

Trade, Traders, and Institutions in Late Medieval Venice (1291-1421)



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An homage in memory of the past *venezianisti*

Che val ricordare la grandezza antica? Pensiamo all'oggi, e la società, se ci è possibile, divenga una macchina, superba macchina, come quella razza di ferro e di carbon fossile - l'anglosassone. Denaro è vita e prosperità; dunque promoviamo soltanto quelle associazioni che intendono a risuscitare le industrie, a far star bene i vivi, e lasciamo i morti in pace.

Questo spirito di calcolo ha anch'esso la sua poesia, ed ha grandi risultati, ma nella vita degl'individui e delle società esso non è tutto. Chi ha animo ben fatto, sente di aver una patria; sente che tutto non istà nei crassi patrimoni che imbottiscono i casati d' ignoranza e d' inerzia.. . . . o in certi consorzi dove la scienza e le lettere divengono la formula del parere e non essere; ma sa che nella storia sta quanto di nobile e di durevole ha lasciato l'umanità, e che la società nostra non sarà degna di esser vissuta, se non avrà posto onorevole nella Storia.

Questa istoria non è l'arido inventario di cose e di uomini, da specularsi per ispazzo, da giuocarsi come un trastullo qualunque; essa è la vita delle vite, la parte migliore dell'intelligenza che sopravvive alla forma individuale, come sintesi di un numero copioso di esseri della scena sociale. Guai a chi volesse tradurre noi italiani [...] in meccanici calcolatori della Borsa. Lavoro, sta bene; pur che non si risolva in prospetti statistici, facile gabbo perfino dei dotti.

B. Cecchetti, 'La vita dei veneziani fino al secolo XIII', *Archivio veneto*, 2 (1871), 92

Notes

All transcriptions from unedited documents and all translations from Latin, Italian, Venetian, and other languages are mine, unless indicated otherwise. This thesis follows the spelling of British English. Texts in Venetian have been transcribed following the conventions of G. Tognetti, *Criteri per la trascrizione di testi medievali latini e italiani* (Rome, 1982). Foreign words are written in italics. Following established conventions, names of magistratures have been kept in their original language, being capitalised with no italics. Names of sources will be given in quotation marks, such as the ‘Zibaldone Quaresimale’. If a manuscript is referred to, the abbreviation MS will precede the name of the source, followed by its shelf mark. Latin names and surnames have been rendered into modern Italian (i.e. Mauroceno becomes Morosini), whilst famous names have been kept in their Anglicised form (i. e. Tamerlane). A single spelling has been adopted for surnames in vernacular, following the current name of the family or the closer Italian equivalent (e.g. a Marco Morexini in the source will be given in the text as Marco Morosini). Toponyms are given in their modern equivalent (e. g. Methoni and not Modone). All units of measurements are given in their original language, providing an English translation if available. Given the extreme complexity of the Venetian money system, every care has been taken in offering to the reader a clear understanding of what monetary unit is being used (see Appendix D for any doubt). Shelf-marks of sources are given with the name of the city where the archive is located in English followed by the source with its collocation in the original language (e.g. Venice, Archivio di Stato, Senato, Deliberazioni, Misti, Reg. 25). Footnote references have been abbreviated to the surname of the author(s), abbreviated title of book or article, and page number(s) after the first reference. The year in Venice started on the first of March *more veneto*. All dates have been converted in the corresponding modern calendar, e. g. the 2nd of February 1338 *more veneto* is given as February 2, 1339.

Short Abstract

Two ideas: that rulers dictated commercial policies, and that long-distance trade was the main dimension of medieval trade, will be tested - and challenged – in this thesis, using late-medieval Venice as a litmus test. Venice did not prosper solely because of the sea, but also due to the integration of the city within the trade networks of the Italian and European mainland. Equally, regional and inter-regional trade mattered as much as international exchanges in Syria or Egypt. Institutions mattered in Venice, but not just in the sense of decision-makers like the Senato or the Maggior Consiglio, but also in the broader sense of kinship ties and partnerships.

To subject the relationship between trade, traders, and institutions/organisations to a fresh analysis, I have chosen, as a case study, Venice during ‘the long fourteenth century’, the period between the fall of Acre (1291) and the reconquest of Dalmatia (1420). It is a broad timespan that reflects the changing fortunes of the city, and its passage through the fourteenth century, both before and after the plague. The Trecento was a century that forced Venice to confront several challenges, leading Venetians to seek new opportunities in the western Mediterranean, diversify their shipping routes, and increase the transport of commodities in bulk to meet the demand of the burgeoning proto-industries such as glassmaking, textiles, and soap-making.

I will reflect on the integration of multiple trade circuits. I will propose that Venetian shipping in the fourteenth century was tripartite: comprising longships, or galleys, for international trade; round ships, such as cogs, for inter-regional trade; and flat-bottomed ships, serving local routes. Another important dimension to the overall argument developed in this thesis is the notion that a plethora of operators partook in Venetian trade, not just the upper echelons of the patriciate, and that non-Venetians equally played a significant role within the Venetian economy. As for organisations and institutions, I will argue that while Venice regulated commerce, it did not dictate it. State intervention coexisted with the relative autonomy of individual merchants and commercial interest groups.

Long abstract

This thesis deals with trade, traders, and institutions in Late Medieval Venice, from the fall of Acre (1291) to the reconquest of Dalmatia (1421). I focus on five key topics: namely, the vessels used to ship goods in late medieval Venice; the types of commodities for sale in the city; the trade circuits of Venetian merchants; the social world of medieval Venetian traders; and the role of organisations and institutions in influencing or regulating trade. I will argue that Venetian shipping rested on the integration of privately owned vessels and state-sponsored voyages of galleys; that Venice was not just an entrepôt but also a city of production and a market for regional production and consumption; that local, regional, and international trade were not mutually exclusive, and neither were maritime and terrestrial exchanges; that the word ‘merchant’ encompassed a large portion of the Venetian population, including non-patricians and foreigners; and lastly, that Venice was a city where kinship ties were as important as formal organisations such as the Senato or the Maggior Consiglio, which were themselves deeply embedded within the social networks of a city where the basic form of business organisation was the partnership between two brothers. By drawing on documents written by merchants and sources as diverse as notarial records and the mosaics of St Mark’s, and combining a quantitative, qualitative, and case-study approach, I will expose a sector of Venetian history which has so far received relatively little attention: namely, privately owned vessels in the ‘long fourteenth century’.

Regarding ships, I will explore in detail the organisation of maritime transport in medieval Venice distinguishing between armed and unarmed vessels, examining how technological advancements in the fourteenth century - such as the introduction of the cog and increased cargo capacity - transformed Venetian shipping. I will focus in particular on the tripartite classification of Venetian ships into round ships, flat-bottomed vessels, and longships, each tailored to specific markets, and trace their development before and after the Black Death. This discussion sets the stage for a quantification of round and flat-bottomed ships and a broader

inquiry into patterns of boat and ship ownership in late-medieval Venice. My analysis will bring together sources as various as pardons for smuggling, notarial and court records, and descriptions of Venetian shipping. It will focus on the Trecento, a timespan less explored than the fifteenth century due to the fragmentation of the records and the dispersal of sources. By employing collections of images of Venetian ships and unpublished manuscripts, I will also consider why round and flat-bottomed ships were depicted in public settings like St Mark's Basilica, as well as in material culture and merchants' manuals, suggesting their widespread recognition across Venetian society. Ultimately, ships will be examined as tangible artefacts, instruments of commerce, and symbolic representations. By comparing Venetian shipping with that of Genoa and Barcelona, I will underscore how Venetian shipping was typical in its composition of different types of ships: a small number of larger vessels used mainly for international trade; a large number of medium-sized round vessels used for regional and inter-regional trade (Adriatic, Puglia, Istria, Friuli); and hundreds of flat-bottomed ships used to transport raw materials, for fluvial trade, cabotage, or for the movement of people within Venice itself. The city differed from most other Mediterranean polities in its reliance on galleys and the use of warships for transporting merchandise. Equally, the concept of 'Venetian' ships needs to be addressed case by case, as ships could be built in Venice or its dominions, sold to or by Venetians, or chartered to consortia of merchants, both foreign and domestic. Ships were at the centre of complex interactions and operations. Ships were at the centre of complex interactions and operations.

Regarding commodities, I will advocate for a more comprehensive overview of Venetian trade by considering production, local consumption, and international exchange. I will do so by analysing extensive lists of products sold in Venice in the fourteenth and early fifteenth century, known as *valute di mercanzia*, mostly compiled by Tuscan merchants active in the city. These offer us a unique insight into a wide set of wares, numbering almost 300 commodities. They clearly show that Venice was not merely an entrepôt but also a centre of production and a

significant hub for regional trade - even before the annexation of the mainland. I argue that exotic wares and mundane goods were complementary. Local, regional, and transnational trade were not at all antithetical. The registers of pardons, which capture actual trade routes rather than theoretical prescribed itineraries, are particularly illustrative of the intense coastal trade sustained by Venetian merchants or foreign merchants bound for Venice. In the absence of fiscal sources, they point to an important dimension of trade that coexisted alongside the large cogs and the *mude*. Technical advancements of shipping and the increasing demand of proto-industries - one mutually influencing the other - clearly encouraged the transport of voluminous items, especially when they could be stowed as ballast. Venetians relied on a tripartite shipping system and the integration of multiple trade circuits. Unarmed vessels were crucial within the city's trade networks, regional trade was dominated by non-patricians, and there was no dichotomy between light and bulky commodities.

In terms of the circuits of trade, the coexistence of different scales of commerce is a crucial theme when studying a city like Venice, whose history is deeply intertwined with the sea. Indeed, assumptions by contemporaries or modern historians about what Venice was have been bound to assumptions about the sea and the special relationship that Venice entertained with it. However, the terrestrial dimension was equally fundamental. Land and sea were not isolated domains but closely integrated, forming a network of trade routes that spanned the Po Plain and the Adriatic. Venice's expansion on the mainland coincided with efforts to reclaim Dalmatian ports and acquire new commercial outposts in the Aegean. To fully understand Venetian commerce, it is necessary to consider both its terrestrial and aquatic dimensions. Similarly, within maritime trade, we should pay more attention to the coexistence of cabotage and coastal trade alongside long-distance routes. This thesis advocates for a reassessment of Venetian trade, emphasising the importance of short-distance commerce and cabotage. It highlights the critical role played by flat-bottomed and round vessels, which were instrumental in helping Venetian shipping overcome the crisis of the fourteenth century - thanks to the

adoption of larger vessels like cogs and a shift toward intensified regional trade. Cabotage should not be equated solely with small-scale trade.

Concerning merchants, I will address three issues: the vocabulary for trade and traders in medieval Venice, the mentality and education of the Venetian traders, and the form of partnerships between them (including the trust-building mechanisms that underpinned them). On the first point, I will focus on who was identified as a merchant in medieval Venice, using both commercial and deliberative sources, highlighting how this term also referred to shipowners, qualified artisans, *cittadini*, and the *popolo*. On the second point, I will reflect on two virtues required of the merchant: *pratica* - or experience -and morality. I will show what notions were inherent to the education of the merchants and what moral virtues he was urged to adhere to, using commonplace books - a distinctive feature of Venetian mercantile culture. These texts provide us with an important source on the multifaceted knowledge required of a young man entering the trade. This included history, arithmetic, geometry, seafaring and astronomy. I will then focus on the way that capital could be entrusted to fellow merchants, the ties that were so created, and the mechanism of trust that underpinned them. I will highlight in particular one aspect that distinguished Venetian merchants from their Tuscan or Genoese counterparts, namely the reliance on *fraterne* - literally, fraternal partnerships - as the main form of commercial association in late-medieval Venice, often coupled with short-term ad-hoc companies, as shown by the case study of Marco dall'Inzegneri. I will also reflect upon the way that trust was maintained between merchants, using various sources including wills, memoranda, and letters, underscoring the challenges faced by Venetian traders in finding reliable agents and in ensuring that written instructions were carried out even after the death of a merchant.

This research is also conducive to a reappraisal of the complex relationship between institutions and trade. Following Douglass North, I differentiate between institutions (in the sense of cultural constraints and systems of beliefs, as well as nautical and practical knowledge)

and organisations (guilds, deliberative assemblies, confraternities). Venetian rulers had to face largely the same problems and deal with several conundrums still familiar today: economic crisis, the presence of foreigners, subsidies to trade, limiting or enhancing competitions, and the building of infrastructure enabling trade. Studying the relationship between organisations and trade illuminates the way in which markets can be shaped and constrained by political action, advancing at the same time a more thorough understanding of the political economy of late medieval Venice. I will argue that when we use terms like ‘state’, ‘public’ or ‘private’, we should avoid generalisations and contextualise what these words meant in their specific historical setting. I will show that in Venice the ‘state’ mattered as much as informal systems of dispute resolution or kinship ties, and that rather than speaking of ‘the state’ as a reified, atemporal entity, we need to situate it within the actual historical context. For this reason, I will discuss Venetian organisations by presenting these magistracies and the functions thereof, explaining their jurisdictions and their relevance in the regulation, control, or organisation of trade. Venice regulated but did not control trade, especially in the case of privately-owned vessels. Statutes were not changed, but they were largely superseded by ad-hoc laws meant to provide the general framework for trade. Organisational competition between multiple administrations allowed considerable freedom of action in practice for merchants, who could exploit the overlapping jurisdictions. The Senato worked to ensure a difficult balance between privately-owned vessels and galleys, but it was not the only forum for political agency, as the Maggior Consiglio provided lesser nobles with means to influence the agenda of the Senato. Control over illicit trade was even more difficult abroad, where Venetian consuls were often torn between the interests of the local merchants, their own social ties, and the theoretical proscriptions against smuggling enacted by Venice. The solution was a system of checks and balances buttressed by the plethora of magistratures controlling both trade and each other. The idea of an adaptive jurisprudence based on ad-hoc deliberations rather than overarching norms was not limited to deliberative bodies, but was also at the centre of the judicial system of

Venice, where private-order institutions like arbitration coexisted alongside court litigation, creating multiple avenues to settle claims and allowing at the same time patrician judges to exercise their *arbitrium*. The Venetian state was not an all-powerful director of trade; it regulated, it did not organise trade, and it was embedded within kinship ties and social networks.

This work is divided into four chapters. In the first one, I analyse the articulation of shipping in medieval Venice. I combine a quantitative approach, to gauge the number and types of ships, with more qualitative research on representations of vessels and their significance in descriptions of the city. I thus propose a tripartition of Venetian shipping: longships, like galleys, were mainly used for long-distance trade; round ships could be used for regional trade; while flat-bottomed ships like *burchi* were essential for local and fluvial trade. I propose a nuanced understanding of the development of Venetian trade over time, and of the expansion and significance in particular of round vessels in the long fourteenth century. I show how boat ownership in Venice was spread beyond the patriciate, and that a wider number of foreigners, middlemen, and smaller merchants contributed to the Venetian economy.

In the second chapter of the thesis, I discuss the structure of Venetian trade focusing on three main dimensions, that is, production, exchange in Venice, and trade circuits beyond the city. In my analysis I will focus on the role of Venice not just as an entrepôt but also as a redistribution centre for local wares and a place of production, highlighting the full scale of products traded in the city. I reflect closely on commodities, especially in their material aspect. Studies by Evelyn Welch and others have reminded us to consider the goods of Renaissance commerce not as abstract terms but as material things. I will reflect on the categorisation of goods in Venice between *havere subtile* (lightweight goods) and *mercationes grosse* (commodities in bulk), two ambiguous terms warranting a closer look. I reflect in particular on the importance of *mercationes grosse*, in their definition as raw materials - crucial for Venetian proto-industries, foodstuffs, and semi-manufactured products like woollens. I define these terms against the

language of medieval sources, highlighting the blurred boundaries in the definitions of these products.

In the third chapter, I will address the question of who traded in Venice and whether they were identified with a recognisable label such as ‘mercatores’, alongside the conundrum of what social strata partook in Venetian trade, and the role of foreigners in the trade networks of the city. I suggest that the category of ‘trader’ encompassed a sizeable portion of the Venetian population, not just the patriciate, and that the term referred to shipowners, qualified artisans, and *cittadini*, a particular social class distinguished from the patriciate yet with resources of its own. I will also focus in particular on two aspects that distinguished Venetian merchants from their Tuscan, Genoese, Spanish, and Jewish and Muslim counterparts, namely the use of fraternal partnerships as the main forms of commercial association in late-medieval Venice (often coupled with short-term, ad-hoc companies), and the peculiar structure of Venetian books of accounts, focused on a single commercial enterprise, rather than on the total cashflow and all available assets at any given time, as happened in Tuscany.

In the fourth chapter, I focus on organisations. I examine four aspects, namely the role of maritime statutes in the regulation of Venetian trade, the legislation passed by the Senato and the Maggior Consiglio regarding shipping, the effective control over trade exercised by the officials entrusted with the repression of smuggling and the exaction of duties, and lastly the interplay between private-order tools of dispute resolution like arbitration vis-à-vis litigation in court, especially in regard to the Corte di Petizion. I will stress how the statutes were soon superseded by ad-hoc legislation, that the Senato regulated but did not control trade, and that the superabundant legislative production posed a challenge to officials tasked with enforcing it. By assessing a wide range of original source material in the light of recent scholarship on the economic and social history of Venice, I advance a reappraisal of the link between trade, trader, and institutions, focusing on the role of privately-owned vessels in the political economy of late-medieval Venice, which was dominated by the entanglement of private and public interest.

Abbreviations:

AC = Avogaria di Comun
ASPr = Archivio di Stato di Prato
ASVe= Archivio di Stato di Venezia
b. = busta
BL = British Library
BMC = Biblioteca del museo Correr
BNCF = Biblioteca Nazionale Centrale Firenze
BNF = Bibliothèque nationale de France
BNM = Biblioteca Nazionale Marciana
DAD = Državni arhiv u Dubrovnik
DEB = Double Entry Book-keeping
f. = folio
Ff. = folios
MS = Manuscript
MV= More veneto
NEI = New Institutional Economics
OREP = Oxford Roman Economy project
PSM = Procuratori di San Marco
PSMC = Procuratori di San Marco, Commissarie
ST = Statuti Tiepolo
STA = Statuti Tarretarum
SZ = Statuti Zeno

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Introduction

The words ‘trade’ and ‘institutions’ are widely used today, both by policymakers who advocate for state intervention in crafting trade policies and by those who argue instead in favour of a self-regulating market. What trade is, what an institution is, and how one influences the other have preoccupied the studies of political economy since the nineteenth century. In the world of tariffs and renewed protectionism we are often confronted with the question of what states can do to foster and regulate the economy. Both terms - ‘trade’ and ‘institutions’ - have undergone a profound rethinking in the past decades, thanks to the contributions of anthropologists, sociologists, and historians. Globalisation has led to the illusion of a flawless transit of commodities throughout the world. The Covid-19 pandemic has shown, however, the importance of regional markets and the obstacles that globalisation faces, in a world where some 11 billion tons of goods are transported by ship every year.¹ 80% of the total exports of the EU by volume, and 50% in terms of value, is seaborne. We are used to the world of instant shopping - and shipping. Yet, the pandemic has shown that a single event can seriously harm the supply chain, and that long-distance trade is not the only dimension of commerce. The fear of a trade war has led to a resurgence of interests in the development of regional or trans-regional markets outside of the sphere of China and the USA. The appeals to production in a single country are faced with the inherent complexity of an industry where a single car ‘contains about 2,000 functional components, 30,000 parts, and 10 million lines of software code’.² In a world of increased scarcity, we have learnt that only a constant flow of metals and raw materials guarantees growth. After decades of celebrations of unhindered trade, we see today a renewed interest in state action, be it to support ailing industries, to promote tariffs on foreign goods, to preserve strategic sectors of the economy, to levy taxes on international

¹ International Chambers of Shipping, ‘Shipping and World Trade: Driving Prosperity’, <https://www.ics-shipping.org/shipping-fact/shipping-and-world-trade-driving-prosperity/> (30/05/2025).

² J. P. MacDuffie and T. Fujimoto, ‘Why Dinosaurs Will Keep Ruling the Auto Industry’, <https://hbr.org/2010/06/why-dinosaurs-will-keep-ruling-the-auto-industry> (30/05/2025).

companies or to grant tax breaks instead. The awarding of the Nobel Prize in Economics to Daron Acemoglu in 2024, one of the leading scholars on the role of institutions as a buttress to growth, underscores the saliency of this topic.³ The term ‘institutions’ has come to denote not just states and regulative bodies, but also social norms and any constraint on human action. The long debate on the ‘big’ and ‘small’ divergence, and the reasons for the different rates of economic development of various regions, has prompted historians and economists to address factors such as literacy rates, property rights, and transaction costs as reasons for developments or lagging back, providing us with a more nuanced approach to economic growth beyond the increase in production.

The case of medieval Venice is both separate from and interrelated to this conundrum. The commercial success of Venice is often linked to the policies enacted by its rulers (such as the organisation of annual convoys of galleys), physical domination over the Adriatic Sea, a narrow sea euphemistically labelled ‘the Gulf of Venice’, which the doge ritually married every year, and the presence of Venetians in far-flung foreign markets, even in China. Two ideas: that rulers dictated commercial policies, and that long-distance trade was the main dimension of medieval trade, will be tested - and challenged – in this thesis, using late-medieval Venice as a litmus test. Venice did not prosper solely because of the sea, but also due to the integration of the city within the trade networks of the Italian and European mainland. Equally, regional and inter-regional trade mattered as much as international exchanges in Syria or Egypt. Institutions mattered in Venice, but not just in the sense of decision-makers like the Senato or the Maggior Consiglio, but also in the broader sense of kinship ties and partnerships.

To subject the relationship between commerce and institutions/organisations to a fresh analysis, I have chosen, as a case study, Venice during ‘the long fourteenth century’, the period between the fall of Acre (1291) and the reconquest of Dalmatia (1420). It is a broad timespan that reflects the changing fortunes of the city, and its passage through the fourteenth century,

³ See for instance his D. Acemoglu and J. A. Robinson, *Why Nations Fail: The Origins of Power, Prosperity, and Poverty* (New York, 2012).

both before and after the plague. The Trecento was a century that forced Venice to confront several crises, including the demographic impact of the plague and the instability of several trade partners. These challenges led Venetians to seek new opportunities in the western Mediterranean, diversify their shipping routes, and increase the transport of commodities in bulk to meet the demand of the burgeoning proto-industries such as glassmaking, textiles, and soap-making.

In terms of exogenous shocks, several of Venice's trade partners faced upheaval: the Mamluks experienced a turbulent succession from the Bahri to the Burji dynasty in the 1380s; the Byzantine Empire was plagued by four civil wars (1321-1328, 1341-47, 1352-57 and 1373-1379); the Ilkhanate disintegrated in the 1330s, around the same time as the Armenian Kingdom of Cilicia; while the more pliable, pirate-prone Anatolian beyliks were gradually replaced by the expanding Ottomans, momentarily defeated in turn by the sweeping conquest of Timur in the early fifteenth century.⁴ Chronologically, Venice had to face the loss of the last stronghold in the Crusader States (Acre, 1291),⁵ a series of wars with Genoa (1289-1311, 1343-1354, 1378-1381, 1402-1403),⁶ the loss of Dalmatia in 1358,⁷ the anti-Venetian Revolt of St Titus in Crete in 1363-1366,⁸ and some fourteen outbreaks of the plague between 1348 and

⁴ See on these episodes A. Tenenti, 'Le temporali calamità', in A. Tenenti et al. (eds.), *Storia di Venezia. Dalle origini alla caduta della Serenissima*. Vol. 3. *La formazione dello stato patrizio* (Rome, 1997), 27-49; B. Krekič, 'Venezia e l'Adriatico', *Ibid.*, 51-85 and B. Doumerc, 'La difesa dell'impero', *Ibid.*, 237-250.

⁵ On the spatial organisation of Acre and the consequences of its loss see D. Jacoby, 'L'expansion occidentale dans le Levant: Les Vénitiens à Acre dans la seconde moitié du treizième siècle', *Journal of Medieval History*, 3 (1977), 225-264.

⁶ F. Surdich, *Genova e Venezia fra Tre e Quattrocento* (Genoa, 1970) and M. Balard, 'La lotta contro Genova', in *Storia di Venezia*, vol. 3, cit., 87-126. For their collaboration in the late crusades see instead S. Lombardo, *La croce dei mercanti. Genova, Venezia e la crociata mediterranea nel tardo Trecento (1348-1402)* (Paderborn, 2023).

⁷ On the impact of this event see B. Krekič, 'Venezia e l'Adriatico', cit., 51-85.

⁸ Magnani, M., 'La risposta di Venezia alla rivolta di San Tito a Creta (1363-1366) : un delitto di lesa maestà?', *Mélanges de l'École Française de Rome, Moyen Âge*, 127/1 (2015), 185-204.

1450.⁹ . The plague resulted in a severe demographic shock: in 1300 the city of Venice had a population of approximately 110,000, which fell to ca. 65,000 in 1363, and partially recovered to an estimated 85,000 by 1400, only returning to its pre-plague level in the sixteenth century.¹⁰ Additional threats included an Angevin invasion in 1348, war with Sigismund of Hungary in 1411-141¹¹ and several endogenous shocks, such as two conspiracies to overthrow the Venetian government:¹² the Tiepolo-Querini plot in 1310¹³ and the spectacular demise of doge Marin Faliero in 1354, accused of attempting a coup.¹⁴

However, the ‘long fourteenth century’ was also a period of possibility and innovation, leading to what has been considered the golden age of Venetian shipping in the early fifteenth century. From the standpoint of nautical history, this period saw the consolidation of the galley convoys (the *muda* system) and the introduction of round ships like the cog into the Mediterranean. It is therefore particularly apt to gauge how the introduction of the *mude* and cogs changed the preexisting systems of local and regional exchanges, and whether these developments fostered the creation of a new, unified marketplace or preserved the fragmentation of the Adriatic into distinct trade zones only partially dominated by Venice.

⁹ See the list in R. J. Palmer, ‘The Control of Plague in Venice and Northern Italy 1348-1600’ (PhD thesis, University of Kent, 1978), Appendix 4, ‘Epidemics in Venice’, 328-332. Outbreaks were recorded in 1348, 1361, 1371-73, 1382, 1388, 1397, 1400, 1405, 1411-1414, 1423, 1427, 1435, 1438-39, 1447-1449. For the impact of the plague see O. Pugliese (ed.), *Venezia e la peste, 1348-1797* (Venice, 1979), and on the measures enacted by the government see A. Tenenti, ‘Le temporali calamità’, cit., 27-49.

¹⁰ I draw these estimates from L. Pezzolo, ‘The Venetian Economy’, in E. R. Dursteler (ed.), *A Companion to Venetian History, 1400-1797* (Leiden, 2013), 257. They differ, but not significantly from P. Bairoch et al., *La population des villes européennes de 800 à 1850* (Geneva, 1988), 49, entry ‘Venezia’: 110,000 in 1300, 100,000 in 1400 and 100,000 in 1500.

¹¹ M. Stefanik, ‘Guerra commerciale. Il blocco economico del Re Sigismondo contro Venezia. Il ruolo delle città e dei mercanti nella lotta fra gli stati’, *Mélanges de l’École Française de Rome. Moyen Âge*, 127/2 (2015), 303-320 and W. Von Stromer, ‘Landmacht gegen Seemacht. Kaiser Sigismunds Kontinentalsperre gegen Venedig 1412 - 1433’, *Zeitschrift für historische Forschung*, 22 (1995), 145-189.

