretan wine seems to have been highly prized<sup>6</sup>. Candia's importance also stemmed from the island's role as a redistribution point for trade which was organised along three axes - Alexandria, Venice and Constantinople. Many ships coming from Alexandria deposited at Candia all that part of their cargo destined for Constantinople before setting sail for Venice or a Western Mediterranean port. Jani (Zorzi) Modiano's *nave* dropped anchor in the straits with a *collo* of *voile* which had been brought to Candia by the galleys from Alexandria (286, 2). In the opposite direction, the *nave* captained by Xeno Murari of La Canée set out on 22 April 1437 with 63 *cantars* 77r. of copper for Zacharia Contarini at Alexandria (111, 16-8). The copper was delivered to Candia to Marco Filomati who had then to forward it to Alexandria (111-112). In March 1439, Badoer agreed to an insurance for Agnolo de Marin concerning some merchandise loaded onto Xeno Murari's *nave* which was setting sail for Chio (643, 10). Relations established between Constantinople and Alexandria were rarely direct: they mostly went through Candia, which meant that the cargo had to be entrusted to two different people and embarked on two different ships, as though the route between the two cities were made up of two segments. This separation was beneficial to the Venetians and their Romanian clients. Venetian merchants set up their agencies in the

<sup>6</sup> J. Chrysostomides, "Venetian Commercial Privileges under Palaeologi", *Studi Veneziani*, XII (1970), pp. 298-311 (Venetian wine-trading in Constantinople).

different ports and seem to have preferred to deal with certain ships' masters who had succeeded in gaining their confidence. On 10 December 1437, Zacharia Contarini, who had taken up residence in Alexandria, sent a bale of paper on Nicholò Pulachi's *nave* (354); on 16 August 1438, Pulachi loaded almost 50 *cantars* of copper for Marco Filomati at Candia, who was to send it to Marin Grimani at Alexandria "per le galie" (457-8); on 18 February 1439, Andrea da Chale, Badoer's agent at Caffa gave Nicholò Pulachi a bill of exchange for 50 perp. for his partner in Constantinople (493-5, 610); on 27 June 1439, this same captain who was decidedly very active on the eastern routes, transported a load of paper to Caffa (616); on 13 April 1439, he had to receive 37 perp. for some alum (635), 10 cantars of which he had to transport to Candia "a so pericholo e spexe, a perp. 3 car 18 el canter". He had to deliver the alum to Marco Filomati and was authorised to pick up more alum at Marogna at the same price and to send it to Venice, to Giacomo's brother Geronimo (642-3). Lastly, on 30 March 1439, Marco Filomati paid Nicolò *zerchier* "bighe C° de zerchi" which he received from Pulachi's ship (644). Thus this ship master loaded the various cargoes he was offered: he had a certain margin of discretion, the merchants acknowledged his ability to negotiate on their behalf in purchasing alum, he sailed from Caffa to Candia, stopping off at Constantinople to deliver his goods and he always arranged return cargoes. Among the other ships' captains with whom Badoer entrusted the transport of goods, we can mention Lion Sguero or Seguro, Michali Seguro, Nicolò Tariano, Antonio Torsielo, Todaro Vatazi, Vergizi Manoli and finally Polo Quirini (Querini?).

*Ship's captain and merchant* For a ship's master, a sure way of rounding off his earnings was to engage in commercial enterprise. So the transporter became a merchant: on 4 December 1436 Todaro Vatazi loaded copper for a voyage to Messina and Saragoxa (Syracuse in Sicily) consisting of 49 *cantars* 16 *rotoli* in 25 *chofe* for Nofrio da Chalzi (77,80). Badoer had made him a partner in a return voyage for 1/3 in compliance with the principles of maritime trade

and contracts binding partners in *societas maris* and consequently for 1/3 of the copper. The Master who owed Badoer 281 *pers* for this purpose, attempted to get around the rules: normally he ought to have paid a sum for the purchase of a third of the copper which Badoer did not debit himself with since the copper, he thought, should not be charged with freight but the master charged the freight to his account and Badoer entered the sum for the copper in Vatazi's account, that is 1%, *perp.* 2 *car* 20 (78,81), a trifle. Vatazi also entered into partnership for the Sicilian products sent from Messina by Nofri da Chalzi: *oripelle* and sugar paid for by the banker Chaloiانو Sofiano (78, 25-33, 79). He was liable for 2/8 of the *oripelle* (131). He was willing to undertake any kind of trade; all offers were welcome.

These ships' masters were entrusted with confidential missions, transporting mail, business letters, accounts and commercial bills. Todaro Vatazi delivered Piero Soranzo's account which was conveyed via the Modon route on 13 December 1436 (2, 16) and other accounts belonging to Piero Michiel, Giacomo Corner (58,7), Francesco Zorzi (63,5) on the same voyage (57,11). Vatazi was as much a merchant as he was a ship's master. He was in many companies. On 13 November 1436 in partnership with Costantin Vatazi he sold wax for 970 *perp.* (73, 5-7), which was entered into the accounts of the banker Carlo Capello on his behalf. On 15 October 1437 he refers to a voyage to Messina and received freight charges for: 169 *botti* of wine at 2 ½ ducats per barrel, 15 bags and 3 kegs of soap, 2 kegs of tartar, 9 *botti* of olive oil, 2 *botti* of *oripelle*, 26 *miera* of sugar, amounting to a total of 525 ½ ducats at 3 *perp* 5 *car* each ducat, 1686 *perp.* (195). A substantial cargo! The Sicilian sugar company (26 *miera*) took into partnership Piero Michiel and Marin Barbo for 2/4, Todari Vatazi for a quarter, and Giacomo Badoer and Todaro Vatazi for the remaining quarter, the former for 2/3 of the said quarter and the latter for 1/3 (200, 1-3). The largest share in the undertaking was therefore that of the Greek captain who held 33% of the total while Badoer held 1/6 and the two Venetian nobles ¼ each. This was not the only partnership in which

Badoer and Vatazi acted jointly. We have seen that they were joint partners for the importation of Sicilian *oripelle* which was shipped to them by one of Badoer's regular agents Nofri da Chalzi who took a 1/3 share in the deal, while the remaining third belonged to Todaro Rali e *chonpagni per raxon de la nave* (203, 33-35), meaning that they were acting "on the ship's behalf" being partners. Todaro was credited with 150 *perp.* 12 car freight while Rali was credited with 500 *perp* in Carlo Capelo's accounts for his share (205, 25-38) and a further 400 *perp* in Rali's accounts for freight (237). On 8 May 1439, Todaro Vatazi was unable to pay his third amounting to 2 ducats for the last cargo of *oripelle* to arrive. Badoer took his place "because the said Todaro was dead and his possessions could not be found"<sup>7</sup> The captain-merchant died insolvent. We should not expect the dry pages of an account book to throw light on the captains's death!

More important: a ship whose master was from Candia does not imply that this vessel was the property of the one of the island's middle class; Venetian shipowners might have entrusted their ship to a captain from Candia whose reputation as a sailor had come to their notice. But when the captain and other partners were natives of the island it is clear that there existed on the island the figure of the captain-merchant who sought employment at sea and to engage in maritime trade. The same can be said of other ships which were also captained by natives of Candia. The island's position on the Venetian shipping routes undoubtedly had significant economic effects.<sup>8</sup>

*Additional Payments* Apart from the wages paid by the shipowner or his representative the captain, the crew received bonuses both in Constantinople and in Simisso<sup>9</sup> in the form of a gratuity (*beverazo*): to load 37 *cantars* of copper Badoer spent 13 carats per *chamali*<sup>10</sup> (a term which

<sup>7</sup> "Per eser morto el dito Todaro e non trovarse de hi so beni" (191, 22, cf 649, 614, 18)

<sup>8</sup> F. Thiriet, *La Romanie vénitienne au Moyen Age. Le développement et l'exploitation du domaine colonial vénitien*, (Paris 1959).

<sup>9</sup> Simisso or Amisos on the southern shore of the Black Sea, east of Sinope, two thirds of the Constantinople-Trébizonde route.

stood for porters whom Badoer calls *bastaxi*) e *charo per portar a marina* on 7 June 1437 and 20 carats for the wagon which transported the goods to the shore, the porters (*bastaxi*) and the *beverazo* to the ship's crew (149). The sailors might have helped with the loading as they appeared in the payments for the porters. The same practice was observed with regard to *galleotas*.<sup>11</sup> This gratuity and the various costs of loading and unloading ships were fixed by tariff on the basis of convention or rules: to unload 2 bales of Vervi cloth the costs went up to 4 carats and it was necessary to obtain a copy of the lading policy called *bolesta* which was sent by the captain's chaplain (priest) ser Piero Contarini, and pay out a tip (*cortexia*) to the galley's sailors (*barcharuoi*) (18); 2 carats sufficed for a small bale of cloth (20) but 6 carats were required for 3 bales of cloth from Alost (22), 12 carats for 4 bales of coarse cloth and 15 carats for 9 cases containing *voile* received in 5 *cbolli* and made up of a total 191 small crates (218). The gratuity was rarely counted as a separate item in the books but was incorporated in the overall transport cost.<sup>12</sup> The tariff was higher if it included wages.<sup>13</sup>

A figure which had a very important role in the mercantile-maritime activity of Venetian galleys was the captain's priest-chaplain who performed the function of scribe and consigned the

<sup>10</sup> J Lefort, "Le coût des transports a Constantinople, portefaix et bateliers au XVe siècle", *Mélanges offerts à Hélène Ahrweiler*, (Paris 1998), vol 2, assimilates *bastaxi* or *camali* and translates the two words with *portefaix* (porter). We may observe that *camali* was mostly used in the *syntagma per camali per mandar a chaxa* (*passim*) while the *bastaxi* who did maintenance work in the port accompanied the carts (the *syntagma* which usually went with *bastaxi* was carts: *bastaxi be chareta*, the porters and the carts, *passim*) but there are some exceptions in the text. I suggest the translation "dockers" for these porters or *bastaxi*. Badoer went further with obligingness: *e per chamalo per mandarla a casa e cortexia a quel del caorserà* (336,26), which should, according to me, be translated as "and for the porters to carry the (silk, 237 pounds) to the house and the gratuity for the person of the Caravanserai". I leave to the experts in Byzantine history, if there was a caravanserai at the city's gates.

