

Note: this chapter seems better and much cleaner, but I cannot go on marking the same copy-editing items. The drift of my suggestion is clear: spell out abbreviations, English or Italian over French names or words, limit the use of italics, esp. re Italian et items in English, spell out more numbers to avoid the profusion of Arabic numerals, curio up long sentences difficult to follow

Chapter Seven

The Orient : Greeks, Jews and Mamluks

Often on foot on the roads, with the dangers of the rivers,
the dangers of the bandits,
the dangers coming from my brethren of race,
the dangers coming from the pagans, the dangers of the city,
the dangers of the desert, the dangers of the sea,
the dangers of the false brothers
(Epistle to the Corinthians, 2, 11, 26).

As long as it had the means to do so, and as long as events did not thwart its objectives, Venice sent its convoys of galleys to the various ports along the routes from distant Asia, which were the terminals of these routes. At the beginning of the century, its galleys reached Constantinople and Tana, Beirut and Alexandria. When, in the middle of the century, the Ottoman Turks seized Constantinople and closed the straits, the Venetians strengthened their links with Alexandria and Damascus, which were dominated by other Turks, the Mamluks, adversaries of the Ottomans. In the second half of the century, Venetian merchants focused their trade to the east on the Venice-Alexandria or Venice-Beirut routes, meaning that they favoured the maritime route from south-east Asia to the Red Sea, where caravans took over to the Muslim ports of the eastern Mediterranean.

Venice maintained regular trade relations with the Mamlūks who governed Egypt and Syria, despite some difficulties that have obscured our understanding. In fact, despite playing a similar role as intermediaries on the very long route that brought spices from south-east Asia to north-west Europe, the two Mediterranean ports protected by the Lagoon or for one of them by the salty lake Mareotis were condemned to get along. Differences in religion and customs created difficulties, as we shall see with the consumption of wine and alcoholic beverages. Maintaining a colony of foreign merchants in Muslim towns also imposed financial burdens covered by the administration and the revenue from the *cotimo*. Arab and Venetian merchants had conflicting interests, which were exacerbated by each other's speculation, but the sultan endeavoured to calm the conflicts because he derived maximum

profits and revenue from the priority sale of spices to Venetian merchants, before the opening of auctions and trade freely discussed between partners. In these Muslim countries, Venice sent convoys of galleys that docked in Alexandria or Beirut to load up with spices from India, silk from Persia and locally produced cotton. However, this trade was in serious deficit, and the Venetians made up the difference in value by massive exports of gold and copper coins, a metal much sought after in the distant East.

Venetian merchants attracted to Alexandria and Damascus came to an agreement with the Mamlūk sultan to share the pepper market on a profit-sharing basis, which did not hinder speculation. This agreement was based on a precise timetable, according to which the arrival in the ports of Levant of the caravans that had crossed the deserts of the Middle East and the galleys that had come from Venice and were placed at the disposal of their Venetian patrons by the State were to coincide. The market was governed by a representative body of merchants, the consul and the Council of Twelve, who had a veritable treasury at their disposal, the *cotimo*, funded by the taxation of transactions. Venice made the most of its position as an intermediary, and its merchants re-exported a large proportion of imports from the Levant to the West. The most important remain was consumed or processed locally. Merchants left the city with highly sought-after Venetian handicrafts, including gold and silverware, glass and mirrors, drapery, silk and soap. If these goods were not enough to pay for their purchases, the merchants took with them bags of gold *ducats* from the chests of the galleys.

In the 15th century, the Venetian colony was one of the most active and numerous foreign trading colonies in Constantinople. Treaties confirmed the Venetians' privileges: tax-free trade, free entry and exit, and grants for bailiffs, councillors and merchants. The share of Venetian merchants among Badoer's buyers was small, as they had common sources of supply. Their role as sellers was much more important, as they themselves brought many Western goods to Constantinople and sold them on the local market or received them from their agents in the northern Black Sea, Anatolia and other parts of the Mediterranean. Most of the goods Badoer bought from other Venetians were of Levantine origin, and from further afield. His fortune was average (according to official estimates for tax purposes) - 2,800 ducats - but this valuation, according to the merchant himself, only considered part of his assets (houses and shops in Venice, government bonds) and did not include property located in the Treviso region, or capital invested in trade. His fortune would have amounted to 5,648 ducats in 1436 and 7,322 in 1440.

CONSTANTINOPLE

Historians have precise information on Constantinople's business circles, the range of goods traded by the Venetians and the production of handicrafts. On the eve of its imminent fall, Constantinople remained one of the most important commercial centres in the Mediterranean, even though the situation of the Byzantine Empire, whose days were numbered, had become very difficult. Gardens and even seeded fields sprang up in the city's central districts. The empire-less capital had only 3,000 to 4,000 inhabitants able to bear arms during the Ottoman siege. Travellers who described the poverty and poor appearance of the population noted both its concentration around the port and the constant presence of numerous ships loading and unloading goods. Constantinople's commercial role was maintained in the 15th century thanks to its favourable geographical position on the straits and the many colonies of Western merchants, Venetians, Genoese, Pisans, Florentines, Anconitans and Catalans. Italian merchants occupied leading positions in foreign trade. Badoer's account book is a valuable source of information on the region described and on the nature of the activities and relationships of the merchant, who was a partner of several leading Venetian merchants.

The total volume of transactions described in Giacomo Badoer's account book exceeded 450,000 *perperi* or 140,000 ducats for 3.5 years. Constantinople was still a major commercial centre at the time, where many merchants carried out numerous commercial transactions. Badoer exported wax and slaves to the West (Venice, Sicily and the Balearic Islands), or oriental products: spices, incense, medicines, and copper, etc. All these goods were bought in Constantinople, purchased in or near Constantinople (wool, leather, etc.), in the neighbouring regions of the Balkan Peninsula and in Asia Minor. Badoer bought textile and raw materials through his agents in the neighbouring regions or in the commercial centres of Asia Minor, the Balkans and the northern Black Sea region. He bought and exported virtually no goods to Constantinople. The sellers of goods exported by Badoer were mainly Genoese and other Western merchants, as well as Jewish, Armenian and Turkish. The Greeks sold leather goods, wax, wool, alum and, very rarely, oriental products at Badoer. The wholesale merchants bought from small traders or direct producers in the production area. The same story applies to goods from the Orient. Western or Levantine merchants bought them in Caffa, Tana, Trebizond and Brousse, then travelled to Constantinople where they sold them. Goods exported from the West passed through several hands in reverse. Western fabrics like expensive silks and fine draperies were bought by Badoer and sold to Greek

merchants who sold them to consumers or retailers, but the repeated passing of goods from one hand to another meant an increase in prices.

Constantinople remained attractive to Venetian merchants: the sums paid at auction in 1405-1450 for the State galleys sent to Constantinople represented 24% of the auction of all the galleys destined for the Levant, but they were close to 38% for the years 1436-1439, which testifies to the great commercial role of this ageing metropolis. In just three and a half years, Badoer's turnover (goods sent and received) with Venice amounted to 235,000 *perperi*. But he was not the only Venetian merchant in Constantinople; many others, including 83 Venetians mentioned by Badoer, traded in Constantinople. Giacomo Badoer's account book shows the range and cost of goods shipped to and from Venice, the tonnage of galleys and merchant ships, and the number of voyages on the various routes. Since the privileges granted to Italian merchants led to the almost total eviction of Greeks from international trade in their capital, how were commercial transactions divided between the ethnic and social groups of buyers and sellers, and what was the structure of demand and supply for Greek or Jewish merchants, those passing through, or Western merchants living in the capital? Not all the transactions in which Badoer was involved are listed, as he was not the leader but only one of the minority parties in the business. For example, the companies' trade with the island of Mallorca (around 110,000 *perperi*) was not conducted through Badoer himself.

The Greeks formed the largest group of Badoer's partners, but their business was mediocre; a small group of Jewish merchants also did business with the Venetian. Among the western merchants, the most active were the Genoese, who were Badoer's main suppliers of goods. The preponderance of Levantine merchants among Badoer's buyers illustrates their presence in the retail trade, while Western merchants held a strong position in international foreign trade. However, there were Greek merchants and craftsmen who met the needs of the local population: carpenters, bakers, butchers, furriers, linen spinners, shoemakers, tailors, cooks, painters, and even craftsmen linked to technical and textile production, dyers, shearers.

The original Greeks (those of Constantinople and not those of Venetian colonies such as Crete, Negrepont, Modon or Corfu) included craftsmen, merchants, cloth merchants, brokers (intermediaries in commercial transactions), even bankers, representatives of the nobility and civil servants. They bought from Badoer the most sought-after fabrics such as velvet and silk as well as more ordinary items (67%), tin, foodstuffs such as olive oil, wine and dried meat or other goods. Badoer mainly bought leather goods (16.6%), wax (28.5%), wool, alum, cereals, and small quantities of silk, oriental articles and copper. Over 60% of the cereals, 22% of the leather, 13.25% of the wax, 8% of

the raw silk and 4.2% of the oriental products that made up the goods purchased by the Venetian came from the Greeks. Among the Greeks, there were also money lenders. For example, Manoli Iagari paid in cash, on a bill of exchange from Venice, one thousand ducats, or 3,375 *perperi*. Lascari Teologo lent Badoer 600 *perperi* for six months at 10% per annum. The loan was secured on 4 pieces of scarlet cloth from Mantua and 2 «bastard» cloths (c. 322). Of the 10 banks listed in the register, three of medium importance were Greek-owned. The turnover of these banks, linked to Badoer's operations, was slightly lower than that of the large Latin banks of Carlo Capello, Tomà Spinola and Francesco di Drapieri, but higher than that of the other Western merchant banks. Badoer paid its suppliers through the bank of Greek Costantin Critopullo or through another bank. Payments were made in small amounts, perhaps because the bank's financial situation offered few guarantees. It went bankrupt because, under the conditions of privilege enjoyed by Italian banks, it was unable to withstand the competition from the latter.

Unlike the Greeks, the Jews bought goods for resale; large consignments of cloth attest to their commercial links with neighbouring Turkish districts. While the Jewish share of buyers was around 16%, it was 40% for expensive silk fabrics. Jews sold spices and incense, wax, silk and dyes. While the share of spice sellers, dominated by Genoese and Venetians, was only 10.2%, it exceeded 54% among silk sellers. The activity of Jewish merchants in Constantinople in the first half of the Fifteenth century had less to do with retail trade than with international trade with the Levant; the variety of goods also confirms the neighbourly relations with the Turkish population. There is no evidence of direct trade between Jewish merchants and the West, as these intermediaries sold their goods to Westerners.

The Jew Sarachaia Chomatiano promised Giacomo on 5 February 1437 that Leonin d'Abram, also a Jew, would give him 544 *perperi* when the galleys arrived; on 4 July, it was Sarachaia who paid this sum. On 1 July, Leonin sold Marin Barbo 4.5 cantars net of pepper at 56 ½ *perperi* per cantar, and Sarachaia committed himself again to this payment of 244 *perperi* 6 carats and to a loan of 500 *perperi* over 4 months (interest at 13% per annum) that the banker Sofiano Chaloiani granted to Giacomo, who paid this money to Piero Soranzo. Badoer had chosen the loan arrangement, which cost him 34 *perperi* 21 carats (interest), because it was more advantageous than buying the copper forward (c. 83). Soranzo had in fact bought 50 cantars and 640 copper plates and owed Carlo Capello 841 *perperi*. Sarachaia, a money-handler, had lent 1,000 *perperi* for 6 months (at 15% annual interest) for exchanges drawn on Giacomo (c. 89). He advanced 2,000 *perperi* to Tomà Spinola, who would repay them on 5 November 1438 (c. 277),

as Giacomo had promised on 1 September 1437. He had business dealings with the bankers Carlo Capello and Tomà Spinola, from whom he received 584 *perperi* through transfers set up by Giacomo (c. 205). He was also a spice merchant, selling 22 cantars 27 *rotoli* of ginger from Mecca, where he had arrived after his long journey, at 22 *perperi* per cantar, to Piero Michiel (c. 179). At other times, he bought 9 draperies measuring 495 ells (*pichi*) at 58 *perperi* each, or 527 *perperi* (c. 252). He delivered pepper, wax, sheep's wool and raw silk to Badoer, and bought crepe sails, oil, soap and «bastard» fabrics. His business network extended to Greeks and the Jews Signorin de Lazaro, his cousin, Elia Dedimari and the broker Pulixoto, who had been involved in the sale of ginger to Michiel (c. 293)¹.

Badoer did business with a dozen Turkish merchants who traded in wax, raisins, hides, wool, linen and cloth. These Turkish merchants could also do business with other Greek or Italian merchants based in the capital. Badoer's business extended to bank payments with Turks who had traded goods with the Venetian. Among these clients, Badoer dealt with the vizier Çandarlı Halil Paşa, whom he called *Ali Basa, turcho*. He also negotiated with Greek Ottoman subjects from Andrinople, Simissos, Rodosto, etc, who frequented Constantinople for their business, their trading partners were conversely admitted to Turkish territories, for example in Brousse. This trade sometimes took a picturesque turn, as in the case of iron, which was in great demand by the Turks: the metal was transported on Italian ships, and the Italian merchants sold it to Greek or Jewish traffickers, who in turn sold it to Turkish merchants. Badoer also refers to Ottoman coins, *aspres* and *turcheschi ducats*, which testify to the regularity and vitality of exchanges between Turks and Greeks or Italians in the capital, which was then paying tribute to the Ottomans².

Badoer's rapid enrichment (29.1%) was the result of his business in Constantinople, where his commercial profits played a decisive role. Badoer not only engaged in transactions on his own account and at his own expense, but also in large-scale commission transactions. In three and a half years, Badoer received around 4,500 *perperi* in profits from his own activities and no less than 3,125 *perperi* from commission business. The range of his activities was very varied: he bought and sold a variety of goods in Constantinople and other cities, dealt in invoices, collected debts and took out insurance. He conducted his business

¹ HOCQUET, based on references in Giacomo Badoer's Account Book. On the length of the «picho» and other Constantinople measures used by the Venetian merchant, see HOCQUET (2002) reprinted in 2023.

² N. NECİPOĞLU (1992).

personally, with the help of an apprentice or servant, and sometimes employed other servants. Badoer rented a house and a few warehouses. Outside Constantinople, he mainly traded on commission. He carried out half of his operations in partnership with other Venetians, with his brother Geronimo who remained in Venice to manage the *fraterna societas*, with Piero Michiel, Marin Barbo, Francesco Balbi, etc. He was the very type of middle-aged Venetian noble merchant, temporarily settled in the Levant to trade in everything. In this respect, he was no different from other foreign merchants, and the dominant image of the time was not that of a small businessman, but of someone on the lookout for something that would bring him a profit after he had sold what he had bought.

As Badoer's associates, the Genoese were the leading western merchants in Constantinople, owning Pera and a district in Andrinople. They bought fabrics from Venice, silks, tin and oil from Badoer and sold him goods from the north, from Caffa, with which they had close ties, and from Anatolia. The goods they sold were varied: copper, spices and incense, leather and furs, wax, slaves, raw silk, indigo and other dyes, as well as cereals and Cypriot sugar. Badoer bought these goods from them, as well as wax, raw silk, indigo, cochineal and cereals. Thanks to their extensive international connections, the Genoese played a major role in supplying the Constantinople market with goods from the East via Brousse, Caffa and Andrinople. Through the Genoese banker Francesco di Drapieri, Badoer made payments not only to Greeks, but also to Venetians, Florentines, Catalans and, to a lesser extent than the Capello bank or Greek banks, to Armenians, Greeks and Jews. Drapieri was also involved in trade proper, as well as promissory notes. He bought 9 barrels of oil and 20 pieces of cloth from Badoer and sold him copper. Drapieri recovered 675 *perperi* from Badoer on a Venetian bill of exchange issued by Geronimo. The Genoese was therefore closely linked to Venetian trade and commercial transactions, which shows that he was probably economically dependent on Venice. Badoer's accounts show that the Genoese and Venetians worked very closely together, as can be seen from the Genoese bills of exchange with Venice, the Venetians' role in Caffa and the supply of fabrics to the Genoese.

ALEXANDRIA OR THE VENETIANS AT HOME

The Venetians in the East did not see themselves as foreigners; they liked to call themselves «sons of the country» (*Noi siamo fioli del paese per viver et morir in quello. Et piu al presente che mail*); *nui poveri*

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marcadanti tuoi fedelissimi servidori et fioli di questo paese già anni 500³.

THE DOLFIN BUSINESS AND THE GEMSTONE TRADE

Biagio son of Lorenzo Dolfin and Maria Malipiero born at the end of the 1360s in the parish of S. Biagio in Castello, made several trips to Alexandria in 1391, 1395-96 and 1397-98, often with the *muda*, one of whose parents, Benedetto Dolfin, was galley patron. As early as 1393, he is said to have bought salt works in Durazzo and thus to have invested part of his earnings in land acquisitions as a young man. In 1396, he is said to have traded in Venetian mirrors. He had another relative, Leonardo Dolfin in Candia. He also came to Bruges in 1397. He married three times, to Elisabetta Gradenigo (1401), to Cecilia Querini and to Pasqualiga Pasqualigo (1405), had no children and named his heir Lorenzo, son of his older brother Antonio, who was also his partner but died of the plague in 1399. Biagio also traded precious stones and pepper with the Jewish merchant Sabatino Russo of Lecce. When he returned to Venice in 1398, he remained there, and in 1404 he is said to have bought Florentine cloth from another Jewish merchant. As a clerk for Marco Morosini he travelled to Damascus famous for its silk fabrics. In 1386, the Venetians had bought 1,400 pieces of fabric there, while in 1393 the galleys of Beirut imported 76 skeins of silk to Venice, in 1395 38 skeins and 800 pieces of cloth, in 1399 another 24 skeins and 95 bales in 1404⁴.