¹² On the agency of the *popolo* see D. Romano, ‘Popular Protest and Alternative Visions of the Venetian Polity, c.1260 to 1423’, in M. Van Gelder and C. Judde De Larivière (eds.), *Popular Politics in an Aristocratic Republic. Political Conflict and Social Contestation in Late Medieval and Early Modern Venice* (Abingdon, 2020), 22-44.

¹³ See N.-E. Vanzan Marchini (ed.), *La congiura imperfetta di Baiamonte Tiepolo* (Verona, 2011) and F. Faugeron, ‘L’art du compromis politique: Venise au lendemain de la conjuration Tiepolo-Querini (1310)’, *Journal des savants*, vol. 2 (2004), 357-421.

¹⁴ D. Dibello, ‘La stabilità delle istituzioni veneziane nel Trecento’, *Reti medievali*, 19/2 (2018), 85-129 and G. Ravegnani, *Il traditore di Venezia* (Bari, 2017).

From a commercial history perspective, the Trecento saw the establishment of the first long-term banks in medieval Venice and increasing sophistication in banking techniques, with reliance on written instructions and the improvement of double-entry bookkeeping.¹⁵ The increased availability of capital led to the proliferation of mostly short-termed companies active across the Mediterranean, as well as the emergence of a few large enterprises like the Corner family's sugar-harvesting operation in Cyprus (1330-1360).¹⁶

The period marked the beginning of Venetian capitalism, which by the early fifteenth century was complemented by the birth of proto-industries serving both local and internal markets. Economic growth is further evidenced by the Republic's rising public expenditure: in 1343, government spending amounted to 257,000 ducats,¹⁷ whilst the two-year war (1404-1406) against the Da Carrara, lords of Padua, cost the Republic some 2,000,000 ducats.¹⁸ Private wealth also appears to have recovered after the plague. In 1378-1381 Venice imposed an extraordinary levy, with citizens asked to lend as much as 41% of their taxable income for the war effort against Genoa.¹⁹ The 2,183 citizens assessed, including 200 women (overall 1,135 noblemen and 1,000 *popolani*), were assessed at 6,201,660 ducats of assets, viz. on average 2,840

¹⁵ See R. Mueller, *The Venetian Money Market – Banks, Panics, and the Public Debt, 1200–1500* (Baltimore, 1997).

¹⁶ F.-X. Leduc, 'De tuto far dener»: gestion et rentabilité d'investissements, avidité patrimoniale, transmutation 'agristocratique' au sein du patriciat vénitien d'après la «Societas de Ca' Cornario» et le partage de ses résultats (1330-1340/1360), son état liquidatif (1349) et l'exécution testamentaire de son patriarche-fondateur (1348-début XVIIIe siècle)', *Studi veneziani*, 65 (2012), 133-612.

¹⁷ L. Pezzolo, 'The Venetian Government Debt, 1350-1650', in M. Boone (ed.), *Urban Public Debts: Urban Government and the Market for Annuities in Western Europe (14th-18th Centuries)* (Turnhout, 2003), Table I, 66.

¹⁸ J. C. Hocquet, 'Venice' in R. Bonney (ed.), *The Rise of the Fiscal State in Europe c.1200–1815* (Oxford, 1999), 384.

¹⁹ The levy was in fact a forced loan in exchange for state bonds, whose value plummeted to 20% at par after the war. See the statistics in L. Pezzolo, 'Venetian Finance 1400-1797', in *Handbook of Key Global Financial Markets, Institutions, and Infrastructure* (Oxford, 2012), Figure 28.3, 305. By comparison, Genoa imposed forced loan on its citizens for 1,000,000 florins, yielding nonetheless an 8% interest, see H. Sieveking, *Studio delle finanze genovesi nel Medioevo e in particolare sulla Casa di S. Giorgio* (Genoa, 1906), 190-191.

ducats each.²⁰ The 1,000 *popolani* were assessed at 2,025,183 ducats, whilst the 1,135 noblemen at 4,050,877. The Trecento is thus a highly suitable timeframe for studying these developments, particularly Venetian reliance on short-term companies more than on banks and on kinship ties rather than external funding. In his preamble to the third volume of the *Storia di Venezia* (1991), Alberto Tenenti remarked that ‘the Venetian fourteenth century is not a stand-alone period nor a defining phase’, but he also noted that ‘the period between c. 1300 and 1400 constitutes both a distinct phase and, in some regards, a junction [sc. between preceding and succeeding periods]’.²¹ It was truly a time of profound transformation for the city—economically, politically, and in its maritime ambitions.

1. Trade

To understand the medieval economy, we must look at the trade networks that underpinned it, from local to long distance exchanges. The Mediterranean serves as a significant case study for connectivity due to the relative proximity of its islands, peninsulas, and coasts, as well as the high number of traders navigating its waters. Like other Mediterranean regions,²² long-distance trade coexisted alongside cabotage and tramping. The concept of connectivity in the

²⁰ See the database *Estimo veneziano del 1379*, R. Mueller (ed.), <https://estimoveneziano1379.it/search> (30/05/25). As explained by R. Mueller in the introduction to the database, the *lira d'estimo* used on this occasion equalled one ducat. It should be noted that 42 entries belonged to hospitals, parishes, or convents. What follows is a simple elaboration of the total obtained by browsing the table based on the category of taxpayers, where noble or non-noble. Mueller revises an old statement by G. Luzzatto (G. Luzzatto, *Il debito pubblico della Repubblica di Venezia : dagli ultimi decenni del XII secolo alla fine del XV* (Varese, 1963) 136, ‘questa cifra del 107 %’, who had mistakenly assumed that the overall levy amounted to 107% of the taxable income, based on the assumption that the unit used for the assessment would have been the *lira a grossi* of 9.19 *grossi* rather than a special *lira d'estimo* worth a ducat (Ibid., 146). To quote the Mantuan merchant, Codelupi, who was in Venice in 1381, ‘omnes conqueruntur de gravaminibus que nimia sunt: sed tamen plus gravantur quia consueverant lucrari et non gravari’ (every complains about taxes, which are modest: but it is all the more unbearable because they were used to make money not to be taxed). Quoted in G. Luzzatto (ed.), *I prestiti della Repubblica di Venezia : sec. 13.-15. : introduzione storica e documenti* (Padua, 1929), CLXVIII.

²¹ A. Tenenti, ‘La formazione dello stato patrizio’, in *Storia di Venezia*, vol. 3, cit., 2: ‘Il secolo xiv veneziano non è un blocco a se stante, né una fase inconfondibile’, and ‘Il periodo compreso fra il 1300 e il 1400 all’incirca costituisce da un lato un tratto individuante e sotto certi aspetti anche uno snodo’.

²² I use here the word Mediterranean as a reference to a sea characterised by narrow rims and local connectivity, surrounded by land and dotted by islands. Examples include the Indian Ocean, the South China Sea, and the Baltic.

Mediterranean has been debated in *The Corrupting Sea: A Study of Mediterranean History* (2000) by Peregrine Horden and Nicholas Purcell. In their discussion of the patterns of navigations and shipping between the fifth and the fifteenth centuries, criticising the geographic determinism of sea routes, they argued, for both late antiquity and the later Middle Ages, that:

Short distances stand for what is not directly comprehended in the standard glamorous story of commercial networks: frequent overnight stops; an extremely dense and mutable pattern of movement, and the redistribution of a great variety of goods, not just luxuries. In sum, the profound, widespread, and lasting interdependence of Mediterranean macroregions. [...] Reference to short distance brings into focus the more or less constant “background noise” to the history of Mediterranean exchange across both antiquity and the Middle Ages: the invisible currents - to use a Braudelian metaphor - beneath the swell of great commercial empires.²³

The coexistence of different scales of trade is a crucial theme when studying a city like Venice, whose history is deeply intertwined with the sea. Indeed, assumptions by contemporaries or modern historians about what Venice was have been bound to assumptions about the sea and the special relationship that Venice entertained with it. However, the terrestrial dimension was equally fundamental. As Gerhard Rösch has pointed out in his study of the trade routes between Venice and the German Empire, the city of St Mark was connected to the Alps through at least three major passes.²⁴ The most westerly route led through the Brenner Pass (about 350 km from Venice) into Austria, while a more easterly path passed through the Cadore plateau via Dobbiaco (roughly 190 km from Venice), or further east through Tarvisio (around 220 km from Venice). Jean-Claude Hocquet’s description of Venice as the port of the Alps and a river harbour underscores the city's link to the mainland, which

²³ P. Horden and N. Purcell, *The Corrupting Sea. A Study of Mediterranean History* (Oxford, 2000), 150-51.

²⁴ See the map in G. Rösch, *Venedig und das Reich: Handels- und verkehrspolitische Beziehungen in der deutschen Kaiserzeit* (Tübingen, 1982), 234.

was traversed by several navigable rivers, including the Adige, Brenta, Mincio, Piave, Po, and Tagliamento.²⁵ Venice's proximity to traversable plains also worked to its advantage. To the west lay Lombardy and Milan, one of Italy's wealthiest regions; to the south, Ferrara and Bologna, easily accessible via the Po River, the longest navigable river in Italy; and to the east, Friuli, a crucial gateway for trade with Germany and the Balkans. Moreover, several Adriatic ports, like Trieste, Koper, and Pula, were relatively close, viz. 50 to 70 nautical miles distant. This area was so intricately linked to the city that some historians have suggested it could be considered as the aquatic *contado* of Venice, much like the Tyrrhenian Sea was for Genoa.²⁶ However, as Tom Scott pointed out, Venice and Genoa faced 'stiffer and more protracted opposition than their land-based rivals, who could physically occupy their territories'.²⁷ Venice's intense focus on controlling the Adriatic stemmed from its uncertain dominion over the region's shores. Revolts in Zadar, the growing competition from Ancona and Dubrovnik, and the loss of Dalmatia in 1358 all contributed to a sense of vulnerability from the sea. For all the pretensions of the Venetian myth, it can probably be argued that one of the most significant acquisitions for Venice in the fourteenth century was Treviso on the *terraferma*, precisely at the moment when Venice had lost control over the eastern border of the Adriatic, and when the Angevins (of Naples and Hungary) were threatening Venetian interests in the Adriatic.

Historiography regarding the *Stato da terra* and the *Stato da mar*, respectively, has often remained compartmentalised. In this thesis I aim to bridge that divide by examining how maritime investments coexisted with inland trade. My focus will be on the economic activities of Venetian patricians, particularly in relation to raw materials, which were frequently imported from or exported to the mainland. Although the lack of fiscal records from the mainland limits

²⁵ J.-C. Hocquet, 'Le système portuaire de Venise à la fin du Moyen Âge', in D. Menjot et al. (eds.), *Les ports et la navigation en Méditerranée au moyen âge* (Paris, 2009), 129–148.

²⁶ For Venice L. Pezzolo, 'Groom of the Sea. Venetian Sovereignty Between Power and Myth', in J. D. Davies et al. (eds.), *Ideologies of Western Naval Power, c. 1500-1815* (New York, 2019), 17-32 and for Genoa, G. Pinto, 'I rapporti economici tra città e campagna', in Id. (ed.), *Economie urbane ed etica economica nell'Italia medievale* (Rome, 2005), 9.

²⁷ T. Scott, 'The Economic Policies of the Regional City-States of Renaissance Italy', *Quaderni Storici*, 2014, 225.

attempts at quantification, existing sources do reveal the scale of trade.²⁸ For instance, in 1409, Venice imported approximately 45,989 hectolitres of wine from Treviso.²⁹ As Gian Maria Varanini rightly observed, research has traditionally emphasised long-distance maritime trade while neglecting short- and medium-range commerce between cities and regions.³⁰ It is essential to avoid framing sea and land as opposites. Patricians often invested in both spheres. The notion of a binary division - between a 'party of the sea' and a 'party of the mainland' - is misleading. Giorgio Cracco introduced this thesis in 1979, suggesting a split in patrician interests: newer noble families allegedly favoured expansion into the mainland, while older ones were more committed to maritime dominance.³¹ Frederic Chapin Lane ascribed these two tendencies to two parties, viz. 'the landward-looking party', and the 'seaward-looking party which regarded possessions in Lombardy as just a malignant tumour sucking the maritime vitality that had made Venice great'.³² Yet this dichotomy oversimplifies reality. As Dorit Raines noted, both Doge Tommaso Mocenigo and Francesco Foscari - members of relatively new noble families - actively supported maritime ventures.³³ The dichotomous perspective found in much modern scholarship is undoubtedly a reflection Venice's own self-image more than its everyday reality. The chancellor of the Republic, Raffaino Caresini, proclaimed in the 1380s

²⁸ For a useful summary see E. Orlando, 'Estimi, decime e fonti fiscali', in M. Conti (ed.), *Le fonti della fiscalità nell'Italia medievale (secoli XIII-XV)* (Pisa, 2024), 429-442.

²⁹ F. Faugeton, *Nourrir la ville: ravitaillement, marchés et métiers de l'alimentation à Venise dans les derniers siècles du Moyen âge* (Rome, 2014), 365, Tableau 24.

³⁰ M. Varanini, 'Mercato subregionale ed economie di distretto nella terraferma veneta: il commercio del vino', in Id. (ed.), *Comuni cittadini e Stato regionale. Ricerche sulla Terraferma veneta nel Quattrocento* (Verona, 1992), 167: 'non hanno adeguatamente approfondito il commercio a breve e a medio raggio, intercittadino e infraregionale'.

³¹ G. Cracco, 'Patriziato e oligarchia a Venezia nel Tre-Quattrocento', in S. Bertelli (ed.), *Florence and Venice: Comparisons and Relations. Acts of two Conferences at Villa I Tatti in 1976-1977*, vol. 1 (Florence, 1979), 78: 'la maggioranza delle case nuove, non tutte, si riconobbe nell'aggressivo indirizzo di Terraferma che fu proprio del Foscari, mentre quasi tutte le proles più antiche erano per il mare colere, terramque postergare'.

³² F. Ch. Lane, *Venice. A Maritime Republic* (Baltimore, 1973), 248.

³³ D. Raines, 'Cooptazione, aggregazione e presenza al Maggior Consiglio: le casate del patriziato veneziano', *Storia di Venezia*, 1 (2014), 40, note 109: 'Entrambe le famiglie dei dogi che rappresentavano le due "anime" del patriziato, Foscari e Mocenigo, facevano parte delle famiglie ducali, e quindi della schiera delle "nuove". Se infatti lo scontro tra l'ideologia "marina" del doge Tommaso Mocenigo, e quella "territoriale" del suo successore, Francesco Foscari, era tra famiglie vecchie e nuove, come mai troviamo il doge Mocenigo, membro di una famiglia "nuova" e quindi più propensa ad investimenti in terraferma, fautore della politica "marina" di Venezia?'

that ‘it is proper of Venice to venerate the sea and to turn its back to land’, ‘marem colere terramque postergare’³⁴ During the fourteenth century, Venice projected an image of itself as a maritime power uninterested in terrestrial expansion - despite having secured control over strategic mainland locations such as Treviso, a major hub for German trade. Even after mainland expansion, the chancellor of Crete, Lorenzo de Monacis, dutifully repeated in 1421 that ‘Venice is a city lying amidst the waves of the sea, living off the sea without any terrestrial nourishment’.³⁵ As with many other such statements, we should read with caution the carefully-crafted image that Venetians themselves circulated. As highlighted by Michael Knapton in his analysis of the relationship between Venice and the mainland:

the timing of Venice’s acquisition of maritime and mainland territories overlapped, and there are other analogies between the two dominions: economic motivations for annexation, to guarantee security and support to trade flows serving Venice;; the empirical approach to acquiring much territory, assessing and exploiting opportunities as they occurred; the often major element of voluntary subjection, rather than mere imposition of annexation; procedures solemnising their passage under Venice.³⁶

Land and sea were not isolated domains but closely integrated, forming a network of trade routes that spanned the Po Plain and the Adriatic. Venice’s expansion on the mainland coincided with efforts to reclaim Dalmatian ports and acquire new commercial outposts in the Aegean. To fully understand Venetian commerce, it is necessary to consider both its terrestrial

³⁴ Rafaino de Caresini, ‘Chronica’, ed. by E. Pastorello, *Rerum Italicarum Scriptores*, 2nd series, vol. 12/2 (Bologna, 1923), 58.

³⁵ M. Poppi, ‘Un orazione del cronista Lorenzo de Monacis per il millenario di Venezia’, *Atti IVSLA*, 131 (1973), 494: ‘civitas in fluctibus maris sita et sine terrestri emolumento de mari vivens’.

³⁶ M. Knapton, ‘Venice and the Terraferma’, in A. Gamberini and I. Lazzarini (eds.), *The Italian Renaissance State* (Cambridge, 2012), 142. For an overview of the historiography on this topic see G. M. Varanini, ‘La terraferma Veneta nel Quattrocento’, *Ateneo veneto*, 9 (2011), 13-63; Id., ‘I nuovi orizzonti della Terraferma’, in G. Ortalli (ed.), *Il commonwealth veneziano tra 1204 e la fine della Repubblica: identità e peculiarità* (Venice, 2015), 13-56 and M. Knapton, ‘«Nobiltà e popolo» e un trentennio di storiografia veneta’, *Nuova rivista storica*, 82 (1998), 167-192.

and aquatic dimensions. Similarly, within maritime trade, we should pay more attention to the coexistence of cabotage and coastal trade alongside long-distance routes.

This thesis advocates for a more comprehensive analysis of Venetian trade, emphasising the importance of short-distance commerce and cabotage. It highlights the critical role played by flat-bottomed and round vessels, which were instrumental in helping Venetian shipping overcome the crisis of the fourteenth century - thanks to the adoption of larger vessels like cogs and a shift toward intensified regional trade. Cabotage should not be equated with small-scale trade alone. For instance, as documented by Sergio Anselmi, a *burchio*, a flat-bottomed ship, along with other smaller boats, transported approximately 130,000 firewood logs in 1408 from Fano to Senigallia in the Marche.³⁷ Notwithstanding studies of the kind which have just been cited, and although over-simplified models of Venetian commerce have been critiqued, notably by Maria Fusaro, there persists an older idea that Venetian trade could be described in a map such as the one below: a few long-distance routes connecting Venice with the main ports of the Mediterranean.

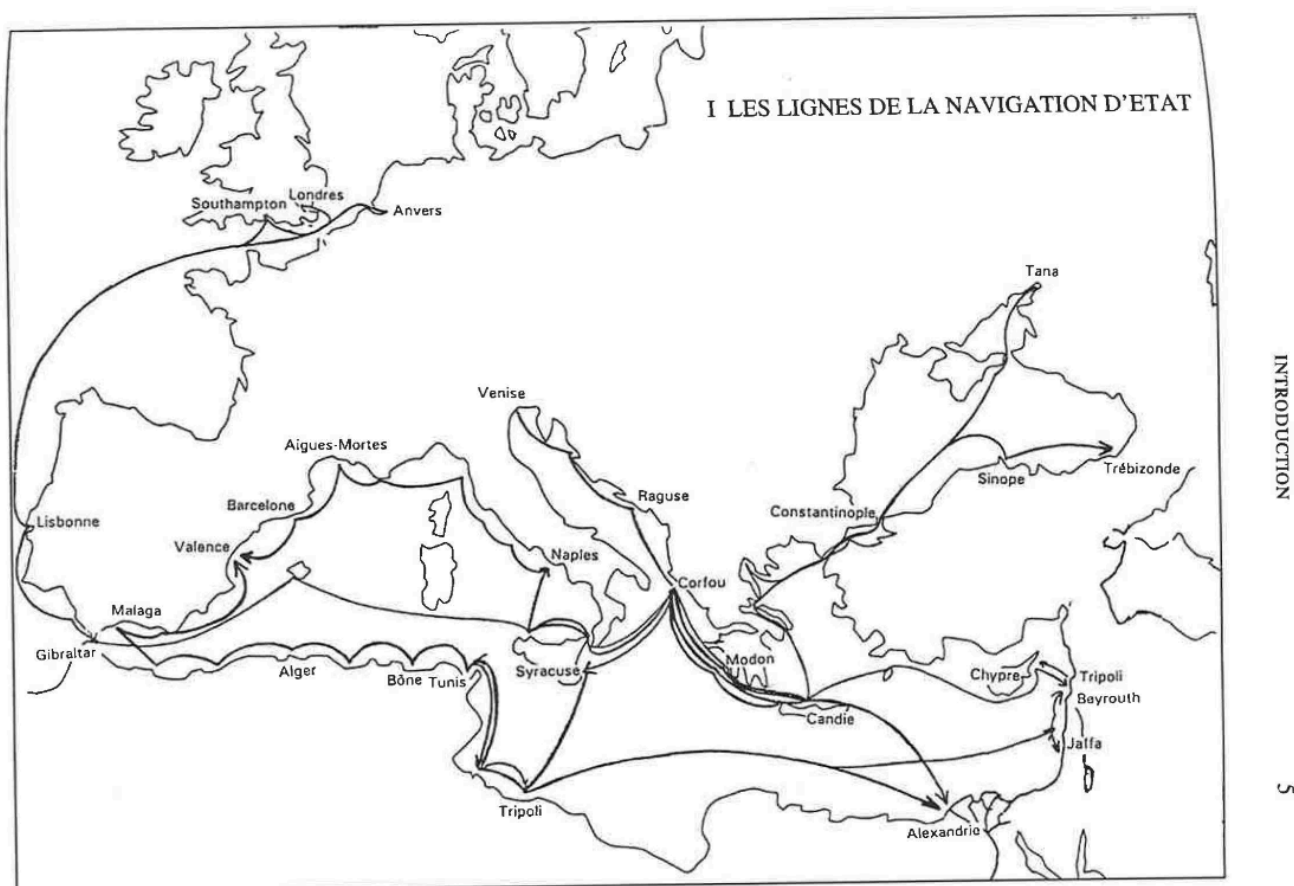
³⁷ S. Anselmi, 'L'attività di un burchio adriatico, 1409- 1410' in Id. (ed.), *Adriatico. Studi di storia secoli XIV-XIX* (Ancona, 1991), 69, note 49 [reprint of Id., 'Per la storia economica del piccolo cabotaggio: l'attività di un burchio adriatico (1409-1410)', *Nuova Rivista Storica*, 62 (1978), 521-548]

Map 1 :

State shipping sea-lanes

from Doris Stöckly, *Le système de l'incanto des galées du marché à Venise (fin XIIIe-milieu XVe siècle)*

(Leiden, 1995), 538



This map - with only minor variations - appears in other relatively recent works of scholarship.³⁹ However, it reflects only a limited aspect of Venetian trade, as it is based primarily on the records of journeys of state-sponsored galleys. These, however, represent just a portion of Venetian maritime activity, which was largely sustained by privately-owned vessels. It is therefore essential to consider a broader range of ships and routes that crisscrossed the

³⁸ The map builds on the maps of galleys found at the end of A. Tenenti and C. Vivanti, 'Le film d'un grand système de navigation: les galées marchandes vénitiennes, XIV-XVIe siècles', *Annales. Histoire, sciences sociales*, 16/1 (1961), 83-86.

³⁹ C. J. De Larivière, *Naviguer, commercer, gouverner. Économie maritime et pouvoirs à Venise (XVe-XVIe siècles)* (Leiden, 2008), XIII and E. Orlando, *Venezia e il mare nel medioevo* (Bologna, 2014).

Mediterranean. This study will centre on privately-owned ships, distinguishing them from the state-controlled galleys, arguing that these so-called ‘unarmed vessels’ carried a substantial share of Venice’s maritime commerce.

I will propose that Venetian shipping in the fourteenth century was tripartite: comprising longships, or galleys, for international trade; round ships, such as cogs, for inter-regional trade; and flat-bottomed ships, like *burchi*, serving local routes. Bulk cargo transport, I argue, was a key element of this system - ships that carried precious cargo like gold could also be loaded with wheat or ballast materials. To clarify the contrast between the galley convoys known as *mude* and the itineraries of privately-owned ships, this thesis draws on the foundational work of Gino Luzzatto and Lane. In a 1941 article, Luzzatto questioned whether Venetian shipping consisted solely of galleys.⁴⁰ Referring to the deathbed speech of Doge Mocenigo (1423), which praised the strength of Venetian shipping, Luzzatto estimated the number of active round ships and proposed a distinction between private ‘free voyaging’ (*navigazione libera*) and state-directed ‘line shipping’ (*navigazione di linea*). He revisited this issue in *Storia economica di Venezia* (1961), concluding:

it would be absurd to posit that galley shipping constituted the totality, or even the majority, of the overall maritime commerce of Venice. [...] There is a whole complex of maritime activities that do not fit at all the framework of a state-directed or state-sanctioned type of shipping.⁴¹

Lane, addressing the same question, incorporated ‘free voyaging’ into a broader understanding of medieval - and Venetian - shipping. In his seminal article, ‘Venetian Merchant Galleys 1300-1334’, published in 1963, he remarked that there were five different types of Venetian shipping:

⁴⁰ G. Luzzatto, ‘Navigazione di linea e navigazione libera nelle grandi città marinare del Medioevo’, *Popoli*, 12 (1941) 389-391.

⁴¹ Id., *Storia economica di Venezia dall’XI al XVI secolo* (Venice, 1961), 47 : ‘Sarebbe assurdo pensare che questi esaurissero, non la totalità, ma nemmeno la parte maggiore del commercio veneziano. [...] Ma vi è accanto a queste tutto un complesso di attività marinare che non rientrano in alcun modo nel quadro di una navigazione di linea organizzata e disciplinata dallo stato.’

1) free voyages of ships privately owned and operated; (2) regulated voyages of ships privately owned and operated; (3) licensed voyages of ships privately owned and operated; (4) voyages of Communally owned ships auctioned for private operation; (5) direct Communal operation of Communally owned vessels, which was more important than has generally been supposed. The free voyaging - "navigazione libera," as Professor Luzzatto has called it - was not exempt from all regulation.⁴²

If maritime historians agree on the existence of these complementary systems, they differ in their assessment of their relative significance. For instance, Ugo Tucci remarked in 1986 that 'there is a risk of overstating the significance of state shipping', and that 'free voyaging' was more important than state galleys in the economic life of Venice.⁴³ Yet interpretations vary - even from the same scholar. In 1995, Bernard Doumerc and Stöckly wrote that 'state shipping - the *muda* of galleys - becomes the preeminent sector of Venetian maritime commerce'.⁴⁴ In the same year, Stöckly wrote that 'privately-owned vessels armed by private citizens form the majority of vessels sailing under the Venetian flag, they constitute, in terms of quantity, the majority of transport'.⁴⁵

To address this apparent contradiction, I have compiled a database of references to privately-owned vessels in fourteenth-century notarial and judicial sources. This data sheds light on the routes they followed, their ownership, and the social range of shipowners - showing that ship ownership extended beyond the upper ranks of the patriciate. It also underscores the

⁴² F. Ch. Lane, 'Venetian Merchant Galleys, 1300-1334. Private and Communal Operation', *Speculum*, 38/2 (1963), 180.

⁴³ U. Tucci, 'La storiografia marittima sulla Repubblica di Venezia', in A. Di Vittorio (ed.), *Tendenze e orientamenti nella storiografia marittima contemporanea: gli Stati Italiani e la Repubblica di Ragusa (Secoli XIV-XIX)* (Naples, 1986), 162.

⁴⁴ B. Doumerc, 'L'évolution du capitalisme marchand à Venise : le financement des galere da mercato à la fin du XVe siècle', *Annales. Histoire, sciences sociales*, 50/1 (1995), 135: 'la navigation de ligne, le muda des galères, devient donc le secteur prééminent du commerce maritime vénitien'.