<sup>11</sup> Per *bastaxi* per far lugar (do casse de veri) e per far cargar quele in la galia (...) e *beverazo* ai Compagni di galia (146); per *barcha* e *chamali* par mandar (chuori de bo saladì) a nave, e *beverazo* a quei di nave (430).

<sup>12</sup> E per *chamali* che i portò a la barca, e *barcha* per mandarli a la galiaza, e *chortexia* ai marineri, in tuto perp. 1 car. 8 (460).

<sup>13</sup> Per *spexa fata* al descargar (pani 70 de Mantoa baleta una) e *cortesia* a quei di nave in luogo del nolo, car. 16 (134).

*boleta* – a written list of goods loaded in the embarkation port and unloaded in the port of destination taken from the ship's log. This was a public document which could be used in the case of disputes and was consigned against payment. The chaplain's function recalls the missions of Venice's notary-priests.<sup>14</sup> The *boleta* was tariffed.<sup>15</sup> The price was based not on the weight but on the volume and content; the same<sup>16</sup> for indigo from Bagdad weighing 11 *cantars* 90 *rotoli* ½ and contained in 2 cases, 1 barrel and 3 bags. For 1 barrel with 3 *cantars* and 9 *rotoli* of incense, Giacamo paid “car. 3 *per boleta*, car. 3 *per cortexia ai chonpagni di galia*, car. 4 *bastaxi e barca* (56). Usually, these various expenses borne at the time of loading and unloading operations were incorporated into the overall expenses under the heading of “goods”: *per spexe de marchandantia: per spexe fate al descargar, per boleta e barcha e bastaxi e mandar a caxa* (26).

In the remuneration of officers and crew “porterage” was an essential component. This practice, which was tolerated – even encouraged – consisted in authorising sailors to load goods into their cabins in order to collect freight charges. In this way the shipowner was able to reduce the crew's wages. In short, everyone sought to gain something, even though the beneficiaries of porterage were then obliged to live in a space which was already cramped and void of any comfort. Before setting sail for Venice, on 3 June 1439 Lion Seguro loaded onto his ship 3 bales containing 300 black sheep-skins “2 of which were placed in the captain's cabin and one was carried as ship's

<sup>14</sup> In 1433 Pope Eugene IV issued a bull against the existence of notary-priests in Venice: G. Cracco, “*Relinquere laicis que laicorum sunt*. Un intervento di Eugenio IV contro i prete-notai di Venezia” *Boll. dell'Ist. di storia della soc. e dello stato veneziano*, III (1961); on the position and role of notaries in medieval society, A Bartoli Langeli, “Documentazione e notariato”, pp. 847-864, in *Storia di Venezia*, vol. 1, *Origini, Età ducale*, (Rome 1992); G. Tamba, *Una corporazione per il potere. Il notariato a Bologna in età comunale* (Biblioteca di Storia Urbana Medievale, vol. 11), (CLUEB, Bologna 1998), p.396.

<sup>15</sup> *azali fasi 80. per boleta a tornexi 6 per cento* (16), *per boleta al prete car. ½ per pan (de zera zagora)*, *ai compagni de galia car. 3 per pan* (30).

<sup>16</sup> *per boleta al prete car 3 per cas(s)a*, *a i chonpagni de galia car. 3 per caxa*, *in tuto perp. 1, car.0* (52).

freight". Thus the captain collected his own personal freight charges, the shipowner received freight for just one bale of woollen fleeces; half of 910 fleeces in 7 bales, half of 13 beef-hides loaded in the (*nocher's*) cabin, other portorage for his profit, 2 *caratelli* of copper (600, 27-35). On 30 August 1439 Seguro returned to the port with 8 barrels of wine which were carried in the captain's and other officers' cabins (*in stazio del pedota a altri ofiziali*) (706) and on the 26 February 1440 he set sail again with 2 barrels of rock alum or 14 *cantars* (647) and 17 *cofe* of copper for Venice (805). All the officers had access to portorage.<sup>17</sup>

### **Goods and Routes**

*The ships and their cargoes.* Regarding the ships' cargoes we only know about that part of the cargo which Giacomo Badoer consigned to them. Therefore it would be fruitless to try and calculate tonnage, the size of the crew, the ship's profitability and the sailors' and captains' earnings. Whether Giacomo acted alone or in partnership with others, especially with Venetians, our approach here is based on one specific operation, such as a voyage to Majorca or to Messina and Syracuse.

<sup>17</sup> Badoer loaded 281 furs (*martres*) on the ship captained by Francesco de Tomà in the captain's cabin (*in la so chamerala*) (433), 5 bales of white fleeces in the another officer's cabin (*in la chamera del nochiero*) and 2 bales as ship's freight (596). On 3 June 1439 he received from Lion Seguro's ship 2 bales which had been stored in the captain's cabin and 1 bale as ship's freight (596 same account). On 12 October 1437 he loaded on behalf of Piero Michiel and partners 7 cakes of wax (probably bought from the Jew Sulaiman) weighing 2124 *rotoli* on the ship captained by Silvestro Bon, in the captain's cabin *de la qual el diè aver di nolo duc. 2 del mier* (171) and 6 bags of wax in *scudele* weighing *chamerada livre 1497 al pexo sotil de Venexia e choli 5 de zera in pani roti che pexò chant. 13 r. 57, chargado in nave pn Silvestro Bon in la chamera del patron* (172, 189, 255). On Zorzi Mavrica's ship which carried 17 *botti* of wine from Candia *de le qual el ne tera una nel stazio del sescalcho(...)* *de i qual ne andò fuora in nave boia 1* (706, 2-3) *la qual mist in conto de hi noli al patron de la nave* (707, 2-3). On portorage and sailors' remuneration, J. C. Hocquet "Gens de mer à Venise. Diversité des statuts, conditions de vie et de travail sur les navires (XIIIe- XVIIIe siècles) -18<sup>e</sup> Congrès d'Histoire maritime, (Naples 1980), in R. Ragosta (ed.) *Le genti del mare mediterraneo*, 2 vol., (Naples 1981), 1, pp. 103-168; by the same: Das Salz und die Gewinne aus der Handelsschiffahrt im Mittelmeer im Spätmittelalter", *Scripta Mercaturae, Zeitschrift für Wirtschafts- und Sozialgeschichte*, Stuttgart, 1/1983, pp. 1-18.

The ships were sometimes engaged in quite complex trading which is not revealed in the usual documentation.<sup>18</sup> For example, on 22 September 1436 Michali Seguro, loaded 10 cakes of wax at Constantinople which were destined for Geronimo Badoer and transported them as far as Candia where Marco Filomati had the task to ship them to Venice (36-7, 42). On 7 December 1437 he took on board two pieces of cloth for Zuan Loredan in Cyprus (225,410) and 38 *chofe* of copper (76.83 *cantars*) for Chatarin Contarini at Damascus or Beyrouth (584-5) which was sold through barter in Damascus (exchanged for *vermeil*, after having been valued at 28  $\frac{3}{4}$  ducats *per cantar*). On 26 August 1438 he was paid for 15000 *doge* in cask probably arriving from Candia (644) and a year later he returned with 18 *fasi* of *vermeil* which was bartered again for copper at Damascus (703).

The merchant-shippers who used the services of transporters

<sup>18</sup> F. Thiriet, "Quelques observations sur le trafic des galées vénitiennes d'après les chiffres des *incanti* (XIV-XVe siècles)", *Studi in onore di Amintore Fanfani*, III, *Medioevo*, (Milan, 1962) wrote : "the large galleys used from the last quarter of the fifteenth century had a much greater capacity ; between 1000 and 1500 *botti* each (from about 800 to 1,100 tons).....the galleys of the previous period (1332-1345) did not hold more than 600 to 700 *botti* (around 480 to 530 tons " (p.513). This posed a simple, common-sense question (where could a thousand tons, with a net capacity of 754 *liters* according to Thiriet, be placed in a narrow low-lying vessel ?) and also a mechanical problem (how to row such a huge vessel?) B. Domerc, "Il dominio del mare" in *Storia di Venezia dalle origini alla caduta della Serenissima*, IV, *Il Rinascimento, politica e cultura, op. cit.*, examines almost exclusively the traffic of galleys and *mude* and refers incidently to the existence of round ships, *navi tonde*, whose capacity he estimates: in his opinion "the size of a trade galley was about 140 tons, the same size ,that is, of a round ship carrying 500 *botti*" (p.113) which makes it about equal 500 *botti* (tons) = 140 tons or 1 *botte* = 0.28 tons or 280 kg, repeated on p. 118 (600 *botti* = 150 *tonnellate*) Domerc does not mention his sources and quotes widely from Lane without using the latter's own calculation according to which 1 *botte* equalled 0.6 *ton*.