He then began a partnership with his brother-in-law Andrea Bragadin with whom he remained in business until his death. For Morosini, he sold drapery and bought pepper. Returning to Venice in the autumn of 1406, he continued his business with Syria investing in the *muda* of 1408. From 1408 to 1410 he was consul in Alexandria for the first time and, according to Piloti he is said to have been involved in buying back Muslim slaves held by the Duke of Naxos. In 1414, he was again in Damascus where he collaborated with the consul Giovanni Dolfin. Between 1415 and 1418, he was *provveditor* at Sebenico. This did not prevent him from continuing to trade in precious stones between Alexandria, Venice and London. At the beginning of October 1418, he was again elected consul in Alexandria. He was around fifty years old, in good health, and wore glasses (*li ochialy*), perhaps because he had

³ Letter from Pietro Zen to the head of diplomacy Mamlūk Tagribirdī, 5 Sept. 1510; petition addressed by the Consulate to the Sultan, 27 July 1510.

⁴ MOLÀ (1994), p. 255. Tamerlan's incursions and the siege of Damascus were very harmful to the economy of the Levant and marked a complete turnaround in trade flows. Then it was the Italians who sold silk fabrics to the Orient.

spent a long time in the sun in Damascus and the delta and had spent a lot of time on his correspondence⁵. On 26 April 1420 he died in Cairo where he was on a mission⁶.

The consul was not authorised to trade⁷, except in precious stones, a family trade involving his brother and cousins, Giovanni da Canal or Perazio Malipiero who was also consul in Alexandria and Lorenzo Donà baile in Cyprus. The stones had been bought in Cairo by Malipiero, some of which were taken to Cyprus to be sold to King Lusignan but this one was penniless, however, and Donà's successor managed to obtain payment only in 1419. The *Precious Stones Company* (*Compagnia delle zoie*) fell apart and the Dolfin family took legal action against Malipiero and da Canal, who had the bills of exchange from Cyprus deposited with the *Rason vecchie* in Venice sequestered. In 1412 Biagio had tried to sell the stones in London through the brothers Andrea and Nicolò da Molin but the deal fell through in the king's absence and Dolfin, together with his brother-in-law Polo Pasqualigo turned to Paris. Biagio Dolfin who was ruthless in his business dealings, initiated proceedings to the *Giudici di petition* against Nicolò da Molin who argued that his dealings with the English court had ruined him. In 1419, he entrusted Baldassare Rizzo with a box of precious stones to be sent to Venice and gave Nicolò Dolfin, Benedetto's son and later his executor, with detailed instructions, inviting him to consult his friend Bernardo Bembo. He warned him against the trickery of the Genoese Tommaso Sofia, who was setting quite low prices. Nicolò informed him that he had sold the stones to a merchant in Paris who hoped that the negotiations opened between the French and English would soon lead to an armistice. Conversely, the conflict between Venice and Emperor Sigismund was escalating and Dolfin wrote to his supplier in Cairo to stop buying gems. Contrary to the regulations prohibiting him from trading in anything other than precious stones, Dolfin also dealt in other goods⁸: Marco Morosini sent him cloth and informed him of pepper prices in Venice; he was also involved in the sale of English cloth and velvet for Andrea Bragadin who expected to do good business with the Sultan, but the latter, Biagio informed him, was no longer interested in luxury drapery, he was too busy buying gold. Biagio, for his part, was moving into the pepper trade. He remained involved in the business network he had built up

⁵ On the faith of his third wife, G. CHRIST (2012), p. 106-9.

⁶ G. CHRIST (2012), p. 97-100.

⁷ Antonio Bembo who was vice-captain of the Flanders galleys in 1409 and had been entrusted with the office of ambassador to the King of England whom he was joining, received a salary of 200 *ducati* for the voyage and had been authorised to trade both personally and through factors [H. BRADLEY (1992), p. 53].

⁸ G. CHRIST (2012), p. 133-4.

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before becoming his nation's consul, a network based above all on his relationships with other members of the ca'Dolfin and with his family in-laws⁹.

THE TAVERNS OF ALEXANDRIA AND THE WINE TRADE

In Alexandria bars served wine, their owners were Italian, one of them Venetian (Piero Malipiero), another Coptic; Jews and two women also ran bars. The clientele included sailors, foreign and local merchants, including Muslims. The Muslim religion did not exclude the consumption of wine. Some Venetians owned taverns close to the *fondaco*, which they rented from the consulate funds, but the neighbours complained about the noise and smoke from these «marzanae» (taverns) and their customers who came to eat. The Venetians had the right to import free of charge «in the necessary quantities», the food and drink they needed, but they had an unfortunate tendency to import more. They also had a monopoly on importing wine and the collection of taxes on behalf of the sultan. In 1419, taxes amounted to 4 *ducats* per barrel of wine and were leased to Venetians from Crete. To reward Emmanuel Piloti for his help in freeing the Muslim prisoners of Naxos, the Sultan allowed him to import 5 barrels of wine free of duty each month and the chronicler calculated his profit at 50 *ducats*, but the Sultan forbade him to import malvasia wine and Piloti had to bribe officers to continue his trade. A Jewish merchant from Retimno (Crete) concluded an agreement with the Venetian wholesaler Angelo Michiel who supplied Christian and Jewish taverns as far away as Rosetta and Cairo to deliver 100 barrels and then another 70 and 60 barrels of wine to Alexandria. The Mamlūks authorities took a dim view of so many alcoholic beverages entering the country. The *Senate* was informed that in August 1419 the Muslims of Alexandria had overturned and destroyed 300 barrels of wine in the customs depots and in the city. The *fondaco*, merchants and their property had also suffered some damage. The *Council of Twelve* decided to send a complaint to the Sultan. The riot had started in July and the mob looted the houses of Italian merchants and the textile warehouse (Western drapery competed with the products of local craftsmen). The rioters also attacked the local authorities. Eventually, the local authorities agreed to restrict the consumption of wine to the homes and taverns of foreigners in Alexandria. In times of epidemic or famine, as during the severe contagion of 1429-30, the Muslims saw in the plague a just punishment for their wrongs and demanded reparation. They first attacked the Copts, then the privileged position of the Christian merchants, who

⁹ G. CHRIST (2012), p. 101.

added to their commercial activities the unpopular role of tax farmers. The Sultan's administration proceeded to purge and exclude Christians from this lucrative sector of activity¹⁰.

THE GALLEYS' STAY IN ALEXANDRIA AND SPECULATION

The *Senate* set the length of time galleys could stay in the ports of the Levant. In 1419, they stayed for 20 days, excluding the days of arrival and departure. If the captain of the convoy exceeded this period, he was liable to a fine of 500 *ducati*. The consul and the *Council of Twelve* could not extend this time limit. The regulations (*regulatio*) also set the day of departure, but this day varied between 18 and 40 days. The *Senate* could extend the period by 20 days, not to load pepper, but only to make payments and carry out administrative formalities. Goods loaded outside the *muda*¹¹ were deemed to be contraband. If he remained in Alexandria (or Beirut) a *rata*, i.e. pepper that had been purchased and for which the merchants had duly completed the formalities with the Mamlūks authorities, the consul would convene the *Council of Twelve* and, together, they would choose the ship (the cog) that would load these spices with the *rata* for transport to Alexandria (or Beirut). From the *rata* to be transported to Venice, the ship receiving $\frac{1}{2}$ of the *nolis*, the common $\frac{1}{4}$ and the last quarter going to the merchants¹². It was important for the galleys to leave Alexandria on time, at the end of October, to sell to the investors who loaded on the Flanders galleys and to the German merchants¹³ who stayed in Venice from December to February, and who were particularly active when the galleys and cogs arrived from Alexandria. There was also the weather to contend with, as it was difficult to return home before the *bora* blew on the Adriatic, even rowing against a violent north wind¹⁴, before the Alpine passes were closed during the winter months or during the fair season in South

¹⁰ G. CHRIST (2012), p. 67-74 and 175-6.

¹¹ On the two meanings of the word *muda*, LANE (1957), p. 129-9. He points out that «in many cases, *muda gothonorum* refers to 'the period when the cotton is loaded and not to 'the cotton fleet' (p. 130) and goes on to examine the reasons why Venice developed such a system: by concentrating merchandise at certain times of the year, i.e. fair times, Venice reinforced its reputation as a world market that was always supplied (p. 134). Were there fairs in Venice, apart from the *Sensa* (Ascension Day) and Christmas fairs, which each lasted 15 days», Lane added two periods of navigation, the return of the galleys and the spring departure of the ships, in December-January, followed by the return of the galleys from Flanders and the departure of the galleys to the Levant in July and August (p. 135).

¹² G. CHRIST (2012), p. 187-90.

¹³ LANE (1957), p. 132.

¹⁴ HOCQUET (1999a), p. 198-9.

Germany at the other end of the long spice route. There was also the arrival of the monsoon at the entrance to the Red Sea.

The patrons of the three large galleys auctioned on 18 June 1419 were Giovanni Dandolo (140 pounds *di grosso* 2 shillings), Arsenio Duodo (140.12) and Daniele Soranzo (141.1), Lorenzo Donà was elected captain of the convoy, which left Venice on 6 September with a cargo worth 80,000 *ducats* and arrived in the waters of Alexandria on 11 October. The Emir's coastguards arrived in front of the galleys to record the cargo of each vessel and transmit the news to Cairo by pigeon¹⁵. When the checking operations were completed, the galleys entered the port where they dropped anchor. Some of the goods were unloaded, while the precious metals and furs remained on board. At the end of October, the consul informed the captain that he wanted to hasten the purchase of pepper or delay the departure of the galleys. As far as the captain was concerned, this was out of the question. The merchants were prepared to load only the required quota of pepper from the Sultan, but «they stood by as if the galleys weren't there», waiting for them and took no steps to buy pepper¹⁶.

The various partners would make calculations, some to reduce costs, others to obtain a better price. Merchants delayed their purchases after the departure of the galleys to earn more by postponing transactions and sending the spices to Venice on other ships. Donà told the consul that the galleys risked returning to Venice incompletely loaded and unfilled, «which would be an iniquitous and dreadful thing». Sedentary Venetian merchants delayed pepper sales as long as possible so that the patrons and merchants who had come with the galleys would offer higher prices to avoid leaving with incomplete loads. On 7 November, payments began to be made to the sifters, weighers, carriers and customs officers. On 14 November, the consul paid the bill for the water loaded aboard the galleys. In principle, the patrons of the galleys could not go ashore and a maximum of 10 men at a time were authorised to leave the galleys to replenish the water and food supplies¹⁷. The cause of the difficulties of the 1419 *muda* was in fact elsewhere, and the merchants living in Venice saw the low demand for spices on European markets that year and the fall in prices as the consequences of the conflict with Sigismund who prevented German merchants from reaching Venice, and the failure of the expected peace treaty between France and England while those based in Alexandria informed them of a major arrival of spices in Egypt. The merchants of Venice advised their colleagues in the Levant not to hurry and buy pepper as cheaply as possible, not to load their

¹⁵ RAGHEB (2002) on the importance and role of carrier pigeons in the Muslim East.

¹⁶ G. CHRIST (2012), p. 191-3.

¹⁷ G. CHRIST (2012), p. 194-7.

purchases onto expensive galleys, but to wait for spring and the arrival of the cogs, as there were few Germans in Venice that winter. In the spring of 1419, Giovanni Morosini and Orso Dolfín received pepper from the cogs¹⁸.

The Sultan's officers needed to know what goods the galleys were carrying to organise the forced sales of pepper and to monitor the customs administration. Once the galleys had been unloaded, the officers carried out a new registration in the customs warehouses. Goods that were not sold could be re-exported free of duty, provided they were duly registered by the customs office. The difference between import and re-export was the sum of the goods sold, on the value of which the customs inspector levied a 10% tax. Furs, precious stones and pearls, and beverages were exempt. Precious metals and coins paid 2% on import. However, the Mamlūks customs officers reportedly demanded a duty of 4% payable immediately (on importation), whereas the commercial *privilegēs* granted a duty of 10% payable on the sale of the goods, leaving unsold and re-exported goods free of tax. They also seized legally declared furs and coins. Merchants were smuggling *ducats* that belonged to them or that had been entrusted to them by merchants into their clothing to avoid customs controls¹⁹. «Their behaviour is sad and harmful», said Consul Dolfín, because if this currency were discovered, the guilty party would be fined 10%²⁰.

Biagio Dolfín had not informed the *Senate* of the confiscation of squirrel furs (*petit-gris*) without subsequent reimbursement. The Mamlūks prized this type of fur (*vair*) as winter clothing or for trimming ceremonial garments. They went so far as to exempt furs from duty, but then confiscated them. Stefano Querini and Chiaro Arcanzoli had difficulties with the customs inspectorate, which eventually compensated them, so that the two merchants were able to take pepper on board their galleys. The consul enlightened the Doge and the *Senate* about what the merchants called «confiscation», which was in fact a regular, daily trade, a complex transaction between partners. The merchants would sell to the customs inspector, who was doing business and taking advantage of his office; they would bank on his goodwill and then declare the goods confiscated. Confiscations», were not seizures or forced sales, but often courtesy gifts of goods that were difficult to sell on the regular market. They included a compensation: a gift from the customs officer. It was profitable for the merchant to declare this act as a forced sale at a reduced price to obtain a reduction in the *cotimo*

¹⁸ G. CHRIST (2012), p. 199-201.

¹⁹ «I qual dener non n'iera tuty suo, anzy era de merchadanty, i qual i fara portar dentro ochultamente per non pagar el dreto» [G. CHRIST (2012), p. 320].

²⁰ G. CHRIST (2012), p. 209-12.

and, possibly, a reduction in the import tax or a loss recorded in the accounts presented to the merchant in Venice²¹.

Venetian commercial privileges, despite the law prohibiting them, did not prevent forward purchases and recommended that they be registered with a notary to avoid any disputes. Pepper purchased on a forward basis had to be delivered on the agreed date, even if the price had risen, as the written contract had legal force and the Muslim had received a deposit (*el caparo*)²². When the galleys arrived, the delivery of foodstuffs, coins and ingots from Venice increased, while the supply of pepper in exchange depended on several meteorological and political factors. Venetian and Egyptian merchants tried to take advantage of this situation and speculated on the quantity and price of pepper by negotiating futures contracts²³. Information played a key role in this game, as did speculation: if the caravan left Mecca late it would arrive in Alexandria during the last days of the *muda*, Egyptian merchants had an interest in selling their stock at high prices as quickly as possible and spreading the rumour that this year the caravan would not arrive before the departure of the galleys; the Venetians took the opposite approach, waiting as long as possible in the knowledge that prices would fall when the caravan arrived and dumped large quantities of spices on the market²⁴. News from Europe was also important, affecting demand for pepper and the supply of draperies.

Pietro Bernardo and Francesco Zorzi were among the wealthiest, based in Alexandria and members of the Council of Twelve. Bernardo worked for his father, who remained in Venice, dealing in cash and soap, while Zorzi also traded in soap and collaborated with Carlo Contarini, Dolfin's future successor at the consulate. He cashed bills of exchange issued by the customs inspectorate on behalf of other Venetian merchants. Bernardo also negotiated pepper purchases for other Venetian merchants. In January 1419, he commissioned a partner in Cairo to keep him informed of pepper arrivals in the Red Sea ports

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²¹ G. CHRIST (2012), p. 220-4.

²² «Alcun non ardisca comprar in credenza o a tempo o termine alcuno sotto gravissime pene. L'è tanta acresciuta la malignità de alcuni avidi et cupidi della propria utilità et guadagno cum massimo danno et ruvina delli altri mercadanti nostri, che cercano secondo le leggi nostre far la loro mercantia» (1492, *Capitolare dei provveditori sopra il cotimo di Alessandria*), in 1407 the *Senate* had recalled a law already passed in 1367, the *Great Council* recalled the ban in 1416, quoted by G. CHRIST (2012), p. 229-30 and n. 8.

²³ VALLET (1999), p. 247, shows that forward sales were widespread in Mamlūk and Venice: Lorenzo Cappello sold *cremese* at six *grossi* a pound with a term of 6 months, p. 249, for silk in Syria, 15 sacks of silk can be bought from the Mores at 310 dirhams a sack between cash and barter, with a 4-month term. The forward sale is a sale on credit.

²⁴ G. CHRIST (2012), p. 231-3.

and, with Zorzi, he went round the market, announcing that they were prepared to buy pepper at 160 besants per *sporta* (s. appendix), paying only a small advance (deposit) and promising the balance at the next *muda*. It was a risky business; the two acolytes, who were short of cash, were expecting a small quantity of pepper, while the consul, better informed through other channels, was hoping for a lot and — the plague that had ravaged Cairo and Egypt was rapidly subsiding — he advised waiting for the return of the galleys and buying at that time, even if it meant paying 200 *ducati* for the *sporta*. But a Catalan fleet and merchants had arrived in Alexandria and had not left any spices behind and the Venetian speculators had bought a thousand *sporte* forward. Everyone expected a price of around 200 *ducati* and the speculators would have made an excellent deal²⁵. Every year, the Venetians were obliged to buy pepper from the sultan, and the Mamlūk authorities waited for the forward price. Many merchants who feared they would not be able to find pepper to buy from the Egyptians would have to buy from speculators at monopoly prices and, in turn, would engage in forward purchases that drove up prices (speculative spiral). This was a dangerous precedent that worked against all Venetian merchants. The consul and a major part of the *Council of Twelve* set a maximum price of 120 *ducati* for forward purchases of pepper to be shipped on Venetian vessels.

The Sultan collected a tax in kind on imported pepper and he also had his merchants who bought pepper in Mecca. The Venetians were obliged to buy some of this pepper at a set price, as specified in the trade privileges. In September 1419, the consul contacted the authorities to negotiate a price acceptable to both parties, but the sultan's representative, a merchant, insisted on a very high unit price of 280 besants for 150 *sporte* of the sultan's pepper. The customs inspector tried to guarantee the Venetians a price of 150 besants and to obtain a guarantee that no Venetian would pay more than 144 besants after the sale of the sultan's pepper. The sultan sold at a higher price than the market price, and as a result the Venetians bought on the open market at a lower price. But this price did not suit those who had promised to buy at 160 besants.