⁴⁵ D. Stöckly, *Le système*, cit., 25-26: 'les navires privés armés par des particuliers - constituent la majorité des navires sous pavillon vénitien. Ils assurent, en quantité, la plupart des transports'.

foundational role of cabotage and regional trade in the Venetian economy. This analysis allows a reassessment of Luzzatto's early insights into the importance of privately-owned ships and opens a broader perspective on the Adriatic as a zone of interconnected trade - not merely defined by direct crossings or formal routes. Despite repeated legal attempts to ban direct trade between Venetian territories that bypassed Venice itself,⁴⁶ this type of activity appears to have been commonplace. This thesis therefore promotes a more nuanced view of Venetian trade: one that sees it as a dynamic integration of multiple trade circuits, both land-based and maritime. Special emphasis will be placed on the role of cabotage and inter-regional trade in the fourteenth century, in tandem with state-operated galleys. This broader lens makes it possible to examine the diverse range of goods carried by these vessels and to trace the development of sea lanes that competed with those of rival Adriatic powers such as Ancona and Dubrovnik.

2. Traders

Another important dimension to the overall argument developed in this thesis is the notion that a plethora of operators partook in Venetian trade, not just the upper echelons of the patriciate, and that non-Venetians equally played a significant role within the Venetian economy. Trade extended beyond elite circles and involved intermediaries such as *messeti* (middlemen) and artisans responsible for shipbuilding and maintenance. Venetian society was broadly divided into three main social groups: the patricians, the *cittadini* - a distinctive class that, while non-

⁴⁶ Already in 1315 we find the mention of a 'strictura' on commerce. See *Venezia – Senato Deliberazioni miste. Registro I (frammento, 1300-1303) e Rubriche dei registri I–XIV (1293-1332)*, ed. D. Girsensohn (Venice, 2021), 400, Rubricae (30/10/1315): 'Declaratio et strictura facta consilio vetanti quod aliquis Venetus nonpossit adducere nec adduci facere nec mittere aliquod lignum nec alias res de extra Culfum intra Culfum alio quam Venecias'. It was repeated in 1347, but the fine was increased from 25 to 50% of the value of the cargo and the prohibition was also extended to goods belonging to foreigners. See *Venezia-Senato. Deliberazioni miste. Registro XXVIII (1357-1359)*, ed. E. Orlando (Venice, 2009), 421-422, n. 778 (15/03/1359). It was repeated again in 1400, this time applied to foreigners as well. ASVe, Senato, Misti. Reg. 45, f. 10v (11/05/1400): Vadit pars quod cridetur publice quod sicut vetitum est nostratibus, ita decetero nullus forensis possit vel debeat cum aliquo navigio veneto vel forensi tarn armato quam disarmato conducere nec conduci facere Venecias aliquam mercantiam suam vel alicuius alius forensis caricatam in aliqua partium de intra culfum que fuisset conducta de extra culfum ad dictas partes de intra culfum sub pena perdendi totam dictam mercantiam.

noble, dominated the bureaucracy⁴⁷ - and the *popolo*.⁴⁸ A sumptuary law passed in 1420 limiting dowries applied equally to nobles and *cittadini*, illustrating the social and economic proximity between these two groups. Stanley Chojnacki described the *cittadini* as ‘the stratum of merchant-bureaucrat citizen immediately below the patriciate’,⁴⁹ Élisabeth Crouzet-Pavan called them ‘l’aristocratie du métier’,⁵⁰ and Brian Pullan referred to them as ‘a lesser aristocracy cast in the image of the greater’.⁵¹ As pointed out by Dennis Romano, ‘some well-to-do commoners were engaged in commercial ventures with patricians, while others shared a mutual interest in overseas trade.’⁵² While the scale of operations may have varied, the line between small and large traders was often blurred. Merchants, artisans, and retailers operated within the same commercial environment. The same merchant who invested in an Alexandria galley could equally buy state bonds (*imprestiti*), fund a soap-making establishment in the city, finance the voyage of a cog, or arrange for the transport of iron from Germany. What defined merchants as such, especially in Venice, was not only their capital but their position within a web of social and economic relationships connecting all strata - from the *popolo* to the *cittadini* to the patricians. Evidence from the fourteenth century shows that wealthy members of the *popolo* and *cittadini* class invested in shipping, owned round and flat-bottomed vessels, formed trade

⁴⁷ For an excellent study on social interactions of *cittadini* see R. Cossar, ‘Venetian Notaries, Space, and Sociability in the Trecento’, *I Tatti Studies in the Italian Renaissance*, 19/1 (2016), 23–39

⁴⁸ Venetian society was largely divided into patricians (about 5% of the population), *cittadini* (5%) and *popolani*. *Cittadini* were a rarefied social class divided into *cittadini originarii* (ancient families who had lived in Venice for centuries) and citizens by residence or privilege (naturalised foreigners). *Cittadini originarii* could aspire to become secretaries to the main councils and also be elected to the top positions within the lay confraternities of Venice, the *scuole grandi*.

⁴⁹ S. Chojnacki, ‘Family and State, Women and Men’, in *Women and Men in Renaissance Venice. Twelve Essays on Patrician Society* (Baltimore, 2000), 8. On the *cittadini* see A. Bellavitis, *Identité, mariage, mobilité sociale: citoyennes et citoyens à Venise au XVI^e siècle* (Rome, 2001), J. S. Grubb, ‘Elite Citizens’, in J. Martin and D. Romano (eds.), *Venice Reconsidered: the History and Civilization of an Italian City State, 1297–1797* (Baltimore, 2000), 339–64; M. Casini, ‘La cittadinanza originaria a Venezia tra i secoli XV e XVI. Una linea interpretativa’, in G. Benzoni (ed.), *Studi veneti offerti a Gaetano Cozzzi* (Venice, 1992), 133–150 and I. Iordanou, ‘Pestilence, Poverty, and Provision: Re-evaluating the Role of the Popolani in Early Modern Venice’, *The Economic History Review*, 69/3 (2016), 801–822.

⁵⁰ É. Crouzet-Pavan, *Sopra le acqua salse: Espaces, pouvoir et société à Venise à la fin du Moyen-Âge* (Rome, 1992), 332.

⁵¹ B. Pullan, *Rich and Poor in Renaissance Venice. The Social Institutions of a Catholic State, to 1620* (Oxford, 1971), 131.

⁵² D. Romano, *Patricians and Popolani. The Social Foundations of the Venetian Renaissance State* (Baltimore, 1987).

partnerships, speculated on state bonds, and provided substantial dowries. Their involvement can also be traced in cases of illicit trade - defined in Venice as commerce that bypassed the city itself - such as disputes between the Podestà of Torcello and local shipowners, or records of vessels fined for smuggling. Notarial documents confirm that ship ownership extended across all social classes, albeit with varying levels of investment.

A further focus of this study is the role of foreign merchants in Venice, particularly those from other Adriatic cities. It is essential not to overstate the restrictive tone found in official records, which often reflect protectionist policies more than actual practice. The very term *mercator* appears sparingly in Venetian documents, rather than being used as a general moniker. It seems to be reserved mostly for foreigners in the city, to refer to a specific group of traders from a city, or as a transient label, in expressions such as ‘nunc mercator in partibus ...’, ‘now a merchant in the territory of ...’. Giovanni Italo Cassandro remarked that the qualification of *publicus mercator* was known in Venice, but more as a social status than as a legal condition.⁵³ The distinction between trade areas reserved exclusively for Venetians and those open to foreign investments appeared early in Venetian legislation, even though in practice these lines were blurred. Already in 1249, the Maggior Consiglio decided that *taride*, a type of vessels, could not be sold to foreigners, but only to ‘Venetis habitatoribus Rivoalti’, Venetians who lived in Venice.⁵⁴ Similarly, in 1278 the Republic enacted a series of restrictive measures on trade with Euboea, including a ban on transporting goods worth over 100 *hyperpera* from Syria to Monemvasia and Euboea by foreign merchants.⁵⁵ Nevertheless, evidence from other Adriatic cities reveals the deep integration of non-Venetians in Venetian commerce and highlights the

⁵³ G. Cassandro, *Le rappresaglie e il fallimento a Venezia nei secoli XIII-XVI* (Turin, 1938), 7: ‘la qualifica di publicus mercator, la quale fu conosciuta a Venezia, ma più come stato sociale che come condizione giuridica.’

⁵⁴ ASVe, Maggior Consiglio, Deliberazioni, Reg. Comune I, f. 29r, Rubrica VIII, 08/05/ 1249: ‘Capta fuit pars in consilio maiori et ordinatum ut Veneti qui habuerint tarretas et extraherint de Veneciis non possint eas vendere, dare, alienare, committere nisi Venetis habitatoribus in Rivoalto’.

⁵⁵ Ibid., f. 23r, Rubrica LXXIIIJ, 10/08/1278: ‘Aliquis patronus venetus cum suo ligno non posset nec deberet portare de partibus Syrie aliuem forensem mercatorem cum mercacione aliqua nec aliquem mercacionem forensem ab yperperis C supra a Monovosia versus Nigropontem [...]’.

mutual dependencies within the Mediterranean.

Recent scholarship has emphasised the vitality and autonomy of other Adriatic centres in relation to Venice, as well as the agency of non-Venetian traders, the importance of joint ventures between Venetian and non-Venetians, and the significance of cabotage in the Adriatic. Studies by N. Villanti, based on notarial records from Dubrovnik, show that Ragusans frequently chartered Venetian ships and regularly visited Venice, while simultaneously maintaining diverse trade routes. Between 1370 and 1379, roughly 20% of Dubrovnik's maritime trade - measured through extant loan contracts - was conducted with Venice, a figure that stood at 12% for 1410–1415.⁵⁶ The study of an insurance contract drafted in 1403 in Dubrovnik bears witness to the fact that a *marciliana* belonging to a Venetian *patronus* could be used for a commercial journey from Dubrovnik to Fermo, insured by a Ragusan, and later employed for a journey from Dubrovnik to Venice, carrying hides.⁵⁷ Similarly, Joachim-Felix Leonhard remarked in 1983 that 'Venetians and Anconitans traded together in Ancona and Venice, as well as in Dubrovnik. Venetian and Anconitan merchants often partook in larger trading ventures', especially in the eastern Mediterranean.⁵⁸ Studying notarial contracts from Ancona in the fourteenth century, Giulia Spallacci has concluded that these documents 'reinforce the idea that the trade networks of Ancona in the late Middle Ages were far stronger and more complex than previously acknowledged', especially considering that the city had its own autonomous role in the Adriatic, trading chiefly with Dalmatia.⁵⁹

⁵⁶ N. Villanti, 'Lo spazio commerciale marittimo di Ragusa (Dubrovnik) nel Trecento' (PhD thesis, Università di Trieste, 2017), 32-100, see in particular the table at 100: 'Percentuale degli scambi con Venezia all'interno del network commerciale marittimo di Ragusa'.

⁵⁷ Id., 'Note sull'assicurazione marittima a Dubrovnik (Ragusa) tra Tre e Quattrocento', in A. Fara (ed.), *Italia ed Europa centroorientale tra Medioevo ed Età moderna. Economia, Società, Cultura* (Heidelberg, 2022), 246.

⁵⁸ J.-F. Leonhard, *Die Seestadt Ancona im Spätmittelalter. Politik und Handel* (Tübingen, 1983), 299: 'Venezianer und Anconitaner betrieben ihren Handel miteinander in Ancona und Venedig ebenso wie etwa in Ragusa. Nicht selten waren venezianische und anconitanische Kaufleute gemeinsam an größeren Handelsfahrten beteiligt; dies galt vornehmlich bei Fahrten in die Levante'.

⁵⁹ G. Spallacci, 'I rapporti commerciali tra le città delle due sponde adriatiche nella documentazione dell'archivio di Ancona tra 1345 e 1514' (PhD thesis, Università di Bologna, 2017), 252-253: 'la rete commerciale anconetana nel basso Medioevo fosse in realtà assai più forte e ramificata di quanto si sia sin qui ritenuto'.

These findings align with a broader reevaluation of the role of non-Venetians in both the Adriatic and the city of Venice itself. Renard Gluzman recently pointed out that a ship hoisting a Venetian flag could belong to a Venetian, a Venetian subject, or someone associated somehow with Venice through a political bondage.⁶⁰ Similarly, even though the activities of Greek shipowners in Venice in the late fifteenth century and sixteenth century are well studied,⁶¹ we know far less about their role in the fourteenth century. Nonetheless, David Jacoby's work on the trade in Cretan cheese destined for Venice suggests, unsurprisingly, a Greek presence as early as the Trecento.⁶² Jacoby,⁶³ along with Brühneilde Imhaus,⁶⁴ has traced this presence, although documentation of their specific commercial operations remains limited. One rare example is the Filomati company, a Greek firm that entered into partnership with the Venetian Rizzo Family in the late fourteenth century.⁶⁵ Similar observations apply to other foreigners, such as the Catalan Torralba Company, which sold wool in Venice in 1433.⁶⁶ This thesis argues that Venetian merchants frequently formed joint ventures with non-Venetians and that they regularly employed foreign ships in their trade. By examining illegal trade and commercial collaborations with foreigners - both within Venice and in its broader dominions - this study contributes to a more nuanced understanding of Venetian trade. It advocates a reconceptualisation of the term to include a wider spectrum of actors: from *popolani* and

⁶⁰ R. Gluzman, 'What Made a Ship Venetian? (Thirteenth to Sixteenth Centuries)', in G. Christ and F.-J. Morche (eds.), *Cultures of Empire: Rethinking Venetian Rule, 1400–1700. Essays in Honour of Benjamin Arbel* (Leiden, 2020), 293–328.

⁶¹ For a handy introduction see G. Pagratis, 'From Venetian to Ionian Protectionism', in K. Galani and A. Papadopoulou (eds.), *Greek Maritime History. From the Periphery to the Centre* (Leiden, 2022), 52–75.

⁶² D. Jacoby, 'Cretan Cheese: A Neglected Aspect of Venetian Medieval Trade', in E. E. Kittell and T. F. Madden (eds.), *Medieval and Renaissance Venice* (Indiana, 1999), 49–68.

⁶³ Id., 'I Greci e altre comunità tra Venezia e oltremare', in M. F. Tiepolo and E. Tonetti (eds.), *I Greci a Venezia. Atti del convegno internazionale di studio, Venezia, 5–7 novembre 1998* (Venice, 2002), 41–83.

⁶⁴ B. Imhaus, *Le minoranze orientali a Venezia 1300–1510* (Rome, 1997), for their economic activities see 86–181.

⁶⁵ See K. Petkov, *The Anxieties of a Citizen Class. The Miracles of the True Cross of San Giovanni Evangelista, Venice 1370–1480* (Leiden, 2014), 211–216.

⁶⁶ *De Aragón a Venecia. El «Libre major de comerç de llana blanca amb Itàlia» de la companyia Torralba (1433-1434)*, eds. E. Basso et al. (Barcelona, 2019).

cittadini to foreign traders. It also underscores the agency of other Adriatic cities in shaping and sustaining regional trade networks and sea lanes.

3. Institutions

In a recent work on Venetian history, written by possibly one of the most influential historians of maritime history, Hocquet, we find the assertion that ‘in Venice, the State was everything, omnipresent through its councils, magistrates, courts, and judges. It regulated the use of boats, both public and private, kept a close eye on the trades, and oversaw supplies’.⁶⁷ Similarly, Grabiela Rojas Molina, in a 2022 work on the Venetian Senato, contends that ‘most aspects of the economy were state-regulated; it was the state that centralised wealth and authority. Over the fourteenth century, Venice had perfected an early successful model of investment and became the birthplace of this sort of capitalistic activity’.⁶⁸ Hocquet went even further, suggesting that state control extended well beyond the galleys. For instance, he argues that the provisioning of salt was essentially a state monopoly designed to maximise revenue, placing consumers at the mercy of prices dictated by the state, which orchestrated private activities.⁶⁹ Other authors have equally stressed the constraints - the *mainmise* - that the state put on private shipping, such as the increased pressure exerted by the Senato on Venetian cogs loading cotton in Syria to travel together and at specific times.⁷⁰ In contrast, this work argues that while Venice regulated commerce, it did not dictate it. State intervention coexisted with the relative autonomy of individual merchants and commercial interest groups.

⁶⁷ J.-C. Hocquet, *The Merchant of Venice: the Activity of Patricians in the Late Middle Ages* (Leiden, 2025), 2.

⁶⁸ G. Rojas Molina, *Decoding Debate in the Venetian Senate. Short Stories of Crisis and Response on Albania (1392– 1402)* (Brill, 2022), 50.

⁶⁹ J.-C. Hocquet, *Venise et le monopole du sel. Production, commerce et finance d'une République marchande* (Venice-Paris, 2012), vol. 1, 269: ‘Le monopole état conçu, en effet, non par rapport à la production, mais à la consommation et à l’impôt. Tout acheteur de sel devait s’adresser à la commune’. The book is the reworking of the earlier *Le sel et la fortune de Venise*, 2 volumes (Lille, 1979-1982), which advanced the same hypothesis.

⁷⁰ J.-K. Nam, *Le commerce du coton en Méditerranée à la fin du Moyen Âge* (Leiden, 2007), 207-275.

To better grasp the meanings of ‘public’ and ‘private’ in late medieval Venice, I adopt North’s distinction between institutions - defined as constraints on human behaviour—and organisations, which enforce these constraints structurally.⁷¹ A key point in analysing the Venetian economy is that institutions were as influential as organisations, and the city’s economic history cannot be disentangled from its social fabric, deeply rooted as this was in kinship networks. Venetian organisations like the Senato and the Maggior Consiglio established general regulations - such as shipping schedules and rules regarding onboard armaments⁷² - and negotiated trade treaties with foreign powers.⁷³ Yet they did not exercise full control over trade. The state was far from all-encompassing in the realm of shipping. It is undoubtedly true that every year the Savi agli ordini, an executive committee elected by the Senato, organised an auction to lease publicly-owned galleys to merchant consortia. These fleets, commonly but inaccurately referred to as *mude*⁷⁴, departed Venice twice annually. However, focusing solely on the *mude* risks overlooking the other essential component of Venetian maritime activity: privately owned ships. The study of privately-owned ships in the long fourteenth century is particularly significant insofar as these vessels have hitherto been mainly studied either in the thirteenth century or in the late fifteenth century.⁷⁵ Two recent studies on the topic, by

⁷¹ D. North, ‘Institutions’, *Journal of Economic Perspectives*, 5/1 (1991), 97-112.

⁷² F. CH. Lane, ‘Venetian Maritime Law and Administration, 1250-1350’, in *Studi in onore di Amintore Fanfani* (Milan, 1962), vol. 3, 21-50, now reprinted in Id. (Ed.), *Venice and History: The Collected Papers of Frederic C. Lane* (Baltimore, 1966), 227-252.

⁷³ E. Orlando, ‘Venezia, il diritto pattizio e il commercio mediterraneo nel basso medioevo’, *Reti medievali*, 17/1 (2016), 3-33.

⁷⁴ F. Lane, ‘Fleets and Fairs’, in Id., *Venice and History*, cit., 129, explains how this word in fact means allotted time of the year, not necessarily the fleet: ‘mudua or muda was also used to denote the time during which specified goods might legally be loaded in specified places by a specified class of ships for transport to Venice’. G. Christ has proposed the Arabic mudda, **مُدَّة**, viz. period, as a possible etymology, see G. Christ, *Trading Conflicts. Venetian Merchants and Mamluk Officials in Late Medieval Alexandria* (Leiden, 2012), 88.

⁷⁵ For the thirteenth century see, U. Tucci, ‘L’impresa marittima: uomini e mezzi’, in G. Ortalli and G. Cracco (eds.), *Storia di Venezia. Dalle Origini alla caduta della Serenissima*. vol. 2. *L’età del comune* (Rome, 1995), 627-659; Id., ‘Navi e navigazioni all’epoca delle crociate’, in G. Ortalli and D. Puncuh (eds.), *Genova, Venezia e il Levante nei secoli XII-XIV* (Genoa, 2001), 273-294 and Id., ‘La navigazione veneziana nel Duecento e nel primo Trecento e la sua evoluzione tecnica’, in A. Pertusi (ed.), *Venezia e il Levante fino al secolo XV. Storia - Diritto - Economia Atti del I Convegno internazionale di storia della civiltà veneziana (Venezia, 1-5 giugno 1968)* (Venice, 1973), vol. 1, 821-842.

Gluzman and Claire Judde De Larivière,⁷⁶ have recognised the importance of privately-owned vessels, but mostly as a consequence of the failures of ‘state shipping’, plagued by delays and by the competitiveness of alternative markets for spices after 1492.⁷⁷ It is therefore crucial to assess the role of private ships in the fourteenth century, when they operated alongside state-sponsored galleys, and to examine how the Senato and the Maggior Consiglio influenced their operations. Conversely, it is important to understand how smaller merchants were able to pursue their own policies, by exploiting organisations like the councils. The Senato itself was a lively forum of debate coexisting alongside the Maggior Consiglio, where all patrician families were represented, a council often passing laws favourable to privately-owned vessels.⁷⁸ The Senato did act as a corporation of merchants, but always in fluctuating collaboration with several other magistracies, chief amongst them the Maggior Consiglio.⁷⁹ The organisation of the *mude* and provisions favouring unarmed vessels were often contentious matters that led to confrontation, as I will show from the records of votes on these matters.

This interplay between institutions and organisations is particularly evident in merchants' options for dispute resolution. They could choose arbitration - typically entrusted to reputable merchants familiar to both parties - or opt for formal legal proceedings. Building on a seminal work on arbitration in Venice by Fabrizio Marrella and Andrea Mozzato,⁸⁰ I will examine the

⁷⁶ R. Gluzman, *Venetian Shipping. From the Days of Glory to Decline, 1453–1571* (Leiden, 2021) and Judde De Larivière, *Naviguer, commercer, gouverner*, cit.

⁷⁷ B. Doumerc, ‘La crise structurelle de la marine vénitienne au XVe siècle : le problème du retard des *mude*’, *Annales. Histories, Sciences Sociales*, 40 (1985), 605-623. It is a theory that echoes F. Lane’s statement that ‘in the first half of the sixteenth century, on the other hand, the merchant galley fleet dwindled and almost disappeared, but the large round ships increased in number so that in 1560 they were certainly larger and probably more numerous than they had ever been’. See F. Ch. Lane, ‘Venetian Shipping during the Commercial Revolution’, *The American Historical Review*, 38/2 (1933), 223.

⁷⁸ On the role of both in the regulation of trade I refer to M. Caravale, ‘Le istituzioni della Repubblica’, in A. Tenenti et al. (eds.), *Storia di Venezia*, vol. 3, cit., 299-364. More specifically on the jurisdiction of the Senato see the dated but fundamental E. Besta, *Il Senato Veneziano (Origine, costituzione, attribuzioni e riti)* (Venice, 1899), 118-170.

⁷⁹ F. Lane aptly defined it as a ‘joint-stock company’, See F. Ch. Lane, *Venice. A Maritime Republic* (Baltimore, 1973), 125.

⁸⁰ F. Marrella and A. Mozzato, *Alle origini dell'arbitrato commerciale internazionale. L'arbitrato a Venezia tra Medioevo ed Età moderna* (Padua, 2001).

rationale behind these choices and how merchants strategically navigated them. I will focus in particular on the Corte di Petizion, a court dealing with lawsuits requiring the *arbitrium* of the judges, in other words involving proceedings that could not be solved merely by having recourse to the statutes or the existing legislation.⁸¹ Since this court also had the right to *interdicere*, that is to summon cases from other courts, it often served as a forum for disputes between foreigners or between merchants. It was intended as the court for equitable justice, and as such it adjudicated on insurances,⁸² dowries, credits, sales, agreements (including *colleganze*, guardianship, commercial partnerships (including fraternal partnerships), fraud, property rights (*investizioni ad proprium*), customs fees, and wills.⁸³ Another significant aspect of the Venetian courts was the deep entanglements between private and public interests. Venetians did not rely on professional judges: patricians themselves adjudicated on all matters. This was met with disbelief by ‘continental’ Italians, as shown by James E. Shaw, whose work has highlighted the unprofessionalised nature of Venetian courts, especially the lower ones.⁸⁴ His work dealt with the seventeenth century, but the conclusions seem to apply to the long fourteenth century as well. Karin Nehlsen-von Stryk has demonstrated how Roman law was seldom used in the context of lawsuits involving insurance contracts in the fifteenth century, and then it was limited to very few selected passages of the Digest.⁸⁵ As remarked by Guido Ruggiero, ‘legal knowledge counted less than social and political standing’ as the criterion for choosing a

⁸¹ L. Pansolli, *La gerarchia delle fonti di diritto nella legislazione medievale veneziana* (Milan, 1970) and P. Nörr and K. Nehlsen-Von Stryk (eds.), *Diritto comune, diritto commerciale, diritto veneziano* (Venice, 1985).

⁸² The functioning of the Corte di petizion in relation to maritime insurance claims, highlighting its role as a fast-adapting organisation, has been discussed in K. Nehlsen Von-Stryk, ‘Aspetti dell’assicurazione marittima nella vita economica veneziana nel Quattrocento’, *Quaderni del centro tedesco di studi veneziani*, 18 (1980), 3-22.

⁸³ An extensive overview of the aforementioned prerogatives of the court in G. Cassandro, ‘La curia di petizion’, *Archivio veneto*, 20 (1937), 5-41. See also M. F. Tiepolo (ed.), ‘Giudici di Petizion’, in *Guida Generale degli Archivi di Stato Italiani* (Rome, 1994), 990-992.

⁸⁴ J. E. Shaw, *The Justice of Venice: Authorities and Liberties in the Urban Economy, 1550-1700* (Oxford, 2006).

⁸⁵ K. Nehlsen Von-Stryk, ‘Ius commune, consuetudo e arbitrium iudicis nella prassi giudiziaria veneziana del Quattrocento, in Id. (ed.), *Diritto Comune, diritto commerciale, diritto veneziano* (Venice, 1985), 119: ‘Viene usato un arsenale piuttosto modesto di regole, dal contenuto assai generico’.

judge.⁸⁶ Private interests and the public good were in fact enmeshed, in a city where judges were patrician-merchants themselves, and organisations like the courts coexisted alongside private institutions like arbitrations.

Luciano Pezzolo has insightfully observed that ‘Italian history shows that there is not a marked conflict between family and state: rather, these are elements that complete one another in a tight dialectic where the boundaries shift only marginally in response to external shocks.’⁸⁷ This was especially true in the context of late medieval Venice, where parish solidarity and membership of a guild or lay confraternity, or *scuola*, was an essential part of the identity of the *popolo*.⁸⁸ As remarked by Richard MacKenney: ‘although the *popolani* had no role in the governing councils of the commune or of the Signoria, within their own institutions and within a greater whole they played a highly significant role in the historical destiny of the polity’.⁸⁹ In this context, my analysis of Venetian institutions will also focus on partnerships involving brothers and kin - known as *fraterne* - and short-term trading companies that were foundational to the city's commerce in the fourteenth century. These shaped Venice's unique accounting practices, which emphasised individual voyages rather than providing a long-term view of assets and cash flow, as was common in Tuscany⁹⁰ Venetian merchants typically did not depend on independent credit but instead relied on intricate networks of kinship to support their ventures. By examining documents authored by the merchants themselves, I will explore how

⁸⁶ G. Ruggiero, ‘Politica e giustizia’, in *Storia di Venezia*, vol. 3, cit., 390, talking about the Avogadori de Comun: ‘anche in questo caso - a dimostrazione della relativa irrilevanza del diritto nella pratica penale veneziana - la preparazione giuridica contava meno della posizione sociale e politica.