Cf F.C. Lane "Tonnages, Medieval and Modern", *Economic History Review*, II ser., XVII (1964), pp. 213-33, repr. in *Venice and History. The collected papers of Frederic C. Lane*, Baltimore 1966, 345-370; we should also mention the article by U. Tucci "Un Problema di metrologia navale: la botte veneziana" *Studi Veneziani*, IX (1967) pp. 201-246 which has a very sound documentary and methodological grounding. Before deciding on a *botte-ton* equivalence, it would be wise to ask what is being measured and why it was necessary to use "...milliare" for calculating the ship's burden and *botte* for calculating the ship's hold. On these problems see in the aforementioned *Storia di Venezia. Il Mare*, edited by Tenenti and Tucci, (Rome, 1992), J.C. Hocquet, "Squeri e unità mercantili", pp. 313-7: *La botte, unità di misura della stazza a Venezia*.

allowed the latter a wide margin for manoeuvre. They paid for the service but were unable to impose their will and views on the ship's captain, a task which at the most was left to the shipowner. The fact is that at sea the captain was the only master. He decided on the route and ports of call and enjoyed great freedom of movement. When on 15 May 1437 he consigned to Nicolò Tariano, ship's master, a barrel of salted fish (*zievai chaostri*) that is 1170 grey mullets for Candia (118) and 23 *chofe* of copper for Zacharia Contarini in Alexandria (111), Giacomo Badoer left the captain to decide whether to reach the Egyptian port and deliver the copper to Contarini for a freight of 4 gold ducats or to break off the voyage in Candia and deliver the copper to his agent Marco Filomati, the freight being reduced to 3 ducats (112). Allowing the captain such latitude sometimes led to unwelcome consequences: following a counterfeit transaction, perhaps the falsification of a bill of lading by the *scrivan*, Tarani would have been able to charge *perp* 9, g. 1 p. 16 for the freight to Candia (113).<sup>19</sup> On 4 August 1439 Contarini sent the account for the copper<sup>20</sup>. For more than two years he had been unable to settle the account.

Badoer knew how to be more prudent with the ships' captains: the captain Xeno Murari from La Canée embarked more than 63 *cantars* of copper for Alexandria for a charterage of 3 Candia gros per *cantar*, the ship probably headed for La Canée. If Murari had then to carry copper to Candia to be handed over to the agent Filomati, he was to receive a

<sup>19</sup> We do not know what the *chontrafazion* of Tarani's freight consisted of (398, 12). Marco Filomati urged "per razon de mie fazende che l'â fato in Chandia, per spexe ch'el me signa aver fate per mie rami (...) mandadali (to Alexandria) in più fiade, per noli e spexe a descargar e chargar... (399,3-5). *Me* and *mie* here denote Badoer's business and person.

<sup>20</sup> The merchant residing in Alexandria had received "per el trato neto de le cofe 23 de rame (...) el qual el mete aver pexâ neto r. 243 (sic:read cant 24 r. 30) a duc, 16 d'oro el cantre monta duc, 388 car. 19 de duchati de deremi 285 el ducato che val, de ducathi correnti da deremi 230 el duchato, duc. 482 car 9 q. 2, bato per spexe (...) duc. 78 4 1/2, resta duc, 404 car 5 che val a deremi 230 el duchato, deremi 92972, che val a deremi 95 a perpero, perp. 978 car 15 (113, 7-19). We can see that the merchants were good at handling monetary exchange and knew the difference between the value of a ducat having currency in the East and the ducat used in Venice.

supplement of 1.5g. per *cantar* and could not ask for more money, anything above that being his responsibility.

Ships and galleys were by and large complementary: the Venetian *muda* system, which was rigid as far as calendar, ports of call, and chartering were concerned, relied upon ships (*nefs*) which had fewer constraints and more flexible itineraries. Vergizi Manoli, the captain of a *nave*, took some cloth to Candia (358) on 17 September 1437 for Troilio Contarini (387); in October 1438, he sent to Geronimo in Venice the copper that Nicolò Pulachi had taken to Candia (458-9, 2-4, 558), as well as transporting zedoria (474), a kind of ginger from India, which was loaded *in galia chapitania* for the voyage to Venice (475). In January 1439, Badoer chartered his ship from Constantinople to Candia with a view to the *nave Justiniana's* voyage to Majorca (524, 44). The *Justiniana* sailed to Majorca with Paolo Querini's *nave*. This Querini or Quirini illustrates the common interests that united the different types of Venetian vessels: on 3 June 1439, he loaded three bales of 390 fleeces (596, 43) to be entrusted at Modon to ser Arseni Duodo who would "put them on the first ship for Venice" (600, 38), and on 26 June he embarked slaves and wood for Sicily (Saragoxa) on behalf of Aldrovandin de Zusti who signed an insurance for 200 ducats at 8% (643, 13). Querini then stopped at Candia to hand over an order of payment to Nofri da Chalzi (620). On 8 December 1439, on his return from the voyage to Syracuse, he owed two *pondi* of pepper (752) but possessed a credit of 72 gold *doble* which had cost him *16 carlini e 1 grana per dobla* (752, 4, 25).

*Itineraries.* Some examples have already shown that Badoer's accounts take into consideration all the operations involved in shipping. This latter did not merely link a port of departure with a port of arrival: on the Sicily route, ships called at Candia and Modon, loaded and unloaded cargo, and waited for a favourable wind before setting sail again: such a voyage, for which a cargo had to be assembled too - which often took a whole month - frequently lasted six months. The time allowed began with the embarking of goods and continued after the arrival in port. A boat and some *camali* had to be

found to dispatch 5 pieces of cloth and 1 *chavezo* from Pera to Giacomo's house, and again some porters and a boat to transport 2 crates of indigo to the galley (292). Recalling these trivial details might invite a smile but sometimes it was quite an adventure: on 16 October 1438, Piero Antonio spent 500 *aspres* to load wool on three boats that would carry it to the *nave* of the Greek captain, Bacsimada, chartered by Aldrovandin di Zusti, but, instead of waiting at Gallipoli, the captain sailed to the Dardanelles where the boats (496), perhaps *griparies* (497), had to go to join the *nave*. Later we shall see another kind of misunderstanding between Provençals and Florentines.

The Constantinople - Trebizond route was used to transport grain, which emphasises the fact that Byzantium was at the crossroads of some of the finest granaries of the eastern Mediterranean<sup>21</sup>. The *griparia* whose captain was Polo Loredu from Corfu loaded 140 *muids* of wheat at Agatopoli for Trebizond (102). In the opposite direction, canary-seed was taken to Constantinople. On 15 July 1437, Chiriacho Sachi's *griparia* loaded 492 *pisomiari* (a Trebizond measure) of canary-seed, i.e. 26 Constantinople *modi* for a charter of 60 *aspri* per Constantinople *modi*, 141 perp. 18 car.

Voyages were *pasazi*, "passages" (146, 303, 528, 600): we have seen the order given to the captain Polo Querini to call in at Modon to give some goods to Duodo who was to load them for Venice *sul primo pasazo* (600). Ser Piero Soranzo had to pay 900 gold ducats for some goods sent to him in Venice by the galleys under the command of misser Zorzi Soranzo *e per altri pasazi* (303). On 26 November 1438, Badoer had one *fardo* of silk sent on Dimitri Tofilacto's *griparia* to Modon, to Marco Abati who was to transfer it onto the Venetian galleys for his brother Jeronimo in Venice (361, 558). These examples illustrate the rationality of the structure of the Venetian Empire that seized ports which it then used to the advantage of merchant shipping. These ports acted as logistical relay stations

<sup>21</sup> S.P. Karpov, *L'Impero di Trebisonda, Venezia, Genova e Roma, 1204-1461. Rapporti politici, diplomatici e commerciali*, (Il Velcro, Rome, 1986) (translated from Russian) points out the importation of grain at Trebizond, the importance of bee-keeping and of the production of wax.

where goods were deposited whose final destination was not on the ship's itinerary and so they would continue their journey on another ship. In this respect, the programming of the *mude* was a winning card. Merchants organised the transfer of goods, mail and money to another market in accordance with shipping traffic on that part of the Venice - Levant axis, marked out by the two main ports of call, Candia and Modon. There maritime routes diverged, from Candia in the three directions of the Levant, and from Modon towards Candia or the West<sup>22</sup>.