The sale of spices took place in two stages. Venetian merchants began by dividing up the obligatory Sultanian pepper, which was fixed by oral treaty [*a voze*]. In the second stage, given the absorption capacity of the markets that extended from Venice to north-western Europe via London and Bruges, they bought the spices that remained in the hands of the merchants by auction²⁶. The price varied according to

²⁵ G. CHRIST (2012), p. 234-5.

²⁶ G. CHRIST (2012), p. 236- 40.

the method of sale: fixed for spices whose income fed the sultan's treasury, variable for those that remained free. In 1419, the consul did not hold an auction. The merchants first bought 150 *sporte* at 150 besants and then again 150 *sporte* at 160 besants. Those who took part in this distribution of pepper from the Sultan then reserved the right to buy from private individuals on the open market. The consul took note of the pepper sold by the sultan and levied a tax equal in 1419 to around 10.5 besants per *sporte*, which brought in 3,419 besants, and rich private merchants in turn offered their pepper. Bernardo is said to have bought 15 *sporte* and Zorzi 7 of pepper from the sultan, but their speculation caused customs to lose 1,000 *ducati*. Zorzi got off the hook by paying a fine of 110 *ducati* and Bernardo 410 *ducati*. Bernardo and Zorzi tried to make the consul bear their losses, but the consul, who held them responsible for their misfortune and for the rise in the price to 170 besants, did not intervene on their behalf and replied that their action had caused all the Venetian merchants in Alexandria to lose money. According to the Swiss historian CHRIST, this amounted to 2,500 besants. Bernardo justified his actions by arguing that the merchants came to Alexandria not for the good of the Venetian community, but for their own personal profit²⁷. The last purchases were made on 7 November, shortly before the departure of the galleys, as Captain Lorenzo Donà risked being fined if he delayed the departure. On the same day, the Venetians paid the various officials involved in the pepper trade, the *gARBELLatori* who sifted the pepper to remove its impurities, and the weighers who, after weighing it, put the pepper into bags to form *colli*, which were then loaded onto the ships by porters.

THE «COTIMO»

Sultan Mamlūk Barsbāy (1422-38) sought to monopolise pepper destined for Europe and metals for Indian markets.

«(This) sultanian stockpiling project would not have been possible without the collaboration of the Venetian authorities to supply a constant demand and without that of the Indian spice suppliers from Calicut»²⁸.

From 1450 onwards, the sultans and their Venetian partners adopted a compromise: the compulsory purchase of spice stocks as a prerequisite for later access to the free market. These spice stocks were allocated to a sort of Levantine trade guild grouping together overseas

²⁷ «Che non n'iera vegnudi in Alexandria per ben de Venexia, anzi per so ben de lor. El (= the consul) die lasar far i omeny el so meio» [quoted by G. CHRIST (2012), p. 248, n. 84].

²⁸ APELLÁNIZ (2009a), p. 271.

merchants, the *cotimo*²⁹. Merchants paid a tax on their business called *cotimo*, which fed into a mechanism that served as collective insurance and a sinking fund³⁰. How did the *cotimo* work? The head of the army office, Badr al-din Hasan, who belonged to a large merchant family and had exercised Sultanic control over the revenues of the port of Gedda was given responsibility by the Sultan for managing the spices sold in Damascus. The quantity of spices that this *Nazir* could impose on the Venetians was calculated according to the annual volume of trade. The ratio that Venice and the Sultan agreed to respect was one *sporta* of Sultanian pepper for every 1,000 *ducati* of Venetian investment³¹. Purchases were forced, and quantities depended on the sums invested by Venetians on the open market during the year. Transactions were recorded both in the Venetian consul's accounts and in the court's tax book. The consul then sold the pepper at auction to Venetian merchants. He had acquired the pepper at the price set by the State and sold it at the market price, which was normally lower. The operation resulted in a loss for the consulate. The *Senate* calculated that the loss on the purchase of a *sporta* of pepper in exchange for 1,000 *ducati* invested should not exceed 3% of the total value of the purchases. This percentage was borne by all Venetian merchants in Syria who paid the *cotimo* duty in proportion to the volume of their business. In the long term, this low percentage increased, as managing this tax was difficult because the investment and quantity of spices varied from year to year³².

Apellániz estimated the investment of Venetian galleys in Syria from 1450 to 1468 and the stocks of pepper purchased from the sultan based on the *ducati* and *ašrafi dinars* taken by the galleys. During these 19 years, the galleys carried 8,762,000 *ducati*, an average of 461,158 *ducati* on each voyage (minimum: 180,000 *ducati* in 1457, nothing in 1464 due to the privateering activities of the Knights of Rhodes and the Sultan's reprisals, which interrupted trade, but 978,000 *ducati* in 1466 for the two spring and winter *mudes*³³. The Sultan's pepper purchases amounted to 7,543 *sporte*, an annual average of 397 *sporte*. The *cotimo*

²⁹ The *cotimo* was levied on all goods entering or leaving Venice. Although the term refers to Venetian trade with the Levant, it had been decided on 2 April 1492 by a general chapter of German merchants in Fondaco that from then on a contribution proportional to the value of transactions would be levied to finance common expenses. The new tax took the name of *cotimo* (BRAUNSTEIN [2016], p. 197-8).

³⁰ APELLÁNIZ (2009a), p. 116.

³¹ TUCCI (2007), p. 365.

³² APELLÁNIZ (2009a), p. 130-135, VALLET (1999), p. 156.

³³ APELLÁNIZ (2009a), p. 135, table 4 -1, has used the *Cicogna manuscript* 3281 III 31 in the Correr Museum. On the testament lent to Doge Mocenigo and the doubts that this document inspires, see HOCQUET (1978), p. 536, n. 42, and see above.

paid by Venetian merchants averaged 3.66% (min = 0.5 to 2, max = 6 to 6.8)³⁴.

years	Investment(1,000 <i>ducati</i>)	pepper <i>sporte</i>
1450	435	398
51	337	258
52	367	300
53	389	188
54	442	251
55	573	400
56	471	700
57	180	181
58	565	540
59	477	476
1460	429	400
61	561	470
62	534	528
63	575	534
65	594	387
66 (spring)	607	625
66 (winter)	370	370
67	548	229
68	308	308
total	8762	7543

Tab. 7: The investment of the Syrian galleys and the Sultan's pepper purchases

«Zayn al-din Ibn al-Nayrabi was a spice merchant. He benefited from a family structure strongly linked to trading with Europeans (...) and constituted one of the most flagrant cases of the penetration of financial bodies into the machinery of the Mamlūk military state. Like so many businessmen of his time, he acted from Aleppo the hub of Euro-Asian trade, although his network extended to Damascus thanks to family alliances. He held the position of *nāzir al-gays* and was entrusted with directing the pilgrimage to Mecca

³⁴ According to APELLÁNIZ (2007), p. 621-2.

which channelled much of the commercial traffic and was the main link with Indian trade»³⁵.

Venetian investments also included goods: Venice exported goods produced in Western Europe to Egypt and Syria, but we are not aware of any Egyptian or Syrian merchant involved in this trade outside the borders of Mamlūk territory. ARBEL chose to study the loading lists of ships that sailed to the Mamlūk Orient, which he found in the diaries (*diari*) of Domenico Malipiero, Girolamo Priuli and Marino Sanudo, supplemented by two tariffs³⁶ which reflect the workings of the Alexandria market around 1500. Venetian tariffs developed over the last two decades of the 15th century thanks to a common practice in Venetian trade at the time, the commission contract, which bound a principal (*maestro*) and a commission agent (*fattore*)³⁷. The principal was charged for the «spese di marchandatia», the expenses incurred on the goods between the place of departure and the place of arrival (nolis, transport, deposits, duties, tips, etc.). The commission agent in Alexandria advanced the money and transferred it to the principal's account, while the tariff avoided frequent disputes and set the rules between the various partners, including the Mamlūks authorities³⁸. Martino Merlini warned his brother:

«Make sure that you always have the orders and will of your masters as the Paternoster, because these take precedence over everything else and it is dangerous to neglect them»³⁹.

The arrival of the Venetian galleys had to coincide with the arrival of spices, and the Sultan was obliged to give the spices when the galleys arrived «because during these few weeks, the maximum concentration of trade and the greatest availability of cash on the spot were expected». In 1499, for example, the Sultan made a commitment to the consul to supply him with spices from al-Tor⁴⁰ «in times of galleys». In 1502,

³⁵ APELLÁNIZ (2009a), p. 140 (al-Nayrabi is mentioned in the records of the *Senate* in 1484).

³⁶ ARBEL (2004a), pp. 37 and 40. The first tariff, dated 1494, bears the name of Lorenzo Rimondo [Arimondo], who was active in Alexandria, the second is by Bartolomeo di Paxi published in Venice in 1503.

³⁷ VALLET (1999), p. 38-9 on the division of roles between the two partners, according to SOPRACASA (2012), «the principal took all the risks in a commercial venture, while the commission agent received a retainer, which was less than the principal's profits, but much more secure»(p. 61).

³⁸ SOPRACASA (2014), p. 144-5. One tariff began as follows: «Tariff of all expenses which must be by the factors put to the account of the masters in Venice for all goods sent to Syria or those dispatched from there» (SOPRACASA (2014), p. 66).

³⁹ SOPRACASA (2014), p. 67 quoting Dalla Santa.

⁴⁰ The sultan's were first unloaded at Geddath terminus for large tonnages, then loaded onto smaller vessels bound for al-Torthe Sinai port where a Sultanic warehouse

information on the delay of caravans (boats in the Red Sea or dromedaries in the desert) reached Venice, which delayed the departure date of the galleys. In 1503, the composition of the caravans bringing the spices to Cairo was calculated in Venice and the time it would take, around a month, to get the spices to Alexandria or Damascus⁴¹.

In 1476 the Sultan had adopted a system of fixed stocks, 210 *sporte* for Alexandria and 530 for Damascus and he tried to impose a new price of 110 *ducats*, the portion attributed to the Venetians in Damascus being more than double that attributed to their colleagues in Alexandria. Other goods flowed into Syria, the financial circles of Aleppo benefited from the flourishing Persian silk trade and the south-north route to Brousse and Constantinople⁴².

On the departure of the galleys in 1489: *cotimo* pepper was paid 74 *ducats*, at the bazaar 78. The sultan's pepper cost less, the Venetians returned with more than 50,000 *ducats* uninvested, one galley returned empty and many spices that had not found a buyer remained on the market⁴³. The reversal in prices went hand in hand with the growing size of the stocks that guaranteed the success of the season for the Venetians. Counting on stable demand for stocks meant offering guarantees of stability to Venetian buyers. During the three years from 1487 to 1489, the Venetian guild, which until then had managed to pay the sultan for his stocks by borrowing from local bankers or its own merchants, or by using deposits placed with it by private individuals⁴⁴, proved unable to pay for the stocks, and the sultan demanded 32,000 *ducats* in arrears. The liquidation of all due Sultanian pepper, including that which had left al-Tor for the 1490 season, would have brought the loss rate to 40% (*el danno del piper*)⁴⁵ according to ambassador Pietro Diedo. During these years, 1,060 *sporte* of pepper remained at the Damascus *cotimo* and the sultan, desperate for money to pay the troops fighting the Ottoman enemy, demanded from the Venetian ambassador that his merchants buy 795 *sporte* of his pepper every year⁴⁶. The

?
Did I see "sultanic" above? Both seen not clear!

had been set up. Private merchants used other routes that led to different ports, such as Qusayr (APELLÁNIZ, (2009a), p. 136-7).

⁴¹ APELLÁNIZ, (2009a), p. 138.

⁴² APELLÁNIZ, (2009a), pp. 182-3 and 189, who rightly states that the concept of stocks covers «a form of administered trade that conforms to the general principle that the supply of a strategic good takes precedence over the maximisation of gain» (p. 142).

⁴³ «Ha manchato a queste galie el cargo de una galia et sono rimaste specie assay et è ritornato cum le galie oltra ducati LM» (APELLÁNIZ, , p. 189 and n. 88).

⁴⁴ APELLÁNIZ, (2009a), p. 190-1.

⁴⁵ VALLET (1999), p. 156 distinguishes between «a *cotimo zeneral*, also called a *dano de piper*, created to compensate for forced pepper purchases, and a *cotimo partichular* specific to each merchant community», from Aleppo, Damascus etc., which paid for the community's expenses.

⁴⁶ APELLÁNIZ, (2009a), p. 199.

Venetians sent to the Levant in addition to the goods destined for Alexandria 190,000 *ducats* in 1495 and in 1496 an investment of 220,000 *ducats* for Egypt, which it was not possible to invest, not counting the investment for the Syrian galleys⁴⁷ but of the five galleys that made the voyage to Beirut in 1496, two returned empty.

On the death of Qāyṭbāy, bad news from Cairo was expected in Venice and some major merchants speculated on the upside; in October 1497, Antonio Grimani had 40,000 *ducats* worth of spices in store in shop and was waiting for prices to rise. Venice was experiencing a moment of euphoria, exporting its precious metals to the East and, in 1497, sending Alexandria 4 galleys and 300,000 *ducats* to Alexandria and 3 galleys and 60,000 *ducats*, in addition to the goods⁴⁸. The value of the Foscari firm's goods reached 400,000 *ducats* in one of these galleys⁴⁹. Despite this good health, *Cotimo* was having trouble paying for deliveries from the Sultan, and had to borrow money, reaching a level of indebtedness in Damascus of 110,000 *ducats* in 1498, including 60,000 «a uxura», at a monthly interest rate of 2 to 3%. Commissions appointed to the *V Savi alla mercanzia* developed a discourse in which trade was the foundation of the social order and gave priority to the continuity of voyages to Damascus and Alexandria, which served all other trades⁵⁰. Venice's war with the Ottomans (1499-1503) made the Venetians even more dependent on Mamlūks: imports of raw materials, alongside spices, helped to sustain the Venetian economy in the Levant. The link between spice stocks and galleys was considered a political priority by the Mamlūk government of al-Gawrī, which prohibited other nations from loading goods before the arrival of the Venetian *mude*. The new sultan, turning his back on the conservative policy of his predecessor Qāyṭbāy, increased the quantity of spices and brought their price into line with that of the market. To finance their purchases, the Venetians borrowed from the Arabs at high rates: in 1500 they borrowed between 25,000 and 32,000 *ducats* at around 7,000 *ducats* interest, but these large loans paralysed operations in Syria. The debt of the *Cotimo* of Damascus then reached 115,000 *ducats* and generated 20,000 *ducats* in annual interest. It was declared bankrupt in June 1501

⁴⁷ PRIULI, *I Diari*, I, p. 30 and 41, APELLÁNIZ, (2009a), p. 204, n. 13 and p. 213.

⁴⁸ PRIULI, I, p. 71.

⁴⁹ DOLFIN, *Annalium Venetorum*, p. 195

⁵⁰ ASV, *V Savi alla mercanzia*, B. 946-47, *Libro del capitulare del Cotimo de Damasco*, 26 May 1517: «... a cadauno di questo conseio è nota la importancia deli viazi di levante dali quali depende in maxima parte il beneficio et augumento de li datij et intrade del stato nostro, el redrizar et bonificar di quelli viazi consiste nel proveder opportunamente alle cose de li cottimi di Damasco et di Alessandria onde occorendo alli proveditori (al *cotimo*) metter di zorno in zorno molte parte et ordini in questo conseio a beneficio de li cottimi et subsequenter di le galie di Levante» (APELLÁNIZ, (2009a), p. 213-5).

by the *Senate* which was considering whether to send galleys to Beirut⁵¹.

Under the influence of the legate Pietro Zen who devised a complex debt repayment mechanism (1504), the Mamlūks agreed to «finance the debt of the *Cotimo* of Damascus which was to be liquidated by repaying one and a half year's worth of pepper each year, i.e. 795 *sporte*», but the Venetians did not honour the agreement. It was as if the Venetians were taking the sultan's pepper without paying for it. The sultan demanded 84,000 *ducatti* in unpaid pepper and reproached the Venetians for having reduced the number of galleys from the usual 5/6 to 3⁵². The Venetians, who provided much of the foreign currency needed to finance the sultanate, were paid in return in spices free from market fluctuations and in jurisdictional rights⁵³. They refused to pay more than 80 *ducatti* for a *sporta*, but on the market prices had risen from 40 to 120 *ducatti per sporta* and the Mamlūks pointed out to them: «masters of the State, they were not obliged to sell their spices for less than they were worth»⁵⁴. Venice proposed paying for its spice imports not with silver ingots, but with German copper, which the Mamlūk state was very keen to have, but the Sultan al-Gawri was very reluctant⁵⁵.

In the *Senate* two parties clashed, and in 1509 spices had remained in Beirut. Some Senators were in favour of importing them on private ships, but the *maritime party* led by Pier-Antonio Morosini refused to create a dangerous precedent: the transport of spices should remain a state monopoly, carried out by galleys, and we should therefore wait for the next season. The year 1508 saw intense commercial activity in Gedda then al-Tor, followed by intense activity in Syria (1509), with at least 200,000 *ducatti* worth of goods shipped to Venice. 1510 was also a good year (270,000 *ducatti*), as was 1512 (350,000 *ducatti* to Alexandria). In 1515, silk from Aleppo flowed into Beirut. In 1515, the «proveditors», demanded that the *Cotimo* stop borrowing money from the Arabs.

Venetian merchants also exported to Alexandria *canevaze*, hemp cloth (hemp was produced around Montagnana in Venetian *Terraferma*) which was used as packaging and bags for the goods they

⁵¹ APELLÁNIZ, (2009a), p. 226. BRAUNSTEIN (2021), p. 86, n. 225, Michele Foscarei would have liked to sell his copper in Alexandria 13 *ducatti* a cantar and buy pepper at 80 *ducatti*, but the copper did not exceed 11 *ducatti*, while the pepper reached 90 *ducatti* and even 120 *ducatti* and more. The pepper market in the Egyptian port was in the hands of Ahmed Bubacho, who sold it on behalf of the sultan (three letters from his factor Daniele Coppo, August to October 1503).