⁸⁷ L. Pezzolo, ‘The Via Italiana to Capitalism’, in L. Neal (ed.), *The Cambridge History of Capitalism, volume 1. The Rise of Capitalism: from Ancient Origins to 1848* (Cambridge, 2014), 267.

⁸⁸ As remarked by Romano, *Patricians and Popolani*, cit., 107: ‘The scuole drew their members from a variety of professions and social groups, even including the popolo minuto’. Romano cautions nonetheless against the idea of a world of equals, remarking on cleavage lines across wealth. B. Pullan estimates that in the sixteenth century about 10% of the Venetian adult male population was member of a *scuola*. See Pullan, *Rich and Poor*, cit., 94. For membership of the scuole piccole see instead R. MacKenney, *Venice as the Polity of Mercy: Guilds, Confraternity, and the Social Order ca. 1250 - c. 1650* (Toronto, 2019), 53 (Table 2.1) and 55 (Table 2. 2).

⁸⁹ MacKenney, *Venice as the Polity of Mercy*, 7.

⁹⁰ See F. Ch. Lane, ‘Venture Accounting in Medieval Business Management’, *Bulletin of the Business Historical Society*, 19/5 (1945), 164-173; Id., ‘Family Partnerships and Joint Ventures’, in *Venice and History*, cit., 36-55; and Id., *Andrea Barbarigo: Merchant of Venice, 1418-1449* (Baltimore, 1944), 171-183.

trust was maintained through family ties and how these relationships sustained maritime trade.⁹¹

The long-standing image of Venice as a harmonious and well-ordered republic is, in many ways, a myth. The Senato was often a site of heated debate, with narrow vote margins, especially on shipping matters. The Maggior Consiglio - representing all noble families - was typically more favourable to legislation supporting small vessels over galleys. The fourteenth century witnessed two major conspiracies, the loss of Dalmatia, and multiple conflicts with Genoa. Venice's success did not stem from highly efficient state organisations or centralised economic planning. Rather, private shipowners had significant freedom to chart their own routes and contribute to economic life. At the same time, the state occasionally subsidised shipbuilding, both in Venice and its territories. Venice's prosperity resulted from a complex interplay between private initiative and state involvement.

4. Sources

4.1 Public magistracies (*consilia*)

For the present work, I have surveyed the extant registers of deliberations of the Maggior Consiglio, focusing on those concerning trade between the late thirteenth century and 1420. The period is covered by fourteen original registers, from Comune I (1232–1282) to Ursa (1415–1455). Several of these were copied in a parallel series of registers - though with some differences - kept by the Avogaria di Comun; these are known as Bifrons, Cerberus, Magnus, Neptunus, Brutus, Philippicus, and Saturnus.⁹² The registers of the Senato have been extant

⁹¹ For an introduction to trust see I. Forrest and A. Haour, 'Trust in Long-Distance Relationships, 1000–1600 CE', *Past & Present*, 238 (2018), 190-213; 'Trust' in G. Rosser, *The Art of Solidarity in the Middle Ages: Guilds in England 1250-1550* (Oxford, 2015), 149-186 and G. Dahl, *Trade, Trust, and Networks: Commercial Culture in Late Medieval Italy* (Lund, 1998).

⁹² On the differences between these registers I refer to G. Monticolo (ed.), *I capitolari delle arti veneziane sottoposte alla Giustizia vecchia e poi alla giustizia nuova*, vol. 1 (Rome, 1896), XLVII-LVII.

continuously since 1332, though we also have a fragment from 1300–1303 and the *rubricae* of the missing registers from 1293 to 1332. The registers have now been published in full for the period 1332 to 1381 by the Istituto Veneto di Scienze Lettere ed Arti. I have consulted the remaining ones online (ASVe, Senato, Deliberazioni, Misti, Registri), from n. 37 (1381-1383) to 53 (1419-1422), as well as the registers 1-5 of Senato, Deliberazioni, Secreti alfabetici, covering the period 1335-1397. I have also consulted the registers 1-5 (1327-1424) of Collegio, Notatorio, Registri, and Collegio, Notatorio, Secreti, reg. 1-3 (1354-1385), a miscellaneous collection of deliberations and records of resolutions of jurisdictional conflicts. Lastly, I have analysed the Deliberazioni, Miste, Registri, 1-6 and 8-10 of the Consiglio di Dieci, covering the period 1310-1429.

4.2 Notarial records:

Notarial records in Venice are currently divided into three series for our period: Notarile, Testamenti; Cancelleria Inferiore, Notai; and Cancelleria inferiore, Miscellanea. According to F. Pucci Donati, the three series amount to 200, 152 and 24 *buste* respectively for the fourteenth century.⁹³ Given the constraints of doctoral research, I have sampled the material and chosen a few notaries that seem to have specialised in commercial acts, such as Angioletto da Venezia (active 1385-1423). Regrettably, few notarial records survive for the first half of the fourteenth century, and the oldest protocol (of Pietro Bonusdeo) dates to 1277.

4.3 Fiscal sources:

There are no fiscal sources extant, and as such I had to rely on the statutes of the magistracies entrusted with anti-smuggling operations, I have thus consulted the *capitolari* of the

⁹³ F. Pucci Donati, *Ad viagium Maris Maioris. L'espansione dei traffici veneziani nel XIII e XIV secolo*, Volume I (Udine, 2023), 23.

Cattaver, Consoli dei Mercanti, Levanti, Provveditori di Comun, Ternaria Vecchia, and Messetteria.

4.4 Judicial sources

There are few medieval judicial records in Venice, and regrettably even fewer dealing with commercial matters. The main repositories are the few extant parchments of the Corte del Forestier and the more substantial accounts of the Corte di Petizion. I have used the series of the Sentenze (both ‘a giustizia’ and ‘a interdetti’) of the Corte di Petizion to supplement the analysis of Venetian shipping. Furthermore, I have examined eight registers (Avogaria de Comun, 3641–3648), covering the period 1324–1442, from the Raspe of the Avogaria di Comun, an appellate court dealing with crimes concerning the state, previously used by G. Ruggiero to gauge the level of violence in Renaissance Venice.⁹⁴ I have used them alongside registers of pardons, that is Cassiere della bolla ducale, Grazie, Registers 1-20, covering the period 1299-1423, to reconstruct the role of boatmen, merchants, and artisans, as well as the illegal activities of *cittadini* and patricians. Lastly, I have analysed a few case studies from the Avogaria di Comun, including a cache of fourteenth-century trials, known as the Processi originali, which are particularly useful for tracing everyday crimes and the circulation of commodities in Venice.

4.5 Commercial records

The fragmentation of the current documentation, and the loss of several key archives, have seriously compromised any attempt to reconstruct the economy of late-medieval Venice. The lack of larger commercial firms also led to a piecemeal preservation of commercial documents,

⁹⁴ G. Ruggiero, *Violence in Early Renaissance Venice* (New Brunswick, 1980).

as the legal validity and hence the utility of documents ended with the death of their commissioner. There is virtually no intact commercial archive from the thirteenth, fourteenth, or early fifteenth centuries. For this reason, I have occasionally had recourse to later fifteenth-century account books to illustrate ledgers that did not survive for the fourteenth century. The survival of commercial documents depended on the fortune of particular circumstances. The absence of documents nonetheless prompts the historian to find alternative solutions. I have first perused extensively the many miscellanies of the Venetian archives, where commercial material has been stored as it did not fit into any existing archival series. Several commercial letters and ledgers, as well as accounts, can be found in the *Miscellanea Gregolin*, *Carte non appartenenti ad alcun archivio*, and *Atti diplomatici e privati*.

Among the most important sources used in developing this thesis are several caches of commercial documents (known as *commissarie*) entrusted to the Procuratori di San Marco as administrators of post-mortem bequests.⁹⁵ The Procuratori were a state magistracy whose main tasks were the upkeep of the basilica and the safe-keeping of the official documents and funds of the Republic. Gradually, this function expanded to include the administration of post-mortem bequests and the administration of the estates of Venetians who died abroad. Given the high risk of litigation, the Procuratori often kept a sizeable amount of materials otherwise lost, like commercial letters, fragments of ledgers, and lists of investments. The existing documents represent a fraction of Venetian society, namely those who foresaw complex inheritance issues or those who felt their interest well represented by the state executors, normally rich patricians. However, these dossiers are amongst the few caches of commercial documents extant for medieval Venice. Originally, the material was divided into three subsections of this magistracy : the De Supra dealt with the administration of the St Mark's

⁹⁵ On the role of the Procuratori see R. Mueller, *The Procuratori di San Marco and the Venetian Credit Market* (New York, 1977) and Id., 'The Procurators of San Marco in the Thirteenth and Fourteenth Centuries: a Study of The Office as a Financial and Trust Institution', *Studi Veneziani*, 13 (1971), 105-220. On their potential as a source for commercial history see V. Formentin, 'Rendiconti duecenteschi in volgare dall'archivio dei Procuratori di San Marco, con una nota paleografica di Antonio Ciaralli', *Lingua e stile*, 49 (2014), 5-42

Basilica, the De Ultra with pious bequests from testators from the other side of the Canal Grande, and De Citra from those of the remaining three *sestieri*. The material has been reorganised into the series: De Citra, Commissarie (321 *buste*), De Ultra, Commissarie (360 *buste*), Misti, Commissarie (270 *buste*) and De Supra, Commissarie (118 *buste*). Using the extremely detailed catalogue compiled by Luigi Lanfranchi, I have been able to identify those most promising in terms of commercial material for this period, choosing a sample that was as broad as possible in terms of geo-spatial location and socio-economic background. I have chosen a sample of around fifty *commissarie* for analysis, using some of these as case studies (such as the Dall'Inzegneri dossiers) to illuminate the investments of the patriciate and the types of ships they used. Given the absence of other repositories of commercial material, these fragments are the closest approximation to caches of commercial documents in Venice.

5. Methodology

I have pursued a multidisciplinary approach to the history of Venice, considering pictorial representations as an important source for the study of shipping, looking at commercial commonplace books as crucial tools for the education of merchants, and using data from shipwrecks to estimate the typical cargo of a Venetian ship. To better appreciate the extent of privately-owned vessels, I have created a database of references to ships using judiciary records, the registers of the Senato and the Maggior Consiglio, pardons for smuggling (*grazie*), and the *commissarie* in the fourteenth century, presented as an appendix to this work.⁹⁶ Throughout my thesis, I have pursued in each chapter an approach based on case studies, applying both quantitative and qualitative analysis where possible, and integrating narrative sources like descriptions of the city with archaeological findings, and chronicles with pictorial representations. A comparative approach has been adopted throughout, whereby presumed

⁹⁶ See the database in Appendix B.

Venetian particularities have been compared with contemporary developments in other Mediterranean cities like Genoa or Barcelona, as they emerge from the bibliography on these other polities.

6. Structure

In the first chapter, I analyse the articulation of shipping in medieval Venice. I combine a quantitative approach, to gauge the number and types of ships, with more qualitative research on representations of vessels and their significance in descriptions of the city. I thus propose a tripartition of Venetian shipping: longships, like galleys, were mainly used for long-distance trade; round ships could be used for regional trade; while flat-bottomed ships like *burchi* were essential for local and fluvial trade. I propose a nuanced understanding of the development of Venetian trade over time, and of the expansion and significance in particular of round vessels in the long fourteenth century. I show how boat ownership in Venice was spread beyond the patriciate, and that a wider number of foreigners, middlemen, and smaller merchants contributed to the Venetian economy.

In the second chapter of the thesis, I discuss the structure of Venetian trade focusing on three main dimensions, that is, production, exchange in Venice, and trade circuits beyond the city. In my analysis I will focus on the role of Venice not just as an entrepôt but also as a redistribution centre for local wares and a place of production, highlighting the full scale of products traded in the city. I reflect closely on commodities, especially in their material aspect. Studies by Welch and others have reminded us to consider the goods of Renaissance commerce not as abstract terms but as material things.⁹⁷ In this chapter, I will reflect on the categorisation of goods in Venice between *havere subtile* (lightweight goods) and *mercationes grosse* (commodities in bulk), two ambiguous terms warranting a closer look. I reflect in particular on the

⁹⁷ E. Welch, *Shopping in the Renaissance: Consumer Cultures in Italy, 1400-1600* (New Haven, 2005).

importance of *mercationes grosse*, in their definition as raw materials - crucial for Venetian proto-industries, foodstuffs, and semi-manufactured products like woollens. I define these terms against the language of medieval sources, highlighting the blurred boundaries in the definitions of these products.

In the third chapter, I will address the question of who traded in Venice and whether they were identified with a recognisable label such as ‘mercatores’, alongside the conundrum of what social strata partook in Venetian trade, and the role of foreigners in the trade networks of the city. I suggest that the category of ‘trader’ encompassed a sizeable portion of the Venetian population, not just the patriciate, and that the term referred to shipowners, qualified artisans, and *cittadini*, a particular social class distinguished from the patriciate yet with resources of its own. I will also focus in particular on two aspects that distinguished Venetian merchants from their Tuscan, Genoese, Spanish, and Jewish and Muslim counterparts, namely the use of fraternal partnerships as the main forms of commercial association in late-medieval Venice (often coupled with short-term, ad-hoc companies), and the peculiar structure of Venetian books of accounts, focused on a single commercial enterprise, rather than on the total cashflow and all available assets at any given time, as happened in Tuscany.

In the fourth chapter, I focus on organisations. I examine four aspects, namely the role of maritime statutes in the regulation of Venetian trade, the legislation passed by the Senato and the Maggior Consiglio regarding shipping, the effective control over trade exercised by the officials entrusted with the repression of smuggling and the exaction of duties, and lastly the interplay between private-order tools of dispute resolution like arbitration vis-à-vis litigation in court, especially in regard to the Corte di Petizion. I will stress how the statutes were soon superseded by ad-hoc legislation, that the Maggior Consiglio was more vocal than the Senato in its predilection for private-owned vessels, that the Senato regulated but not controlled trade, and that the superabundant legislative production posed a challenge to officials tasked with enforcing it. By assessing a wide range of original source material in the light of recent

scholarship on the economic and social history of Venice, I advance a reappraisal of the link between trade, trader, and institutions, focusing on the role of privately-owned vessels in the political economy of late-medieval Venice, which was dominated by the entanglement of private and public interest.

Chapter 1

Ships and shipping in medieval Venice

This chapter explores the organisation of maritime transport in medieval Venice. It begins by distinguishing between armed and unarmed vessels, followed by an examination of how technological advancements in the fourteenth century - such as the introduction of the cog⁹⁸ and increased cargo capacity - transformed Venetian shipping. The chapter then analyses the tripartite classification of Venetian ships into round ships, flat-bottomed vessels, and longships, each tailored to specific markets, and traces their development before and after the Black Death. This discussion sets the stage for a quantification of round and flat-bottomed ships and a broader inquiry into patterns of boat and ship ownership in late-medieval Venice, drawing on seminal studies by Luzzatto, Lane, Tucci, Hocquet, Judde de Larivière and Gluzman.⁹⁹ My analysis will build on these studies but will also differ in bringing together sources as various as pardons for smuggling, notarial and court records, and descriptions of Venetian shipping. It will also focus on a timespan less explored than the fifteenth century, due to the fragmentation of the records and the dispersal of sources. By employing collections of images of Venetian ships¹⁰⁰ and unpublished manuscripts, the final section considers why round and flat-bottomed ships were depicted in public settings like St Mark's Basilica, as well as in material culture and merchants' manuals, suggesting their widespread recognition across Venetian society. Ultimately, ships are examined as tangible artefacts, instruments of commerce, and symbolic representations.

⁹⁸ On which see R. Gardiner and R. W. Unger (eds.), *Cogs, Caravels and Galleons. The Sailing Ship 1000-1600* (London, 1994), in particular 34-36 and R. W. Unger, *The Ship in the Medieval Economy 600-1600* (London, 1980), 161-200, and in particular 184: 'the climatic change and the Black Death both promoted the use of the cog in the Mediterranean and an all intra-European trades. [...] There was a rise in the relative demand for industrial goods after the mid-fourteenth century plague.'

⁹⁹ G. Luzzatto, 'Navigazione di linea', cit.; Lane, *Venice. A Maritime Republic*, cit., 45-54, 118-134 and 154-170; F. Ch. Lane, *Navires et constructeurs à Venise pendant la Renaissance* (Paris, 1965); J.-C. Hocquet, *Le sel et la fortune de Venise*, 2 volumes (Lille, 1979-1982).

¹⁰⁰ C. A. Levi (ed.), *Navi venete da codici marmi e dipinti* (Venice, 1892); G. B. Rubin de Cervin (ed.), *Bateaux et batellerie de Venise* (Lausanne, 1978) and L. Ray Martin (ed.), *The Art and Archaeology of Venetian Ships and Boats* (London, 2001).

An illustrative example of the maritime world's complexity is the process of stowing cargo aboard ship - a task requiring careful balance between small valuable items, bulky goods like cotton, and essential but lower-value raw materials such as metals. One vivid representation of this seafaring reality can be found in a Venetian -Dalmatian altarpiece from the very end of the fourteenth century, now housed in the National Gallery (London).¹⁰¹ Painted around 1400 by either a Venetian or Dalmatian artist, this wooden panel includes eight scenes and a predella depicting the Immaculate Conception of the Virgin. One panel portrays a miracle: the rescue of a storm-stricken ship carrying the abbot Helsinus on his voyage from England to Denmark in the eleventh century.¹⁰² At the ship's stern, a saintly bishop appears holding a scroll that reads: 'You will escape death if you celebrate the Feast of the Conception of the Virgin' on the sixth day before the Ides of December.' The imminent threat of death is embodied by the storm's ferocity: black demons tear the sails, the masts threaten to collapse, and the cog-like round ship drifts dangerously close to disaster. Notably, the artist includes a striking detail - the cargo being thrown overboard. Barrels, chests, and boxes are vividly depicted as they vanish into the tumultuous sea, reflecting not just artistic imagination but a common reality governed by maritime laws and insurance practices.¹⁰³ The physical stowage of passengers and their belongings was hardly an exclusively Mediterranean problem, as is proven by Elizabeth A. Lambourn's study on the luggage list of Abraham Ben Yiju who plied the Indian Ocean in 1149. Luggage was literally called *māl*, everything movable in a house.¹⁰⁴

¹⁰¹ D. Gordon (ed.), *The National Gallery Catalogues: Italian Paintings before 1400* (London, 2011), 145-6. Dalmatian/Venetian painter, *Helsinus Saved from a Shipwreck; A French Canon Drowned*, ca. 1400, Egg tempera on wood, The National Gallery (London), <https://www.nationalgallery.org.uk/paintings/dalmatian-venetian-helsinus-saved-from-a-shipwreck-a-french-canon-drowned> (30/05/2025).

¹⁰² Elsinus is most likely Aethelsige, who was abbot of Romsey and is also named in connexion with a ship in the Domesday Book, see R. Fleming, *Domesday Book and the Law: Society and Legal Custom in Early Medieval England* (Cambridge, 1998), 177.

¹⁰³ M. Fusaro, A. Addobbatti, and L. Piccinno (eds.), *General Average and Risk Management in Medieval and Early Modern Maritime Business* (Cham, 2023); G. Ceccarelli, *Risky Markets: Marine Insurance in Renaissance Florence* (Leiden, 2020) and O. Remie Constable, 'The Problem of Jettison in Medieval Mediterranean Maritime Law', *Journal of Medieval History*, 20/3 (1994), 207–220

¹⁰⁴ E. A. Lambourn, *Abraham's Luggage. A Social Life of Things in the Medieval Indian Ocean World* (Cambridge, 2018).

Image 1

Helsinus Saved from a Shipwreck, Panel of an altarpiece, Tempera on wood,
Dalmatian or Venetian School, ca 1400, National Gallery (London)



1. Types of Venetian vessels

In describing medieval Venetian shipping, it is important that we understand what we mean by ‘private’ and ‘public’ and how shipping was categorised in medieval Venice.¹⁰⁵ It is equally important to avoid a crude dichotomy between privately-owned vessels and state galleys, as merchants would invest in both, and often they would navigate the same waters. The two types of shipping that underpinned Venetian trade were, on the one hand, privately-owned vessels, some bound for specific routes decided by the Senato (such as the loading of cotton in Syria) and others voyaging freely to a destination of their own choosing; and on the other hand, state-owned ships, mostly galleys, that were either chartered to merchant consortia or outfitted directly by the commune in time of need, typically to fetch grains. It is paramount to understand the relative scale of both operations, and their mutual interdependence. According to the database compiled by Stöckly, the *mude* included some 474 state-owned galleys on the Byzantium-Black Sea route (1301-1452), 278 to Cyprus and Armenia (1301-1453), 328 to Alexandria (1301-1452), 355 to Flanders (1315-1453), to Beirut 251 (1374-1453), 61 to Aigues-Mortes (1402-1453), and 32 to North Africa (1437-1453), making a total of 1924 galleys (or 12.5 galleys on average each year in the 1300-1453 period).¹⁰⁶ The Senato established the price for the auction (*incanto*), and the patron, a patrician, who won the auction had to find other investors, known as *parzenevoli*, who would share the burden of the *incanto*, normally around 500 ducats. The patrons and the *parzenevoli* would rely on a web of *plezi*, or guarantors, who vouched that they had enough liquidity, and they could pay later, even after the return of the galley. Each *parzenevole* owned one or more carats of the galley, of which there were twenty-four

¹⁰⁵ C. Judde De Larivière, ‘Entre gestion privée et contrôle public: les transports maritimes à Venise à la fin du Moyen Âge’, *Histoire urbaine*, 12 (2005), 57-68 and B. Doumerc, ‘Flottes publiques, flottes privées à Venise (XIIe-XVe siècles)’, in M. Balard (ed.), *The Sea in History*. Vol. 2. *The Medieval World* (Woodbridge, 2017), 138-147 and more generally the essays contained in R. González Arévalo (ed.), *Navegación institucional y navegación privada en el Mediterráneo medieval* (Granada, 2016); the contribution on Venice by B. Doumerc focuses solely on galleys, see *Ibid.*, 77-104.

¹⁰⁶ Data from Stöckly, *L’incanto*, cit., 96-98.

in total.¹⁰⁷ The patrons paid for the crew on board, the captain, the crossbowmen, the physicians, and for the ‘gifts’ offered to foreign authorities, as well as giving a one-off payment of 700 ducats to the Patroni all’Arsenale, as expenses for the caulking of the galleys.¹⁰⁸ The way in which the galleys made a profit was by a monopoly over the transport of precious merchandise, such as spices.¹⁰⁹ As an incentive, the patrons were granted loading space free of freightage. The total value of the cargoes of galleys bound for Alexandria varied between 60,000 ducats¹¹⁰ (recorded in 1426) and 370,000 ducats (recorded in 1406),¹¹¹ the typical value being around 100,000 ducats for a single galley. The cargo capacity of a single galley varied over time, from 70/80 metric tons in 1303-1307 to 115 in 1318-1335, 170 in 1356-1358, 200 after 1440, and peaking at 280 before 1480.¹¹² By comparison, according to the same estimate, Venetian merchant shipping in 1420 counted some 35 round ships of at least 240 metric tons, 265 round vessels of 100-239 metric tons, and 3,000 vessels of less than 100 tons. The total cargo capacity of round and flat-bottomed ships would have been 73,500 metric tons, whilst a total of 43 galleys would have carried 7,000 tons in the mid fifteenth century.¹¹³ If Lane’s estimates are correct, the whole of Venetian shipping would have amounted to 80,500 metric tons, with approximately 91.3% of the cargo volume being carried by round and flat-bottomed ships.

Venetians were inconsistent in the classification of their shipping, but they did operate a distinction between the state galleys, referred to as ‘armed vessels’ and privately-owned vessels,

¹⁰⁷ The *parzenevoli* system in detail at Ibid., 245-265.

¹⁰⁸ Ibid., 205-218.

¹⁰⁹ Ibid., 215-243.

¹¹⁰ This is the value of the Alexandria galleys in 1426, see E. Ashtor, *Levant Trade in the Later Middle Ages* (Princeton, 1983), 328, table XXXIII. The value of the Beirut galleys was also 60,000 ducats, but in both cases we should add 150,000 to 180,000 ducats of the cargoes of the supporting cogs.

¹¹¹ Ibid., 265, table XXVIII, value of the Alexandria galleys.

¹¹² F. Ch. Lane, *Navires et constructeurs*, cit., Tableau C, 222.

¹¹³ Ibid., 95 and Tableau D, 224-225.

called 'unarmed', that is relatively less armed.¹¹⁴ Notaries described all sorts of different vessels using a generic 'navis', sometimes qualified as 'sive cocha', or 'vochata cocha'. It is usually impossible to assign a generic term 'navigium' or 'navis' to a type of ship without further details. To this, we may add that Venetian authorities simply differentiated between 'armed' and 'unarmed vessels', the latter term meaning that such ships necessitated fewer crossbowmen, not that such a ship was bereft of defences. The first attestation of the term 'unarmed shipping' seems to date to the lost second book of the Misti registers of the Senato (1302-1307), since in one of the recorded headings we read 'caravana Apulie fiat cum navigio disarmato' (the 'ship caravan' will be composed of unarmed vessels).¹¹⁵ This distinction was nonetheless already implicit in a decree passed by the Maggior Consiglio in 1290, distinguishing 'navis, tarita and banzonus' (in other words round ships) from all other 'armed vessels with more than twenty oars'.¹¹⁶

If we follow modern nautical conventions instead, Venetian vessels can be divided into three groups according to their shape: that is, longships, pot-bellied vessels, and flat-bottomed ships.¹¹⁷ This is a categorisation, in fact, already hinted at by a nautical treatise known as 'De Navigatione', written by Benedetto Cotrugli, a merchant from Ragusa (Dubrovnik), in 1464/65. In his work, he maintained a clear distinction between galleys and all other ships. These other vessels are sometimes referred to collectively, such as in the thirteenth chapter of the second book, where they are grouped as 'caravelle, marsiliane, marani, barcosi, carachie, barcie, urche, et burchi et liuti'.¹¹⁸ However, the author does identify a distinction amongst them, differentiating 'legni multo velieri' (ships that can hold the wind well, unlike galleys) and 'legni

¹¹⁴ ASVe, Senato, Deliberazioni, Misti, Reg. 27, f. 12r (22/06/1355), stipulated that every 'unarmed' vessel had to embark five crossbowmen every ten seamen 'a Creta supra', and three 'a Creta citra', reduced in 1357 to three and two respectively.

¹¹⁵ G. Giomo, 'Le rubriche dei libri misti perduti', *Archivio veneto*, 17 (1879), 251.

¹¹⁶ *Deliberazioni del maggior consiglio di Venezia*, edited by R. Cessi, vol. 3 (Bologna, 1934), 262.

¹¹⁷ See Gluzman, *Venetian shipping*, cit., 64-72.