### Trade with Caffa and Tana

These two ports in the Crimea and the Azov Sea, Caffa and Tana were the most eastern points reached by shipping from the Italian republics<sup>23</sup>. The Russian river fleet brought the produce of the steppes to them, and beyond them, caravans took over one from another along the endless trails which led to Cathay. It would seem pretentious to examine these two ports' traffic, in that the register considers only those ships which transported Badoer's merchandise. As it stands, within its narrow limits, we have an eloquent picture of the amount of trade carried on by Eastern merchants who sold Venetians wax, furs, some spices, slaves, caviar and fish-glue, and bought from them metals, iron wire, copper, linen cloth, woollen cloth and grain. Locally, Badoer's dealings were looked after by two agents, Andrea da Chale at Caffa and Francesco Corner at Tana<sup>24</sup>.

<sup>22</sup> E. Ashtor, "L'apogée du commerce vénitien au Levant. Un nouvel essai d'explication", *Venezia centro di mediazione tra Oriente e Occidente (sec. XV-XVI). Aspetti e problemi.*, (Florence, 1977), pp. 307-326.

<sup>23</sup> M. Balard, *La Romanie génoise (XIIIe-début du XVe siècle)*, 2 vol., (Rome and Genoa, 1978).

<sup>24</sup> If Caffa was a Genoese colony, the Venetians were more powerful at Tana: M. Berindei - G. Veinstein, "La Tana-Azaq de la présence italienne à l'emprise ottomane (fin XIIIe - milieu XVe siècle)", *Turcica*, VIII (1976), pp. 110-201; B. Doumerc, "Les Vénitiens à La Tana au XVe siècle", *Le Moyen Age*, XCIV (1988), pp. 363-379; B. Doumerc, "La Tana au XVe siècle: comptoir ou colonie?", in M. Balard (ed.), *Etat et colonisation au Moyen Age et à la Renaissance*, (Paris, 1989), 251-266.

**TABLE 1: Attempted reconstruction of Badoer's trade with Caffa and Tana**

For Caffa <sup>1</sup>			
1437, 23 June	Gallaza cpt. Matio Faxuoi	1 cask of wire received from Venice on same (2 casks)	136, 6-7; 137, 15; 160, 4
30 June		4 cofe of copper for Tana	155,12
19 September	Galley ser Zacharia Donado	Another cask of wire	160,6-7
1438 18 February	Zuan Montaldo's ship	1 bill of exchange drawn on Zuan Spinola	354,25
20 February	Ship cpt. Galeoto Lumelin	2 moza of corn	310,10
29 April	Ship cpt. Franzesco d'Allegro	4 casks of wire 2 pieces of black cloth	394, 25-8
21 May	Ship cpt. Zuan Montan	2 pieces of black cloth	379, 20-1; 394, 32; 395, 18
10 December	Ship cpt. Nicholò Pulachi	1 bale of paper	354, 31; 616, 3
For La Tana			
1437 3 September	Gallia cpt. Zacharia Donà	100 mazi of wire	137,17; 160,7-8
1438 9 July	Ship cpt. Jachomo di Manoli	100moza of canary seed	440,21; 441,4
From Caffa			
1438 16 June	Ship cpt. Simon da Morta	Cant 5 r. 93 of wax	384, 13; 423,3
17 July	Ship cpt. Franzesco d'Allegro	Cant.2 r.30 of wax	384, 22-3; 423, 6-7
31 July	Ship cpt. Antonio Torsello	1 piece of cloth, cant.1 r.12 of wax	384, 35-6; 423, 11
13 August	Ship cpt. Jachometo Berguzo <sup>2</sup>	Cant. 4 r. 74 of wax	423,16; 454,4, 26-7; 493,10.
30 August	Ship cpt. Vielmo de Lucho	Batimani 29 r.24 1/2 of wax	423,18-9;454,9.
17 September	Ship cpt. Zuan Montan	Batimani 8 r,5 1/2 of wax	493,2; 494, 3
16 November	Ship cpt. Galeoto Lumelin	2 bags of wax	493,7-8; 494,7
16 November	Ser Lion Duodo's galia	Pichi 18 of zetanim	493,13-4
1439 5 May	Ship cpt Simon da Morta	Return of 3 out of 4 casks of wire brought by Franzesco d'Allegro	395,21-3;652,4
<p><sup>1</sup> The dates refer to the loading or unloading in Constantinople.</p> <p><sup>2</sup> Perhaps the ship belonging to Zorzi Vlachiano de Chandia captained by Jacometo Alberguzo (493, 10-11)</p>			

27 June	Ship cpt. Biaxio Gritti	86 martens and 90 weasels	493.19-20
1440, 19 June	Ship cpt. Zuan de Fontana	4 pondi of pepper	760.18-9
And from La Tana			
1438 9 June	Griparia cpt. Zorzi Docaropolo	6 caratelli of caviar	416.1-2
26 July	Ship cpt. Biaxio Gritti	1 Baliban slave	446.15-22
1439 20 August	Griparia cpt. Termo da Sarzana	Caviar, spices, fish glue	707.15
Direct voyage Caffa-Venice			
1438 29 December	Ship cpt. Zuan Contarini	Fasi 2 de verzi. I cask of tuzia	569.31; 616.8.

The busiest place, both for technical and commercial reasons, was, however the large island of Crete, a veritable unavoidable place of passage and a turn-table for Venetian shipping in the Levant, where routes diverge to the north and to Romania, to the south and to Alexandria, and to the east and to Cyprus and Beirut.<sup>25</sup>

### **A World of Trade with No Frontiers**

Badoer did a considerable amount of business with merchants and carriers from Ancona, Florence, Greece and Genoa. He loaded goods onto foreign boats and insured the boat herself.

*Ancona*<sup>26</sup>. Giacomo insured the ship and the cargo of Adoardo of Ancona's ship for the voyage from Constantinople to Ancona where, on 26 July 1438, the merchant Bortolamio de Franchi insured her for the

<sup>25</sup> This may be compared with the situation one century earlier: A. E. Laiou, "Un notaire vénitien à Constantinople: Antonio Bresciano et le commerce international en 1350", *Les Italiens à Byzance*, (Paris, 1987), pp. 79-151, has above all the value of a survey, but the reader is tempted to conclude that there were permanent commercial links with Constantinople and that dealings with Crete were increasing. Bresciano, a notary at Candia, spent the summer of 1350 at Constantinople; M. Abrate, "Crete, colonia veneziana nei secoli XIII-XV", *Economia e storia*, IV (1957).

<sup>26</sup> E. Ashtor, "Il commercio levantino di Ancona", *Rivista Storica Italiana*, 88 (1976), p. 227 *et seq.*; E. Ashtor, "Il commercio anconetano con il Mediterraneo occidentale nel basso Medioevo", 9-72, in *Mercati, mercanti, denaro nelle Marche (Secoli XIV-XIX)*, *Atti e Memorie della Dep. di st. p. per le Marche*, 87 (1989), p. 666.

**TABLE 2: Candia, the turn-table for Mediterranean traffic**

Date	Ship	Goods	Shipper	Consignee	Source
From Candia					
1437, 15 March	Ship Zorzi Modiano	1 case of voile		Badoer	116,20-21
20 June	Ship Chapela	800 squirrel furs	Marco Filomati	Badoer	136,2-3
October	Galley Alvise Bembo	27 botti of wine	Alvise Bembo	Badoer	256,1-2
18 November	Ship Jani Modiano	1 parcel of voile	By galley from Alexandria, galley Andrea Bembo	Badoer for Jewish merchants	286,2-4; 287,2-10 527,21-22
1438	Ship Zorzi Sirocho	1 bale of cloth	Troilo Contarini	Jeronimo Bembo	386,2-3
9 September	Ship Nicolò da Vegia	26 botti of wine 14 measures of flour	Marco Filomati	Badoer	407,19-20; 486,2-3 645,10-11
1439 4 August	Ship Sguoro	8 botti of wine	Marco Filomati	Badoer	707,10-11
22 August	Ship Zorzi Mavrìcha	27 botti of Candia wine	Marco Filomati	Badoer	706,2-3
For Candia					
1437, 10 February	Ship Zuan Langadioti	13duc 1/5 1 bill of exchange 1 Zicha slave		Marco Filomati	168,13-14 169.9 358.6
10 May	Ship Nicolò Tariano	Bota 1 zievai chaostri (1170 pesi saladì)		Marco Filomati	118, 2-4
8 July	Ship Biaxio Gritti	1 mule and its fodder		Marco Filomati	168,5-9
2 August	Ship Antonio Tomaxini	50 cantars of copper	Piero Soranzo	Troilo Contarini	169,15-17
1438, 15 February	Ship Nicolò Pelindari	10 dozen spurs 2 Fardi of silk	Zaccaria Contarini	Fator del Fallier	140,26-28 172,35-38; 337,2-5
14 June	Ship Zorzi Androniti known as Palapano	1 bale of 6 pieces of cloth	Marin Sanudo	Antonio de Mezo	295,29-31
16 June Ship	Jacomo della Porta	1 bale of 6 pieces of cloth	Marin Sanudo	Antonio de Mezo	295,32-33 →