⁵² APELLÁNIZ, (2009a), p. 229 and 231, n. 102.

⁵³ *Soleano venir ogni anno tre galie... et de quello tornava utyle assay ai dachieri et alla doana* (al-Ghawri to ambassador Domenico Trevisan in July 1512).

⁵⁴ APELLÁNIZ, (2009a), p. 239-40.

⁵⁵ APELLÁNIZ, (2009a), p. 251-2.

brought with them, for example cotton from Syria. They also sold crystal objects enamelled with precious stones (*lavori di cristallo smaltadi*) and Martino Merlini, whose commercial correspondence has been preserved, advised his brother to study the Syrian market carefully and to send him a detailed report on the goods in particular demand from the Syrians, especially new products⁵⁶. He advised his brother to ask an emir what product he wanted, to make a wooden model or, failing that, to draw one so that the Murano master crystal-maker, Vettor di Anzoli, could meet his customer's exact requirements.

The loading lists also include two products of Venetian industry: soap and paper. Soap was made from olive oil and potash ash imported from Syria⁵⁷. In 1496, the galleys brought 200 *miera* of it to Alexandria. Sulphur was also much sought-after, and the Alexandria galleys loaded 90 boxes of it in 1510⁵⁸.

Malipiero noted that in 1486 the Venetians sent little silver money to Egypt, whose exports to Venice he estimated at 230,000 *ducats*; in 1496, 220,000 *ducats* worth of gold and silver were sent to Alexandria but 50,000 were returned to Venice, while 150,000 *ducats* in goods were sent in the same direction; in 1510, according to Sanudo, only 52,000 *ducats* in gold and silver and 300,000 *ducats* in merchandise, including 50,000 *ducats* worth of copper in various forms (boxes and barrels, bars or ingots, wire), were sent to Egypt⁵⁹.

VENETIAN MERCHANTS IN SYRIA IN 1483-84

Eric VALLET has analysed the letters sent by Zuan Alvise Morosini to his brother in Venice over the course of a year, from October to October, and the letters received by Ambrogio Malipiero in Tripoli⁶⁰

⁵⁶ ARBEL (2004a), p. 57, who follows Dalla Santa and develops other examples on p. 58-59, which would bring in thousands of *ducats*.

⁵⁷ On the import of ashes to Venice, ASHTOR and CEVIDALLI (1983), HOCQUET (2007).

⁵⁸ ARBEL (2004a), p. 63, states that sulphur had a variety of applications: it was used as a bleaching agent, in the preparation of gunpowder and fireworks, as a fumigant against parasites or as a poison against venoms, and as an ointment for skin diseases, fever, coughs, asthma, etc.

⁵⁹ ARBEL (2004a), pp. 69 and 77. The old restrictions on trade in strategic products with the Mamlūks had fallen into disuse, especially as Venice was at war with the Pope. BRAUNSTEIN (2021), p. 83, n. 222, lists the goods loaded on the Alexandrian galleys. These included copper plates, ingots, worked copper (basins) and copper wire. Michele Foscari had 2,220 *cofe*, the Loredans 90, the Venier 72, the Baxadona 81 (according to PRIULLI, *Diarii*, p. 254).

⁶⁰ E. CONGDOM (1994), p. 5, Ambrogio received 17 letters sent from Aleppo and two others written elsewhere in Syria were addressed to Jeronimo and Marino Malipiero. These letters are kept in the James Ford Bell Library at the University of Minnesota.

who lived in Tripoli, supplemented by fragmentary accounts from some of the merchants connected with him who were in Syria at the same time, Segondin Loredan, Alvise Baseggio in partnership with Polo Caroldo, Leonardo and Anzolo Malipiero. He noted the merchants mentioned in these documents. For the Venetians trading in Syria, the two ports of Beirut and Tripoli which served as outlets for Damascus and Aleppo and their regions, but for the purposes of trade, it could extend as far north as Laias (Lajazzo)⁶¹ to the north and Palestine and its port of Acre to the south.

Aleppo that year had twelve patrician merchants who belonged to the greatest families: Contarini, Corner, Donà, whose representative, Almorò was also vice-consul, Gradenigo, Morosini, Priuli (two *fraterne*, the sons of Piero and Costantino), Querini and the Zorzi brothers, the apprentice Segondino Loredan and a chaplain who stayed for more than ten years. At the time, Tripoli, less endowed, had five merchants, including two popular ones and three noble representatives, two Malipiero and one Giustinian, Ambrosio was also vice-consul, so naturally the small colony could not do without the services of a chaplain. In Beirut at the end of the voyage of the Syrian galleys, there were only seven merchants mentioned in the documents consulted, two popular ones and five noble ones, the Dolfin brothers, Alvise and Jacopo, Gabriel and Anzolo Malipiero, lastly Lorenzo Morosini. Damascus had the largest colony, with sixteen Venetian merchants doing business there⁶², Piero Cappello, three Contarini, Loredan, the consul Francesco Marcello, da Molin, Rizo (perhaps Erizzo), and Tomà Zane, the others were citizens or popular people, Batista's nephew Morosini and two Malipiero cannot be linked to a town⁶³. A list from 1482 included 41 Venetian merchants trading in Syria, 12 of whom were still present in 1483-84. Although most of these merchants did not stay in Syria for more than a year, some did stay, such as Antonio

⁶¹ ASHTOR (1978) p. 306, shows the importance of Laias and the kingdom of Little Armenia, where western merchants obtained spices from India without entering the sultan's lands where they would have contravened papal prohibitions, but in 1375 the small kingdom was conquered by the Mamlūks. On the activities of the Venetian colony at Laias, HOCQUET (2015b).

⁶² MELIS (1972) p. 186 has published a letter sent from Damascus to Marco Bembo which shows the variety of products offered or demanded by the Damascene market at the end of the 15th century and their prices (1484).

⁶³ VALLET (1999), p. 317-21 (appendix VI), notes that his table is purely indicative, for example Ambrogio Malipiero resident in Tripoli «left out the Venetian merchants of his city (who) by definition did not send him any letters» (p. 102). As an anecdote, he cites the doubts expressed by Almorò Donà on hearing of a death: «he didn't say who he (the son) was or who he was, but I doubt he was my cousin, I know four Zorzi Pisani and I don't know which one it is» (p. 103). Zorzi is the Venetian form of the first name Giorgio, not the patrician family that bears the name.

Zustinian already present in 1477, was still in Syria in 1484, but his place of residence had changed; Zustinian had moved from Beirut to Tripoli⁶⁴.

Many of these merchants belonged to the business community, which combined maritime trade with banking. Zuan Alvise Morosini who belonged to one of the oldest Venetian families, hoped to «recover capital from Francesco Pisani dal Banco himself linked to another family of bankers, the Priuli»⁶⁵. Agustin Soranzo from a large family that, through several of its branches, those of S. Maria Formosa and those of S. Angelo, became renowned in banking and big business in Alexandria, Syria and Flanders. In 1482, the family had the highest turnover on the list⁶⁶.

Venetian merchants in a city would sometimes group together to form a cartel or *maona*, a commercial association of galley masters concluded for a business deal, for example wool from Spain⁶⁷ or dates from Majorca⁶⁸ but the *maona* could also bring together merchants from Aleppo for a business deal⁶⁹, the purchase of pepper or cotton for example. It functioned like a cartel, protecting merchants from competition and guaranteeing prices if they felt they were too high. It was inadvisable to defraud the *maona*.

Rhubarb seems to have been a highly prized commodity: on 9 August 1484, Zuan Alvise Morosini wrote to his brother expressing his certainty that he had sold all the rhubarb before the departure of the

⁶⁴ VALLET (1999), p. 104-6.

⁶⁵ VALLET (1999), p. 115.

⁶⁶ MUELLER (2018), «Soranzo» and «Soranzo dal Banco». On the Soranzos' involvement in the galley trade, STÖCKLY, p. 305-7. VALLET also reviews the Priuli and Malipiero families (p. 315-7).

⁶⁷ BRAUDEL and TENENTI (1966), p. 62.

⁶⁸ MONTEMEZZO (2013), p. 184, mentions in the account book of Giovanni Foscari a «maona de dattelli (of dates)» set up in Majorca on 20 August 1463 with the captain of the convoy and the patrons of the galleys, in which he himself had a 1/5 share. It was a big deal, because the fifth of the *maona* gave him a credit of 166 *ducati* 9 gros, a capital he paid off with a case of cinnamon and pepper. Montemezzo extends the *maona* to all the investors (*caratisti*) in the galley (p. 400), which does not seem to us to be the case.

⁶⁹ E. CONGDOM (1994) published the letter written by «the merchants of the *maona* of Aleppo» written on 19 April 1484 and carried by the Arab Amet el Salam to inform Ambrogio Malipiero of the shipment of two packages (*buste*) of rhubarb to be loaded onto Francesco Bonauer's ship. One package appears to contain 2 *rotoli*, while the other, smaller one, is said to contain 30 small ounces. The rhubarb in question was the root of the plant, according to EVANS ed. (1936), p. 377. It had nothing in common with the rhubarb of our gardens and grew only in northern China or Tibet. In Naples it was sold by the pound, according to Pegolotti and was recommended for stomach aches and digestive problems.

ships in September, and he was expecting 300 *ducats* from the sale⁷⁰ as everyone had sold the rhubarb at a great profit. Giovanni Priuli bought 2 pounds of rhubarb of mediocre quality for 1 ducat and his brother sold it in Venice for 45 *ducats*⁷¹. Ieronimo, son of Constantino Priuli, lost his reputation the day when, after swearing an oath to give everyone their share, he bought a *ratl* of rhubarb incognito; knowing he was about to be discovered, he spent nearly 50 *ducats* (*ashrafi*) to buy the silence of witnesses at a high price⁷². He should have put the rhubarb at the disposal of the *maona*, in which case each of the participants would have received his share of the profits, but we don't know what happened to the *maona* in Venice itself, did everyone try to sell on their own before taking the money back to Syria as Zuan Alvise suggested?

Segondin Loredan bought cotton from twenty Syrian merchants called «mores (*mori*) in the presence of interpreters (*turzimani*). The cotton was produced locally, in the regions of Hamā and Aleppo, merchants and perhaps producers sold directly to the Venetians⁷³, while brokers intervened in the sale of spices, exotic products. This was the case for rhubarb, which was more expensive as Syrian merchants pooled it and sold it at auction at prices that could go as low as 18 *ducats* a *ratl* or as high as 24 *ducats*, as the Venetians in Damascus asked the Venetians of Aleppo to buy it, whatever the price⁷⁴. «Even at 18 *ducats*, the root was unaffordable».

The Venetians were not to be outdone, and Zuan Alvise was appointed to sell the tin brought in by the galleys, in accordance with the agreement reached between the merchants, who thus concentrated

⁷⁰ He received the 300 *ducats* expected from the sale of rhubarb in Venice by the galleys that arrived on 8 and 10 October 1484 [VALLET (1999), p. 304]. Rhubarb was a much sought-after product in Mediterranean countries, and in January 1398 Antonio Contarini had shipped to Spain 300 pounds of fine rhubarb «from Damascus» and 15,000 pounds of copper, worth 1,350 *ducats*, to be exchanged for 350 «fardi» of wool [MOZZATO (1999), p. 38]. This rhubarb, transported to Catalonia was extremely expensive, costing 45 sous (from Barcelona) a pound (*ibidem*, p. 40).

⁷¹ VALLET (1999), p. 296.

⁷² VALLET (1999), p. 244. Priuli could buy the product but had to make it available to the *maona*. Paxi mentions the *ratl* as a measure of Syria and Aleppo. He calls it *rotolo* (Italian pronunciation of the Arabic *ratl*): the Aleppo *rotolo* (1/100 de cantar) weighed pounds 7 ounce 2 sazi 2 «al sotil de Venesia» (Paxi. 107v).

⁷³ ARBEL (1988) edited the correspondence between Francesco Bevilaqua, who belonged to a family of «native citizens», and his business partner, Nicolò Giustinian whose clerk he was. The town of Acre had been partly destroyed when the Mamlūks had taken it from the last crusaders, but in 1471-72, 3 to 8 Venetian merchants were attracted there mainly by cotton. Arbel hardly found any examples of merchants coming into direct contact with peasants to buy their crops; instead, they dealt with brokers at the bazaar.

⁷⁴ VALLET (1999), p. 125 and 308.

the sale of the metal to raise the price from 25 to 30 dirhams per *ratl*⁷⁵. Pepper, a much sought-after spice, was sold by the cantar (100 *rotoli*) at a price of 55 to 60 *ashrafi* in October 1483, when the arrival of the *muda* drove up prices, and at 48 to 50 *ashrafi* in August. Conversely, the influx of goods brought in by the Venetians triggered a fall in prices in the autumn of 1484, against which they protected themselves by setting up sales monopolies⁷⁶. The sailing schedule of the cotton-loading galleys and ships and what the galleys had left behind (*la rata*) determined the price situation. Rhubarb reached its lowest price of 18 *ashrafi* at the beginning of August, when the galleys were not expected until two months later and Venetian merchants had 40 days in which to make their purchases.

The Venetians sold metals, copper and tin, coral and rosaries, and sugar. If the sale was unprofitable and difficult in one city, they transferred the merchandise to another in the hope of making a better deal there. You have to sell quality, and Ieronimo Contarini had stored thirty pieces of Majorcan cloth in Tripoli, but this cloth was not top quality and he could not sell it to Hamā for six *ducati* a piece, so he left it to Ambrogio Malipiero to sell it for less than three *ducati*⁷⁷, which was a very bad deal, but Contarini wanted to return to Venice and get rid of the goods lying around in the warehouses. Zuan Alvise was getting better prices for his drapery. In his letter of 9 August 1484, he told his brother that he had sold cloth from Bergamo for 480 dirhams a piece, broadcloth from Genoa for 204 dirhams, Southampton cloth for 120 dirhams, broadcloth from Essex at 180 dirhams, and bastard cloths at 100 dirhams. In his letter of 26 October, the prices varied little, and he added cloths from Vicenza at 460 dirhams⁷⁸. These fine cloths were bartered for silk and cash made up the difference in value between the products exchanged.

⁷⁵ VALLET (1999), p. 308.

⁷⁶ VALLET (1999) has done a remarkable job and his translations are faultless. However, the following points should be noted: Geneva (*zenevera*, Paxi p. 129v which deals with the fairs of Geneva) sometimes takes the place of Genoa (Genova in Italian, *zenovesi* are the Genoese in Venetian), the Maurienne is supposed to sell cloth in Syria when in fact it was sheets from Majorca (should we read *pani mazorechini*?). On the beginnings of the wool industry in Geneva, see the work of Liliane MOTTU-WEBER (2002).

⁷⁷ VALLET (1999), p. 291. ARBEL (1988) cites other examples of poor-quality sheets shrinking in the rain (p. 248) and that the *qādī* condemns the Venetian merchant to take back the goods and compensate his customer.

⁷⁸ VALLET (1999), pp. 297 and 308. A typo or two: the drapery known as Southampton would only be worth 12 dirhams, while bastard sheets «for which demand is low» would be sold at 950 dirhams? The zero has probably shifted; it should probably read 120 and 95. The gold ducat and the *ashrafi* were quoted at 55 dirhams in 1484 (*ibidem*, p. 142, but on p. 137, n. 79, a quick calculation shows that the Venetian ducat was worth 64 dirhams in Aleppo).

The Venetians resorted to a wide variety of means to obtain money when they were short of it, because they had not received the money they had requested from the home country⁷⁹, they were looking at a good deal for which they needed money, they had to repay a previous loan that had fallen due, etc. One of the solutions used was to resell goods bought on credit for cash. One of the solutions used was to resell goods bought on credit for cash: Ieronimo Campanato was desperate to buy 1,000 sacks of cotton but he was running out of money. He bought drapery on credit from Bergamo and sold it on, thus raising the money he needed to buy a few more sacks of cotton⁸⁰.

In Aleppo and Damascus Venetian merchants lived in houses grouped together in a street that was closed at night. There they would deposit the goods they wanted to keep with them, otherwise they would store them in a *funduk* built, next to other *khāns*, in another part of the city. As in Alexandria

«Coexistence encouraged cultural exchange, but dialogue remained difficult. Venetian merchants were wary of the Arabs and were quick to accuse them of reprehensible behaviour. The Arabs had the same suspicious attitudes. The difficulty of understanding each other was accentuated by religious beliefs, with all the rules of behaviour that flowed from them. Everyone, quite rightly, kept their own and there was no need to give them up, except from perspectives that were not part of economic life»⁸¹.

⁷⁹ ARBEL (1988), p. 247, to pay cash for their purchases, if the town in which they worked was not part of the financial circuits where it was easy to negotiate bills of exchange, the factors urged their masters and associates to send them *ducati* in bags (*groppi*).

⁸⁰ VALLET (1999), p. 160-2, which gives other examples of loans used to buy cotton.

⁸¹ TUCCI (2007a), p. 372-3.

Chapter eight

Western products : wool, drapery and metals

Venice was not only a city of international trade, it was also an industrial city with a large number of craftsmen, and the State Arsenal was not the only activity employing many workers who built or repaired the ships of the Commune. The city's textile industry was very active, if not flourishing, as a large part of its profits went to exporting merchants. These merchants fetched the raw material, wool and focused on two qualities supplied by Catalonia and England where the merchants had permanent clerks, sales representatives responsible for scouting out the breeding regions, selecting the best wools and collecting their purchases at the ports. The merchants did not neglect lower quality wool, supplied by the Balkans or the Maghreb. They were even interested in mixed wools made from a mixture of goat's and camel's hair, which the weavers used to provide cheap clothing for a modest clientele on a low income.