¹¹⁸ P. Falchetta (ed.), 'Il trattato 'De navigatione' di Benedetto Cotrugli (1464-1465). Edizione commentata del ms. Schoenberg 473, con il testo del ms. 557 di Yale', *Studi Veneziani*, 57 (2009), 132-135 and 236-37.

plateschi' (flat-bottomed vessels). Cotrugli explained that caravels were 'legni multo velieri', employed by the king of Portugal, with a limited cargo capacity (100-150 *botti*), but very easy to steer. *Marciliane* were 'like ships' ('ad modo de nave'), but with a flat-bottomed keel ('piati de sotto'), used in Sicily, the Adriatic, Greece, and Dalmatia. They could be beached easily, as people from the Marche used to do. *Marani* were also 'multo plateschi', with a very flat-bottomed keel, ideal to carry heavy cargoes ('portano roba assai'), used in Venice and Istria. *Barcosi* were also part of this category but were employed in Dalmatia, and especially in Dubrovnik, where allegedly they were invented. Carracks were defined as a hybrid ship type between a *nave* and a *marsiliana*, used in Puglia, Morea, and Greece.

To gauge how the Venetian merchant marine was organised, I will draw on an important source from the fourteenth century, namely the records of pardons (*grazie*) for smuggling granted by the Republic between 1331 and 1335. This source has been chosen because it is a register of pardons devoted exclusively to illegal trade, and because it captures Venetian shipping across the whole Mediterranean. Moreover, it provides precious data for a period that is relatively poor in notarial records and commercial sources, and it can present us with a good overview of Venetians shipping before the plague. It will therefore also serve as a benchmark to measure the evolution of the merchant fleet in the second half of the century, thanks to the dataset of references to privately-owned vessels I have compiled covering the 1387 to 1404 period. It does present a limitation insofar as only illegal trade is represented, but this makes it precisely useful to investigate the traffic not endorsed by the Republic.

Table 1

Mentions of ships in Register 5 of the Grazie (1331-1335)¹¹⁹

(ASVe, Cassiere della bolla ducale, Grazie, reg. 5)

Ship	Mentions
<i>Banzone</i>	1

¹¹⁹ The full database is presented as Appendix E to this thesis.

Ship	Mentions
<i>Barcha/ Barchetta</i>	26
<i>Burchio</i>	8
<i>Cocca</i>	3
<i>Condura</i>	1
<i>Galea disarmata</i>	4
<i>Legno</i>	14
Foreign <i>legno</i>	1
<i>Marano</i>	2
<i>Naviglio</i>	6
<i>Nave</i>	47
<i>Plata</i>	2
<i>Tarida</i>	4
Total	119

The variety in Venetian and Mediterranean shipping highlighted by Cotrugli in 1460 is clearly already visible in the 1330s, with no fewer than fourteen types of vessels plying the waters of the Adriatic. From the modest *plata* and *tarida* to unarmed galleys, passing through a few cogs, the true prime movers of Venetian commerce in this period seem to have been lateen-rigged ships and boats, together with *legni* and *navigli*. We can thus clearly appreciate the presence in the Adriatic of lateen-rigged ships, flat-bottomed vessels, and round ships. Of the 119 vessels mentioned 26 are *barche* (21.8%), 47 *navi* (39.5%), while the generic moniker ‘legno’ appears 14 times (11.7%), with all other types of ships numbering fewer than 10.

We can compare this overview of Venetian shipping in the 1330s with a database that I have created with 122 references to ships in the period 1387-1404.¹²⁰ I have chosen this period as the end of the fourteenth century saw a general recovery of the merchant fleet after the War with Genoa (1378-1381), but it also ends just before Venice reacquired Dalmatia and conquered

¹²⁰ See Appendix B.

the Italian mainland, thus significantly increasing its overseas possessions. Shipping in the last quarter of the fourteenth century can be characterised by drawing on judicial, notarial, and commercial records. I have thus combined the records of one notary who worked routinely with merchants (Marco Rafanelli, active between 1364 and 1409), one register of the appellate court dealing with crimes against the state, namely the Avogaria de Comun, spanning the period 1393-1406, and two volumes of the Commemoriali, a chartulary that includes commercial records covering the years 1375-1405.¹²¹ Having recourse to judicial, notarial, and commercial records, I have sought to reduce the possible bias in the selection of the types of ships mentioned in a specific category of sources. Together, they can provide us with a broader overview of round vessels than sources like the deliberations of the Senato, which mostly deal with the organisation of the galleys.

Table 2

References to Venetian ships, divided by type (1387-1404), based on appendix

B¹²²

Name	Number of entries	Percentage of all entries
Barca	23	19
Barcoso	1	1
Battello	1	1
Burchio/ burchiello	8	7
Caracca	1	1
Cocca	16	13
Griparia	3	2
Legno	1	1

¹²¹ ASVe, Cancelleria Inferiore. Notai, *buste* 168 and 169 (Marco Rafanelli); ASVe, Avogaria de Comun, Raspe, Reg. 3645; ASVe, Commemoriali, *Registri* 8 and 9.

¹²² See Appendix B.

Name	Number of entries	Percentage of all entries
Marciliana	7	6
Nave (Navis)	26	21
Navetta	3	2
Naviglio (Navigium)	25	20
Panfilo	2	2
Plata:	5	4

Overall, we might notice a certain continuity, with several vessels reappearing in both tables (*barche*, *burchi*, *cocche*, *legni*, *navi* and *plate*). If we look at these two tables, we might also notice that technological development led to both the emergence of new types of ships, like the carrack, and the disappearance of older models like the *tarida* or the *condura*, replaced by the new models of round ships with increased cargo capacity. The number of ships is equally significant. In the first table, related to the period 1331-1335, we find roughly thirty mentions of ships every year, while the second table, drawing on a more dispersed sample, features roughly five ships per year. If we look at the second table, covering the period 1387-1404, Venetian shipping, excluding galleys, thus seems to have been dominated by three types of ships, namely *barche* (19%), *naves* (21%), and *cocche* (13 %), together with the generic name for ‘ship’ in Latin (*navigium*) amounting to 20% of all entries, with passing references to *marciliane*, *plate*, and *burchi*, the trio of vessels used for local transport and trade. Venetian shipping was thus varied and featured several categories and types of ships, serving both local and international markets. Having now summarily presented the main categories and types of ships, it is important to clarify the details and characteristics of the main categories of Venetian vessels,¹²³focusing in particular on long-ships, round ships, and flat-bottomed vessels, specifying the technical

¹²³ On the types of Venetian ships See Gluzman, *Venetian shipping*, cit., 47-72.

characteristics of each, using archaeological data coupled with iconographical representation and notarial records.

1. 1 Longships

It is important to define the different types of rigging and shape of these vessels and crafts. Two types of rigging (sails) were used in the Middle Ages, either alone or in combination.¹²⁴ Square-rigging, used on cogs and carracks, meant that sails were hoisted on spars at right angles to the keel of the ship; lateen-rigging refers to sails mounted on a spar set at an angle and not perpendicular to the keel. Longships are so defined because their keel is long and streamlined, they normally used both sails and human propulsion, and they could be fast and more easily steered thanks to oars. To this category belonged the galley,¹²⁵ the later *galeazza* (a sturdy galley), the smaller *griparia*, the *panfìlo* (a small longship), and an earlier version of the *navis* (a ship with lateen sails). They can be easily identified in visual sources, as their sides were low and close to the surface of the sea, the oars were aligned on the locks, they had between one and three masts, and normally the castles were either aligned to the keel or only slightly emerging.

Venice was at the epicentre of an important innovation in this domain, namely the creation of an amphibious warship-cum-merchantman, the *galea da mercato*, a galley derived from the

¹²⁴ For the discussion of sails used in the Adriatic see M. Bonino, 'Lateen-rigged Medieval Ships. New Evidence from Wrecks in the Po Delta (Italy) and Notes on Pictorial and Other Documents', *Nautical Archaeology*, 7/1 (1978), 9-28 and S. Bellabarba, 'The Square-rigged Ship of the Fabrica Di Galere Manuscript Part 1', *Mariner's Mirror*, 74/2 (1988), 113-130. More generally R. J. Whitewright, 'Maritime Technological Change in the Ancient Mediterranean: The Invention of the Lateen Sail' (PhD thesis, University of Southampton, 2008).

¹²⁵ The bibliography on the Venetian galleys is substantial. I will only mention a few titles. For an authoritative introduction Stöckly, *L'incanto*, cit. and B. Doumerc, 'Le galere da mercato', in U. Tucci (ed.), *Storia di Venezia*, vol. 12. *Il mare* (Rome, 1991), 357-95. For the experience onboard see B. Arbel, 'Daily Life on Board Venetian Ships: The Evidence of Renaissance Travelogues and Diaries', in G. Ortalli and A. Sopraccasa (eds.), *Rapporti mediterranei, pratiche documentarie, presenze veneziane: le reti economiche e culturali (XIV-XVI secolo)* (Venice, 2017), 183-219. For details on a galley excavated in the Venetian lagoon see G. Arici (ed.), *La galea ritrovata : origine delle cose di Venezia* (Venice, 2002). On the profit of a single voyage, in which the Foscari Family invested in 1463 see S. Montemuzzo, 'Ships and Trade: The Role of Public Navigation in Renaissance Venice', in G. Nigro (Ed.), *Le reti marittime come fattori dell'integrazione europea: selezione di ricerche. Maritime Networks as a Factor in European Integration: Selection of Essays*.(Florence, 2019), 473-484, which forms the backbone of the more recent Id., *Networks in the Early History of Capitalism. Merchant Practices in Renaissance Venice* (London, 2025).

more classic *galea* but heavier.¹²⁶ It bridged the gap between warships and cargo ships, proving itself as a quick boat that could be easily defended, and could equally be used for offensive purposes if needed.¹²⁷ Indeed, the cargo capacity of *galee da mercato* was limited, probably a maximum of 250 tons, and they shared the usual problem of oar-propelled vessels: for the stroke to be efficient the oars needed to be almost horizontal to the water, hence they had a low board, exposing them to the waves.¹²⁸ The *galee da mercato* ‘carried between 140 and 250 dead-weight tons of cargo below deck’ and ‘were warships with crews of over 200 men armed’, of which around 30 were crossbowmen, having room for 200 men.¹²⁹ According to the Senato auctions, in the fourteenth century an average of twenty-six galleys set sail from Venice annually, with a total tonnage of 3,900 tons, decreasing around 1410 to fifteen vessels and 3,000 tons, bouncing back in the second half of the fifteenth century to nineteen ships and 4,750 tons.¹³⁰ According to Renaissance nautical treatises, each had roughly a length on deck, stem to stern, of 138 Venetian feet (47.9 metres); the beam was 23 Venetian feet (8 metres), the floor 12 Venetian feet (4.1 metres), and the depth 9 Venetian feet (3.1 metres).¹³¹ As explained by Courtney R. Higgins, ‘galley hulls had length to beam ratios between 5:1 and 7:1’,¹³² which illuminates why they were known as ‘long ships’. Archaeological evidence seems to confirm the validity of this ratio, with a length of 38 m and a beam of 5 metres ascribed to the only fourteenth-century Venetian galley excavated so far (the San Marco in Boccalama B Hull),

¹²⁶ Doumerc, ‘Le galere da mercato’, cit.

¹²⁷ R. W. Unger, *The Ship*, 127.

¹²⁸ F. Ch. Lane, *Ships and Shipbuilders of the Renaissance* (Baltimore, 1934, reprint 1992), 15-16.

¹²⁹ Lane, ‘Venetian Shipping’, cit., 4. When talking about tonnage it is important to distinguish clearly the unit being measured. As explained by the Encyclopaedia Britannica ‘Deadweight tonnage (DWT) is a measurement of total contents of a ship including cargo, fuel, crew, passengers, food, and water aside from boiler water. It is expressed in long tons of 2,240 pounds (1,016.0469088 kilograms).’ Deadweight Cargo Carrying Capacity (DCCC) measures the weight of cargo a vessel can carry, gross tonnage measures the total internal volume of a ship and net tonnage measures the available cargo space on a ship, excluding non-cargo areas.

¹³⁰ F. Ch. Lane, ‘The Merchant Marine’, in Id. (ed.), *Venice and History* (Baltimore, 1966), 144.

¹³¹ F. Ch. Lane, ‘Naval Architecture, About 1550’, in *Ibid.*, 166, ‘Great Galley’ entry.

¹³² C. R. Higgins, ‘The Venetian Galley of Flanders: from Medieval (2- dimensional) Treatises to 21st Century (3- dimensional) Model’ (MA thesis, Texas A&M University, 2012).

even though the size is smaller than the theoretical measurements prescribed by treatises.¹³³ Galleys remained inextricably linked to the very public image of Venice, being widely reproduced in pilgrims' accounts of the fifteenth century and repeatedly referred to as 'vita et salus', the life and well-being of the Republic, in the deliberations of the Venetian Senato.¹³⁴ Nonetheless, it is important to note that not all galleys were publicly owned and that the Republic could decide to outfit the galleys directly without leasing them. The galley proved an ingenious innovation combining the lightness and versatility of a warship with a cargo capacity sufficient to load 'light' cargoes in the eastern Mediterranean, even though limited by oar-propulsion.

1.2 Round ships

Round ships were so called because their high decks clearly conveyed the idea of a round vessel, reinforced by a far shorter ratio between length and width, namely 3:1.¹³⁵ They were used for regional and international trade. According to Lane: 'the typical round ship of the twelfth or thirteenth century used no oars. It was a 'round ship', its length overall being about three times its width or beam. It had two masts, each carrying a triangular sail. To be worthy of the name 'ship' these two-masted lateeners had to have at least two decks, a stern castle, a forecastle, and a fighting top.'¹³⁶ The *navis* and the *tarida*, the older models, gave way in the

¹³³ M. D'Agostino and S. Medas, 'Excavations and Recording of the Medieval Hulls at San Marco in Boccalama', *The Ina Quarterly*, 30/1 (2003), 26-27.

¹³⁴ See for instance ASVe, Senato, Deliberazioni, Misti, Reg. 36, f. 30v (11/08/1377): 'quod vita et salus nostra est quod galee nostre navigent et non impediatur ullo modo'.

¹³⁵ For a general introduction see S. McGrail, *Boats of the World. From the Stone Age to Medieval Times* (Oxford, 2001), 230-248 and B. Greenhill, *The Evolution of the Sailing Ship, 1250-1580* (London, 1995).

¹³⁶ Lane, *Venice. A Maritime Republic, cit.*, 46. I will use henceforth the name *navis* in Latin to refer to the specific type of ships normally referred to by anglophone authors as *nef*, since Venetian sources employ the term 'navis'. I will use ships to indicate general vessels.

fourteenth century to the cog, the true protagonist of that century.¹³⁷ According to the Florentine chronicler, Giovanni Villani, in 1304

At about the same time (1304) certain men of Bayonne in Gascony, with their ships, which they call cogs, were passing through the Strait of Seville, and having come plundering in this sea of ours, did considerable damage. And from that time on the Genoese and Venetians and Catalans have made a practice of navigating with cogs and have been leaving off use of the big ships, « nave grosse», to navigate more safely in the cogs and because they are less expensive; and this has been a great transformation in the shipping of our fleets¹³⁸

The information relayed by Giovanni Villani seems to be trustworthy, given that a cog is already mentioned in a notarial act dated 1310 in Venice.¹³⁹ Unsurprisingly, this ‘navis vocata cocha’ appeared in the western Mediterranean, where it was plundered by Catalan pirates. The adoption of the cog, a normally single-masted, high-sided, square-sail-rigged vessel, with a high forecastle and stern castle protruding outwards and a stern-mounted rudder, was a breakthrough in nautical technique.¹⁴⁰ The cog was more stable than the *navis*, and could be more abundantly loaded:¹⁴¹ the stern-mounted rudder increased the steering capacity of the boat, which had previously to be achieved with anchors and rigging. For these reasons, it

¹³⁷ See R. Gardiner, *Cogs, Caravels and Galleons*, cit.; G. Hutchinson, *Medieval Ships and Shipping* (London, 1994); L. Carbonel Relat, ‘La “coca”, nave del Medioevo’, *Revista de historia naval*, 4/15 (1986), 45-64.

¹³⁸ Giovanni Villani, *Croniche di Giovanni, Matteo e Filippo Villani, secondo le migliori stampe e corredate di note filologiche e storiche (vite degli uomini illustri fiorentini, di F. Villani, colle appendici di G. Mazzuchelli)*, ed. A. Rachei, 2 volumes (Trieste, 1857-58), volume I, 205: ‘In questo medesimo tempo certi di Baiona in Guascogna con loro navi, le quali chiamano coche, passarono per lo stretto di Sibia, e vennero in questo nostro mare corseggiando, e feciono danno assai; e d’allora innanzi i Genovesi e Viniziani e Catalani usaro di navigare con le cocche, e lasciarono il navigare delle navi grosse per più sicuro navigare, e perché sono di meno. I have taken the translation from G. Hutchinson, ‘Bayonne and Beyond. Pivotal Points in the Transmission of Medieval Shipbuilding Technology’, *Archaeonautica*, 14 (1998), 185-190, quote from 188.

¹³⁹ *Domenico prete di S. Maurizio, notaio in Venezia (1309-1316)*, ed. by M. Tiepolo (Venice, 1970), n. 143.

¹⁴⁰ For ships and technology see J. R. Adams, *A Maritime Archaeology of Ships. Innovation and Social Change in Late Medieval and Early Modern Europe* (Oxford, 2013).

¹⁴¹ See C. Tipping, ‘Cargo Handling and the Medieval Cog’, *The Mariner’s Mirror*, 80 (1994), 3-15; L. Berggren et al (eds.), *Cogs, Cargoes, and Commerce. Maritime Bulk Trade in Northern Europe, 1150-1400* (Toronto, 2002), J.-C. Hocquet, ‘Productivity Gains and Technological Change’, *The Journal of European Economic History*, 24/3 (1995), 537-56.

gradually superseded the older lateen-rigged ships and became the true ‘super-container’ of the Middle Ages. The technical characteristics of the cog and of its later iteration, the carrack, can be fully appreciated by looking at two images from the fifteenth century, namely the *nave quadra* in the ‘Book’ of Michael of Rhodes (1440) and the print of a carrack (1470), distinguishable for a protruding sail known as a ‘spritsail’ located on top of the bowsprit.

Image 2¹⁴²

**A Venetian round ship in The Book of Michael of Rhodes,
manuscript illumination, ca 1440, Private collection**



Image 3

A three-masted ship under sail (carrack), Print, ca 1470,
National Maritime Museum (Greenwich), Venetian School¹⁴³



The importance of the cog in Venetian shipping has been amply debated, with diametrically opposed conclusions. According to U. Tucci, ‘in the Trecento the cog is the most widespread type of vessel in Venetian and Genoese shipping’,¹⁴⁴ whilst according to B. Doumerc, ‘the cog

¹⁴³ Greenwich, National Maritime Museum, *A Three-masted Ship Under Sail*, Engraving, ca. 1470, <https://images.rmg.co.uk/asset/44305/> (30/05/25).

¹⁴⁴ U. Tucci, ‘Navi e navigazioni all’epoca delle crociate’, in G. Ortalli et al. (eds.), *Genova, Venezia, il Levante nei secoli XII-XIV* (Genoa, 2001), 280: ‘Nel Trecento la cocca è il tipo di nave più diffuso nelle marine di Genova e di Venezia.’

had a limited development in Venice'.¹⁴⁵ I would concur with Tucci on the importance of the cog, considering that it often appears in Venetian documents.¹⁴⁶

The technical advancements in shipbuilding in the domain of round ships, and the increased demand for raw materials by European proto-industries led to an increased cargo capacity, which however had two important downsides, namely a heavier ballast to enhance stability, and a proclivity to shipwrecks.¹⁴⁷ To give an idea of the cargo capacity of these ships, I present here a relatively early 'bill of lading' of a Venetian ship in 1327, drawn from the *Commemoriali*, a collection of notable documents assembled by the Republic. In one of the rare complete descriptions of the cargo of a Venetian ship, in this case bound for Messina and dated 20 March 1327, we can appreciate the variety of the cargo and its volume, as well as the high number of investors who partook in the said trade.¹⁴⁸ Nicola Zappatino loaded twelve bales of *matarelli* (equal to 6,370 *brachia*), that is woollen cloth,¹⁴⁹ 24,044 Venetian *libbre* of iron in 2,334 bars; 3,016 *libbre* of copper in 526 pieces; 900 *libbre* of lead; further 2,147 *libbre* of copper in 365 pieces in eight barrels and further 2,127 *brachia* of *matarelli* in four bales.¹⁵⁰ The value of these commodities is given as 3,594 *lire ad grossos*, 9 *soldi ad grossos* and 10 *denari ad grossos*, that is 1,377 ducats. Nicola and Pietro Michel, alongside Marco Petener, loaded onto the same ship one bale of cloth; 2,024 *libbre* of copper in three barrels; 407 *libbre* of copper meant for Tunis;

¹⁴⁵ B. Doumerc, 'Gli armamenti marittimi', in *Storia di Venezia, volume III*, cit., 626: 'Quanto alla cocca, ha un destino piuttosto limitato a Venezia, per ragioni probabilmente molto varie.' It is unclear how this conclusion fits with what he wrote earlier, *Ibid.*, 622: 'All'inizio del secolo XV il cronachista Antonio Morosini menziona il numero di unità in servizio nei convogli di linea, vale a dire trentacinque cocche e ventisei grandi galere da mercato, con una capacità di carico complessiva pari rispettivamente a 15.000 e 4.500 tonnellate.'

¹⁴⁶ See Appendix B.

¹⁴⁷ Pros and cons of round ships are perceptively discussed in R. W. Unger, 'Ships, Shipping, Technological Change and Global Economic Growth, 1400-1800', in G. Nigro (ed.), *L'economia della conoscenza: innovazione, produttività e crescita economica nei secoli XIII-XVIII. The Knowledge Economy: Innovation, Productivity and Economic Growth, 13th to 18th Century* (Florence, 2023), 373-394.

¹⁴⁸ ASVe, *Commemoriali*, Reg. III, f. 23 r/v, 20th March 1327, no. 40 'infrascripta sunt mercimonia et res Venetorum existencia in navi Venetorum cuius est patronus Marinus Longo de Veneciis'.

¹⁴⁹ See Stussi, *Zibaldone*, cit., 135. More precisely, they were 'pannilani naturalmente colorati in grigio e marrone, 'grievi e matarelli'. See G. De Gennaro, 'Le lane di Puglia nel basso medioevo', in M. Spallanzani (ed.), *La lana come materia prima: i fenomeni della sua produzione e circolazione nei secoli XIII-XVII* (Florence, 1974), 154.

¹⁵⁰ For the weights used in Venice see Appendix D of the present thesis.

400 *placoni* (timber planks) to be shipped to Palermo; and cheese. Gabriele, Andrea and Andreolo Pisani loaded onto that same ship 861 *brachia* of *matarelli* in 27 *pecias*; another 1,766 *brachia* of *matarelli* in 28 *pecias*; another 2,137 *brachia* of *matarelli* in 33 *pecias*; 2,622 *brachia* of *grisis* fabric in 43 *pecias*, bound to Messina for their representative Giovanni Coppo; 27,700 *millier*¹⁵¹ of rings; 15 *millier* of keys for coffers (*clavorum a cassella*); one *ligaço* of coral; 100 dozens of crystal rosary beads (*paternostrz*); 120 dozens of knives; 20 bundles of iron threads; 113 *risme* of paper; 12 *millier* of *siblotis* (sic, possibly camlets); 18 copper *çençelli*; 6,100 *zendadi* fabrics; 1 sack of crystal objects; 30 *millier* of brocades; 8 dozen candlesticks; 305 hides from the Marche; 13 dozens of curry combs (*streglarum*); 160 *millier* of rosary beads; 3.5 dozen mirrors; 15 *millier* of needles and 600 single needles. Filippo della Rama loaded 16,110 *libbre* of iron, whilst Giovanni Cupo shipped 4 *millier* and 550 *libbre* of the same material, to be sent to Paolo Berretta in Messina. Counting textiles and metals alone, this ship carried 312.898 *millier* (150 tons) and 15,883 *brachia* of cloth. If we consider that twelve bales of *matarellis* are equated with 6,370 *brachia*, we establish that each bale equalled 530.83 *brachia*, hence 15,883 *brachia* of cloth meant 30 bales of cloth. This implies a cargo capacity of at least 200 tons, which was a sizeable amount for the early fourteenth century. Moreover, this seemingly mundane document illuminates the variety of the cargo laden on a medieval ship: we find textiles and hides in all qualities, from canvas to the prized camlets and *zendadi*, agricultural products like cheese, and a remarkable amount of metallic objects, shipped both as metal bars or as finished objects such as needles. The extent of the import suggests it was for trade and not just for local needs. There is no hierarchy in the list of objects, and the overall value of these materials is significant. In fact, this is one of the earliest complete cargo lists from the early fourteenth century, and it perfectly illustrates how the increased cargo capacity of ships favoured trade in a variety of products and the coexistence of precious textiles with metals in bulk. This suggests that early in

¹⁵¹ This is probably a mistake for *libbra*. I counted it as 27.7 *millier*.

the early fourteenth century vessels of this sort could load a significant cargo, and were often bound not just for the eastern Mediterranean, but also for Spain, Sicily, or Northern Africa.

This is even truer in the later part of the century when round ships became, to quote Antonio Ivan Pini, 'medieval super containers'.¹⁵² The need for larger cargoes led to what has been called 'medieval gigantism', with cogs or *naves* with the remarkable carrying capacity of 1,000 *botti* (a unity of volume equating to 600 tons).¹⁵³ However, this increase had a drawback, which was the necessity to balance the vessels with a heavy ballast (at least half of the carrying capacity). In 1353 the Maggior Consiglio reiterated that ships had to carry two-thirds of the total 'cargo' (more precisely the carrying capacity) as salt.¹⁵⁴ It is not surprising that we find a reference to ballast (*saorna* in Venetian) already in the maritime statutes enacted by Doge Zeno (1255-68), one of the earliest legislations on ships in Venice, where the inherently 'useless' ballast became a vehicle for raw commodities needed by Venice, such as metals, materials related to glass production, and alum.¹⁵⁵ The structure of round ships also made them more unstable and slower than galleys, rendering them particularly prone to founder. Medieval sailors tried to solve this problem with the use of a stern-mounted rudder (instead of multiple lateral rudders) and by adopting square sails.¹⁵⁶ To temper the instability of these boats, medieval sailors increased the sail surface, that is the number of sails and their extension. This led to the multiplication of sails in the fifteenth century, so much so that multiple masts with more than a dozen sails became the norm. However, this exposed round ships to the danger of running

¹⁵² A. I. Pini, 'Alimentazione, trasporti, fiscalità : i "container" medievali', *Archeologia medievale*, 8 (1981), 173-182.

¹⁵³ The *botte* was a unit of volumes equating to 0.6 tons. For a discussion of the *botte* see Gluzman, *Venetian Shipping*, cit., 73-85.

¹⁵⁴ ASVe, Maggior Consiglio, Deliberazioni, Novella, f. 32 v (22/04/1353): 'Cum aliqua navigia habuerint olim questionem cum dominio de adducendo duas partes carici salis Veneciis, et ipsum dare pro illo pretio quo proximum ordinem habuerat et aliud tercium carici possent adducere de rebus solitius inde adduci, et ipsa navigia venerint cum toto carico salis'.

¹⁵⁵ A. Sacerdoti and R. Predelli (eds.), *Gli statuti marittimi veneziani fino al 1255* (Venice, 1903), 160.