17 September	Ship Manoli Vergizi	1 bale of cloth	Return of Zorziz Sirocho's cloths	Troilo Contarini	387,24
26 November	Ship Antonio Torselo	1 Russian slave	Badoer and Zuan Montan	Babilan Palavexin	610,25
1439, 9 January	Ship Jacomo della Porta	2 mier zerchi 4500 doge 1450 dogei	Badoer	Melisino boter Papa Michali Papa Manoli	610,8-9 610,10-11 610, 14-15 610,16-17
13 February	Ship Nicolò da Vegja	2 mier zerchi		Marco Filomati	610,18-19 581,26
30 March	Nicolò Pulachi's Ship	Bigè c° zerchi		Nicolò zerchier	644,5-6
26 August	Ship Michiel Sguro	Miera 15 de doge		Jani Plemeno	644,11-14
3 September	Ship Zorzi Mavrigha	1 piece of satin	Piero Soranzo	Troilo Contarini	229,21-23 598,17
29 December	Ship Zorzi Zacharia	1 account		Marco Filomato	644,23-24
Candia port of call for Alexandria					
1437,22 April	Ship Xenò Murari	63 cant 77 rot of copper		Zaccaria Contarini in Alexandria	112,2-8
15 May	Ship Nicolò Tariano	50 cant 73 rot of copper		Zaccaria Contarini	112,9-14
7 June	Ship Zorzi Palapano	37 cant 86 rot copper 15 sheepskins		Alexandria Marco Filomati	112, 22-24
6 July	Ship Biaxio Gritti	79 cantars copper		Zaccaria Contarini	112,26-29
4 September	Ship Antonio Tomaxini	51 weasels and 1 marten 162 cant. of lead	Marco Filomati	Zaccaria Contarini Id	124,11-14 124,15-19
1438 9 July	Ship Nicolò Pelindari	11 chests of copper and 1 caratelo of "tornexi" copper	Marco Filomati		124,25-27

*Ships, Sailors and Maritime Activity in Constantinople (1436-1440).*

Candia port of call en route for Damascus					
1439 12 June	Ship Jacomo della Porta	Can 50 rot 94 copper	Zuane and Jachomo Bragadin	Benedetto Foscarini	428,7-9
Candia port of call on Majorca route <sup>1</sup>					
1439 22 January	Manoli Vergizi's ship or ship Justiniana	Chant.1300 of alum, 200 of rock alum, 203 of gale, 164 slaves and their food 1 barrel of ginger 100 cant. of copper 364 martens, timber, beams, 1 bill of exchange	Aldrovandin de Zusti, Domenego de Cha'da Pesaro, Marco Balanzan and Badoer	Marco Balanzan and Cristofai di Franzesci	524,27-45
Candia port of call on Venice route					
1436					
25 September	Ship Michali Seguro	14 cant 23 rot of wax	Badoer	Jeronimo Badoer	37,14-16
1438 15 February	Ship Nicolò Pelindari	1 bundle with 128 pounds of silk	Badoer	Zaccaria Contarini	337,2-5 558,31-35 in Alexandria
	Griparia Dimitri Tofilacto		Marco Filomati	Jeronimo Badoer	in Venice
21 May	ship	1 box of wax	Marco Filomati		166,44-46, 399,15-16
October	Ship Manoli Vergizi	Cant 49 rot 61 copper		Marin Grimani	558,27-30
456,459,764					
1439 13 April	Ship Nicolò Pulachi	Cant 10 Marogna alum	Badoer	Jeronimo Badoer	542,6-11
in Alexandria then Venice					

<sup>1</sup> The Catalians were active on the route Constantinople-Candia-the Balearic Isles and Catalonia: M. Del Treppo, *I mercanti catalani e l'espansione della corona d'Aragona nel secolo XV*, (Naples 1972), pp.54-60.

cotton loaded at Phocis on the ship under the command of Gratioxo of Ancona "from the moment she begins to load at Phoia until she drops anchor again at Ancona" (643, 15-17). On 4 September 1438, he was again the person who insured this boat from Ancona which had authorisation on the voyage from Constantinople to Ancona to call in at Phoia or Scio (643, 18-20).

However, Badoer, who was also a merchant, likewise loaded some cotton for Ancona. In July 1438 the Majorca Shipping Company had left with Pantalón Guardato at Phoia some 40 (or 49) *cantars* of cotton which Sandro Zeno had not been able to load on to the *nave* (450-51). On the orders of Francesco di Drapieri and Badoer, Guardato had sent this cotton to Ancona on the boat belonging to Bevenuto. Giacomo credited him with funds for 40 perp. for the two *carats* he had in the Majorca company (754, 15-19). He imported soap from Ancona, 7 crates on Lorenzo di Grimaldo's *nave* (33,30), and then insured the Florentine merchant who sent wax back to Ancona on the same boat for 100 ducats, whereas he exported soap to Trébizond and Simiso on Galeoto Lumelin's *nave* (87, 6-8). He sent on board the ship under the command of Antonio Petracha of Ancona (several letters for his brother in Venice) (362-63).

*The Greeks.* The Greeks also feature in Badoer's register. They were mentioned when the different types of vessels were examined: Giacomo loaded or received merchandise on Chiriacho Sachi's *griparia* from Trébizond, Zorzi Doscaropolo's *griparia* from Eno and the ship captained by the Greek Bacsimada. On 6 August 1437, he recorded in his book 400 pounds (*véen*) of kermes sent by Griguol Contarini on the *nave* of the Greek captain Chiriacho Chachalopolo of Trébizond (182, 2-4), while the *nave* captained by Jani Tepefto of Constantinople did the trip in the opposite direction (102, 8-12) to take to Contarini 1 *gropo de duc.* 200 *turchi de pexo*. Badoer handed the sack over to the captain in the presence of four witnesses.

*Provençals and Florentines.* Badoer had some unpleasant experiences connected with a series of orders and counter-orders: for

ser Nofri da Chalzi in Sicily, he had had almost 50 *cantars* of copper loaded onto a boat to be taken to the Provençals' galleys, and then from the galleys to the *nave*, but he had to take the copper off the *nave* to transfer it to the Florentines' galley (284, 27-29), captained by ser Francesco Manelli<sup>27</sup>. The record does not give us any explanation for this shillyshallying.

### **Transport, Chartering and Insurance**

Maritime trade entailed various expenses: maintenance costs for the boat, *far chonzar la mia barca e sesola e sponza* cost money,<sup>28</sup> a berth had to be hired or a shelter built (*far una chavana*), the person who accepted to take charge of the boat for six months had to be paid, and sacks, ropes and casks had to be purchased. On 26 January 1437 the *nave* captained by Galeoto Lumelin loaded "2 barrels of salted mackerel, 19 thousand fish at 1 *perp.* 18 *car* per thousand, and the salt to salt the fish 3 *perp.* 1 *car*, added to the total under the yards (*monta in tuto, fin chargadi in dita nave*) 36 *perp.* 7 *car.* (88, 12-14) but 2 barrels had to be purchased for the *sgonbri* 3 *perp.* (*idem*, 15).<sup>29</sup> It was not always easy to find a ship locally: the agent went to Trepea to charter Polo de Loredo's *griparia* which loaded 140 *moza* of wheat at Agatopoli (148).

The loader had to pay the transport costs of the goods (charterage) as well as their purchase price and associated costs: the captain of the boat which loaded 5 *pondi* of pepper at Brousse for Badoer received a charterage of 8 *perp.* 18 *carats* (66). Were charterages expensive? The answer would involve research irrelevant to the subject of our paper, but some inquiry throws some light on the matter: When Michiel Seguro loaded 18 vermeil *fasi*,

<sup>27</sup> Alessandro Zen paid 1,200 *aspri per el gripo e omeni che meno via de li* (=from Phoia) for the transportation of 49 *cantars* of cotton which could not be loaded onto the Majorca voyage *nave*.

<sup>28</sup> "to prepare the boat, the scraper and the sponge"

<sup>29</sup> L. Balletto, "Il commercio del pesce nel Mar Nero sulla fine del Duecento", *Critica Storica*, XIII (1976), pp. 390-407.

almost 10 *cantars* in Damas weight, the purchase price of the goods was 1456 *perp.* paid to Catarin Contarini, and the charterage on the Beirut - Candia journey at the rate of 1 duc *per cholo* (18 articles) came to 57 *perp.* 18 *car.* (703, 5-7), i.e. less than 4% of the price paid to the seller. Other examples are to be found here and there in the register and in this paper.

Unexpected losses had to be reckoned with: e.g. throwing part of the cargo into the sea to lighten the boat and so flee from bad weather conditions more quickly. Badoer, together with three other merchants, Zanin Jarachi, Antumi Protachumino and the Florentine Francesco degli Albizi, with a quarter each, had bought two cargoes of vegetable ash from which soda was extracted to make soap. One cargo of 310 sacks was loaded onto Zorzi da Scarpanto's *griparia* (= 303 *cantars* 28 *rotoli damascini*), and the other cargo of 202 sacks travelled on the *nave* whose captain was Lio Magrigno of Rhodes, and weighed chant. 165 *r* 19 *barutini*: the 310 sacks weighed at Tripoli in Damas *cantars* were reduced to 304 because the owner threw 6 sacks into the sea. Badoer paid for a quarter of the 310 sacks, i.e. 77.5 sacks at 60 *dirbams* a *cantar* 366 *perp.* 10 *car.* (*costo de prima insachade*) and a quarter of the second lot (50 *cantars*) 340 *perp.* Albizi and Badoer, partners in this importation, paid half the charter price, 400 *perp.* for the two cargoes (630). The cost of Badoer's share totalled 706 *perp.* 10 *car.* and his share of the chartering fee for the journey Beirut/Tripoli - Constantinople was 200 *perp.* which represented 28.4% of the first purchase. It can be seen that, in spite of the theory of differentiated charter fees which according to Melis appeared between 1350 and 1375,<sup>30</sup> goods of great value - in this case, *vermeil* - travelled cheaper than a common item - in this case, vegetable ash.