However, England had begun to transform wool into drapery; it preferred to export fine cloth and obtain far greater added value from its wealth. Its drapery towns rustled with the sound of weaver's looms and Venetian galleys left London¹ or Southampton well placed as an outlet for the sheep breeding for wool in the Cotswolds, with a cargo of wool and cloths. Venetian ships brought the dyes and alum needed for English textiles, cotton from Syria and spices as well as the luxury products of Venetian craftsmen, silk fabrics in particular perfumes and glassware. Mrs Powys Quinton has compiled a list of products imported by 33 London clothiers in one year (1487-88): wine appears 51 times, followed by oil (16), dyes and furnishing fabrics, linen, and fish, with wax, soap and silk a distant second². Venetian merchants sent the fine English and Italian woollen cloth they received by galley to the Orient.

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¹ POWYS QUINTON (2001), p. 247-8, the Venetians are said to have begun in the 1390s to favour London and the export of English cloth because of the economic and political crisis in Flanders. [RUDDOCK (1951), p. 49]. Their galleys were capable of sailing up the Thames, and several naturalised English Venetian merchants joined the London clothmakers' guild in the middle of the century.

² POWYS QUINTON (2001), p. 275-6. Spices and luxury products were weighed by the pound, while heavy and common products such as almonds, rice, soap and tin, but also cumin and Valencian aniseed were weighed by the avoirdupois (*cwt*).

These cloths then reached the cities with which the Venetian shipping terminals were in contact: from Constantinople where Badoer was based, drapery was exported to Trebizond, Cyprus and Beirut or Alexandria.

Venetian galleys needed ballast, and England had an abundance of tin from the Cornish archipelago, of which it had a virtual monopoly and which was used mainly for two purposes: crockery and, when alloyed with copper, to make bronze, whose beautiful golden colour was seductive. English metals provided this ballast, which was used as far afield as the Orient. Venice acquired tin by exchanging it for its most expensive products, notably silk.

Venetian merchant nobility was not without competition on the English market and other Italian merchants were active there, including mediterranean products. For example, the Borromei firm imported 20 bales of spices in 1437, 8 in 1438 and only 4 in 1439, with a total weight of around 15,000 pounds. The 8 bales that arrived at the London branch in 1438 belonged to the Tommasi and arrived with Lorenzo Moro's galleys. The pepper was sold for 313 pounds 2 shillings 7 pence, and after deducting various expenses amounting to 32 pounds 18 shillings, the balance of 280 pounds 8 shillings³ was credited to the Tommasi. England imported linen fabrics from Burgundy, Flanders and Holland, oil of which a delivery of 30 barrels from Bruges arrived in London in November 1439 to be distributed to grocers and soap factories, some of whom took one barrel, others 6 barrels in just over a month, at a price of 10 to 11 pounds each. In 1438, the siege of Bruges bought from Seville 90 barrels of oil at a price of 3,878 double 4.9, or 533 pounds 7 shillings of groat⁴. The English were also fond of dates and dried fruit, almonds in particular. A man from Palermo sent 65 bales of dates weighing 7,864 pounds to London on several occasions throughout 1439. They fetched £ 112 1.3, but expenses and a 1% commission should be deducted, making a total of £ 10. s. 12. d. 1. The siege of Bruges in March 1439 sent the London branch 30 bales of almonds, the cost of which up to the point of loading into the galleys was charged to London⁵. The sugar loaves, of which there were 474 weighing a total of 2,049 pounds, also came from Palermo on behalf of Raineri Aiutamicristo of Pisa. The book distinguishes between four types of sugar, depending on the number of cookings, and the selling price varied according to the cooking, from 6 sterling a pound (a luxury item) for sugar with one cooking to 13 sterling for the so-called «fine», qualities. Gross takings amounted to 78 pounds 12 pence, with costs

³ BISCARO (1913), p. 107.

⁴ BISCARO (1913), p. 110.

⁵ BISCARO (1913), p. 110-111.

and a 2% commission of 18 pounds 2 shillings 6 pence. There were still 8 one-bake loaves and 3-bake loaves in shop, so the sum of 66 pounds 13 shillings 3 pence deniers was credited to the Pisan⁶.

VENETIAN MERCHANTS AND SPANISH WOOL

MOZZATO illustrates the commercial activities of three Venetian importers of Spanish wool, two patricians, Francesco Corner, son of Doge Marco, and Antonio Contarini, son of the procurator Marino, a major supplier of greige wool to textile artisans and a clothier himself, and a citizen wool-maker, Pagano degli Angusti, who presided over the *Art of Wool*⁷. All three were active at the turn of the 14th and 15th centuries. The exporting countries were Spain, England, Flanders, the Balkan peninsula and Barbary. Spanish wool played a key role, with prices hovering around 6/7 *ducats* per 100 lb (*centener*, *cantar*, 47.8 kg). Importers entrusted the task of purchasing to Italian or Catalan factors living in the supply markets, who received a commission of between 1% and 5/7% on the goods purchased. These clerks frequented the seasonal fairs in Barcelona in June and Valencia in July and scoured the country for the best wool. They obtained information from local merchants and shepherds⁸. They were able to calculate the quantity of wool to be sold from lambs two or three months before shearing.

Francesco Corner contacted the famous Prato merchant Francesco Datini, whose representative in Venice, Zanobi Gaddi, ran the branch. Getting closer to Datini, whose company had also branches in Barcelona, Valencia and Majorca, had significant advantages and was not unequivocal. The partner would make the most of Venice's maritime resources and knowledge of Eastern markets. Over two years (1395-96), Corner invested 3,000 *ducats* in the purchase of Catalan wool, which he had loaded onto cogs⁹, while in 1397 he loaded one of these cogs with 271 thousand pounds of copper and, on another ship, 4 cases of lacquer and pearls worth 890 *ducats*. The proceeds of the sale would be reinvested in the purchase of wool, and Corner followed another habit of Venetian merchants, dividing his merchandise between several vessels. In 1397, he invested a further 3,000 *ducats*, but one of the ships ran into a severe storm and the salty water damaged a large part of its 1,000 sacks of wool. The following year, Corner sent bills of

⁶ BISCARO (1913), p. 111

⁷ MELIS (1972) analyses the stages in the preparation of wools to finishing drapery (p. 104-12).

⁸ LANE (1996), p. 104-5. In Valencia Andrea Barbarigo used the services of an experienced clerk, Bertuccio Zorzi, who sent his own agents to prospect the hinterland and place orders for wool.

⁹ HOCQUET (2012), v. index, *cocca*, *coque* (cog).

exchange worth 4,000 *ducats* to Spain with which he bought 2,000 «roves», (287 metric quintals) of Catalan wool at 17.5/19 Barcelona shillings per «rove»¹⁰. In four years (1395-1398), Corner imported 18,700 *ducats* worth of wool¹¹, much of it for local craft workshops, but most of it for export to other textile centres in northern Italy¹². Francesco Corner was not the only Venetian importer and Antonio Contarini showed the same attraction for Spanish wools and for an association with Datini, whose factor in Barcelona was Luca del Sera. In spring 1397, Contarini sent Datini 1,500 *ducats* for a purchase of Catalan wool from San Mateo (near Valencia), half of which would go to Zanobi Gaddi¹³. He also enquired about the prices of pepper and velvet in Spain, which he, together with Alvise Contarini, he would gladly exchange for wheat and oil from Seville which he could ship to Alexandria. He then invested 3,900 *ducats* in wool and saffron and ordered one of his relatives, Mafeo Contarini, his clerk in Valencia, to buy 1,400 *cantars* of wool at no more than 17/18 shillings the *rove*¹⁴. The wool was loaded onto Antonio Arduino's cog and in the autumn Luca del Sera bought a further 1,300 *cantars*, then in 1398 Alvise Contarini sent rhubarb and copper worth 1,350 *ducats* to barter for wool from San Mateo. In March of the same year, Contarini sent a bill of exchange worth 1,500 *ducats* to buy new sheared wool from S. Mateo, Peñiscola and Castella at the April fair. Purchases continued throughout the summer, and Venetian merchants sent several cogs to load up on these massive purchases. When mainland Catalonia could not supply the required quantity, the cogs travelled to Majorca and Menorca, bringing Indian ginger or Dalmatian wood loaded in Segna, alum from Chio, paper reams, indigo or pearls, dyed fustians, copper and copper sheets, five boxes of rosary beads, *zambelloti* and cloth silk embroidered with gold, linen or hemp cloth, etc.

These ships loaded with wool needed ballast, and the port of call in Ibiza provided them with an abundance of production to be delivered to

¹⁰ Exchange: 15 shillings from Barcelona = 1 ducat [MUELLER (1997), p. 596], the equivalency 1 *rove* (from Barcelona) of wool = 30 lb of Venice *al peso grosso* = 14.34 kg. The weight of the *rove* is taken from PAXI, c. 126v.

¹¹ MOZZATO (2008), p. 32-6.

¹² DEMO (2004) for example.

¹³ San Mateo (S. Matteo in Italian) is located halfway between Tortosa and Valencia, close to Piana, where Venetian merchants also went to collect wool.

¹⁴ According to PAXI, c. 127v, «da rova de lana laqual sono lb 36, ma quando se vende se da lb 37 ½ e questo è per usanza della terra» the wool *rove* exported from Valencia therefore weighed 37 ½ pounds of Valencia, and the *cantar* contained 4 *roves*. 1,342 pounds of Valencia returned 1,000 pounds to Venice, and a pound of Valencia weighed 356 grams.

San Mateo?

Chios

San Mateo

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the warehouses of the *Salt Office* in Venice¹⁵. The plague raged in Italy and Spain, one after the other it took away the factors of the merchants, who were themselves merchants, did not favour business, old unsold wool clogged up the warehouses. Disappointed, Contarini, who could not meet the demand from local weavers and who was expecting 2,600 roves of wool from his shipments to Spain, received only 1,000 roves from S. Mateo. The epidemic was exacerbated by disputes with the King of Aragon, the state of war with Genoa which was stepping up privateer attacks on Venetian merchant ships, all of which did nothing to boost the trade in Spanish wool, the price of which plummeted to 5/6 shillings per rove. When peace was restored with Genoa in 1404, Antonio Contarini ordered 4,000 pounds of woollen yarn from San Mateo and Majorca used as warp yarn due to their strength, 3,000 roves from S. Mateo and 60 bags from Mallorca. The family continued to trade in Spanish wool and supply it to craft workshops in Venice¹⁶ and its state until the mid-15th century¹⁷.

The third wool merchant lived in the parish of S. Simeone Profetta, in the heart of the woollen and weaving district. This Pagano degli Augusti, related to Antonio Contarini was a wealthy citizen who owned property on *Terraferma*, in Camposanpiero. A wool entrepreneur¹⁸, he modelled his business on that of the merchant patriciate, founded a company with another wealthy citizen whom he did not hesitate to deceive about prices and quantities, and delegated his nephew to Valencia and Cartagena, where he worked as a clerk, exchanging goods, silk and gold thread drapery, soap, paper, woad, hemp cloth, with Catalan or Castilian wool, which he sold from Monza to Fermo, from Lombardy¹⁹ to the Marche, or to Venetian artisans. Between 1402 and 1404, he is said to have unloaded 3,000 sacks of wool from ships, bringing 38,000 *ducats* to the Rialto market. A 1411 account credited

Marche

¹⁵ HOCQUET (2006), p. 311-76 (Ibiza and commercial competition); ORLANDI, p. 50 and 54.

¹⁶ MOZZATO (2004), p. 1037-8: the transaction had to be registered within five days at the *Messetaria* (brokerage) office set up in the 13th century, which was empowered to register all commercial transactions in the city and collect the tax; a woollen craftsman who had resold wool to others without notifying the *Messetaria* was hefty fined of 500 *ducats*. His failure to declare the sale was treated as tax fraud.

¹⁷ MOZZATO (2008), p. 36-51.

¹⁸ ROMANO (1987), pp. 66-67, borrows from Florentine historiography the distinction between artisans and entrepreneurs associated with the patriciate and forming the *popolo grande* and the *workers* who formed the *popolo minuto*, divisions that did not exist in Venice.

¹⁹ BRAUDEL (2000), p. 370: «(by) the great waterways that converge towards its lagoons, the Brenta, the Po and the Adige, by these paths and canals, barks pushed by pole constantly reach the great city». On the importance of river traffic, see HOCQUET (2012), p. 789-807 and 811-817.

him with 13,000 *ducati* for the purchase of wheat, wool and skins from Spain. These Venetian importers resold 8 to 9 tenths of the imported wool and transformed the rest into beautiful draperies in their workshops²⁰.

ENGLISH WOOL

At the end of the 14th century the Venetians met in Bruges English merchants specialising in the export of wool to the Calais stage, who bought their spices, wines, alum, wax, dyes, soap and oil. In 1378, Italian merchants were authorised to export drapery and wool directly without passing through Calais, and from the 1380s onwards began the fortunes of Southampton²¹, a port exporter of products from southwest England²². Genoese and Venetian merchants were said to have exported a quarter of English cloth production²³.

On the books of the Borromei bank (Filippo Borromei's firm had its headquarters in Bruges²⁴ and subsidiaries in London, Venice, Genoa, Florence, Barcelona and Avignon), the English clientele included, first and foremost, the guild of haberdashers, who bought cloth silk and canvas from the Venetians. The Bank's ledger lists 54 haberdashers with whom it did business. At the top of the list was Thomas Osteriche, with a turnover of 1,226 pounds, to whom the London firm sold fustains, silk drapery and needles. There was also a large guild of grocers (*grossieri*) who bought saffron, pepper, dates, wax and alum. The clothiers, of whom there were seven or eight, made and sold woollen cloths and in exchange bought dyeing products, in particular «grana», from which the beautiful purple colour was obtained. Seven merchants (*vinattieri*) bought barrels of wine, and alongside these main

²⁰ MOZZATO (2008), p. 53-57, LÓPEZ Maria Dolores *et al.* described how Aragonese wool produced each year (around 2,500 tonnes), first centralised in Zaragoza, was transported down the Ebro to Tortosa before being shipped to Ragusa and above all to Venice, where the Barcelona company of Torralba, which had agents in the woollen towns, also had a factor, Francesc Aluart, in 1433-34. Most of the sacks of wool transported by Antoni Favar's ship in 1433 (196 *fardas*) were bought by merchants from Bergamo and the whole of northern Italy.

²¹ RUDDOCK (1951), p. 144-6, in addition to taxes and expenses in the port, rents from houses rented by Italian merchants and expenses in town by merchants and sailors contributed to the prosperity of Southampton in the late Middle Ages. Our Venetian sources give priority to galleys and state-organised shipping, but the historian has found traces of ships bringing Mediterranean products or sailing back and forth between La Rochelle and the English port.

²² POWYS QUINTON (2001), p. 241.

²³ FRYDE (1970), p. 307.

²⁴ In the Borromei ledger (*libro mastro*) which records frequent relations between the parent company and its London subsidiary, «per noi» referred to the Bruges company and «per loro» the subsidiary (*for us, for them*).

arts, there were also copper and brass craftsmen (*lottonieri*), soap makers, tailors, jewellers, furriers and simple speculators who cornered wool or tin to sell wholesale to Italian or Catalan merchants. In addition to this local, ordinary clientele, who frequented the shops of the lower middle classes, the London firm of the Borromei also had an aristocratic clientele, to whom it sold luxury products such as silk cloth²⁵, and the royal court, whose wardrobe was stocked with velvets, fur coats and damasks. Finally, it also supplied a large clientele of small businessmen who worked in the trades and had supplies essential to their business delivered to them.

Business handled by the Borromei bank amounted to the sum of 55,000 pounds in four years²⁶ and, in addition to trading in spices and silk cloths and woollen cloths or tin on the one hand, it was more a question of currency exchange and money transfers. Negotiations between London and Venice, the most important money market in Europe, were very active and payments and remittances with the other Italian centres, Florence, Rome, Milan or Naples were normally made in Venice, where the largest firms had their factors. In 1436 and 1437, the ordinary correspondents of the bank of Filippo Borromei and co in Venice were the Milanese Arrighino Panigarola, succeeded by Cicco di Tommaso brothers (known as «the Tommasi») from Siena, who had their bank headquarters in Venice and a branch in Valencia and whose business with Borromei amounted to almost 12,000 pounds²⁷. Antonio Cionelli's company which exported silk cloths from Venice and brought tin to the city, also did business with Philipppo Borromei in 1438-39.

Among exports from England, wool was in first place. An illustrious Venetian merchant, Luca Falier, whose business extended from Rhodes to Castile, the Maghreb and England, chartered his ship to Italian merchants who loaded English wool for Florentine cloth companies and unloaded it at Porto Pisano²⁸. During the four years covered by the «ledger», the Borromei Company of London bought 137,356 pounds (379 sacks) worth £4,514, a cost that rose to £6,377 when the wool was loaded onto the galleys. In 1436, the governor of the subsidiary, Giovanni Micheli, visited the production site at *Boriforti* (possibly

²⁵ The most important supplier of drapery and silk velvet was the Lucchese Guifredo Rapondi based in Bruges but whose family, originally from Lucca where it had played a leading role, had emigrated to Venice, where its members, even though they had settled abroad, had obtained *extra* Venetian citizenship by the end of the 14th century [MOLÀ (1994), pp. 59-62 and 69-70]. The Rapondi had deposited their silks with the Borromei bank and their business at the bank amounted to the princely sum of £4,680 [BISCARO (1913), p. 72].

²⁶ BISCARO (1913), p. 72. On the importance of English wool exports to the continent, in addition to FRYDE, see BOLTON and GUIDI BRUSCOLI (2006), p. 468-469.

²⁷ BISCARO (1913), p. 75.

²⁸ GONZALES AREVALO and VIDAL, p. 208.

Bradford, in Yorkshire), where he met breeders from whom he bought 71 sacks of wool on delivery. The wool was delivered in February 1437, the two breeders having had time to buy the production of other breeders in the region and were thus able to deliver 141 bags. The balance was paid over the following months: to the initial cost of £1,262, customs (£380), insurance, packaging and cartage had to be added, increasing the cost by around 60% to £1,950²⁹. For its first wool purchases, the still little-known company paid a large part of the price when the contract was signed, a few months before the product was delivered by the breeders or the merchants. In the years that followed, wool purchases were paid for in instalments fixed for one or two years, but a provision had to be made when the contract was drawn up, and the first payment was made several months after delivery. Normally, payments were made in cash, but only a few small deliveries were settled by bank transfer. During the reign of Edward IV (1461-83), the Venetians, who then had strong positions in England and particularly in Southampton where they took advantage of the Genoese (the transport of alum from Phoecea had come to an end) and Florentine and the financial embarrassments of the King of England (the War of the Two Roses had weakened royal revenues) bought wool export licences from the King: in 1478, they loaded 620 sacks, and in 1481, 1086 sacks³⁰.