¹⁵⁶ On the introduction of the rudder see L. V. Mott, *The Development of the Rudder: A Technological Tale* (London, 1997).

adrift, meaning that the ships would have been at the mercy of prevailing winds and gales.¹⁵⁷ Prior to the introduction of navigation by longitude and latitude, navigation depended on ‘reckoning’ of the coast whenever possible. This was particularly the case in the Adriatic and in the Aegean, where the presence of islands and a recognisable coastline would have helped medieval seafarers. The coast of Northern Africa, famous for the absence of suitable harbours, posed conversely a serious obstacle to medieval sailors.¹⁵⁸ Even though the increased size of the cog meant that, theoretically, these ships could have avoided stopovers along the coast, precisely the risk of running adrift led them to stay as near as possible. It also meant that when the ship encountered a strong gale it could easily be at the mercy of the sea. It is no coincidence that in a series of nautical miracles performed by the True Cross of Venice in the fourteenth century, we find the rescue of a ship in distress running adrift due to a gale, carrying olive oil from Puglia into Venice in 1370.¹⁵⁹ The power of the cross was invoked again in 1421 to guide a ship coming from Crete and encountering a strong gale in the Kvarner Gulf.¹⁶⁰ Ships devoid of divine protection seem to have been less fortunate: of the sixty-eight Venetian shipwrecks between 1403 and 1433 tabulated by Simone Rauch using the ‘Morosini Chronicle’ only five involved galleys.¹⁶¹ The cog was thus a major innovation of Mediterranean and Venetian shipping, but it was also the victim of its own size: it ran the risk of running adrift and its increased cargo capacity affected its manoeuvrability. Its ascendancy proved to be short-

¹⁵⁷ T. Marelić, ‘Wind Influence on Sailing Ship Navigation across Croatian Parts of the Adriatic Sea’, *Geoadria*, 21/2 (2016), 211-236. On sails and their use F. Castro, ‘A Quantitative Look at Mediterranean Lateen-and Square-Rigged Ships’, *The International Journal of Nautical Archaeology*, 37/2 (2008), 347-359 and J. Whitewright, ‘Technological Continuity and Change: The Lateen Sail of the Medieval Mediterranean’, *Al Masaq*, 24/1 (2012), 1-19.

¹⁵⁸ J. H. Pryor, *Geography, Technology, and War. Studies in the Maritime History of the Mediterranean, 649-1571* (Cambridge, 1988), 21

¹⁵⁹ K. Petkov, *The Anxieties of a Citizen Class. The Miracles of the True Cross of San Giovanni Evangelista, Venice 1370–1480* (Leiden, 2014), original at 265-266, commented at 47-66. All translations are my own unless otherwise stated.

¹⁶⁰ *Ibid.*, 123-150.

¹⁶¹ R. Mueller, ‘A Device for Signalling the Height of the Tide at the Port of Venice around 1500’, in G. Christ (ed.), *Cultures of Empire: Rethinking Venetian Rule 1400/1700: Essays in Honour of Benjamin Arbel* (Leiden, 2020), note 6, 274-275.

termed, as it would be replaced by the carrack only a century later.

To give an idea of the dimensions of a Venetian cog we have to rely on fifteenth-century shipbuilding treatises, namely the ‘Fabbrica di galere’, the ‘Ragioni antique spettanti all’arte del mare’, and the ‘Raxion de’ Marinieri’.¹⁶² Following Lane’s reconstruction, the length of the keel of a cog was 2.5 times its beam (3.6 times counting the keel), according to the fifteenth-century *nave quadra* in the ‘Fabbrica di galere’ by Michael of Rhodes, the depth equalling half of the maximum width. A cog was thus 8.87 metres wide at its maximum, and it was 23.95 metres long (71.5 English feet).¹⁶³ Between 1405 and 1450 the standard ‘large’ round ship (cog then carrack) offered by wealthy Venetians to the Republic, and considered as ‘worthy’ of joining the publicly-organised convoys, averaged between 400 and 799 *botti* (240-479 tons).¹⁶⁴ The cog was thus truly spacious and particularly apt for the transport of commodities in bulk like wine or wheat, and essentially the main Mediterranean ‘cargo ship’. It was nonetheless limited by its own size, which essentially restricted the number of anchorages it could put into. Cogs worked often in convoys to load cotton in Syria or to provide support to the state galleys, but they could equally be used for private voyages.

1. 3 Flat-bottomed vessels

Flat-bottomed vessels, similar to modern barges, such as the *barca* (Middle English ‘bark’),

¹⁶² The history of these texts has been discussed in M. Bondioli, ‘Early Shipbuilding Records and the Book of Michael of Rhodes’, in A. Stahl et al. (eds.), *The Book of Michael of Rhodes: A Fifteenth-Century Manuscript*, volume 3 (Cambridge MA, 2009), 243-280 and F. M. Hocker and J. M. McManamom, ‘Mediaeval Shipbuilding in the Mediterranean and Written Culture at Venice’, *Mediterranean Historical Review*, 21/1 (2006), 1-37. For Michael of Rhodes specifically see D. McGee, ‘The Shipbuilding Text of Michael of Rhodes’, in H. Nowacki and W. Lefèvre (Eds.), *Creating Shapes in Civil and Naval Architecture: A Cross-Disciplinary Comparison* (Leiden, 2009), 223-250.

¹⁶³ For a reconstruction of the *nave quadra* see V. N. Valenti, ‘Transitions in Medieval Mediterranean Shipbuilding: a Reconstruction of the Nave Quadra of the Michael of Rhodes Manuscript’ (MA thesis, Texas A & M University, 2009).

¹⁶⁴ F. Ch. Lane, *Ships and Shipbuilders*, cit., Table A, 235.

the *rascona*, the *sandalo*, the *burchio*,¹⁶⁵ and the *marciliana*,¹⁶⁶ were mostly used for cabotage or fluvial transport, for local trade in Venice and as *traghetti*, the ferries that enabled Venetians who could not afford a gondola to cross the many city canals.¹⁶⁷ A perfect illustration of the boatman par excellent, Charon ferrying souls across the Styx, is offered in a fifteenth-century illumination of the Divina Commedia (BNF, MS italien 78, f. 14v). The whole scene, probably painted by Cristoforo Cortese, has been attributed to a Venetian context by the accompanying description in the BNF catalogue included in the Illuminated Dante Project.¹⁶⁸ The copyist, Giorgio Zancani, was certainly Venetian (a family of the same name was famous as bankers and merchants before defaulting in the fifteenth century).¹⁶⁹ The setting closely resembles the lagoon, with its dark green-blueish waters and an island in the foreground clearly reminiscent of Punta della Dogana. Even though in a clearly deluxe version, this manuscript nonetheless clearly represent a flat-bottomed *traghetto*, a common means of transport in late-medieval Venice, especially for poorer citizens of Venice who did not own their own boat.¹⁷⁰

¹⁶⁵ The similarity between these boats is underscored by a deliberation passed in the Maggior Consiglio in 1348 fining those who dared to sell wine ‘in barca, burchio, vel plata’ in the city. See ASVe, Maggior Consiglio, Deliberazioni, Registri, Spiritus, f. 156r (03/04/1348).

¹⁶⁶ On the *marciliana* see R. Gluzman, ‘Resurrection of a Sunken Ship: The Salvage of the Venetian *Marciliana* That Saved Cattaro from Barbarossa’, *Archivio Veneto*, 6th series, 8 (2014), 29-78.

¹⁶⁷ The history of boatmen has attracted considerable attention by social historians see D. Romano, *Housecraft and Statecraft: Domestic Service in Renaissance Venice, 1400-1600* (Baltimore, 1996) and K. Lowe, ‘Visible Lives: Black Gondoliers and Other Black Africans in Renaissance Venice’, *Renaissance Quarterly*, 66/2 (2013), 412-452.

¹⁶⁸ Illuminated Dante Project, entry ‘Paris, Bibliothèque nationale de France; Manuscrits, 78’, detail from f. 14v, ‘Dante e Virgilio incontrano Caronte sulla riva del fiume Acheronte’, Manuscript illumination, first half of the fifteenth century, copied by Giorgio Zancani, https://www.dante.unina.it/idp/public/preview/preview/idMs/279856/returnPath/pagine_query_page_1 (30/05/2025). I am indebted to Simone Briano for drawing my attention to this image.

¹⁶⁹ Mueller, *The Venetian Money Market*, cit., 151-157.

¹⁷⁰ D. Romano, ‘The Gondola as a Marker of Station in Venetian Society’, *Renaissance Studies*, 8/4 (1994), 359-74.

Image 4

Caron as a gondolier, Manuscript illumination, Bibliothèque Nationale de France,
MS It. 78, f. 14v, 15th century, Venetian workshop



These flat-bottomed vessels were normally propelled either by sail or oars, but could also be pulled by horses on towpaths.¹⁷¹ *Burchi* were the backbone of Venetian trade between the mainland and Venice.¹⁷² They could also engage in Adriatic trade, as demonstrated by the activities of one of them in the early-fifteenth century Adriatic.¹⁷³ A *burchio* recorded in 1365 measured 1.8m in height at midship, a 3.5-metre beam, a length of 15 metres, and a tonnage of 12 tons, with virtually no keel, like a barge.¹⁷⁴ Documentary and archaeological evidence, mainly from the Logonovo Wreck (from the beginning of the fifteenth century) in the Po delta suggests the following measurements for other lateen-rigged ships. The two-masted lateener *barca* from the Logonovo Wreck measured 10.05 metres as total length, with an 8.6-metre long keel and a 2.55-metre beam, the flat part of the bottom totalling 1.08 metres.¹⁷⁵ A two-masted *marviliana* recorded in 1362 at Ravenna had a total length of 10 metres, the keel length was 8.7 metres, the beam ('boca') 1.87 metres and the floor was 0.97 metres long. *Burchi* and *rascone* were flat-bottomed vessels with a limited cargo capacity, as low as 6.7 tons in the case of a 1357 *rascona*.¹⁷⁶ Archaeological evidence from the aforementioned site of San Marco in Boccalama clarified that Hull A, a *rascona*, was quite long, as it measured 23.6 metres, the beam reaching 6 metres. As explained by Marco d'Agostino, who excavated the hulls, the *rascona* 'is characterised by a low freeboard, recurving posts that rise to a significant height above the rail, two quarter-rudders fastened at the sides of the stern, and two vertical beams used to support a frame for mounting the rudders'.¹⁷⁷ Unlike the *burchio*, which was rigged with a lugsail, the one-masted *rascona* represented in a later fresco of St George, painted by Pisanello in the Cappella Pellegrini

¹⁷¹ Rubin de Cervin, *Bateaux*, cit., 155-66.

¹⁷² They also transported salt see J-C. Hocquet, 'Le "burchio", outil privilégié du transport du sel en Vénétie', in G. Cabourdin (ed.), *Le sel et son histoire* (Nancy, 1981), 117-138.

¹⁷³ S. Anselmi, 'Per la storia economica del piccolo cabotaggio', cit. 521-48.

¹⁷⁴ L. R. Martin, *The Art*, cit., Appendix 3, 208.

¹⁷⁵ M. Bonino, 'Lateen-rigged', cit.

¹⁷⁶ Ray Martin, *The Art*, cit., 208.

¹⁷⁷ D'Agostino, 'Excavation and Recording', cit., 26.

in Sant'Anastasia in Verona (1433-38), was rigged with a lateen sail and featured a round-roofed cabin above deck.

Image 5

**Detail of a *rascona* from Pisanello, St George and the Princess, fresco,
Verona, Church of Sant'Anastasia, 1433- 1438**



1. 4 Comparing Venetian Shipping

Having now briefly presented the main categories of Venetian shipping, I would like to suggest a comparison with other maritime cities of the same period, to underscore how this

tripartition of shipping between longships, round vessels, and flat-bottomed barks was in fact shared by other Mediterranean cities, with different categories of ships catering for different trade circuits, from the local to long distance. Despite the obvious difference in building techniques and types of ships, this fundamental articulation is found in centres as various as Barcelona, Genoa, and Venice, suggesting the widespread integration between these three types of vessels. Venice, however, differed from the others in one respect, namely the choice of galleys as both warships and cargo ships.

The Genoese relied on at least 100 *naves grosse* for international trade, but Furio Ciciliot, in his thorough analysis of Genoese shipping (2005), lists no less than thirty-four different types of vessels used in medieval Genoa, pointing out the ubiquity of flat-bottomed ships.¹⁷⁸ A lone Genoese customs register from 1376-1377 clearly attests to the importance of smaller vessels for cabotage trade between Provence, Genoa, and Porto Pisano, such as *leudi*, *legni*, and *vacchette*.¹⁷⁹ Similarly, Catalonia relied on a small number of *naus* and cogs for international trade with the Levant, numbering no more than sixteen in the 1402-1405 period.¹⁸⁰ Nonetheless, Marcel Pujol Hamelink has shown that they were complemented by hundreds of other vessels, which he also divided into three categories: galleys, ships, and boats, according to their shape.¹⁸¹ Customs records for Barcelona and the Catalan coast equally suggests the intense cabotage trade sustained by the coastal towns in the area, either with Barcelona itself or amongst themselves. A customs register from Valencia dated to 1404 recorded forty-two *barques* (boats) from Dénia on the Valencia-Dénia route, laden with wheat; not to mention one skiff (*llagut*) and fifteen foreign boats. A similar route, Valencia-Perpignan, crucial for the wheat trade, was plied by no fewer than fourteen boats in 1393. As for Barcelona itself, already in 1357 no fewer

¹⁷⁸ On Genoese shipping see F. Ciciliot, *Le superbe navi: cantieri e tipologie navali liguri medievali* (Savona, 2005).

¹⁷⁹ *Les douanes de Gênes, 1376-1377*, ed. J. Day, 2 volume, (Paris, 1963).

¹⁸⁰ D. Coulon, *Barcelone et le grand commerce d'orient au moyen âge. Un siècle de relations avec l'Égypte et la Syrie-Palestine (ca. 1330 - ca. 1430)* (Madrid, 2004), 140, graphique 1, for the types of ships see the appendix 645-58.

¹⁸¹ M. Pujol i Hamelink, *La construcció naval a Catalunya a l'Edat Mitjana* (Barcelona, 2012).

than twenty-nine boats or skiffs (*barques* or *llaguts*) left that port, and twenty-five boats tramped between nearby Valencia and Colliure in 1381.¹⁸² The variety of ships was not a prerogative of the western Mediterranean, being equally attested to in medieval Dubrovnik.¹⁸³

Venetian shipping was thus typical in being composed of different types of ships, with a small number of larger vessels, used mainly for international trade, a large number of medium-sized round vessels used for regional and inter-regional trade (Adriatic, Puglia, Istria, Friuli), and hundreds of flat-bottomed ships used to transport raw materials, for fluvial trade, cabotage, or for the transport of people within Venice itself. It differed from most other Mediterranean polities in its reliance on galleys and on the usage of a warship for the transport of merchandise. This development in Venice was particularly significant because elsewhere, as remarked by Richard W. Unger, ‘the greater volume of trade handled by cargo ships meant that they could expand their activities and increasingly replace galleys in the movement of all goods including luxuries’.¹⁸⁴ Galleys, round ships, and flat-bottomed vessels formed a complementary shipping system, each sustaining different circuits of trade. This is in line with contemporary developments in Barcelona, Genoa, and Dubrovnik, even though the choice of the galley as a cargo ship is typically Venetian. Nonetheless, as shown both by finds and archival records, flat-bottomed vessels were ubiquitous both in Venice and in the other maritime cities, serving both as a vessel for trade and as means of transport.

2. Quantifying the Venetian merchant fleet

¹⁸² M. T. Ferrer i Mallol, ‘Navegació, ports i comerç a la mediterrània de la Baixa Edat Mitjana’, in J. Pérez Ballester and G. Pascual (eds), *Comercio, redistribución y fondeaderos, la navegación a vela en el Mediterráneo : actas de las V Jornadas Internacionales de Arqueología Subacuática* (Valencia, 2008), 120 and 142.

¹⁸³ S. Vekarić, ‘Vrste i tipovi dubrovačkih brodova XIV stoljeća’, *Anali Historijskog Instituta u Dubrovniku*, 10/11 (1966), 19-42 and J. Luetić, *Pomorci i jedrenjaci Republike Dubrovačke* (Zagreb, 1984).

¹⁸⁴ Unger, *The Ship*, cit., 127.

When it comes to quantifying Venetian ships, in the absence of statistical data, we can only infer the general order of magnitude, rather than the actual number of ships. This is not just a theoretical exercise, but a useful way to understand the volume of Venetian trade, and how each of the type of ships described above partook in the trade networks of the Republic, and to what extent. We do have three documents quantifying Venetian ships, albeit in approximate terms: a proposal by the Genoese to replace Venetian ships in Dalmatia (1418); the so-called deathbed oration of Doge Mocenigo (1423); and a description of the city by Jacopo d'Albizzotto Guidi (1442). With less certitude, we have occasional references to fleets used for specific tasks. In 1316, for instance, the *podestà* of Pellestrina was ordered to send 100 *plati* (flat-bottomed ships) to fetch stone in Istria to reinforce the port of that city.¹⁸⁵ Daniele Chinello, the chronicler of the War of Chioggia (1378-1381), claimed that during the siege of Chioggia - when most of the Venetian fleet had already been sunk or damaged - Venice was still able to deploy thirty-four galleys, sixty *ganzaruoli* (small flattened boats), two big cogs, and 400 smaller vessels (*barche*, *burchi*, and *palischermi*).¹⁸⁶ Given the desperate circumstances, it is certain that Venice was using whatever could float for its last desperate attempt to save the city. In 1354, as a comparison, in a previous war against the Genoese, Venetians were able to deploy thirty-five galleys, two *ligni* (generic vessels), twenty *griparie*, and three *naves*.¹⁸⁷ In a different large-scale operation, in November 1402, the Republic agreed to pay the colossal sum of 6,000 ducats to Giovanni da Parma, parish priest of the church of Santa Maria of Codroipo, to dredge all the canals of the city of Venice. The Republic agreed to make available to him no less than one

¹⁸⁵ Hocquet, *Le sel et Venise*, cit., vol. 2, 95. A similar number reappears in the fifteenth century, see Ibid. 508-510.

¹⁸⁶ Daniele Chinazzo, *Cronaca della guerra di Chioggia scritta da Daniele Chinazzo di Treviso ; pubblicata da Lodovico Antonio Muratori ed ora in comoda forma ridotta e diligentemente riveduta e corretta* (Milan, 1864), 76. These numbers echo the contents of a 1414 trial against Daniele Loredan who was deployed during the War with Padua on the Adige river with 100 *barche* and 26 *ganzaruoli*. ASVe, Avogaria de Comun, *busta* 3601, Processi originali, sub anno 1414 : 'I(n) temppo de la guera da/Padoa fo in l'Adexe zioè ad Anguilara capetanio de barche C e ganzaruoli XXVI'.

¹⁸⁷ See the *Venetiarum historia vulgo Petro Iustiniano Iustiniani filio adiudicata*, ed. R. Cessi (Venice, 1964), 241.

‘plata magna’, a flat-bottomed ship, two ‘batelli a navi’, one ‘barcha fulcita remis, furchis, vello, timone’, and the remarkable number of thirty-two flat *burchi*, manned by two men each.¹⁸⁸

Doge Mocenigo’s oration has been preserved in a later work by Marin Sanudo, known as ‘Vite de’ duchi di Venezia’. Marin Sanudo (1466-1536) had access to the materials of the Venetian chancery and took great care when transcribing documents in his works. The text is allegedly the transcription of a grandiose *encomium* of the Venetian Republic in 1423, boasting its uncountable resources. Addressing the senators, the doge is recorded to have said:

Because of our peaceful condition, our city of Venice sends 10,000,000 (ducats) of value around the world by means of ships (*navi*) and galleys (*galere*). You have seen that there are 3000 seaworthy smaller vessels (al navigare sono navili 3000), from ten (five freight tons) to 200 *anfore* (106 freight tons), that have 17,000 sailors. You have seen that we have 300 ships (*navi*), carrying 8,000 sailors. You have seen [that we have] 11,000 sailors on the forty-five heavyweight galleys (*galere grosse*) and lightweight galleys (*galere sotili*). You have seen that we have 16,000 carpenters (*marangoni*)¹⁸⁹

The precision of Mocenigo’s estimates has been repeatedly challenged. Alan Stahl has convincingly shown that another passage from the same source, related to the coins struck by the mint, is not trustworthy.¹⁹⁰ This text has been the basis of the rare studies which attempt to reconstruct the total number of Venetian ships, but a more accurate analysis is needed. Lane studied these numbers, coming to the conclusion that ‘there is nothing unreasonable in his (Mocenigo’s) figures’.¹⁹¹ Luzzatto, a scholar of whom Lane was a disciple, had expressed the

¹⁸⁸ ASVe, Libri Commemorativi, Reg. IX, 141v-143r (22/11/1402).

¹⁸⁹ Marin Sanudo, *Vite de’ duchi di Venezia*, ed. L. A. Muratori (Milan, 1733), *Rerum Italicarum Scriptores*, 1st series, vol. 22, column 929.

¹⁹⁰ A Stahl, ‘The Deathbed Oration of Doge Mocenigo’, *Mediterranean Historical Review*, 10 (1995), 284-301.

¹⁹¹ F. Ch. Lane, *Shipbuilders*, 254. He discussed Mocenigo’s estimates also at 100-111, and in the appendices at 235-265.

same view in 1929, confirming the plausibility of these numbers.¹⁹² The American scholar substantiated Luzzatto's idea using the registers of the Notatorio del collegio, a source recording the round ships offered by private citizens to join the publicly-sponsored convoys of galleys or used for war efforts from 1450 onwards. Drawing on Mocenigo's speech, Lane proposed what he called 'a guesswork', namely the breaking down of the ships mentioned by the doge. He proposed thirty-five round ships of 240 tons or more, 265 round ships of one hundred to 239 tons, 3,000 vessels under one hundred tons, two pilgrim galleys, twenty-five light galleys, and eighteen great galleys. According to his estimates, the round ships would have carried a total cargo of 73,500 tons, to be compared to the mere 7,000 tons of the galleys.¹⁹³

I believe that two further sources confirm Mocenigo's account and Lane's proposed diversification of Venetian shipping. Both are known but have not yet been used for this purpose. In 1418 Sigismund, king of Hungary, tried to impose a blockade against the Venetians, limiting the number of Venetian vessels on the shores of his kingdom.¹⁹⁴ The Genoese were quick to provide their services to replace their archenemies, offering one hundred ships. Sigismund intended to banish all Venetians from his territories, and admonished all the cities of the kingdom 'kein geschefte noch handlung in koufmanschacz odern andarn dinger mit Venedigern haben'¹⁹⁵ ('not to have any business activity nor commercial partnership or other association with Venetians'). The Genoese offer was thus intended as a complete replacement of all Venetian vessels in Istria and Dalmatia, both state-sponsored and privately-owned. In a letter to Sigismund detailing the Genoese offer, we read:

And indeed the Genoese have one hundred big ships (*naves grossas*) and more,
from one deck to three (*ab una coperta usque in tres*), and this is because the

¹⁹² G. Luzzatto, 'Sull'attendibilità di alcune statistiche economiche medievali', *Giornale degli economisti*, 69 (1929), 122-134.

¹⁹³ Lane, *Shipbuilders*, 103.

¹⁹⁴ Stefanik, 'Guerra commerciale', cit.

¹⁹⁵ *Deutsche Reichstagsakten unter Kaiser Sigmund, Erste Abtheilung, 1410-1420*, ed. D. Kerlet (München, 1878), 362, no. 239, lines 24-35.

Genoese do not transport merchandise with galleys like Venetians, since the smallest of the Genoese ships carries more cargo than any of the Venetian galleys' (*cum unaquaque galea Venetorum minima navis Januensium plus deferat*).¹⁹⁶

The proposal was surely meant to impress the king, but given that it is an official letter from the Doge of Genoa, it is unlikely that he made an unrealistic offer. In the Genoese 'Statuti di Gazaria', an ordinance promulgated in 1403 and meant to regulate all ships bound to the Levant, the smallest vessel (*navis seu cocha*, ship or cog) listed had a tonnage of 3,000 *mine* (247 metric tons).¹⁹⁷ If we assume an average tonnage of 600 *botti* for a Venetian large round ship (360 tons),¹⁹⁸ had the Genoese offered only their smallest ships, this would have meant that at least seventy Venetian large round ships tramped along the coasts of Istria and Dalmatia. If, as it is likely, the Genoese offered the 'median' vessel (618 tons) listed in the 'Statuti di Gazaria', this would have meant that Genoa volunteered to substitute the equivalent of roughly 170 large Venetian round ships.

These two sources can be complemented by a third one, which has only been recently employed by scholars to gauge the self-representation of the city.¹⁹⁹ In 1442, the Florentine merchant Jacopo d'Albizzotto Guidi wrote an encomiastic poem dedicated to the city of Venice, called 'El sommo della condizione di Vinegia'. He was surely keen to impress the Senato for his own ends, but his praise also needed to sound sufficiently realistic. His poem mentioned ships and boats on numerous occasions. He estimated an average of 6,000 smaller craft in Venice, and also affirmed that 'in truth, there are in Venice more than sixty cogs from

¹⁹⁶ Ibid., 360, n. 238, lines 44-45.

¹⁹⁷ A. Musarra, 'La marina da guerra genovese nel tardo medioevo. In cerca d'un modello', *Revista Universitaria de Historia Militar*, 6/11 (2017), 100.

¹⁹⁸ If we look at the list of Venetian ships found in the Datini Archive, we might notice that they cluster around the 500-700-botti size. See F. Melis, 'Werner Sombart e i problemi della navigazione nel medioevo', in Id. (Ed.), *I trasporti e le comunicazioni nel medioevo* (Florence, 1984), 11 and 14. The list provided by Melis is both incomplete and erroneous, often counting the same boat twice. It does provide a general idea of the size of Venetian shipping, nonetheless.

¹⁹⁹ See S. Toffolo, *Describing the City, Describing the State. Representations of Venice and the Venetian Terraferma in the Renaissance* (Leiden, 2020).

150 (90 metric tons) to 1000 *botti* (600 metric tons)/, not counting other smaller vessels [...].²⁰⁰ There are good reasons to believe that this account is trustworthy.²⁰¹ On other occasions, the author referred to ‘written documents’, and went to great lengths to list all the Venetian magistratures, the types of ships, and the revenues from customs duties. He seems to have used the eye of the merchant, rather than the pen of the flatterer. The number of boats in Venice that he provides is far more plausible than the estimates attested by other fifteenth-century pilgrimage accounts written by foreigners who visited the city. The quantity, in this context, points simply to a plethora of vessels, rather than to any accurate numbering, and these totals often suspiciously echo each other. An anonymous traveller from Cologne ‘was told as a fact the barques at Venice number more than fifty thousand’,²⁰² the same number reported by Philippe de Commines (1447-1511), a French diplomat. Another fifteenth-century German pilgrim, Johann Meisenheimer, proposed an estimate of ‘vierzig tausend kleine Schiff’ (40,000 small craft), emphasising their role as carriers of people in Venice, an occupation which in his view employed 40,000 Venetians. Venetians themselves were not more precise, as Marin Sanudo simply observed that these vessels were ‘uncountable’.²⁰³ Following Marin Sanudo, we may surmise that three types of ferries existed in Venice: ferries along the Grand Canal (*traghetti di dentro* or *traghetti da bagattin*), ferries to be rented for an hour, or crafts headed outside Venice. The first category numbered between sixteen and twenty, and was managed by consortia of gondoliers.²⁰⁴ Most likely these smaller craft numbered roughly around 5,000. If we assume a population of 80,000 inhabitants in Venice in the second half of the fourteenth century, it is

²⁰⁰ Jacopo d’Albizzotto Guidi, *El sommo della conditione di Vinegia*, ed. Marta Ceci (Rome, 1995), chapters 3 and 4, passim, online edition <http://www.bibliotecaitaliana.it/testo/bibit000236> (30/05/25).