<sup>30</sup> F. Melis, "Werner Sombart e i problemi della navigazione nel Medio Evo", *L'opera di Werner Sombart nel centenario della nascita*, (Milan, 1964), pp. 85-149; on the early appearance of differentiated freight charges, see Hocquet's contribution in M. Balard, J.C. Hocquet, J. Hadziiossif, H. Bresc, "Le transport des denrées alimentaires en Méditerranée à la fin du Moyen Age", pp. 91-175, in Kl. Friedland et al., *Maritime Food Transport*, (Bochlaue Verlag, 1994), p. 583.

*The Slave Trade.* The accounts register draws the reader's attention in a spectacular way to the slave trade in the Mediterranean during the fifteenth century.<sup>31</sup> Michel Ballard, who has analysed this trade of unexpected dimensions, rightly points out that the Venetian nobles were happy to be slave merchants engaged in a very profitable trade. On 5 March 1439, Badoer collected 18 perp. 0 car. transferred by Piero Chapelo to the Tomà Spinola bank: this money was the insurance premium paid by Zuan Mocenigo of Modon and Alvixe Falier for slaves which the two merchants had embarked on the *nave* captained by Zuan Bonifatio. The insurance covered the voyage from the departure from Phoia until the arrival in Sicily at 9%, and the capital insured was 200 *perp.* (499, 10-13).

The slave trade was very big business. In 1438 it justified the setting-up of a company for the Majorca voyage at the instigation of two of the merchants. Zuan Mozenigo advanced 12 carats, Alvise Falier and his masters 6 carats, Alessandro Zen 4 carats and Badoer 2 carats. These four operators were to receive 25% of the profits. For his 2 carats, Badoer sold 13 *balabani* slaves, Zuan Mozenigo 150 slaves and 400 cantars of cotton, Alessandro Zen 19 slaves and 100 cantars of cotton and Alvise Falier 100 cantars of cotton and 700 cantars of rock-alum (442). The slaves sold by Badoer were generally between 20 and 25 years old, but 2 were about 30 years old (346). On 22 January 1439, Badoer joined a second company, which also was

<sup>31</sup> Michel Ballard, "Giacomo Badoer et le commerce des esclaves" in *Etudes offertes à Robert Delort*, (Paris, 1997); Ch. Verlinden, "La colonie vénitienne de La Tana, centre de la traite des esclaves au XIVe et au XVe siècles", *Studi in onore di G. Luzzatto*, (Milan, 1950), II, pp. 1-25; despite the title, Ch. Verlinden, "La Crète, Vébouché et plaque tournante de la traite des esclaves aux XIVe et XVe siècles", *Studi in onore di Amintore Fanfani*, III, *op. cit.*, almost ignores the fifteenth century and does not use the accounts register, but rightly points out that recourse to slavery was an arm in the fight against unproductiveness and famine caused by depopulation (p.669); A. Ducelier, "Marché du travail, esclavage et travailleurs immigrés dans le nord-est de l'Italie (fin du XIVe-milieu du XVe siècle)" in Ballard, *Etat et colonisation, op. cit.*, pp. 217-249; B. Krekić, "Contributo allo studio degli schiavi levantini e balcanici a Venezia (1388-1398)", *Studi in memoria di F. Melis*, (Naples, 1978), II, pp. 379-394, and *Dubrovnik, Italy and the Balkans in the Late Middle Ages*, (Variorum Reprints, 1980), VII: according to the data in the minute-book of the Venetian notary Raffanelli (1388-1398), in nine years Venice imported 292 slaves, 233 of whom were women.

called *viazo de maioricha* with Aldrovandin de Zusti (50%), Domenego da Ca'Pesaro (20%), Marco Balanzan (15%) and Badoer (15%) to transport on the *nave Justiniana* 164 slaves (worth 17,048 *perp.*), 1300 *cantars* of rock-alum, 200 *cantars* of *sorta* alum, 601 *cantars* of cotton, 100 *cantars* of copper, in total with an exchange of 460 ducats, goods worth almost 41,000 *perp.* (524).<sup>32</sup> These ships were of large tonnage, indeed of very large tonnage, but one imagines hundreds of slaves from the Russian plains or the Caucasus valleys in chains (?) between decks, the rest of the cargo consisting of alum, cotton<sup>33</sup> and copper. Historians knew about slavery in medieval times: they knew that the masters liked to surround themselves with young Slavonic concubine slaves who ran their households and flattered them, but it had not been very often pointed out that Venetian ships foreshadowed the slave-ships of future centuries. It is true that the demographic catastrophes at the end of the Middle Ages forced people to fill the vacancies, especially for work in the sugar plantations in Sicily and Majorca.<sup>34</sup>

*Marine Insurance.* The perils of the sea and of other men were commonplace for sailors and merchants. Theft caused slight damage: 83 black sheep fleeces were stolen from the *scrivan* of Zuan Contarini's *nave* (596, 35-36). Only one shipwreck seems to be recorded in Badoer's register: on 18 January 1440, Zorzi Zorzi, the Venetian bailiff, was given 6 *perp.* 10 *car.* to help the *galioti* from Tadio

<sup>32</sup> Balard, "Giacomo Badoer et le commerce des esclaves", *op.cit.*, p. 562; Demetrios J. Constantelos, "Slaves and Slavery in the late Byzantine World", *Klèronomia*, 18 (1986), pp. 263-279.

<sup>33</sup> *Coltra* - a tarpaulin, a strong cloth used to protect the cargo from bad weather - on 21 January 1436, *per l'amontar de livre 18 de goton che vene a tuor Lio so fameio* (the servant of Alessandro Zeno), *di volerlo per una choltra, a car. 4.5 la libra*.

<sup>34</sup> On Sicily, H. Bressi, *Un monde méditerranéen. Economie et société en Sicile, 1300-1450*, 2 vol., (Ecole française de Rome, 1986); H. Bressi, "Esclaves auliques et main-d'oeuvre servile agricole dans la Sicile des XIIe et XIIIe siècles" in Bressi, *Figures de l'esclave au moyen age et dans le monde moderne*, (Paris, 1996, pp. 97-114), and on Spain, William D. Phillips Jr., *Historia de la esclavitud en España*, (Madrid, 1990); Larry Simon, "Mallorca and the International Slave Trade in the Thirteenth Century", *American Historical Association*, (Chicago, 1991).

Justignan's galley which had been wrecked and dashed to pieces. It was aid given to cope with an urgent situation because the money had to be paid back in Venice (636). Lastly, pirates and privateers were to be feared.

One way of taking precautions was to let others bear the risk by taking out marine insurance.<sup>35</sup> Marine insurance occupied an important place among Badoer's financial activities, with Badoer acting as an insurer collecting the premiums, an operation which a Venetian merchant did not fail to seize. On 22 September 1438, Badoer had already collected premiums for a total of 314 *perp.* and 16 *car.*, after having concluded marine insurance contracts with 10 partners (45).

This incomplete table - the book contains three other accounts for a total of 26 contracts<sup>36</sup> - shows that it was the ship that Badoer insured most frequently; sometimes he insured the goods on board, and once the ship and its cargo. The insured were either the ship-owners for the ship or the loaders for the cargo loaded, or both of these categories. The sum for the premiums varied from 3% to 19%, but, in this latter case, it was the longest distance, both there and back, and the capital insured was variable, and always a round figure which means that it represented not the value of the merchandise, but a lump sum. Lastly, since we are dealing with maritime activities, we must emphasise the vitality of certain centres, such as the port of Ancona and its ships, or local traffic. Merchant and capitalist solidarity was an undeniable fact: Badoer agreed to insure Italian merchants who were active rivals of the Venetians. The internationalisation of capital was a reality which escapes the historian's attention if he consults only the official registers

<sup>35</sup> A. and B. Tenenti, *Il prezzo del rischio. L'assicurazione mediterranea vista da Ragusa (1563-1591)*, (Rome, 1985, p. 500); K. Nehlsen-von Stryk, *Die venezianische Seeversicherung im 15. Jahrhundert*, (Ebelsbach am Main, 1986), translated into Italian by C. Vinci-Orlando, *L'assicurazione marittima a Venezia nel XV secolo*, (Il Velcro, Rome, 1988, p. 598) does not examine this register which, she writes, does not offer any material of interest in research on the Venetian market (p. 36).

<sup>36</sup> For example, Badoer insured Aldrovandin de Zusti, premium of 16 *perp.* 0 *car.*, at the rate of 8% for a capital of 200 *perp.* on the ship, freight and the merchandise loaded on to his *griparia*... for a voyage from Tana to Constantinople and back again, 24 March, 1438 (499, 14-16).