In the brief table below, we have cross-referenced information taken from Hélène Bradley's manuscript thesis and, more specifically, from the various appendices at the end of her book³¹.

²⁹ On the activities of the Rapondi family in Bruges GALOPPINI (2009), see index.

³⁰ RUDDOCK, p. 219.

³¹ H. BRADLEY (1992), appendix 5 (patrons of the Venetian Galleys in London), appendix 7 (particulars of account for London) and appendix 12 (revenue generated by Venetian merchants).

Year of the <i>muda</i>	Patterns for galleys	Value of exports (in £)
1380-81	?	200
1398	Nicolò Bragadin and Andrea Ghisi	88
1422-23	Giovanni Gradenigo and Andrea da Lezze	575
1422-23	Pietro Michiel and Bernardo Corner	313
1437-37	Geronimo Dandolo and Lorenzo Moro	1144
1439-40	Giacomo Barbarigo and Battista Contarini	561
1444-45	Marino Contarini and Giovanni Soranzo	329
1450-51	Andrea Contarini and Giovanni Cappello	544
1461	Marino Dandolo	461

Tab. 8: Value of Venetian exports of English wool loaded in London

THE DRAPERY

The second most important English export was woollen drapery of wool (*panni di lana*) known as «de stanforte», (Standford, Lincolnshire), sex (Essex), 197 «panni luestri», (Lowestoft), 141 «cloth fini», and 4 «panni mostovilieri». Over four years, the Borromei firm purchased 906 pieces, including 506 «panni stretti»³². In the autumn of 1438, according to the customs valuation, Italian merchants exported £14,809 sterling worth of English cloth from London, i.e. 8,462 cloths. The Venetians were the main customers, accounting for nearly 90% of these exports that year (7,479 cloths). In addition to drapery, the Italians also bought English wool in London, 342 sacks. These exports varied from year to year, but if we add the exports that took the Southampton route, 4,307 cloths and 631 sacks of wool³³, we can see that English prosperity was based on sheep farming and an active textile industry. To finish fabrics, the English bought dyes from abroad, such as woad, which came mainly from Italy, and purple imported from

³² BISCARO (1913), p. 92-3.

³³ BOLTON and GUIDI BRUSCOLI (2006), p. 469. The *Tractatus de ponderibus et mensuris* (circa 1302-1303) states that the sack filled with wool weighed 350 or 375 Avoirdupois livres (7,000 grains or 453.54 g) depending on the place. The wool sack weighed 158.73 kg or 170 kg (CONNOR, p. 130-131, 362 and 364).

Mediterranean countries. Sometimes clothers would ask for advance payment, but more often they granted the buyer credit for 2 or 3 months. It also happened that the selling clothier was also a buyer of silk, furs and dye products, in which case the assets and liabilities were offset and the balance was paid at the end of the year or carried forward to the following year³⁴. Clothier Giovanni Brocolea, a seller of woollen cloth bought silks, furs, Roman wine and dyeing products from his Italian suppliers and remitted them to his customers. The clothier Giovanni Brocolea who sold woollen cloth, bought silks, fustains, Romanian wine and dyeing products from his Italian suppliers and postponed payment of the balance owed until Candlemas 1439. Another clothier, Thomas Picco, took drafts drawn on Bruges, carried out various credit operations, both active and passive, sold various types of cloth and in March 1439 handed over a bill of exchange for 1,020 *ducati* (170 pounds) on the Tommasi of Venice, which the bank remitted to its Milan branch after having credited the sum of 1,022 *ducati* and 21 *grossi* to the Tommasi³⁵.

Venetian merchants came to London to obtain made on site cloth and cloth from the surrounding area brought to London by drapery merchants from outside³⁶. These cloths were also dyed and finished in London, where they received the seal of approval. The Venetians are said to have exported 48,000 English cloths in the 1420s, followed by the Florentines (16,000 cloths) and the Flemish. and develop their own textile industry, the Venetians would have reached the height of their commercial activities in England during the 1440s³⁷.

VENICE AND THE DRAPERY INDUSTRY

Not all wool importers were oriented towards the great maritime trade; many did business with neighbouring merchants³⁸, for example Gasparo Licacorno produced high quality drapery and in 1415 he sold 50 cloths dyed with *grana* to the Mantuan Melusello, who acted as procurator for the lords of Mantua, the Gonzagas. Melusello, instead of

³⁴ BISCARO(1913), p. 121. One libel described as dishonest a system of trafficking whereby Italian merchants went to the wool farms of the Cotswolds, bought the wool on long-term credit and then sold it for cash to Flemish merchants, making an additional profit of no less than 5%. Yet this was a common practice that had already been seen in Syria.

³⁵ BISCARO (1913), p. 122.

³⁶ POWYS QUINTON (2001), pp. 86 and 127 (n. 105).

³⁷ FRYDE (1970), p. 352.

³⁸ MOZZATO (2004), p. 1036: «Cloths must first be sold here and one must succeed in the State (*in questa terra*) before sailing them», as Venetian clothmakers declared in the 1480s.

making a cash or forward payment, had to register the name of the selling weaver with the Chamber of Loans (*Camera degli Prestiti*) where, up to the price of its merchandise, it would receive the annual interest due to holders of the public debt. The Gonzagas had obviously placed their money in Venetian government bonds³⁹. This method of payment was rarely used; usually the foreign, Italian merchant, living outside Venice, conducted his business in the Piazza di Rialto through the intermediary of warrantors, who acted on his behalf, placed orders, received the goods, made payments, if necessary by transferring the money to a local bank, sold the goods and reinvested the proceeds etc., all of which were recorded in this power. Venetian cloth in the shops of haberdashers in Milan as well as Verona, in Mantua and Brescia, Ravenna and Modena. In 1410, a Florentine living in Venice was asked by a merchant in Florence to transfer money to the Priuli-Venier bank into the account of Bernardo Corner the proceeds from the sale of 42 cloths. The following year, an entrepreneur from Brescia sold 24 Brescian cloths at 17 *ducats* each and bought from Antonio Contarini 5,500 pounds of wool at 70 *ducats* per thousand. The sale of the cloth brought him 408 *ducats*, while the purchase cost him 385. The great Venetian merchants who had access to the markets for the raw material, Spanish wool and semi-finished (undyed) products had no difficulty in selling their goods to weavers in Venice or abroad, then they sold the finished, dyed product on regional or international markets overseas.

Rom

There was a fundamental difference between the craftsman who was master of his shop and his looms, and the international merchant who distributed imported wool, took over the drapery from the weaver and was not required to register with the guild. Craftsmen were registered with the *arte della lana* of which almost half of the ten *gastaldi*⁴⁰, administrators, were of foreign origin in 1381, coming from Mantua, Como, Bergamo or Parma. Each of those enrolled in the art had to donate three cloths each month to the fullers - there were 53 of them in 1412 - and each employed 7 or 8 workers in his workshop. Among those absent from the chapter⁴¹ meeting on 24 November were merchants (all of whom were *mercatores*) from Pisa, Bergamo, Padua, Siena, Orvieto and Monza. In 1423, the wool masters (*magistri lanarii*, who were also

³⁹ MOZZATO (2008), p. 1041, on the banking functions of the «chambers» of wheat, MUELLER (1988), of salt, HOCQUET (2012), p. 1025-39.

⁴⁰ ROMANO (1987), p. 70-72, the wool guild and its organisation. More generally, MACKENNEY (1987).

⁴¹ ROMANO (1987), p. 72. When the guild held its chapter, only about forty clothmakers attended, whereas wool employed thousands of workers. See *below*. On the social consequences of this restriction, *ibidem*.

*mercadanti*⁴²) asked the *Senate* that all cloths purged with *purgo de rio Marin* should be purged with good quality soaps made from oil quality⁴³, they had to be spotless, for the honour and good of the Commune⁴⁴, its merchants and all the people, «because more than 3,000 cloths were made every year», in the city⁴⁵. Four years earlier, in July 1419, the *Senate* had deplored the fact that «it was common knowledge that the *art of woollen clothmaking* is here in Venice totally destroyed»⁴⁶, the conclusion that comes to mind is that an annual production of 3,000 pieces was marked by the crisis⁴⁷. By 1458, the crisis had been overcome:

«Today the wool trade in this town has (re)started and they are working with the greatest fervour (*a grandissima furia*) on all kinds of cloths especially *garbi* cloth. Merchants from here (from Venice) are trying in various ways to break the said trade and have given orders that in England, in Flanders and elsewhere we make *garbi* and fine Florentine cloths. They have even sent the measurements of width and length, the shearer's cuts, the colours, and by doing this they are contributing to the ruin of the trade. No one may bring such counterfeit cloths to Venice and no citizen or inhabitant of this city may transport such cloths or be associated with a master of a ship, galley or any other vessel going to Romania or the Levant (with such cloths) on pain of smuggling»⁴⁸.

The few statistics we have gathered therefore exclude the great noble merchants, the Morosini or the Contarini. We only know that Antonio Contarini prided himself on producing 500 cloths in his workshop⁴⁹. The *lanaioli*, instead of depending on a single large merchant, bought or resold semi-finished products and entrusted work to other craftsmen. It was a complex network of work.

⁴² Many *lanaioli* (wool craftsmen) also traded in wool, of course, but also hides and skins, Fabriano paper, copper, woad, pearls and lacquer, silk, berets, glass and crystal objects and pearls [MOZZATO (2006), p. 90, n. 79].

⁴³ HOCQUET (2010), p. 93 and 118-9, MOLÀ (2007), p. 628-51.

⁴⁴ ROMANO (1987), p. 70: «united by fraternal and professional ties, the members (of the guilds) were supposed to work together to guarantee the reputation of their profession and a fair share of business for everyone, but in practice this ideal was far from being achieved»; CIRIACONO (1996), p. 545.

⁴⁵ MOZZATO (2002), p. 116 (cap. 230) and 194-5 (cap. 361)

⁴⁶ MOZZATO (2002), p. 170 (cap. 332), ROMANO (1987), p. 71-2 cites the *Art of Woollen* «as the most striking example of the domination of masters. In this activity, the authorities authorised the formation of a single guild, that of the clothmakers, the employers who had the wool, shearers, fullers, spinners, etc., were not authorised to do so and were strictly dependent» on their bosses. A clothmaker who temporarily worked for another was disqualified and lost his membership of the guild.

⁴⁷ MOZZATO (2006), p. 81.

⁴⁸ MOZZATO (2002), p. 294-5 (cap. 511).

⁴⁹ MOZZATO (2006), p. 83, n. 47.

The noble merchant joined forces with one or more craftsmen to whom he supplied wool, dyeing products, capital or semi-finished products, in exchange for receiving the cloth for sale. As far back as 1419, noble merchants, well informed about the foreign market, prices, quality and colour requirements, imported the raw materials they sold to other merchants or traded with them, and the latter supplied them with the cloth obtained from the craftsmen; this was the procedure followed in the 15th century by Leonardo Vitturi, Bernardo Zustinian and Mafeo Michiel in 1426, the Contarini brothers, Girolamo and Agostino in the middle of the century, Francesco Calbo, Bertuccio and Girolamo Gradenigo in 1468, Lorenzo Loredan and Antonio Valier at the end of the Quattrocento, while clothier Bertuccio Soranzo was the owner of a drapery shop in Rialto. These nobles were not obliged to join the *Art of Wool*, but some were already members, such as Matteo Balbi, Michiel Boldù and Iacopo da Canal in 1463⁵⁰. Others preferred to deal directly with the craftsmen, such as the brothers Bertuccio and Tomà Contarini who traded with England and Syria, imported English cloth into Venice, selling two «kerseys», to a craftsman and entrusting 15 «bastards», to the shearer (*cimador*) Ragarin and 11 others to two dyers who would give them a scarlet tint⁵¹. Once the finishing touches had been made, the drapery would be sent on its way to Syria. All those operating in the textile sector were involved in two main activities: either they produced local drapery (*panni facti*), or they finished foreign drapery (*panni laborati*). Various trades were involved in the textile industry, trying to subordinate those above them, and there were frequent disputes within the guild. However, the patricians kept a close eye on the guilds through various governing bodies, the *Giustizieri vecchi*, the *Provveditori di comun* and the *Camera dei mercanti*, but they had to be cautious, as the master craftsmen could acquire a power that would lead them to demand the sharing of political power⁵².

BADOER, CLOTH MERCHANT

Giacomo Badoer who was 30 years old (born on 18 Feb. 1403), had married Maria Grimani in 1425 and was widowed when he landed in Constantinople. In June 1434, together with his elder brother, he bought a galley for the voyage to Alexandria for 182 pounds of *grossi* (1,820 *ducati*). In his double-entry *mastro*, he recorded his own businesses

⁵⁰ MOZZATO (2006), p. 92 and n. 86.

⁵¹ According to ASHTOR (1978) p. 317, «the Venetian cloth exported to the Near East was mostly of good quality, often scarlet» and p. 321: the Brescian cloth (which the A. describes as cheap) supplied to the Venetians formed the bulk of their textile exports to the Levant after 1450.

⁵² ROMANO (1987), p. 73.

Same fellow
discussed above?

conducted with his own capital or with capital invested by others, or the businesses of companies in which he was involved, or the businesses he handled on behalf of third parties⁵³. The business that yielded the greatest profits was the maritime trade in goods, but the young merchant did not disdain the small profits from retail trade, or the commissions charged to third parties whose business he had handled, or the profits from trading in bills of exchange, or lending at interest, or collecting insurance premiums. At the dawn of the second third of the 15th century, the preferred form of capital association was the *viazio company*, a temporary association (joint venture) concluded for the duration of a journey to a specific destination, which brought together a group of Venetian merchants who entrusted their capital and merchandise to another merchant, who completed the journey.

Badoer, trader in dye products

Badoer's account book gives a rich overview of the "myriads" of cochineals on which (the) crimson (*cremex*, *cremesi*, *chermisi*) or carmine fashion feeds. These insects have been given the name *Porphyrophora*; they parasitise the roots of various plants and proliferate in sparsely populated, uncultivated steppe and salt marsh regions. Badoer was a «trader in dye products (indigo, lacquer, alum)», and proved to be a dealer in crimson bugs. As soon as he arrived, he got in touch with a cloth merchant to whom he offered to barter the cloths entrusted to him by two Venetian companies in exchange for a delivery of *cremese rosesco*, a cochineal harvested from Poland to the Ukraine and southern Russia. The delivery took place on 14 November 1437, and involved almost 180 kg (over 7 million dried female insects) of crimson insects, valued at *perperi* 2.5 per pound, and loaded for Venice on Alvise Contarini's galley. Badoer was also looking for a better price and turned to producing merchants in the regions where the insects were produced, obtaining from a Bulgarian 54.631 kg at a price of 1 *perpero* 18 carats per pound and from Griguol Contarini in Trebizond a barrel of another type of cochineal, *cremese di vini*, which weighed 400 Venetian pounds or 120.4 kg at a price of 1 *perpero* 9 carats per pound. His young clerk, Lorenzo Tiepolo, bought 26.563 kg of *cremexe* from an Armenian at a price of 1.5 *perperi* per pound. In 1437 alone, Badoer shipped 380,764 kg of *cremexe* (equivalent to 15,260 million insects) to Venice. In 1438, he did even better by placing orders with merchants who scoured the producing regions and the Caucasus. Three Russian merchants brought him 430, 469 and 961 pounds of *cremexe rosesco* respectively, but half of the third batch was retained by Zuan Mocenigo in Modon. The deal was concluded at a price of 1.5 *perpero* per pound

⁵³ ASTUTI (1968-1969).

or bartered with pepper. For this price he acquired a further 234 pounds of Armenian cochineal. The four lots, totalling 1,614 pounds or 486 kg, packed 2 by 2, were shipped on the galleasses of Pandolfo Contarini and Francesco de Tomà (c. 212). In exchange for cloth and velvet, he obtained 4 sacks of two kinds from a Jew, 2 sacks containing 566 pounds of *cremexe savaxi* at a price of 2 *perperi* 6 carats per pound, the other two contained 530 pounds of *cremese di vini* at a cheaper price of 2 *perperi* per pound. The bags were loaded onto Lorenzo Minio's galley. On 13 December 1438, he bartered cloth and *chamocho* to obtain a barrel of *cremese rosesco* valued at 2 *perperi* 6 carats per pound. The barrel weighed a net 122.2 kg and left the following day on Andrea Tiepolo's galley. In total, during his stay in Constantinople, Giacomo Badoer sent 1 tonne 324 kg of *crimson cochineal* (53 million insects) to Venice. The dyeing power of these cochineals was low: to dye a pound of silk, 6 pounds of Polish cremese or 12 pounds of Armenian cremese were needed, which explains the price difference⁵⁴.

Badoer and the distribution of cloths

The Venetian merchant traded in everything and spurned every opportunity to earn a little money. He even exchanged a couple of Tartar slaves in good health in a barter transaction for a cloth *loeste* valued at 48 ½ *perperi*, the balance, 131 ½ *perperi* paid in cash. He also knew how to handle scissors at his counter, he had correspondents in various places in the Levant. The European drapery trade in the East was based on a network of relationships woven by Venice over the centuries. Piero Michiel and his partner, the dyer Antonio della Colona, loaded onto the galleys of the *muda* ordered by Zorzi Soranzo a bale of 7 bastard or from Florence cloths, so that they could be sent to Zuan Loredan in Cyprus on the ship of the Greek *paron* Michali Sguro, but these cloths, which his partner was unable to sell, were returned to Badoer, who sent them to Catarin Contarini who was trading in the Beirut area.