²⁰¹ For the debate on the number of ships see D. Sella, ‘L’economia’, in G. Cozzi and P. Prodi (eds.), *Storia di Venezia, volume VI: Dal Rinascimento al Barocco* (Rome, 1994), 651-711; J.-C. Hocquet, ‘I meccanismi dei traffici’, in *Storia di Venezia, volume 3*, cit., 529-616; F. Ch. Lane, ‘The Merchant Marine’ and Id., ‘Venetian Shipping’.

²⁰² Arnold von Harff, *The Pilgrimage of Arnold von Harff*, tr. by M. H. Ikin Letts (Nendeln, 1967), 57.

²⁰³ Toffolo, *Describing the City*, cit., 96.

²⁰⁴ Lowe, ‘Visible Lives’, cit. 430. On gondoliers and boatmen see R. Quillien, ‘Apprentissages et voies d’accès au métier de barcarolo à Venise à l’époque moderne (XVIe -XVIIIe siècle)’, *Mélanges de l’École française de Rome - Italie et Méditerranée modernes et contemporaines*, 131/2 (2019), 273-283.

not unreasonable to think that there was a boat for every sixteen inhabitants. What these authors meant by ‘small ships’ seems to be clearer, as all sources concur on considering seaworthy a vessel of at least one hundred metric tons.²⁰⁵ This is a parameter expressed by three different systems of measurement: the 150 *botti* (ninety tons) in Jacopo d’Albizzotto Guidi, the 200 *anfore* (106 tons) in Mocenigo’s oration, and the minimum of 200 *miliaria* (ninety-four tons) for ships to be registered in the accounts of the *Consoli dei mercanti*.

To appreciate the plausibility of these numbers we can try to compare them with arrivals of Venetian ships in foreign ports. Between 1394 and 1408 at least 278 Venetian ships of more than 250 *botti* visited the port of Beirut, but only twenty-two Venetian galleys bound for that port were armed by the commune during this period.²⁰⁶ Georg Christ, studying the number of ships at Alexandria between 1418 and 1419, has identified thirty-three Venetian vessels, of which twelve were cogs, five were *naves*, ten were *grippi*, and only six galleys.²⁰⁷ By comparison, between 1344 and 1378, the papacy granted licences to forty-one cogs and ninety-nine galleys to trade with Egypt.²⁰⁸ From a Tuscan letter in the Datini archive, we know that in 1385 Venetians had at least eighteen ships loading cotton on the Syrian coast (with a total cargo of 6,800 sacks).²⁰⁹ Federigo Melis traced 154 Venetian round ships in the documents of the Datini archives, mostly in the western Mediterranean, between 1383 and 1411.²¹⁰ These totals are partial and do not allow us to identify a precise number of ships. However, they do suggest a scale. It is reasonable to assume that in 1400 Venice could rely on some 5,000 smaller ships

²⁰⁵ Gluzman, *Venetian Shipping*, cit., 73-84.

²⁰⁶ F. Melis, ‘Nota sul movimento del porto di Beirut secondo la documentazione fiorentina intorno al 1400’, in Melis (ed.), *I trasporti*, cit., 77-79, commented in E. Ashtor, ‘The Volume of Levantine Trade in the Later Middle Ages (1370-1498)’, *The Journal of European Economic History*, 4 (1975), 585.

²⁰⁷ G. Christ, ‘Quelques observations sur la navigation vénitienne à Alexandrie à la fin du moyen âge’, in G. Ortalli et al. (eds), *Venise et la Méditerranée* (Venice, 2011), 55-72.

²⁰⁸ S. Stantchev, ‘Embargo: the Origins of an Idea and the Implications of a Policy in Europe and the Mediterranean, ca. 1100 - ca. 1500’ (PhD thesis, University of Michigan, 2009), 244-246.

²⁰⁹ ASPr, Fondo Datini, Fondaco di Avignone, Carteggio, *busta* 183, inserto 11, no. 316499. Letter of Boni Ambrogio di Meo to Stoldo di Lorenzo (01/06/1385).

²¹⁰ F. Melis, ‘Werner Sombart’, 11 and 14. As said, this statistics is to be regarded with caution.

(below 100 tons), some hundreds (2-300) of small (between 100 and 300 tons) round ships and flat-bottomed vessels used for regional trade, probably between thirty and fifty larger round ships with an average tonnage of 600 *botti*, and thirty galleys. This is an estimation, but it gives at least a fair impression of the scale of Venetian shipping in the late fourteenth century.

3. Ownership and identification of vessels

Having presented an estimate of the number of ships in Venice, in this section I will discuss how the identification and ownership of vessels in late medieval Venice involved non-Venetians, and how ships can truly be conceived of as heterotopias, non-places laden with wares from the whole Mediterranean. In theory, a simple banner was sufficient to identify a ship, but the identification and ownership of ships in the Middle Ages, as today, was not always straightforward; and in the case of Venice often entailed complex brokerage processes between Venetians and foreigners. In the Venetian case, the medieval flag of the city was a winged red lion on a white background. It can be seen in the illustration of Venice in the ‘Chart’ of Angelino Dulcert (1325) and in an illuminated chronicle written in a neat *mercantesca* script in the early fifteenth century in Venice, where it appears as the official flag of the Venetian fleet, triumphing over ‘morti e anegadi infeniti’ (endless dead and drowned [Genoese]).

Image 6

**The Venetian and Genoese fleet (‘morti e anegadi infeniti’),
Manuscript illumination, Biblioteca Nazionale Marciana (Venice),
Ms It. Z. 18, f. 88v, ca 1400, Venetian**



The problem with the identification of Venetian ships is that fiscal sources are missing and in any case they would be unlikely to give us a precise overview of Venetian merchantmen. Gluzman has remarked how ‘Venice’s maritime authorities never attempted to compile into a single registry the multitude of ships and smaller vessels built or operating from its territories’.²¹¹ The closest thing to registers of Venetian ships were the *quaderni* of the Consoli dei Mercanti, entrusted as early as 1268 with determining the tonnage of each ship registered in Venice. It was a role endorsed by the Senato and the Maggior Consiglio, with a gradual expansion of their jurisdiction by including the estimates of goods damaged at sea by the end of the fourteenth century.²¹² The Consoli, however, did not measure foreign vessels and ships

²¹¹ Gluzman, *Venetian Shipping*, cit., 9.

²¹² For the ease of the reader I use the following edition: M. Michelon (ed.), *Capitolare dei Consoli dei Mercanti (seconda metà del sec. XIV)* (Rome, 2010). There are two versions of these statutes. I will reference here the Capitolare Zamberti, and I will list here the entries related to that text (see Ibid., 37-50). For the 1268 decree see *rubrica* 61. It was reiterated in *rubricae* 72 (1276), 86 (1287), 115 (1300), 131 (1317), 163 (1332), 164 (copied from a now lost ‘*liber extimationum navium in fine*’), 200 (1362), and 247, 250-251 (1400). The earliest mention of damaged goods (‘*rebus devastatis*’) seems to date from 1292, see Ibid., *rubrica* 105, reiterated in *rubrica* 150 (1325), 152 (1323) and 153 (1325).

built outside Venice and its immediate hinterland. In fact, Venice seems not to have kept an updated register of ships built in its overseas dominions prior to 1495.²¹³ Sales of ships, like any other sales in Venice, were subject to a 5% tax on value (first mentioned in 1337) due to the *messeti*, the middlemen who registered sales and purchases in Venice.²¹⁴ However, there are several indications of widespread fraud and poor record-keeping by the holders of this office, especially given that the role was often assigned as a sort of sinecure to poorer Venetian citizens.²¹⁵ Another parallel register of ships' carats was kept for the purpose of collecting freightage charges by the *Estraordinari*.²¹⁶ The loss of all medieval fiscal sources makes it impossible to know precisely what these registers contained, and how extensive they were.

Even from a legal standpoint, identifying a ship as Venetian was more a matter of convention than law. In theory, banners and flags would have been the main tools to identify a ship, and a banner does appear amongst the objects on board the cog of Francesco Pampano, plundered by the Genoese in the port of Rhodes in 1402. It is listed in the inventory of stolen goods as 'J bandera, duc. 6', suggesting a prized object, given the price.²¹⁷ However, as Gluzman has explained, 'ship captains were not always eager to expose their identity to every passing ship'.²¹⁸ As a consequence, in 1500 a Venetian *caravella* was intercepted in Nauplio by Venetian light galleys. The ship refrained from hoisting the flag, fearing Ottoman pirates, and thus ironically it was badly damaged by friendly fire.²¹⁹ Ships were thus identified based on

²¹³ Gluzman, *Venetian Shipping*, cit., 9.

²¹⁴ ASVe, Ufficiali alla Messetteria, b. 1, Capitolare, f. 11r (1338).

²¹⁵ See *ibid.*, f. 15r, 1356 : 'Cum multi (sic) fraudes et malities committantur per aliquos missetas Rivoalti [...] et ab hoc comune substinet damnum de messetaria quia illa pars que deberet devenire in comune intrat in suis bursis'.

²¹⁶ ASVe, Cinque Savi alla Mercanzia, Prima serie, *busta 22ter*, Capitolare II degli *Estraordinari*, Rubrica 70, f. 63r (15/11/1428): 'Cum sicut notum est Extraordinarii nostri teneantur et debeant exigere omnia nabula galearum et navium atque navigiorum nostrorum et illam dividere et partire equaliter inter participes ipsarum galearum et navigiorum secundum quantitatem caratorum'.

²¹⁷ ASVe, Libri commemoriali, Reg. IX, n. 252, f. 144 r/v (04/12/1402).

²¹⁸ Gluzman, 'What Made a Ship Venetian?', cit., 300.

²¹⁹ *Ibid.*, 300-301.

conventions, rather than the registration of a ship in a list of Venetian vessels, and captains could easily hoist foreign flags to camouflage their real identity.

If identifying a ship was difficult, determining who owned it was equally complex. In 1396, an arbitration was agreed, thanks to the help of Marino de Caboga ‘civis et mercator Ragusii’, to settle the dispute between Matteo Dolfin *quondam* Michele from the parish of S. Canzian and the co-owners of a cog, following the death of a slave on board belonging to Matteo Dolfin. The vessel was ‘a cog called Santa Clara, Sancta Lucia et Sanctus Blasius.’ As was common, no merchant owned the whole ship, which was instead divided into several carats owned by different investors (normally 24). In this case, the two Da Pozza brothers from Ragusa (Dubrovnik), namely Gozzo and Giorgio, owned five carats and were identified as *patroni posticii* (officers onboard), while the Ragusan Pasquale da Resta owned another five carats and his co-citizen Alvise de Goziis instead had six carats. The Da Pozza brothers issued a loan of 500 ducats to a Venetian merchant, Giacomello Bellegno, granted against the goods of the cog. The boat was then loaned to Florentines for eighty ducats for a sea journey towards Byzantine territories (‘ad viagium Romanie’). One of these ‘Florentines’ must have been Petrello Masi, referred to as ‘from Ancona’ in the document, who used a sea loan worth fifty ducats he had stipulated with the Da Pozza brothers to secure a discount on the value of the loan.²²⁰ The same cog appears in a Croatian document, when in November 1394 Pasquale di Matteo Resti, Alvise di Marino da Gozza, and Gozza di Marino da Pozza entrusted their cog to Zannino di Clemente di Marino Gozza, Alvise’s nephew, for commercial journeys to Puglia and the Marche. The cog was chartered in 1394 to Andrea Alamanni from Florence, Sabino Stimulo from Barletta, and Nicola Falaco, from the same city. It was a sturdy ship, bought in the Byzantine Empire, with thirty men onboard, active between 1393 and 1399.²²¹ Pietro Maselli

²²⁰ ASVe, Cancelleria Inferiore, Notai, *busta* 169 (Marco Rafanelli), 1396 protocol, ff. 41r and 52r.

²²¹ I am indebted to Niccolò Villanti for having shared his notes on Ragusan trade with me. I owe to him the following shelf mark for the documents featuring this cog in the State Archives of Dubrovnik (Državni arhiv u Dubrovnik, henceforth DAD). DAD, *Diversa Cancellariae*, Vol. 30, f. 6v; vol. 31, ff. 55, 128v, 130v and 149; vol. 32 ff. 24v and 59v; vol. 33 ff. ff. 64v, 65v. For Petrello Masi see DAD, *Diversa Notariae*, Vol. 9, f. 179. (20/05/1377).

specialised in the import/export of wine, lead, and slaves from Serbia, with commercial activities spanning to Ancona, Rhodes, and Alexandria, and was a shipowner in his own right. This agreement is more telling than any treatise on shared ownership. We have a ship owned by several members of the wealthiest families of Ragusa (Dubrovnik), rented to Florentines and to merchants from Ancona and Puglia, laden with merchandise belonging to Venetians, bought in the lands of Romania (Byzantium), and used for trade between Dubrovnik, Venice, the Marche, and Puglia. The arbitration was facilitated by a merchant from Dubrovnik, and it was signed in Venice and registered by a Venetian notary. The ship was clearly divided into shares that could also be exchanged or sold at a price. This is a perfect illustration of how attaching ‘national’ labels to medieval vessels can be misleading and how ships were frequently characterised by this sort of Mediterranean collaboration.

Even though Venetians should have only shipped merchandise on Venetian ships, they were in fact more than glad to partake in the profits of coastal and regional trade in the Adriatic, no matter the nationality of the ship. Partnerships between Venetians and foreigners were common. Indeed, the traditional animosity between Venetians and Genoese did not stop them from carrying out lucrative business together. As early as 1311, Zanotto Mamara, a Venetian dwelling in Famagusta, was robbed of a cargo of pepper (weighing 1 *cantaro* and 20 *rotoli*, according to the weight of Cyprus) by the pirate galley of Simonino Doria while travelling between Cyprus and Candia on board the *tarida* of the Genoese Vignolo de Vignolo.²²² In 1418, Dino Magalotti from Genoa gladly sold 100 *pezze* of cloth in Damascus to the Venetian Giacomo Contarini, son of Francesco, who in turn received corals, called ‘tori bastardi’ from

²²² ASVe, Commemoriali, Reg. 1, f. 167v, n. 463 (04/06/1311): Çanetus Mamara, venetus, habitans Famaguste, iuratus et interrogatus et querendo dixit quod venerat Candidam cum quadam tarita Vignole de Vignolo ianuense; cum fuerint in scoleio sancti Pauli supervenit illuc quedam galea armata Simonini de Oria et Antonio Arcato, que venerat de ponenti, in qua erat quidam anbasator (sic) ianuensis, qui ibat ad magistrum hospitalis, que galea derobavit eum et accepit (sic) sibi sacos (sic) III piperis, qui ponderabant (sic) cantarium I et rotolos XX ad pondus Çipri (sic), qui sibi constiterunt (sic) in Rodo bisantia alba VIIIC’.

the Genoese Uberto Doria, shipped on a ‘galeaza Venetorum’, a sturdy Venetian galley.²²³ To the assured horror of the papacy, Venetians were not only glad to trade with the Genoese but also with the Mamluks. In 1417, a new Venetian 450-*botti* cog owned by Salvador de Belvedere set sail from Naples and Gaeta towards Alexandria, laden with oil and soap worth 12,000 ducats. It foundered on the shoals near Alexandria, the soap was recovered and the ship, with a broken mast, was made seaworthy again and sold to none other than the ‘Saracens’ for 500 to 700 ducats.²²⁴

In a similar way, it also makes sense to expand our notion of ‘investors’ in the context of late medieval Venice to include several strata of the population, not just the patriciate. For instance, although we are fairly well informed about the activities of the Arsenal, we know far less about private shipyards, even though they seem to have been present in the very heart of the city. In the fourteenth century, these private shipyards belonged to *popolani* such as Francesco Macaron and Francesco Falastoppa, two otherwise unknown individuals and also to women, such as Caterina Contarini (near San Marcuola), and to the wife of Giovanni Marangon, a surname suggesting her husband was a shipwright. In 1311 Albertino dal Compare built a 39-foot-long ship in the San Vio area, where today we find the Gallerie dell’Accademia, and the Venetian Senato apparently sheltered ships even in the garden of the nuns of Sant’Anna di Castello in 1300.²²⁵ The ‘Morosini Chronicle’, a usually reliable source for the early fifteenth century, given its interest in details of commercial dealing, recorded that in 1415 a small 250-*botti cochina*, owned by Michiel de Nicholò, sank whilst en route from Calabria,

²²³ ASVe, Cancelleria Inferiore, Notai, b. 230, Notary Nicolò Venier, Parchment Protocol written in Damascus titled ‘millesimo quadringentesimo decimoseptimo indictione undecima, in Baruto’, f. 1v (04/01/1419): ‘ser Dinus de Magalotis alias fecerit certam venditionem hic in Damasco nobili viro ser Jacobo Contareno filio quondam domini Francisci civi Venetiarum ad presens mercatori in Damasco de peciis centum pannorum qui consignati fuerunt hic in Damasco ipsi ser Iacobo emtori predicto per dominum Ubertum de Auria de Ianua’ and f. 3r, copy of a letter written on 03/10/1417: ‘de casse sete (sic) toro bastardo missis in galeaza Venetorum’.

²²⁴ A. Nanetti and N. K. Vu (eds.), *EHM – The Morosini Codex (1095-1433)*, (2018 - ongoing), henceforth *The Morosini Codex*, §64, ch. 581 (28/10/1417), <https://engineeringhistoricalmemory.com/post/?p=5116> (30/05/2025): ‘E da puo’ frachasiada la nave cerchà de venderla con meso i suo coriedi a saraini, e chavado a la suma de duchati V cento in VII cento d’oro’.

²²⁵ W. Dorigo, *Venezia romanica: la formazione della città medioevale fino all’età gotica*, volume 1 (Venice, 2003), 434-35. Caterina owned one in 1387; the wife of Marangon in 1385; Macaron in 1323 and Falastoppa in 1306.

laden with wheat and silk. And beyond that, another ten or eleven ships, all laden with greasy materials, also sank, with the crews on board. The *cochina* had a cargo worth 13-15,000 ducats, and its loss was ‘a great damage of our noblemen and the people of Venice’ (‘con molto dano d’i nostri nobel e puovolo de Veniexia’).²²⁶ The mention of the ‘puovolo’, a term which in the aristocratic republic was most closely associated with the rioting mob, clearly does not, in this case, coincide with the destitute fishermen of San Nicolò dei Mendicoli. Morosini must have meant that not only noblemen but also rich commoners (*cittadini*) invested in this ship.²²⁷ The hefty sum of 13,000 to 15,000 ducats was most probably pooled amongst several merchants. It highlights the oft-neglected agency of smaller merchants in the context of Venetian trade.

There are also good reasons indeed to believe that ownership of a boat was not the prerogative of the patriciate. In the very few purchase contracts for a vessel preserved in the deeds of the notary Marco Rafanelli, we find a sale of a boat for twenty-four ducats in 1389 to Leonardo Rosso, a boatman from the parish of San Samuele (the seller is one Raniero Aurifice, a goldsmith). A *platea*, a flat-bottomed boat, was sold for a roughly similar sum (20 ducats) in 1397 to ‘Zelinus lignarolus’, evidently a timber merchant. A *barca marciliana* was sold by Andreolo ‘massarius’ to Giovanni Garzoni for forty ducats in 1397. In that same year, Giovanni Scutarius (shield-maker) and Giacomo di Giovanni, ‘pistor’ (baker), sold one-third of an 80-*anfore navigium* to Bernardo Falier for 74 ducats (so the total value was presumably 222 ducats).²²⁸ On a grander scale, the king of Sicily granted compensation for a shipwrecked cog

²²⁶ *The Morosini Codex*, §64, ch. 279 (06/09/1415), <https://engineeringhistoricalmemory.com/post/?p=4299> (30/05/2025): ‘trovado fose el navilio con meso el fondi in suxo, per vaiuda de duchati d XIII in XV milia d’oro, con molto dano d’i nostri nobel e puovolo de Veniexia’. For a comparison with the value of cogs’ cargoes in Genoa see Day, *Les douanes*, cit., 214 et seq.

²²⁷ See R. Mueller, *Immigrazione e cittadinanza nella Venezia medievale* (Rome, 2010). Citizens were a sort of patriciate of their own. They monopolised all the highly prized clerical positions culminating with the *cancellier grande*.

²²⁸ ASVe, Cancelleria Inferiore, Notai, *busta* 168 (Marco Rafanelli), 1388 protocol, f. 95r, deed n. 9 (15/09/1388): ‘teneor vobis in ducatis XXIIIJ auri pro una barcha?; Ibid., *busta* 169 (Marco Rafanelli), 1396 protocol, ff. 49v, deed n. 6 (16/02/1397): ‘que plata cum suis coredis fateor esse valorisation ducatorum viginti auri?; 59v, Deed n. 6 (09/04/1397), f. 80r (30/08/1397): ‘terciam partem unius nostri navigii portate anforarum octoginta (sic)?’.

near Malta in 1399, estimated to be worth 1,500 ducats.²²⁹ This estimate is roughly equal to the proposed incentive (1,000 ducats) that the Republic would have been willing to pay for anyone building a private vessel in 1356, at least according to the proposal of a senator.²³⁰ These sums mean little without context. To put these prices in perspective, in the Trecento the average dowry amongst commoners was around 176 ducats²³¹ and the salary of the highest member of the Venetian bureaucracy, the Cancellier grande, was capped at 200 ducats in 1390.²³² Given these estimates, it seems that the ‘entry-level’ for boat ownership fluctuated roughly following the tripartition of shipping: flat-bottomed ships like *burchi*, *marciliane*, *barche*, and *rascone* probably cost somewhere between twenty and fifty ducats. It was a relatively high sum, but an affordable investment for skilled artisans who seem to have been their principal owners.²³³ *Navigia*, probably in this case small round ships or lateen-rigged ships, could instead fetch more than 100 ducats. It is clear that, despite the sums required, investment in these vessels did not have to be confined to the upper echelons of the patriciate. And conversely, even rich patricians invested in both galleys and round ships.

This challenges the idea that what Doumerc and Hocquet have dubbed ‘capitalisme marchande’ was underpinned mainly by voyages of galleys.²³⁴ This is a view expressed even in a

²²⁹ ASVe, Commemoriali, Reg. IX, f. 97v (1399): ‘Item, Bartholomeus Natali, patronus cuiusdam navis dicte choche, naufragate in portu Meliveti, pro se et sociis suis, pro valore choche, coredorum, marchaciarum (sic) et bonorum suorum in ducatis mille quingentis’.

²³⁰ The proposal by a councillor was rejected but it must have been a credible sum. ASVe, Senato, Deliberazioni, Misti, Reg. 27 (04/09/1356), f. 91r.

²³¹ L. Guzzetti, ‘Dowries in fourteenth-century Venice’, *Renaissance Studies*, 17 (2002), 449.

²³² M. Pozza, ‘La cancelleria’, in *Storia di Venezia, volume III*, cit., 376: ‘Pietro Rossi nel 1390 si vide aumentare il salario fino a venti lire di grossi’. In 1352, he was remunerated with 18 *lire di grossi*, or 180 ducats. See M. Pozza, ‘Benintendi Ravegnani’, in *Dizionario Biografico degli Italiani*, 86 (2016): ‘Finalmente, scomparso il suo predecessore, il 1° luglio 1352 fu nominato cancellier grande con lo stipendio di diciotto lire di grossi’, [https://www.treccani.it/enciclopedia/benintendi-ravegnani_\(Dizionario-Biografico\)/ \(30/05/25\)](https://www.treccani.it/enciclopedia/benintendi-ravegnani_(Dizionario-Biografico)/ (30/05/25)).

²³³ A master craftsman in the building trade would have been paid 80 ducats a year in 1388, for instance. A master shipwright instead was paid about 48 ducats in the period 1407-1447. For both See R. Mueller, ‘Appendix I. The Value of Money and the Cost of Living’, in Id., *The Venetian Money Market: Banks, Panics, and the Public Debt, 1200-1500* (Baltimore, 1997), 649-650.

²³⁴ J.-C. Hocquet, ‘Capitalisme marchand et classe marchande à Venise au temps de la Renaissance’, *Annales*, 34 (1979), 279-304; B. Doumerc, ‘L’évolution du capitalisme’, cit.

recent article by Diego Puga and Daniel Trefler,²³⁵ according to whom a broader political participation in the thirteenth century led to important innovations like the *colleganza*, whilst a smaller and wealthier number of families monopolised long-distance trade in the following century, reinforcing their monopoly by erecting barriers to trade and excluding other families from partaking in the profits of long-distance commerce. This in turn is supposed to have led to a society that by 1400 was characterised by a new emphasis on rank and hierarchy. It is a conclusion that closely mirrors the idea of a crisis of the patriciate, and an exclusion of ‘commoners’ from commercial rents, advanced in 1976 by Benjamin Z. Kedar in his study of the Venetian cadastre of 1379, according to which patricians monopolised the commercial rents deriving from the galleys, leading to a less dynamic, inward-looking society.²³⁶ In their contribution, Puga and Trefler have argued that long-distance trade by galleys was inherently more profitable than any other form of trade, and thus that exclusion from it resulted in a significant economic loss. But if it is true that Venice restricted trade with the enactment of a cap on investment, known as the *Officium de navigantibus*,²³⁷ it is equally true that this mercantilist policy was pursued for just eleven years during the fourteenth century (1324-25; 1331-38; 1361-63). And, as we have seen, investments in the state galleys did not exclude the outfitting of cogs or *burchi* for free voyaging, and the transport of commodities in bulk did generate significant revenues.

Having examined the identity and identification of ships in medieval Venice, and briefly summarised the complex ownership structure of such vessels, we can conclude that ships were really microcosms of Mediterranean trade. The concept of ‘Venetian’ ships needs to be

²³⁵ D. Puga and D. Trefler, ‘International Trade and Institutional Change: Medieval Venice’s Response to Globalization’, *The Quarterly Journal of Economics*, 129/2 (2014), 753-821.

²³⁶ B. Kedar, *Merchants in Crisis: Genoese and Venetian Men of Affairs and the Fourteenth-Century Depression* (New Haven, 1986).

²³⁷ R. Cessi, ‘L’*officium de navigantibus* e i sistemi della politica commerciale veneziana nel secolo XIV’, in Id. (ed.), *Politica ed economia di Venezia nel Trecento* (Rome, 1952), 23-61. For its effects see F. Thiriet, ‘Quelques observations sur le trafic des galées vénitienes d’après les chiffres des incanti (XIVe-XVe siècles)’, in *Studi in onore di Amintore Fanfani*, vol. 3 (Milan, 1962), 493-522.

addressed on a case-by-case basis, as ships could be made in Venice or in its dominions, could be sold to or by Venetians, or could be chartered to consortia of merchants, both foreign and domestic. Ships were at the centre of complex interactions and operations. Ships' carats could be used as collaterals for credit,²³⁸ boats could be promised as a reward for crimes,²³⁹ and they could be used as a marker of social status, such as gondolas, or appear in all their diversity in the city's representations in *vedute* (cityscapes).