Date	Insured party	Capital Insured	Goods Insured	Ship	Route	Premium
1436 12 October	Alvise Arduin <sup>1</sup>	200 duc	Cargo	Piero di Belveder	Cp-Venice	6% perp. 40.12
1437 8 February	Ugo de Peruzzi of Florence	100 duc	Wax	Lorenzo de Grimaldi of Ancona	Cp-Ancona	10% perp.32.12
10 October	Franzesco di Drapieri dal Bancho	50 duc	Ship and freight	Adoardo d'Ancona	Cp.Ancona	8% perp.12.22
10 December	Nofrio da Chalzi	100 duc	Ship	Giacomo Marzello	Cp-Phocea - Syracuse	6% perp.19.6
1438 28 March	Tomà Spinola	200 perp	Ship		Zagora-Caffa	3% perp.6
21 May	Nicolà Giustinian	100 duc	Ship	Silvestro Polo	Cp-Venice	4% perp 13
26 May	Alvise da Riva	150 perp.	Ship	Antonio Drago	Cp-Moncastro	3% perp.4.12
3 July	Confortin di Confortini	500 perp.	Ship	Nicolò Minio	Cp-Venice	5% perp.25
4 September	Crisuli petener	300 perp.	Cargo	Naveta Crisuli	Cp-Caffa	3% perp.9
22 September	Marco Balanzan	800 perp	Ship	Ship Giacomo Justinian	Cp-Majorca and back	19% perp.152

<sup>1</sup> In this contract the benefactor was Zuan di Priull (45,18)

of the Senate or the Council of Ten in Venice where protectionism seemed dominant and the struggle against competition a permanent priority.

The operation was at times complicated, as, for example, when on 10 December 1437 ser Nofri da Chalzi, resident in Messina, who insured with Badoer, on the Florentine galley and the ship under the command of ser Jachomo Marzello for a total of 1,250 perp., first the Genoan Chora del Pasto for 200 perp. on the Florentine galley, 8 perp. (a premium of 4%), ser Zorzi da Quarto, Antonio da Chastro e Gotifreo for 100 perp. each, the Florentine Zulian Ziati, for an insurance of 80 ducats at 5%, 12 *perp.* 20 car., Anzolo Azaiuoli for an

insurance of 50 ducats on the galley, 8 *perp.* 4 *car.*, total on the Florentine galley with expenses: 44 *perp.* 8 *car.* (330). Then Giacomo Badoer agreed to a further insurance of 320 *perp.* on the *nave Marzella* at 6%, 19 *perp.* 6 *car.*<sup>37</sup> The first payment amounted to 63 *perp.* 14 *car.* This contract was the only one that had to bear a loss which had to be compensated: on 1 December 1438, the insurer paid 325 *perp.* 0 *car.*, rate of exchange, to ser Nofri da Chalzi, for his insurance of 100 ducats on the *nave Marzela* for four slaves embarked on the ship by Badoer and captured by the seigneur of Metelin (498). In other words, the register recorded the ship's insurance, but the catastrophe, here an act of piracy on the part of one of the local tyrants, which were so frequent in the archipelago, seems to have struck only four slaves embarked for Sicily. There was no mention of the ship. The incident shows how frenetic the quest for slaves and for man-power was in that calamitous world.

In the field of marine insurance, Badoer prudently excluded certain risks. On 27 March 1438 he received from Antonio Portonari 2 *perp.* 12 *car.* to insure Zuan Venier on Zozi Saita's *griparia* for the transportation of wheat from Panido to Constantinople at 2,5% (499, 20-21). An insurance contract dated 5 March 1439 for a cargo of wheat on a *griparia* in favour of the same beneficiaries contains a restrictive clause: "da poi che l'averà fato vela non scorrendo pericholo de turchi" (499, 6-9). The Turkish peril was excluded from the risks and the insurance covered the ship only once against Turkish privateering.

*Payments.* Many payments were made at Constantinople *al retorno de le galie del mar mazor* (17, 23, 25, 30, 47,...)"on the arrival at Constantinople of galleys coming from Venice", "one week after the arrival of the galleys from Venice", or "half on the arrival of the galleys from Venice, the other half when the galleys return from Mar Mazor"

<sup>37</sup> *A di 10 dizenbre (1437) per cassa chontadi da mi Jachomo Badoer per segurtà fata a Nofrio da Chalzi de duc. 100 su la nave patron Jachomo Marzelo dal partir de Costantinopoli e andar a Foia e fin zonta chon salvamento in Saragoxa a 6 per c<sup>o</sup>: perp. 19 car. 6 (45).*

(92, 5-6), or "half in one month's time, the other half on the arrival of the galleys from Venice". However, sometimes the arrival of *nefs* was chosen: "on the arrival in Constantinople of the *nefs* from Venice". The two payment dates could unite the arrival of the two fleets: "cash payment of 300 *perpères* and the rest due between the arrival of the *nefs* and the arrival of the galleys" (305, 11); two tailors bought five pieces of second-shearing woollen cloth for a total of 496 *perp*, 200 *perp*. paid in cash and the rest "between Easter and the arrival of the galleys month by month according to the custom of the tradesmen (*segondo uxanza di botegieri*)" (622). Payment could also be made in Venice: the buyer of eight Circassian and Avog assian female slaves, belonging to Badoer and Piero de Belveder, paid for his purchase "three months after Piero de Belveder arrived in Venice" (101). Payments were made, too, after the galleys' departure: "falling due one week after the departure of the galleys for Venice" (101) or "termene zorni 15 da poi el partir de le galie" (219) etc. The rhythm of the world of shipping and the rotation of the fleets consequently determined payment dates, wealth and poverty, "la larghezza e la strettezza de danari"<sup>38</sup> on the market.

### The Loading of the 1436 *Muda* Galleys for Badoer

The Seigniory saw to it that competition between *nefs* and galleys, between private shipping and State shipping was curtailed. Badoer bore witness to this policy. On 10 December 1437, he was to receive 13 *perp*. from the Venice City Council, a reimbursement for excess payment for the resale of imported on the navi.<sup>39</sup> However, Badoer put forward another reason: he had transported on sailing ships some furs which, according to the regulations, were authorised to travel only on

<sup>38</sup> The image, taken from the treaty on trade by Bernardo Davanzati (1581), is borrowed from R. C. Mueller, "Chome l'ucciello di passagio: la demande saisonnière des espèces et le marché des changes à Venise au Moyen Age", 195-219, in J. Day (ed.), *Etudes d'Histoire monétaire, XIIIe-XIXe siècles*, (Lille, 1984), p. 450.

<sup>39</sup> *per raxon de danari che ho pagadi più del dover (...) per utel e dano per chomerchio che ò pagado chontra el dover de casete 26 de mie veli che me ne vene chon la nave, e trusile fuor de questa tera avanti che pasase un mexe, montono perp. 1300 tocha perp. 13* (116, 16-19).

galleys.<sup>40</sup> For mainly defensive reasons, Venice wanted to favour simultaneously both types of vessel, both the powerful armed *nefs* and the extremely-manoeuverable galleys, so as always to have available crews able to handle the square sails of the *nefs* or to use the oars and handle the lateen sails of the galleys. The solution lay in keeping both kinds of vessel in the merchant fleet and in guaranteeing them a cargo.<sup>41</sup> It has already been pointed out how the arrival of the Venetian galleys in the Golden Horn determined the payment mechanism, but their arrival also brought merchandise.

*Galleys Coming From Venice.* In September 1436, the convoy captain Piero Contarini's galley delivered to Badoer some cloth and some metals: a crate of *crépon voile* (10 cases), 12 tin *fasi*, 80 steel *fasi* (16, 2,13,26), 1 bale of 10 pieces of Mantova cloth, 1 bale of Vervi cloth, 22 tin *fasi* (18,2,16,27), all merchandise sold by Pietro Soranzo, 3 bales of Alost cloth (1322 *braza*), 3 bales of Brescia cloth, consisting of 25 pieces and 1124 *braza* 3 q plus a *biavo* of Brescia cloth (22, 2,18,33) sent by Antonio Contarini, 5 casks and a bale of *oripel* consisting of 106 *mazi*, 2 casks coming on Contarini's ship and 5 bales of Alost cloth, 36 pieces and a *dozena scarlatina*,<sup>42</sup> in all 1533 *braza* q 1 (26, 2,14) *de mia raxon*, 1 bale of 8 pieces of Florentine cloth and another of Mantova cloth (28, 2,17), and 2 bales of white fustian. By the same *muda*, Badoer had had merchandise sent on the galley *Mora*: silk and Cologne gold brocade. The galley had put in at

<sup>40</sup> *Chomun de Veniexia per raxon de danari che me roman de l'una per c°, che pagemo de le marchandantie, i qual denari me par debitamente poder tegnir per duc. 15 ch'el Chomun de Veniexia me tose l'ano che fu patron in Alexandria de noli de vari che iera stà porta chon nave, i qual tochava a le galie e romaxe in Chomun, diè aver a di 23 hotobre per el chomercio de la chosse abude l'ano de 1436 per le galie, per saldo di quello, perp. 9 car. 2* (117, 9-13).

<sup>41</sup> D. Stoeckly, *Le système de l'incanto des galées du marché à Venise (fin XIII - milieu XV siècle)*, (Leyden, 1995).

<sup>42</sup> The *dozena*, which could be a very fine cloth woven at Douai in Flanders, was, according to Badoer, *una dozena scarlatina fata de chavezi a carati 19 el piccho* (c.13, 37-38). On the cloth trade at Constantinople, J.C. Hocquet, "Giacomo Badoer, marchand-drapier à Constantinople et les draps du Nord de l'Europe", *Atti dell'Istituto Veneto di Sc., L. ed A.*, (2002 sous presse).