On foreign markets, the cloth merchant was never safe from unpleasant surprises. A small bale of 4 pieces of broadcloth from London, one scarlet and 3 *peacock* (*paonazze*), went back and forth between Constantinople and Candia, Troilo Contarini had ordered it from Badoer and then returned it to him before changing his mind and placing a new order. The cloths of Flanders by Marin Barbo, first taken to Trebizond, returned to Constantinople, this increased the cost of transport, taxes and various administrative costs, such as measuring fees, expert appraisals, brokerage and «hotelage», charges, totalling 24 ½ *perperi*. These cloths, which remained in good condition, were resold

⁵⁴ CARDON (2000a).

by Badoer to his usual buyers. This was not always the case: cloths sent to Brousse and returned to Constantinople came back shortened. Cristobal de Bonifazio sent back from Brousse 4 pieces of cloth, 2 *turchini* from Florence, a green from Florence and a fine scarlet from Mantua with a total value of 640 *perperi*. The cloths from Florence were missing *pichi* 4 *q* 1⁵⁵, the scarlet cloth, *pichi* 5 *q* 1. The price of the cloths was *perperi* 575, and Badoer's loss was *perperi* 76 *car* 3, more than 13%. Six of the eight bales of *bastardi* cloth produced by Michiel - Badoer brothers were first sold between 14 October 1438 and 9 January to seven Greek, Jewish, Venetian and Genoese merchants. From 13 January to 1st October 1439, Badoer sold a further 17 cloths, some of which were of poor quality (*non boni, cattivi*). On 1 October 1439 and the following 26 February, he sold still two cloths, one of which was bartered for 34 *cantars* 78 *rotoli* of sturgeon in brine.

Venetian merchants received western cloth from the convoys of galleys that called at the port or from the *ships* whose owners brought him a variety of goods. He knew how to distinguish cloths according to their origin, size, colour and weaving techniques⁵⁶, he indicated the price and defects, and noted how he had sold or exchanged the draperies, in which market and which merchant or craftsman, for what purpose, on what boat, and for what goods⁵⁷. In 1436, when it came time to pay the import-export customs tax (*comerchio*), paid to the baile of Venice, Badoer wrote that he had received, via the galleys of Captain Piero Contarini for 17,816 *perperi* of goods, including cloths: on behalf of *ser* Piero Michiel alone or in association with other Venetian merchants, 4 scarlet cloths from Milan, 40 *pani vervi*, a cloth counterfeit in the *vervi* manner, from *ser* Piero Soranzo 10 scarlet cloths from Mantua, 8 cloths from Florence and on his account 7 cloths of 60 from Mantua, 60 and a half *pani loesti* measuring 50 *pichi* a piece, and a further 25 cloths from Brescia to the double account of *ser* Antonio Contarini and himself, and 16 cloths from Florence for Marco and Lunardo Giustinian. After the departure of the galleys on 18 November 1436, Giacomo received another 45 *pani valenzini* on behalf of Piero Soranzo, 6 cloths of 40 called *quarantini*⁵⁸ on behalf of his brother

⁵⁵ The Constantinople *pico*, based on information provided by Pegolotti, would have a converted length of 577 mm.

⁵⁶ CARDON (1999).

⁵⁷ On various aspects of cloth production, see CHORLEY (1987).

⁵⁸ Venice produced *quarantini*. This was not a measure of length, but rather of the texture of the fabric [CARDON (1999), p. 358-9]. These numbers (70, 65, 60, 40, etc.) were used to count the spans that made up the different qualities of cloth. The «span» was the unit of measurement for the number of threads making up the cloth warp, known as the «*ordito del panno*». In Venice, for good quality cloth (*panni alti*), each span was made up of 40 threads, so that *quarantini* were woven with 1600 warp threads.

Jeronimo, 2 bales of *pani vervi* on behalf of Piero Michiel and Marin Barbo, 2 cloths of *paonazi di grana* and 4 cloths of scarlet. Letters from his correspondents and the ship's *scrivan* book informed him of the origin, nature, ownership and number of cloths shipped from Venice to pay the *ad valorem* tax. Giacomo also estimated the prices of the cloths, which ranged from 18 ½ *perperi* a piece for the *valenzini*, the cheapest, to 45 *perperi* for cloths measuring 40, 65 *perperi* for *vervi*, 125 and 150 *perperi* for scarlet and *paonazi* cloths, i.e. a very wide price range, from 1 to 8 1/3. A key factor in the market value of cloth was its colour. Cloths were woven to a certain standard length, so the merchant was able to appreciate each type of drapery. The common length in Venice and the towns of *Terraferma* was 50 *braccia*⁵⁹, which was reduced to 48 *braccia* in 1419.

From Piero Contarini's galley we disembarked for Antonio Contarini and Giacomo Badoer three bales of *pani loesti* (30 pieces each), of which 19 were scarlet, 5 green and 6 *turchini* (an intense blue produced with indigo), were sold to the Catalan Vielmo Portela, who undertook to pay the balance of the price on his return from the Black Sea ports. Zorzi Soranzo's galley delivered «4 pieces of wide bastard cloth, one cloth of Ghent, 2 remnants of medium green cloth». In 1437, Piero Michiel and Marin Barbo sent to Constantinople on the galleys of Piero Contarini's convoy, 2 bales of 41 pieces of *pani vervi*, worth 3,216 *perperi*. Ser Piero Soranzo in the spring of 1436, also sent 45 *pani valenzini* to Constantinople, valued at *perperi* 18 ½ each, for a total of *perperi* 800. The following year, he sent by boss Silvestro Bon's ship 6 bales of 45 coloured draperies. On 26 June 1436, he sent on Jacomo Salon's nave 6 bales of Catalan cloths (*chatelaneschi*) of mediocre price, the scarlet costing only *perperi* 20.

On 2 October 1438, Captain Lorenzo Minio's galleys brought 143 cloths in several lots to Badoer (the prices in *perperi* are given individually).

There was a close relationship between the fineness of the thread and the weight of the finished fabric, and weighing provided a convenient way of finding out and verifying this: a fabric with 40 spans weighed 44 pounds, while a cloth with 60 spans weighed 70 pounds.

⁵⁹ The *braccio* (plural: *brazza* in Venetian) was the standard for Italian cities. It measured 667.920 mm.

balls	number and quality cloths	merchant name	price
2	16 <i>pani bastardi</i>	Piero Soranzo	62
3	21 pieces <i>pani loesti</i> and 21 remnants	Zuan Trevisan and Giacomo Badoer	44
2	16 <i>pani bastardi</i>	Zuan Trevisan	60
3	22 <i>pani bastardi</i> 2 Florence cloths	Antonio Marcello	64
8	66 <i>bastardi</i>	Piero Michiel and the Badoer brothers	68

Tab. 9: Cloth deliveries to Badoer during the muda in autumn 1438

Giacomo Badoer sold the cloth to other merchants on different terms: of the 20 cloths from Comines that arrived on 18 September 1437 on Zorzi Soranzo's galleys, he sold 9 cloths at 40 *perperi* each to the tailor Domenego Rizo from Pera who would pay on credit when the 1438 galleys returned, and to the cloth merchant Nicholoxo d'Aste, on three occasions during the winter, 11 cloths exchanged (*a barato*) with kermes, for the same price. It was a big deal, and Badoer was sometimes content with more modest gains, when he entrusted Felipo Contarini with a cloth *vervi* and 9 ells of green *vervi*, his factor assuring him that he had sold the cloth for 75 *perperi*. On 27 March 1437, he sold the Jew Cain 21 *pichi* of dark *morelo* (black) cloth, at the price of *perperi* 2 per *picho*, to be paid on the return of the Black Sea galleys. A modest sum of *perperi* 42 was therefore subject to payment on credit, with the shipping calendar setting the due dates, as the return of the galleys or the arrival of the *navi* with their cargoes triggered a lively flow of business and an accelerated circulation of money. Giacomo Badoer entrusted a piece of *vervi* cloth to a Greek tailor to make him a suit. He had paid *pichi* 9 of turquin cloth to the Greek Paleologo Jagari and *pichi* 6 of the same fabric to the Jew from Pera, Zuan Avrami.

ENGLISH PEWTER, A CURRENCY OF EXCHANGE WITH SILKS

The tin extracted from the mines of the Isles of Scilly off the coast of Cornwall, purchased in ingots or as crockery (jugs, dishes, bowls, spoons, saltcellars, candlesticks, etc.) for household use, was of little value. Tin was initially bought from Cornish merchants. In 1437 the Borromei branch of London bought 1,250 pounds of wrought pewter which it sent to Venice to the Tommasi to sell them on behalf of the firm. The following year, these received 2,611 pounds of this metal. The Cionelli received 20 ingots of tin weighing 4,788 pounds in Venice

in 1438, and another 1,326 pounds in 1439. The tinner (*stagnaro*) Johan Salter sent 5,500 pounds in 24 bars to Martino Martini and the Cionelli, who also received two shipments weighing 13,381 pounds in 1440⁶⁰. In exchange for the tin received, the Cionelli sometimes sent a «fardello», of silk which contained a 35 1/2-ell piece of purple damask. In 1435, another 21 pieces of fine gold embroidered baldachin sent by Antonio Cionelli's company arrived in Middelburg, all of which were purchased by the merchant Ugo Dich⁶¹. However, Dich was not the only buyer: in November 1439, Girardino Valetto brought another load of canopies from Bruges to London, while in 1438 the Cionelli company sent to London a «load», of 49 pieces of *aghatoni*, probably large steel needles.

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* *

In the 15th century, Venice's merchant class did not simply engage in international trade to sell products that they had bought far away and which they would have avoided processing. This was true of spices, which, apart from being sifted to remove some of the impurities (known as "gARBELLatura"), did not need to be processed. As for the rest, the city was home to numerous shipyards, while dyers and weavers worked in certain areas of the city's western suburbs. The glassmaking that had made his fortune was relegated to Murano because of the fire hazard posed by the furnaces, but the ships carried mirrors, dishes and window glass. Travellers, and there were many of them, were amazed by the power of the Arsenal, which Venice did not hesitate to show off to deter hostile forces. On the lookout for new inventions, Venice was quick to adopt new techniques, but other countries, notably England, were beginning to develop their textile industry using a raw material, wool, that until then had been exported. Venice was also an industrial city and juxtaposed the two activities of commerce and industry.

⁶⁰ BISCARO (1913), p. 97.

⁶¹ BISCARO (1913), p. 104.

Chapter nine

Money, and precious Metals

The real currencies minted in the mints were not considered in the accounts or ledgers, where their extreme diversity (in terms of metal, content, weight, and origin) would introduce extreme confusion that was impossible to control, and even to add at the bottom of the page, such as the diversity of real currencies within a city or between cities in the same country. It was therefore necessary to use a single currency in the accounts, known as the «accounting currency». When a payment was made, internal exchanges had to be made between the account currency and the actual currency to settle a debit, or, more simply, to transfer the account currency, which had become the bank's currency in the bank's books, from a debit account to a credit account.

Continual attention is needed to disentangle the values and nature of the money used in the accounts¹. In fact, merchants only used this slowly developed system for account books, and Giacomo Badoer who worked in Constantinople used the Byzantine system based on a 24-carat *hyperpere* in his writings. On the other hand, when it came time to make a payment, for labour for example, for porters and boatmen, rowers or masons, roofers, carpenters, and glaziers, he would abandon the money of account and distribute real money, the billon money being used to make up the difference. He recorded these expenses on sheets of paper or in a daybook before transferring them, converted into money of account, to his ledger. Historians who fail to pay attention to these details expose themselves to monumental errors, and these 'detail's are all the more difficult to detect as the nature of the coins is often written in abbreviated palaeography, making it difficult to distinguish between d(ucat) and d(enier or pence), except for their position in the list and organisation, the ducat comes first, followed by the gros (g), the denier comes last and in Venice it was written in «piccoli», (p).

¹ So as not to bore the reader's attention, we have converted the Venetian coins into gold *ducats* and gros (1/24 ducat) without going any further.

Venice had no shortage of precious metals, in ingots, coined or transformed into ornaments and jewellery. Through its relations with central Europe and with the so-called «German», merchants who flocked to the *Fondaco dei Tedeschi*, loaded with the precious ores extracted from the mines, which were quickly exhausted, and miners moved from one to the next. If we add to this the textile products that its merchants fetched from Flanders and England before re-exporting them to the Levant, Venice, contrary to what the mercantilists argued, was not impoverished by paying high prices for spices, silk and cotton, that his galleys and ships brought back from the East. However, the seasonal rhythm of trade, the departure and return of galleys from various voyages spread throughout the year, dictated the abundance or scarcity of currency and consequently the intervention of speculation. *Larghezza* and *strettezza* therefore played an important role in determining interest rates. Fortunately, Venice had at its disposal, better than any other Western city, abundant reserves of precious metals and a gold currency, the *ducat*, which prevailed on many markets, so much so that it was adopted and imitated in the East, and imposed its authority on the international exchange market by issuing the «certain», that transformed its currency into a reference value.

GOLD AND SILVER PRODUCTION IN EUROPE

Venice successively minted silver coppers and gold *ducats*, sending large quantities to the East. Where did it get this silver and gold from? The two precious metals were extracted using rudimentary mining processes in Central Europe, and the mines, which were small and numerous and quickly exhausted, were short-lived: the techniques of the time allowed access to the surface layers of the ore, as at Friesach (archbishopric of Salzburg), whose veins were exhausted in the 1230s, while Freiberg in Saxony was the main supplier of silver to European mints throughout the 13th century and the early years of the following century. Other silver mines provided a significant supplement from 1220, Jihlava in Bohemia and from 1250, Iglesias in Sardinia. The largest of these mines could supply 4 tonnes of silver a year. The miners moved from one mine to another as those in operation were exhausted and new discoveries were made. They were originally from Saxony and the mining statutes were inspired by those of Freiberg. These «German», miners were highly sought after, and the Hungarian king Bela IV invited the Jihlava miners to open the silver mine at Banskáštiavnica (in what is now Slovakia). When production in Jihlava dwindled, the mine was taken over by Kutná Hora, also in Bohemia, which quickly became Europe's main supplier of silver: from 1298 and

throughout the first half of the 14th century the Kutná Hora mines supplied between 20 and 25 tonnes of silver every year.

Gold made a later appearance, with the Kremnica in Slovakia (around thirty kilometres from Banská Štiavnica) was opened around 1320 and continued for a century and a half. The kings of Bohemia and Hungary encouraged by the discoveries made in their kingdoms, minted silver coarse coins and gold florins (soon to be called *ducats*), modelled on Italian coins, which reached Bruges and Venice. A lot of gold flowed into Venice in ingots. When the silver mines of Kutná Hora saw their production decline to around 10 tonnes a year and then it was the Emperor's troops who ransacked the town and the mine during the Hussite War (1422), gold coins and other means of payment (bills of exchange and bank transfers) replaced the failing silver coinage, from which much of Europe suffered. Venice escaped this crisis because it had access to new silver and gold mines in Bosnia and Serbia, whose production approached that of the most important mines of previous centuries, especially at Novo Brdo which could extract 2.5 tonnes of silver and half a tonne of gold each year. Three quarters of this silver was shipped to Venice, where it was then re-exported to Egypt and Syria or to England. The Ottomans took over these two kingdoms in the middle of the 15th century. The shortage of precious metals would have become extremely acute had it not been for a series of discoveries and inventions from 1460-70 onwards that came to the aid of the mints. The first were opened in Schwatz in Tyrol and Schneeberg in Saxony, and each of these new mines produced 10 to 11 tonnes of silver a year from 1480 onwards. The most important invention was the pump, which eliminated the water ingress that had forced the old mines to close and made it possible to refine the ore. Pumps made it possible to reopen abandoned mines in Kremnica, Kutná Hora, Freiberg and even in Goslar (Harz), which had produced silver lead in the 11th century. The silver mines of Annaberg in Saxony and Joachim in Germany were also opened on the slopes of the Erzgebirge. In Saxony and Joachimstal in Bohemia, silver production reached its peak in Europe in 1530².

BALANCE OF PAYMENTS WITH THE MUSLIM EAST

The long-dominant mercantilist view is well known: precious metals (gold and silver) are not just means of exchange, but the most tangible form of wealth, reserves of value and the key to gaining and maintaining a nation's power. The export of precious metals was seen as an impoverishment, a damage that weakened Europe. Europe in the late Middle Ages would have suffered from monetary shortages, the supply

² We follow SPUFFORD (2006), p. 354-62; ARBEL (2004a), p. 43-4.

of currency in circulation would not have been sufficient to meet the demand for transactions, particularly during the deflationary phases that Munro identified in the years 1320-1340, 1370-1420 and 1440-1470. He adds that even the depressions observed in England and the Netherlands were not related to a deficit balance with the East, but to a decline in population that lasted from 1348 to 1520, to increasing hoarding, to war-related expenditure financed by devaluations and by higher taxes and trade barriers, all of which had harmful consequences for the European economy: high transport and transaction costs, various impediments in the flow of currencies injected into international trade, mercantilist attempts to prevent the outflow of precious metals and encourage their inflow. «The obstacles to the flow of money were more important than the reduction in the stock of precious metals»³. The fear of running out of money led to restrictions on credit and the postponement of investment, resulting in a scarcity of money whose circulation was slowed⁴. Money did circulate, however, and merchants abroad were faced with current expenses such as taxes, food and payments to suppliers, but not all of them were prepared to accept bills of exchange. Zuan Alvise Morosini who was in Aleppo in 1484 was waiting for a bag of gold coins that had already arrived in Beirut. According to Morosini's accounts, the bag (*groppo*) contained 400 *ducati*⁵.