Pola where 4 *braza* of hemp and some rope to wrap up the textiles were purchased (20, 15,22). Dardi Moro collected the charterage, including the charge for the 5 bales of Alost cloth.<sup>43</sup> But the captain of the galley and Badoer had close dealings with each other: Badoer had given him a factitious bill of exchange (*una letera de chanbio fentiza*) to collect some money owed by Felipo Contarini and deposited at Chaloiani Sufiano's bank (5, 11-15, 6, 2-3). He had loaded 1 case of *crépon voile* on the galley Mora (30). He likewise received merchandise which had travelled on the two other galleys of the Romania *muda*, under the command of Nicolò Contarini and Polo Soranzo. And so the 5 casks of Messina *oripel* travelled in the 1436 *muda* on three of the four galleys: 2 casks on the flag-ship, 3 on the *Soranza* and 1 bale on the *Mora* (26, 2-4). After putting in at Constantinople, according to Badoer's register, only one galley, the *Soranza*, sailed into the Black Sea for Trébizona, the *Mora* remaining in port; this would explain why Dardi Moro collected all the charterage fees, the galleys travelling by tradition *ad unum denarium*,<sup>44</sup> but it is also possible that the two Contarina galleys continued the voyage in the *mar mazor* (the Black Sea), heading for Caffa and Tana, without embarking Badoer's merchandise. The sources reveal nothing on this subject.

*Galleys Returning From Black Sea Ports.* Did the galley *Soranza* bring some goods back which had been loaded on board in the ports of call? Her *scrivan*, who in Constantinople had loaded some pieces of cloth for Sinop and Trezibond, took on board at Trezibond 1 *fardo* of 47 pounds 21s. of silk and 1 sack of white wax for Badoer.

<sup>43</sup> These pieces of cloth had been *rezevudi per le galie chapetanio miser Piero Contarini, zioè per la chapetania bale 2, e per el Contarini bale 3; per nolo cbontadi a ser Dardi Moro per le bale 3 che avi sul Contarini* (26, 20-21). Piero Contarini, the admiral of the fleet, was not in command of two galleys, his or the flag-ship and *el Contarini*: this latter was captained by Nicolò Contarini. The Contarini family were the most numerous clan (*stirpe*) amongst the Venetian patricians.

<sup>44</sup> A. Scialoja, "Le galee grosse della repubblica veneta. I, Un precedente medioevale dei pools marittimi", *Saggi di storia del diritto marittimo*, (Rome, 1986, pp. 251-307); Giulio Mandich, "Forme associative e misure anticoncorrenziali nel commercio marittimo veneziano del secolo XV", *Rivista delle società*, 6 (1961), p. 485.

*Galleys Sailing for Venice.* On 5 November the galleys began to load merchandise before heading back to Venice. Badoer sent on board 4 *pondi* of Indian ginger, 2 on the galley captained by Piero Contarini and 2 on the *Mora* (51, 2-3) 2 *pondi* of cloves on each galley (65, 3-4), 3 casks of incense on the *Contarina* and 1 sack on the galley *Soranza*, and 3 crates and 1 cask of Baghdad indigo (53, 20) on the flag-ship on 12th November. On 15 November, he sent 16 cakes of wax and 21 cakes onto both galleys (62, 3-4), and a bill of exchange for his brother Jeronimo, 8 *pondi* of pepper (5 on the flag-ship and 3 on the *Soranza*) and 293 marten pelts on the *Soranza*. The loading went on for about ten days.

In the same year, Badoer also sent goods on the *nefs* of Michali Sguro, Domenego Frixon and Zorzi Palapano (42) for a total of 5,645 *hyperpères*, calculated on 3 July 1437. Of this amount, the galleys embarked merchandise to the value of 3,934 *perp.* and the bill of exchange, whereas the *nefs* were loaded with 842 *perp.*: wax, 20 bales of sheep fleeces, some *montonine*, wool of various quality, a 20-year old Tartar slave and a small botte of white wax. In 1437, the sailing-ships (*navi*) and the galleass of Zuan Doto loaded goods for a total value of about 1,653 *perp.*, including a bill of exchange for 90 *perp.* sent to Jeronimo on Nicolò Capello's ship that put in at Candia, and goods worth 1,679 *perp.* on the galleys; thus there was a good balance between the goods Badoer loaded on to State galleys and on to private shipping. It is to be noted that the price of slaves - 372 *perp.* for half of 6 women and 2 adolescents in partnership with the nave's captain, Piero di Belveder - is less than half that of a *fardo* of silk weighing 161 pounds, invoiced at 733 *perp.* (166) or of 10 cakes of wax sold on the Venetian market at a price equivalent to 381 *perp.* (167). In 1438, 5 *nefs* and a galleass loaded goods to the value of 4,230 *perp.* (392, 558, 600), including a bill of exchange for 354 *perp.* 16 *car.*, protested and bought at an auction by Giacomo Badoer<sup>45</sup>: the galleys of the *muda* transported 4,615 *perp.* worth of goods to Venice (558, 600), including a large worth consignment 2,856 *perp.* for 10 *fasi* of cinnamon and 4 *fasi* of *vermeil* (*verzi*), obtained on the market at Alexandria in exchange for copper and loaded at Candia onto the galleys that were returning to Venice after having

<sup>45</sup> *Una lettera de cambio chon el protesto, che chonpri a l'inchanto* (503, 12).

carried the Grand Master of Rhodes on the outward journey (600). The value of the cargos carried by *nefs* was the same as that carried by galleys<sup>46</sup>; a closer study of the kind of cargos would enable us to compare the tonnage of goods transported on this route. It should be remembered that State shipping enjoyed a net preference on the shipping lines assigned to the *mude*, and that free-lance shipping, not commissioned by the State, provided transport on all the routes not served by the galleys, for example in Badoer's day, to the ports in Sicily and the Balearic Isles.

After having examined closely Giacomo Badoer's register, we shall be very cautious in drawing any conclusions about the shipping world in Constantinople. As far as maritime trade is concerned, it would seem that the capital of a cramped empire had frequent dealings with the Eastern Mediterranean ports, from Tana to Beirut and Alexandria, as well as with, of course, the Western Mediterranean ports of Ancona, Venice, Syracuse and Majorca. There was an important consumer market at Byzantium, with an aristocratic clientèle demanding luxury products and a Greek and Jewish bourgeoisie very active in retailing, in foreign exchange and banking,<sup>47</sup> and in handicrafts. The Italians

<sup>46</sup> T. Bertelé, "Il giro d'affari di Giacomo Badoer: precisazioni e deduzioni", *Akten des XI. Internationalen Byzantisten-Kongresses 1958*, (Munich 1960), 48-57, states that Badoer received from Venice goods to the value of 85,000 *perp.* carried on the galleys and goods to the value of 15,000 *perp.* carried on the *navi*. He sent 61,000 *perp.* to Venice via the galleys and 26,000 via the *navi*. On the route between Constantinople and other cities, he sometimes used the galleys on the route to Trebizond and Caffa, but more often the *naviglio* (purchases: 30,000 *perp.*, sales: 33,000 *perp.*). We were not able to consult the thesis of one of Melis' students, C. Billi, *Ricostruzione del viaggio di Costantinopoli del mercante veneziano Giacomo Badoer, 1436-1439*, (Florence, 1970), which reconstructs all the enterprise's activity (quoted by F. Melis, *Documenti per la storia economica dei secoli XIII-XIV* (Olshki, 1972), p.103, n.1).

<sup>47</sup> Laiou, "The Byzantine Economy", *op.cit.*, p. 204, believes that the position occupied by Greek bankers is proof of the dependence of the Byzantine economy, whose capital could not be invested in trade controlled by foreigners and was doomed to invest in financial transactions. His opinion may seem paradoxical. *Oikonomides, Hommes d'affaires grecs et latins, op.cit.*, states (p.68) that Greek bankers had a direct involvement in trade, and that Latins and Greeks were often partners in commercial companies (p.82). M. Balard, "Les hommes d'affaires grecs de Constantinople au XVe siècle d'après le livre de comptes de Giacomo Badoer", 478-479, in *Finances, pouvoirs et mémoire. Hommages à Jean Favier*, J. Kerhervé et A. Rigaudière (eds.), (Paris 1999), confirms these views.

occupied an unrivalled position and monopolised most of the maritime traffic, directly or via Candia, leaving a small portion to both the small tonnage belonging to Aegean or Pontic Greeks and to their business partners engaged as associated agents (Badoer sent a Greek agent, Michali Sofo, to Brusa to clinch the sale of some cloth (74), which shows that there were some personal and not only business relationships with the Ottomans who were all round the town under siege, be it Brusa or Adrianople). The town and its port played an active role in the transit and the organisation of foreign exchange. Exportation was based on raw materials, minerals and agricultural products, especially spices which occupied an essential position, hunting products (furs) and slaves, which were numerous, whereas importation was based on manufactured products of an industrial nature, cloth, soap and glass-ware. This could have led to a trade deficit, but Badoer's book deals only with the micro-economic analysis of an enterprise, and so we shall forgo drawing any macro-economic conclusions from it.