Deflation increased the purchasing power of silver and encouraged mineral prospecting, which triggered the copper-silver mining boom in Germany. Munro estimates that Venice at the end of the 15th century exported to the Levant from 2,056 to 2,587 kg of fine gold or from 22,621 to 28,463 kg of fine silver if we accept a gold/silver ratio = 1/11. It would have exported between 1,285 kg and 1,617.5 kg of fine gold and between 14 and 17 tonnes of silver to Europe. These precious metals would have accounted for 62.5%⁶ of the value of goods acquired in the Levant. Venice was supplied with silver by German merchants, who also supplied Antwerp which reopened its mint in 1467. The Venetians exchanged their cotton for German silver. According to Maureen Mazzaoui the Venetians imported almost 4,000 tonnes of cotton at the end of the 15th century, twice as much as in the middle of the century⁷. Venice imported cotton from the Levant to sell to the

³ MUNRO (2007), p. 907.

⁴ MUNRO (2007), p. 909, after SPUFFORD (1988), p. 345.

⁵ VALLET (1999), p. 37n and 81. Coins sent abroad circulated in «groppi», but it is not known whether the «groppo» (bag or purse) was a unit of measurement.

⁶ It seems that this ratio of 62.5% is an average borrowed from ASHTOR of which MUNRO is highly critical.

⁷ MAZZAOUI (2008) and MUNRO (2007), p. 9 23-24. SPUFFORD (2006), p. 352, map of the Venice-Antwerp route via the Brenner. The persistence of the war in France

Lombard and Swabian fustainers of Augsburg, Ulm and the towns around Lake Constance, which initially sold linen cloth. The expansion of German industry boosted Venetian imports, while Syria-Palestine Mamlūk developed its cotton production at the expense of grain cultivation demand for which had plummeted after the Plague⁸.

Munro asks two questions: why did Europe require such treasures to trade with the Levant? And why did a high proportion of these treasures consist of silver? The typical mercantilist answer was that Asia had developed the same industries as Europe, and that Europe had little to offer Asia at competitive prices. Spices were extremely expensive in the 15th century and played a major role in trade with the Levant, accounting for perhaps 75% of the value of Venetian trade.

The gold/silver ratio in Venice was 1:11 in the first half of the 15th century, 1:11.9 in 1463 and 1:10.7 in 1509. In Egypt, it would have risen to 1/14 in 1403-1410, when the Venetians were exporting large quantities of gold *ducats* to the East. In 1414⁹, it would have fallen to 1/7, but from 1430 onwards it remained at a stable level of 1/10 - 1/11, a ratio reached in 1483¹⁰. Munro concludes: «in these conditions, it is difficult to determine which metal and which proportion of the two metals predominated in the Levant trade».

In reality, precious metals were valued in *ducats*, like spices, they were more likely to be transported on galleys than on sailing ships¹¹, as the galleys sailed in convoys and, grouped together, were better protected against pirate attacks. Precious metals imported into the Mamlūks were not a sign of Venice's balance of trade deficit, even in the form of coins. Merchants paid freight or nolis and customs duties on the gold and silver they carried to Egypt.

marked the abandonment of the routes that crossed the kingdom. The development of these routes via Nuremberg, Augsburg and the Brenner reduced the distance by sea via Gibraltar by 20%.

⁸ MUNRO (2007), p. 9 12-14. Fustains (cotton weft and linen warp), were a popular, light and inexpensive textile, the word deriving from Fustat (Cairo), which produced this textile using linen from the delta and Syrian cotton. According to BRAUNSTEIN (2016), p. 324, fustain was a fabric made from a mixture of wool or hemp and cotton.

⁹ According to STAHL (2008), p. 256, «in 1407, the *Senate* realised that the amount of silver arriving in Europe was low, the Levant in fact turned to gold *ducats*, not silver *grossi*, and the movement of silver turned away from Venice in other directions».

¹⁰ SPUFFORD (2006) 47, published a comparative table of gold/silver *ratios* in Venice and Egypt from 1278 to 1472.

¹¹ On the role of naval vessels (*navi*), HOCQUET (2012), pp. 298-312, BRAUDEL (2000), p. 352 ; among the essential factors in the commercial revolution that fortified the West, MUNRO (2007), p. 924-28 notes first and foremost the transport revolution and the adoption of the three-masted armed vessel with mixed sails, which reduced by 25% the cost of maritime transport, so important for transporting wool and cotton. Finally, there was the financial revolution, which created fully negotiable credit instruments.

«The Venetians did not go to Syria first and foremost to sell their products, but on the contrary to acquire various products of very high quality, and to resell them in Venice at a solid profit»¹².

In fact, we shouldn't forget that, from Syria which was not just a supplier of spices, Venice imported raw materials (silk, cotton, ashes) and exported finished products (silks, draperies, glassware, wrought metals). Zuan Alvise Morosini made no mistake when he confessed: «There's only one thing that keeps me here, and that's earning *ducats*»¹³. Marin Sanudo noted in 1498 that the galleys had taken a considerable quantity of coins and gold to Alexandria, but no great profit was to be expected (*di li qual ori non si farà bene*)¹⁴, but, corrects ARBEL, large sums expressed in *ducats* were in fact circulating in the form of silver ingots or silver coins. This silver, like the *marcelli* minted in Venice, contained copper (60 carats per silver marc), which was highly sought after¹⁵. Sources mention, for example, 10,000 *qintars* of copper (954 tonnes) loaded onto galleys bound for Alexandria in 1496, 381 tonnes for Beirut in 1501. We know that Badoer frequently sent copper to Alexandria at the end of the 1430s, while Michiel Foscari is said to have loaded 1,000 *miera* (477 tonnes) in 1503, not including 400 *miera* stowed on private ships and 300 waiting to be loaded. The copper came from the Tyrol and Slovakia and reached Venice thanks to German merchants. It had been refined in Germany or in Venice and was sold *in pan, in verga* (bar) in wire, or worked (*lavoradi*). Michiel Foscari, who was also involved in exporting steel and steel objects, had invested in iron mines and controlled production in Belluno. The English pewter brought to Venice by the Flanders galleys was also redirected to the Mamlūks (as were lead and mercury). Marcantonio Morosini sent some to Syria on a ship that sank in 1499.

ABUNDANCE OR SHORTAGE OF SILVER IN VENICE

What effect did this massive export of capital to the Levant or to the West¹⁶ ? In 1443, an anonymous Florentine trade manual described the

¹² VALLET (1999), p. 88.

¹³ *Ma una chosa me fa restar: de veder (...) vadagnar qualche ducati* [VALLET (1999), p. 88].

¹⁴ ARBEL (2004a), p. 43-5.

¹⁵ VALLET (1999), p. 83 -4.

¹⁶ LANE (1984), p. 38, «in the mid-14th century, gold travelled from the East to Venice, with silver following the opposite route. In the 1420s, gold travelled from Venice to the east, silver from Venice to the west..., in shipments of around 3,000 kg of metal on Flanders galleys bound for England...».

annual calendar of the foreign exchange market in Venice in the first half of the 15th century¹⁷.

February was inactive, business was slow and there was an abundance of coins. March and April woke up a little because of the departure of the Flanders galleys. The Venetian nobles began to build up their assets in anticipation of future departures. In May and June, the market was bustling with activity due to the forthcoming departure of the Romanian galleys. July saw a surge in prices on the money market (ingots and cash were exported to Romania). After the departure of the Romanian «voyage», at the end of the month, prices began to fall. August ushered in a new period of payments with the loading and departure of the Beirut galleys which carried a great deal of precious metal (ingots, silver crockery, *ducati*). September saw the departure of the fourth fleet of the year, the journey (*viazo*) to Alexandria loaded with gold and silver, but as soon as these galleys left port, prices plummeted. October, the month of balances, was calm. At the end of November, the return of the galleys brought some excitement. December was lively with the arrival of German merchants buying spices and cotton, bringing gold, silver and merchandise. In January, Venetian exporters paid the State the *nolis* for the goods they had loaded onto the galleys, the cogs set sail to fetch Syrian cotton or Spanish wool and took away a lot of money.

How did money flow into Venice and how did the merchant patriciate build up its reserves? Most of the precious metals sold or minted in Venice were brought in by «German», merchants. In 1383, a merchant from Regensburg, Matthäus Runtinger¹⁸ who had taken 48 marcs of gold and 65 marcs of silver to Venice¹⁹ returned north of the Alps with saffron, coral and pepper, which he sold in Vienna, Prague, Frankfurt and Bavaria. In 1395, he returned with 283 and a half marcs of silver, and in 1399 he sent more than 71 marcs of silver to Venice²⁰. He was not alone in importing these precious metals. At the same time, a Nuremberg merchant, Hilpolt Kress, sold 18 ½ marc of gold and 580 marcs of silver to Venice in two years. Unfortunately, this traffic is best known for the fines imposed on importers who broke the meticulous Venetian laws. Not only did importers have to pay taxes (less than 1%), but they also had to make a declaration within 3 days to the officers in

— ? mark
of thought

¹⁷ MUELLER (1984), edited this description on p. 218-9 (in Tuscan) and provided a commentary on p. 203-5, which we summarise below.

¹⁸ BRAUNSTEIN (2016), p. 207, Runtinger was the richest merchant in Regensburg and in 1384 he bought the farm of the iron and salt customs on the Danube, then in 1392 that of the Mint.

¹⁹ HOCQUET (1995), p. 88 (1 pound weighing 478 g = 2 marcs).

²⁰ BRAUNSTEIN (2016), p. 870-1, on the import of silver to Venice and Runtinger's relationship with Piero Benedetto's bank.

charge of controlling this traffic (*offitiales argenti, offitiales auri*), as the Mint needed to know how much metal it could use to mint coins. Taxes were light, but fines were heavy - half the value of the metal. When the mines in Bosnia and Serbia were exploited, merchants from Ragusa brought the precious metals to Venice²¹.

Gold and silver varied with the opening, exhaustion and closing of mines. And since the Germans, as the Venetians understood them, were major importers of metals to Venice, let's look at what the most famous of them, the Fugger were doing at the end of the Middle Ages. Jacob (1412-1469) married Barbara Basinger, daughter of the master of the Augsburg mint who, as such, supplied the town with silver, and settled in Schwatz in the middle of the century. This gave Jacob and his numerous descendants access to the Tyrolean metal trade and the technical knowledge needed for mining. Barbara outlived her husband by 30 years, and her youngest son, also named Jacob (1459-1525), began his training in Venice at the age of 19, where he met a well-connected man, Antonio de Cavalli²². Cavalli was an entrepreneur in Schwatz, a mining judge in 1478, an adviser to Sigismund but also the author of the *Mining Statute* presented and adopted by Venice in 1488, thanks to which the Republic adopted German mining law, entered and obtained «the collaboration of Venetian capital in the exploitation of deposits on both sides of the border» (BRAUNSTEIN). In 1485, Jacob Fugger loaned the Innsbruck court 3,000 Rhenish florins against 1,000 silver marcs and made himself indispensable to the archduke and his successor by using his loans to finance purchases in Venice of luxury items and goldsmith's wares that were an integral part of court life. In June 1488, Jacob Fugger signed a contract for 150,000 florins payable over 18 months in exchange for silver production at Schwatz, i.e. 3,000 marcs per month. This refined silver was either minted locally in Hall or exported in bars to Venice. Subsequently, the warlike policy pursued by the Habsburgs, Emperor Frederick III and his son Maximilian, in Hungary, Italy and France cost them a lot of money and Jacob Fugger loaned them more than a million florins, which they used to obtain silver (and copper) from the mines in Schwatz and Hungary²³.

There was a close relationship between the supply and demand of money, between bank assets convertible into cash and loans, between

²¹ STAHL (2008), p. 216 and 219-21.

²² Antonio de Cavalli and Jacob Fugger were guarantors of the peace that put an end to hostilities between Archduke Sigismund and Venice and advanced Sigismund the 23,628 florins he owed the Republic as war indemnity [BRAUNSTEIN (2016) p. 35 0]. The people of the Archduke, Count of Tyrol, had arrested the Venetian merchants who had gone to the fairs in Bolzano and had seized the Primerio silver mines that the Venetians were exploiting on the borders of their territory.

²³ BRAUNSTEIN (2016), p. 351-3.

exchange rates and their fluctuations and the demand for cash. A market became wider or narrower if there was a lot (*dovizia* or *larghezza*) or little (*strettezza*) of money to be exchanged. If, for one reason or another, there was a lot of money to be exchanged in this market, those who still had it would agree to lend it at a high rate, and those who needed it would accept the interest: this was the situation of exiguity (*strettezza*). This situation had an impact on exchange rates, and it was in the interest of foreign exchange dealers to keep abreast of the times when money was plentiful or in short supply, in other words the seasonal fluctuations of the markets, to be able to forecast prices²⁴. The high cost of money led to an influx of foreign money, which lowered the interest rate and restored equilibrium. In Venice, the regular departures of galleys loaded with cash and merchandise for the Levant, the Maghreb or Flanders and England made forecasting easier, and merchants knew the best times to buy or sell, which reduced the risk of loss. «The predictability of the demand for silver at Rialto explains why Venice was chosen for alternative contracts»²⁵.

Giovanni Stornato who made his will in 1347 (he died the following year) recommended that his executors invest his estate in the silver market. It was necessary, he advised,

«buy the silver each year, immediately after the departure of the galleys, when the fall in demand would have lowered prices, and sell it the following year, immediately before the departure of the galleys when demand and prices are at their highest»,²⁶.

The exchange could be used to settle foreign purchases or credit, especially if it was supplemented by a replacement, by an again exchange. In this case, «the profit on the exchange was calculated once the sum of money had been returned to its place of origin», and the exchange was settled in such a way as to benefit the creditor party, i.e. the lender of the funds²⁷. Since Venice needed money to send its galleys full of merchandise and cash on «voyages», it needed to attract it by granting lenders a favourable exchange rate. This gave them the money they needed to load and arm their galleys. Its merchants withdrew their assets from banks or from the mint if they had deposited the ingots they

²⁴ «Se chiameno cambii, perché da uno zorno a l'altra cambiano prexio (they are called [ex]changes because they change their value from one day to another)» wrote a Venetian in London in 1465 (cited by BOLTON and GUIDI BRUSCOLI (2021) p. 888).

²⁵ MUELLER (1997), p. 289.

²⁶ STAHL (2008), p. 221-2.

²⁷ MUELLER (1984), p. 199 and graph 3, p. 208. The author then develops three statistical examples (1389, 1394 and 1399) based on the correspondence of the factors of the Tuscan company Datini active in Venice.

had bought there. Bankers to meet this demand built up cash reserves, which they obtained by exchanging currency²⁸.

THE COPPER MARKET

Copper had many uses in the Middle Ages. It was used to make bells and kitchen utensils, and Venice used it in the Arsenal which used it extensively for the fleet and to defend its Romanian possessions. It was also used as a monetary metal to make *piccoli* (coins); there were different types and qualities, the most prized being the «rame di bolla», which was transformed in the foundries of what would become the *ghetto* in the 16th century. It bore the seal of St Mark and came in rectangular slabs or loaves. The copper was bought by Venetian merchants in Constantinople and sold in Beirut, Damascus and Alexandria. In the East, it was used to buy cotton and spices. Badoer sent it first to Candia on Candian ships and instructed the owners to send it to Zaccaria Contarini or Marin Grimani, both in Alexandria, to Benedetto Foscarini in Damascus, to his usual factors in Majorca or his brother in Venice. Large quantities of copper were exported, leaving Constantinople in hundreds of *cantars*. merchants shipped it in cloths, plates or wire, the most expensive of all, and even in *torneselli*²⁹, provided the small change was made of this much sought-after metal³⁰. The copper therefore came from Romania, from the Pont mines in Castamon³¹, or from Poland (*from Polana*); in reality it was mined in Slovakia, but it arrived by the Krakow route in Bruges or Venice, where its trade was controlled by Viennese merchants. When the Tyrolean mines were developed and German operators improved metal refining techniques, the copper from Schwatz went directly, along with the silver, to the *Fondaco dei tedeschi*.

Venetian copper first reached Alexandria³² then to the Indian coast of Malabar, where the masters of Cochin agreed to sell spices if half or

²⁸ VAN DER WEE (1991) provides a convenient and exhaustive description.

²⁹ STAHL (1985), p. 11-20.

³⁰ HOCQUET (2010b), p. 63-64.

³¹ According to BRAUNSTEIN (1977), Venice was excluded from this trade «because of the high refining tax levied on (the copper)» (p. 85) which we also found in Giacomo Badoer's account book.

³² BRAUNSTEIN (2021), p. 83, «the five Alexandria galleys embarked 1,000 *miers* of Hungarian copper in February 1503, to which were added 400 *miers* that were to leave later with a ship, then the 300 *miers* that remained alongside, making a total of 840 tonnes» (1 *mier* = 1,000 venetian pounds). All the copper was sold between February and June in Alexandria. The contract signed with the Fuggers was an «a baratto» deal for 1,100 *miers* of copper at 12 *ducati* per cent in exchange for pepper worth 24,570 *ducati*. «We are not far from 73,499 *ducati*, with a final gain for the Venetian merchants

at least a third of the price was paid in copper³³. Priuli noted in his diary that Venice shipped the equivalent of 523 tonnes of copper to Alexandria in 1495 and 223 tonnes in 1498, while 32 tonnes went to Beirut. This was galley traffic, but the merchant Michele Foscari who had dealings with Fugger is also said to have loaded 150 tonnes of copper onto a private vessel in 1495, and much more in years when the galleys had no takers or did not carry the metal³⁴.

of 16,884 *ducats*» (*Ibid*, n. 221). On the spice trade in the Indian Ocean, between the Malabar coast or Ceylon and the Red Sea, and the role of Arab or Jewish merchants in this trade, BALARD (2023), p. 68-91.

³³ Pepper was purchased «under the condition that the bezalung sey halb tail in Kupfer oder auf das minst das drittail» [BRAUNSTEIN, p. 91].

³⁴ BRAUNSTEIN (1977) inspired this development. BRAUNSTEIN (2021): Michele Foscari was «one of the first businessmen of Venice» (p. 13), son of Filippo, first cousin of the doge Francesco, who died of the plague in 1478. Michele began his career importing wine from Crete to supply the taverns of Venice, and then benefited from its presence in Beirut and Alexandria where he acquired large quantities of pepper through the sale of metals.