4. Representation of merchantmen

We have seen in the previous pages the value of a ship, the structure of ownership, and the capital required to invest and buy a vessel. Having examined ships in their materiality and as vehicles of wares and capital, it is now time to turn our attention to their role as symbolic vessels. In this section, I will discuss the rationale for the representation of round ships in late-medieval Venice in four contexts, that is, hagiographical cycles, *vedute* of the city, merchants' manuals, and material culture. I will clarify, for each of these domains, why round and flat-bottomed ships featured in these representations and what we may infer from these images. As we shall see, the city of Venice was represented sketchily as a Canal Grande populated by cogs already in the fourteenth century. The conspicuous association of Venice with round ships in these early *vedute* raises the possibility that the city was perceived by foreigners differently from the self-representation that Venetians themselves circulated, defining galleys as the salvation of the state. On this account, we must equally avoid an oversimplification of the Venetian self-

²³⁸ ASVe, Giudici di Petizion, Sentenze a Giustizia, Reg. 4, f. 1v/2v (3rd October 1375). As explained in Gluzman, *Venetian shipping*, cit., 27, freightage charges (*noli*) were paid in full to the captain before setting sail, plus an extra tax (*mezzo nolo*) to be paid to the Estraordinari. Upon the safe return of the vessel, this was used as a credit owed to the shareholders. Marino Dandolo invested in a cog bound for Cyprus and asked the ship's captain to register his share of the ship in the name of his banker, Jacomello Zancani. When Zancani's bank failed he appeared in front of the Estraordinari claiming that he was the real owner and that the shares and freightage were his.

²³⁹ ASVe, Avogaria de Comun, Raspe, Reg. 3648, f. 151 r/v (1437). Pietro from Zagreb was promised a boat for his complicity in a crime.

representation, given that the celebrated *veduta* of the city in 1500 by Jacopo De' Barbari equally abounds in representations of private shipyards, barges, and carracks. In the fourteenth century, images of round ships were employed in St Mark's Basilica to symbolically claim Chios from the Genoese and to illustrate the arrival of the body of St Mark. Round and flat-bottomed ships featured in fact in both high-end and more 'popular' forms of art. They were part of a series of *teleri*, large oils on canvas, featuring the St Ursula's Cycle painted between 1490 and 1495 for a confraternity (the Scuola di Sant'Orsola), at the behest of the powerful Loredan Family, patrons of the same institution. But we can equally find representations of round ships in material culture and as part of the everyday life of Venetians, in the form of graffiti. These vessels were equally represented in commonplace books, ruttiers, and merchants' manuals, both to educate merchants and to make abstract concepts like recreational arithmetical problems more visually accessible, even though when we move from frescoes and monumental art to portable objects and manuscripts, to ascribe the ships they illustrated to a specific geographical area is even more difficult.²⁴⁰ Ships were laden with cultural meaning not just amongst patricians: they appeared in different media and they were employed to signify mobility or to evoke dangers. They were used as objects (such as ex-votos shaped like ships), figuratively, and as an educational tool in medieval merchant manuals.

4. 1 Ships in *vedute* of the city

The representation of Venice in the *vedute* is particularly significant insofar as these images were often made at the behest of pilgrims who had spent time in the city en route to the Holy Land, and they seem to share the same basic image, that is, Venice as a canal populated by ships and surrounded by almost floating houses, an imaginary certainly stemming from genuine

²⁴⁰ Wien, Österreichische Nationalbibliothek, MS 2576 (Historie Universelle en prose), ca 1380-1399, for instance, has been attributed to either Provence or Venice. It contains two basic representations of ships with no rigging at folios 60r and 101r. I owe the knowledge of this manuscript to Fabio Zinelli.

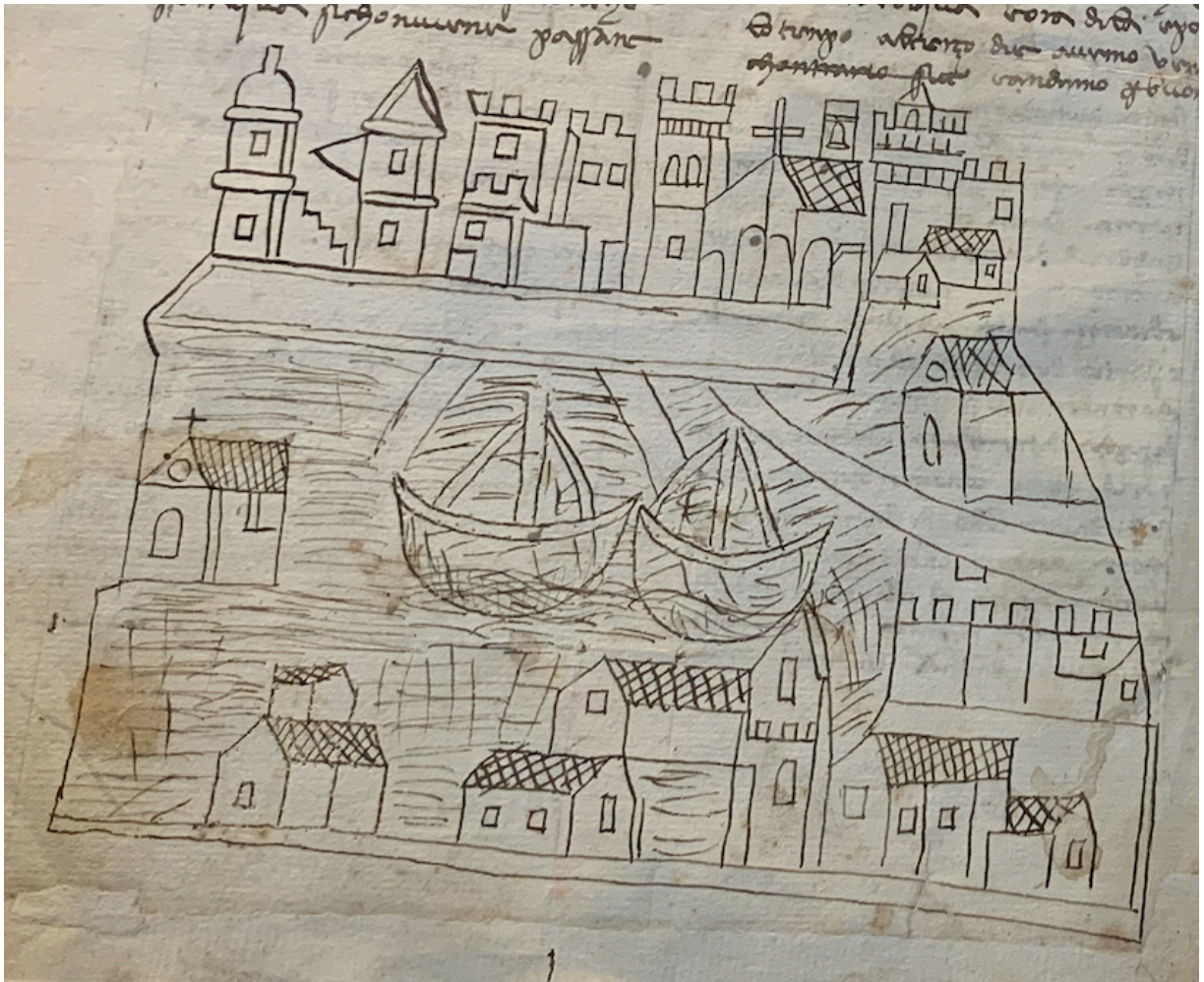
bewilderment at the ubiquity of water in Venice. In her studies on the representation of the city of Venice, Sandra Toffolo has unearthed a series of illustrations in the *Libro d'oltremare* of Niccolò da Poggibonsi,²⁴¹ including a sketchy, fourteenth-century *veduta* of Venice from a manuscript in the Biblioteca Nazionale in Florence. Niccolò alluded to Venice in two passages on the same page. First, he described the city, emphasising how ‘the streets, broad or narrow, are water canals’, then he praised its harbour : ‘il più reale porto del mondo’, the ‘most regal of harbours, for you could always find a ship willing to carry you somewhere’. In the next chapter, he described how he left Venice on a two-masted ship, with a forecastle and a stern castle, described by him as ‘due ghabie’.²⁴² Ships represented in this manuscript are undoubtedly round. They are unfortunately represented with bare poles, i.e. without sails and rigging and with a single mast. It is indeed a mere sketch, with little artistic ambition. Significantly, however, all drawings of ships in the same manuscript featured either cogs or flat-bottomed boats, with no mention of galleys. This is a pattern that we can trace in other copies of the same text.

²⁴¹ For these *vedute* see Toffolo, *Describing the City*, cit., 85-94. For the bibliography on these early *vedute* see Ibid., 89-90, note 28.

²⁴² Niccolò da Poggibonsi, *Libro d'oltremare*, in A. Lanza and M. Troncarelli (eds.), *Pellegrini scrittori. Viaggiatori toscani del Trecento in Terrasanta* (Florence, 1990), 34.

Image 7

Pen drawing of a *veduta* of Venice,
Florence, Biblioteca Nazionale Centrale,
Fondo Nazionale, II.IV.101, f. 1v, ca 1400



The ubiquity of ships in Venice is confirmed by a very similar image in another fifteenth-century copy of Poggibonsi's *Libro d'oltramare* now in Milan, in which the chapter, 'How we set sail on the sea', is duly decorated with a round ship, albeit more detailed than the Florentine example.²⁴³ We can see how Niccolò is setting sail in what appears to be a lateen-rigged ship with a protruding stern castle.

²⁴³ The codex is Milan, Biblioteca Braidense, MS Castiglioni 5. See K. B. Moore, 'Braidense Ms. Castiglioni 5: An Additional Early Illustrated Copy of Niccolò da Poggibonsi's *Libro d'oltramare*.' *Peregrinations: Journal of Medieval Art and Architecture*, 7/3 (2021), 116-141. Ships are more sketchy in two further Florentine manuscripts: BNCF, MS Panciatichiano 78 and MS Panciatichiano 79 (which lacks a representation of Venice).

Image 8

Drawing of a cog, Manuscript illumination, MS Castiglioni 5, f. 1 r

(‘chomme entramo i(n) mare i(n) ‘1 primo di’), Biblioteca Braidense (Milan), ca 1400



In a German translation of the text from 1467 this became an even more prominent detail, as Venice is literally a floating city where palaces and churches seem to be invaded by the waters, while two round ships dominate the very centre of the representation. Ships floating in an amphibious city can also be found in a contemporary Italian copy of the *Viaggio* (Biblioteca Nazionale Centrale di Firenze, MS Panc. 78), completed in 1453, where roughly-sketched ships ply the waters of an imaginary floating Venice, with no bridges and made up of isolated complexes of houses divided by water.

Image 9

'Die vorneme Stat Venedig', Manuscript illumination,
MS Egerton 1900, f. 4r, British Library (London), ca 1467, German;



Image 10

Veduta of Venice, Manuscript illumination,

MS Panciatichiano 78, BNCF (Florence), ca 1453, probably Tuscan



The imaginary seascape of the city represented in the fourteenth-century Ms Bodl. 264,²⁴⁴ containing the 'Devisement du monde' by Marco Polo and illuminated in London in the early fifteenth century, is equally populated by flat-bottomed ships and either single or double-mast round ships. It is particularly interesting as this text was itself a copy of a French manuscript from the fourteenth century (BL, MS Royal MS. 19 D. i).²⁴⁵ It clearly conveys the idea that the city was known even abroad as a harbour to which came vessels of all sorts and crafts. We can see a craft disembarking some passengers, another incongruously steered by a knight in armour, at least two galleys visually recognisable by their oars and by their black colour, and at least four large round ships, most likely cogs or carracks.

²⁴⁴ Oxford, Bodleian Library, MS Bodl. 264.

²⁴⁵ C. Dutschke, 'The Truth in the Book: The Marco Polo Texts in Royal 19.D.i and Bodley 264', *Scriptorium*, 52/2 (1998), 278–300.

Image 11

Imaginary view of Venice, Manuscript Illumination, Bodleian Library (Oxford),

MS Bodl. 264, English illuminator, early 15th century



The plethora of vessels plying the waters of Venice is indeed a leitmotif of *vedute* of Venice including the *veduta* by Jacopo de Barbari, etched in 1500.²⁴⁶ In this splendid rendering of the city, we find hundreds of different vessels as well as some of the very few representations of private shipyards dotting the city. Similarly, a thorough knowledge of the variety of Venetian vessels must have underpinned Fra Mauro's 'Mappa mundi' of 1460, which displayed no fewer

²⁴⁶ See G. Zaganelli, *Navi, squeri, traghetto da Jacopo de Barbari* (Venice, 2011); L. Basch, *Les navires et bateaux de la Vue de Venise de Jacopo de Barbari* (Bruxelles, 2000).

than eight different typologies of ships, mainly round and flat-bottomed.²⁴⁷ The recurrent representation of round ships suggests they were perceived as an important part of the shipping of the city, and that pilgrims took heed of the variety of Venetians shipping, represented more or less fantastically in each of these works. Venice was not associated with a single type of vessel, but rather was seen as an aquatic world populated by all sorts of crafts. Interestingly, when the representation was reduced to a single type of vessels, it was the cog and not the galley which featured prominently, especially in the fourteenth-century representations.

4.2 Holy ships : Ships in hagiographical cycles

In the analysis of ships in hagiographical cycles, and the rationale for their representation, it seems fitting to start with St Mark's Basilica. The theme of the ship appears often in the mosaics and in the decoration of the basilica, especially as the body of the saint was transported by sea from Alexandria to Venice in 829. Indeed, in one of the earliest mosaics (twelfth century) in the Cappella di San Clemente we can observe St Mark appearing in a dream to the crew of a vessel. The saint gently woke up Tribunus, one of the two traders who discovered his body, as the ship carrying the holy relics risked crashing on the rocks of a nearby island. The vessel is at the very centre of the scene, a three-masted lateen-rigged longship propelled by oars, besieged by roaring waves. The island seems to be near, complete with lush vegetation, but the writing above the mosaics recites: 'Land is nigh. Sailor, tell them to prudently furl the sails' ('tellus adest, naute, dic velum ponite caute').

²⁴⁷ A. Nanetti, 'Animation of Two-Dimensional Pictorial Works into Multipurpose Three Dimensional Objects', *Scires It*, 9/2 (2019), 29-46.

Image 12

St Mark Rescuing a Ship, Mosaic,

Cappella di San Clemente in the Basilica di San Marco, ca 1150



Two hagiographical cycles in the church, that of St Isidore and that of St Mark, were illustrated with round ships in the fourteenth century, most likely for political purposes. Both were completed under the aegis of Doge Andrea Dandolo (r. 1343-1355), a powerful leader and the last doge ever to be allowed to rest in the basilica. In the fourteenth century, he spearheaded a renovation of the building. As remarked by Stefania Gerevini, the cult of St Isidore, whose body was buried on the Genoese island of Chios, was clearly an attempt to appropriate the hagiographical tradition of the arch-enemy.²⁴⁸ This cycle of mosaics, conceived by Paolo Veneziano and completed by expert craftsmen between 1343 and 1355, also featured a round ship. In this scene, we can spot St Isidore and his companion Amenio setting sail from Alexandria towards Chios. The type of ship represented is obviously incongruous with an episode dating to the mid-third century, but it corresponds to the reality of seafaring between Alexandria and Chios in the fourteenth century, when such a journey could indeed have been

²⁴⁸ S. Gerevini, 'Inscribing History, (Over)Writing Politics: Word and Image in the Chapel of Sant'Isidoro at San Marco, Venice', in T. Frese (ed.), *Sacred Scripture / Sacred Space. The Interlacing of Real Places and Conceptual Spaces in Medieval Art and Architecture* (Berlin, 2019), 336.

made on a cog. The mosaicists clearly illustrated not only the protruding stern castle but even a sideboard anchor and the crow's nest on top of the ship's main mast.²⁴⁹

Image 13

Paolo Veneziano, St Isidore Leaving Alexandria, Mosaic,
Cappella di Sant'Isidoro (Basilica di San Marco), ca 1343-55



The same artist and the same patron (Paolo Veneziano and Andrea Dandolo) were responsible for one of the most significant additions to the decoration of the basilica in the Middle Ages, the Pala Feriale, completed in 1345. The Pala Feriale was meant as a cover for a large retable known as the 'Pala d'Oro', occasionally displayed on the altar of the church. As the 'Pala d'Oro' was seldom on display, Paolo Veneziano was commissioned to make a 'covering', in the form of two rows of seven panels each, with the lower register representing miracles of St Mark. Here the artist chose to depart from the earlier mosaic of the Cappella di San Clemente, opting for a round ship. The same hagiographical episode was rendered

²⁴⁹ See Ray Martin, *The Art*, cit., 51-53, Image 26.

differently. A rocky red island can be seen very near the vessel, whilst panicked sailors stare in awe at the apparition of St Mark standing on the stern castle (an iconography also popular for St Nicholas). The figuration of the ship is sketchy but accurate: the roundness of the ship is evoked by its tall sides, the stern castle protrudes outwards, and the rudder is shown perpendicular to the keel. By 1343, a supposedly ninth-century merchantman from Alexandria was equated with a cog.

Image 14

Paolo Veneziano, St Mark Rescues a Ship,

Tempera on wood panel from the Pala Feriale, Basilica di San Marco, ca 1345



Round ships were thus part of the visual narrative offered to both foreigners and Venetians visiting the temple of Venetian power, being displayed in several key areas of the basilica. They were closely associated with two important hagiographical cycles decorating the church, commissioned by the doge himself. More significantly, the same scene of St Mark rescuing a ship was illustrated by the fourteenth century with a round ship, thus ‘updating’ a ninth-century ship model to the reality of trade in the fourteenth century. Paolo Veneziano must have known that a journey from Chios to Alexandria was most likely carried out on board a round ship. He was perfectly aware that other ship types existed, such as longships, possibly galley-like Byzantine dromons,²⁵⁰ which indeed were used to illustrate the arrival of the doge Domenico Michiel in Chios in the same cycle. The depiction of a round ship literally at the heart of the basilica thus really emphasises the significance of these vessels in fourteenth-century artistic representations.

Round ships are also represented in several other cycles related to maritime miracles. The cult of St Ursula, for instance, paved the way for several representations of the saint on board a ship in Venice and the Veneto, even though her cult was not exclusive to the region. St Ursula was betrothed to a ‘pagan’ prince whom she loathed: she tried first to procrastinate and then to escape on board a ship. She met choppy waters and was compelled to disembark at the mouth of the Rhine, continuing on foot to Cologne. From there she embarked on a pilgrimage leading her to Rome, whence she returned to Cologne together with - an invented - Pope Ciriacus, only to find the city invaded by the Huns, meeting her death there, together with her followers, as martyrs.²⁵¹ The cult of St Ursula spread from Germany outwards, largely thanks to confraternities known as ‘Ursulaschiffchen’, the small ships of St Ursula. Ursula was clearly

²⁵⁰ On which see J. H. Pryor and E. Jeffreys (eds.), *The Age of the Dromon: The Byzantine Navy ca. 500-1204* (Leiden, 2006).

²⁵¹ G. Zarri, ‘La nave di Sant’Orsola’, *Annali dell’Istituto storico italo-germanico di Trento*, 19 (1993), 277-280.

connected to ships in the German area.²⁵² She came to be connected with protection against storm and flooding, as is the case of a gigantic late fourteenth-century altarpiece once adorning the church of San Paolo a Ripa d'Arno, right next to the Arno river, where she can be seen saving Pisa from the waters.²⁵³ In the case of the Veneto region, her cult followed trade routes connecting Germany to Italy: we find a fresco from 1380-1420 with the ship of St Ursula in the church of San Valentino in Termeno (on the road between Trento and Bolzano), another in the Chiesa di Sant'Orsola in San Vigo di Cadore (1353-55, right on the road between Austria and Belluno), and then a cycle of frescoes featuring St Ursula on a ship, originally in the church of Santa Margherita degli Eremitani of Treviso and now in the Musei Civici of the same city, painted by Tommaso da Modena in 1355-58.²⁵⁴ Treviso was precisely the arrival point of trade routes connecting Germany to the Venetian mainland. The cult of St Ursula was the result of the entanglement of trade routes and deeply connected to maritime activities. It is significant that this cult in Venice had two important developments. First, Ursula and her ships featured in the late fifteenth century in not just a single altarpiece but in a whole series of gigantic *telari* commissioned by the powerful Loredan Family from Vittore Carpaccio in 1490-95.²⁵⁵ Second, the cult of St Ursula was linked in Venice to the very materiality of ships. In a now-dismembered *paliotto* (altar covering) painted by Paolo Veneziano between 1333 and 1362, the stories of St Ursula became a narrative cycle of sixteen panels in four rows, with ships

²⁵² In Cologne, there was a now-dismembered series of panels representing the saint, including her coming with a ship. The Master of 1456. *The Martyrdom of Saint Ursula and the Eleven Thousand Virgins of Cologne*, oil on oak panel, ca. 1456 (<https://www.sothebys.com/en/auctions/ecatalogue/2015/old-master-british-paintings-evening-sale-115036/lot.2.html?locale=en>) (30/05/25), sold by Sotheby's in 2015. The saint was already connected to the city in an earlier canvas known as 'The Martyrdom of St Ursula', painted by the Master of the Small Passion, active in Cologne in 1411-14 (now in the Wallraf-Richartz Museum). A ship features prominently in an oil on panel from 1420 in Hamburg, with demons tearing its sails apart, sold by Sotheby's in 2008. Anonymous, *The Voyage of St. Ursula to Cologne*, oil on panel, (<https://www.sothebys.com/en/auctions/ecatalogue/2008/important-old-master-paintings-including-european-works-of-art-n08404/lot.28.html?locale=en>) (30/05/25).

²⁵³V. Carmeliti, 'La "Sant'Orsola che salva Pisa dalle acque" del Museo di San Matteo e altri dipinti del Trecento pisano', in M. Ferrari (ed.), *L'arme segreta. Araldica e storia dell'arte nel Medioevo (secoli XIII-XV)* (Florence, 2015), 143-58 argues instead that it was a political allegory. The painting is currently at the Museo di San Matteo in Pisa.

²⁵⁴ For Vigo see L. Ray Martin, *The Art*, cit., 96-98, image 81. On the Treviso cycle M. Muraro, *Tomaso da Modena: le storie di Sant'Orsola* (Villorba, 1983). For Termeno see S. Marseiler, *Kunst in Südtirol. Führer zu den bedeutendsten Kulturdenkmälern zwischen Vinschgau und Pustertal* (Bolzano, 1991), 85-87.

²⁵⁵ G. Nepi Scirè, *Carpaccio: le Storie di sant'Orsola* (Milan, 2000).

appearing in four of them. Strikingly, Paolo Veneziano abandoned the traditional representation of ships as mere vessels of the virgins and the saint, producing instead a further panel in which we can see shipwrights assembling a ship ashore, hammering with their tools the keel of the vessel standing on poles. The caption ‘laborantur naves’ refers not just to a hagiographical episode but to a moment of everyday life in medieval Venice. In another panel, now in a private collection in Bergamo, we see instead St Ursula sitting on the stern-castle as captain of a round ship, giving orders to her companions, who are hoisting the sails.²⁵⁶

Image 15

Paolo Veneziano, Stories of the Life of St Ursula (detail: shipwrights’ panels),

Paliotto, ca 1333-1362, Venetian workshop, unknown location



²⁵⁶ This is reproduced in P. Flores D’Arcais (ed.), *Il Trecento adriatico. Paolo Veneziano e la pittura tra Oriente e Occidente* (Milan, 2002), 150-51.



Details of trade and maritime traffic often found their way deep inside the Veneto region in hagiographical cycles. Close contacts with Venice must have inspired the Maestro della Cappella Galletti, who in 1460/70 decorated the Cappella Galletti in the Church of San Giovanni Battista in Serravalle, a place strategically located near the road to Belluno and Germany. Here we can see a variation on the motif of St Nicholas saving a single-masted round ship, as the cargo is jettisoned and we can see the same variety of boxes and barrels we observed in the first painting of this chapter. Some fifty kilometres from Venice, round ships and their cargoes still featured in the imagination of artists and patrons.²⁵⁷ As we have seen, ships appeared often in hagiographic cycles, and the movement of saints was often associated with round ships, sometimes rendered in their vivid materiality, as in the case of the shipwrights making a ship ready.

²⁵⁷ For further references to the cult of St Nicholas in the Veneto see G. Kaftal. *Saints in Italian Art. Volume 3. Iconography of the Saints in the Painting of the Northeast Italy* (Florence, 1978).

Image 16

Maestro della Cappella Galletti, Stories of St Nicholas, fresco,
Cappella Galletti (Chiesa di San Giovanni Battista, Vittorio Veneto), ca. 1460-70



4.3 Ships in mercantile culture

Representations of ships did not just inform hagiographical cycles and *vedute* of the city, but can be tracked in a vast array of different media. The case of mercantile culture is particularly salient, given the proximity of merchants to the sea, and their everyday interaction with ships and maritime trade. In chronicles produced at the behest of merchants, round ships started appearing incongruously even in contexts where representations of galleys would have been more appropriate, such as when depicting warships. This is certainly the case in a fourteenth-century codex probably produced in Venice, containing the ‘Chronologia Magna’ by Paolino Veneto (d. 1344). In this representation, the war fleet of Giovanni Polani (r. 1133-1164) was sketchily signified by a two-masted cog, with a sternpost rudder, and a squared sail, hoisting a St Mark’s flag,²⁵⁸ rather than by the more historically accurate longships.

Image 17

The Fleet of Doge Polani, Manuscript Drawing, 14th century

Biblioteca Nazionale Marciana (Venice), MS Marc. Lat. Z. 399 (=1610), f. 80v



²⁵⁸Biblioteca Nazionale Marciana, Venice, Marc. Lat. Z. 399, f. 78v). For ships in this codex see H. Zug Tucci, ‘Francesi e Veneziani alla quarta crociata’, in *Venezia e Parigi* (Milan, 1989), 21.

Occasionally, a ship appears in chronicles written in *mercantesca* script, as a generic representation of a ship caught in a storm. One such instance is an early-fifteenth-century illuminated chronicle in the vernacular written in a cursive *mercantesca* script, most likely by a Venetian trader. In this manuscript, BNM It. Z. 18, we find representations of galleys but also drawings of round ships. The mention of a shipwreck must have reminded the illuminator of a real situation, since both text and image suggest the effect of a strong gale on a round ship now proving difficult to steer. The illumination is sketchy and evokes rather than depicts a round ship. Nonetheless, the roaring waves and the hoisted sails suggest a dangerous voyage at sea. To quote the text that matches the image:

And so a storm arrived, and blew away the sail and Micas was unable to steer the boat when a thunderous wind blew, setting the ship westwards, and the wind was storming the waves of the sea so violently that the sea seemed to hurl the ship towards the sky, and then everything became grey, and other winds lambasted the waves of the sea during the night²⁵⁹

²⁵⁹ Venice, Biblioteca Nazionale Marciana, Marc. It. Z. 18 (= 4793): ‘Si vene uno collo di vento e si portò la povera vela e Micas si era sì fornito che lo legno si li era falito de governare, churò uno grande vento sì percose poy la nave che si vene versso oçidente e percose sì forte le onde che pareo che portase la nave infina al çielo, poy vene bigio e molti altri venti sì percoseno le onde de lo mare la note’.

Image 18

A Storm Besetting a Ship, Manuscript Illumination, early 15th century, Venetian

workshopBNM, It. Z. 18 (= 4793)



Representations of ships in the mercantile milieu served to illustrate mathematical problems, thus serving an educational purposes, even though the Venetian examples outlines the general details of round ships, without providing a particularly accurate depiction of these vessels. They were employed both in nautical manual and in commonplace books.²⁶⁰ Arithmetical treatises (*libri d'abaco*) often contained 'recreative maths problems', i.e. problems linked to more or less amusing situations, rather than mere arithmetical calculations. One of these is the three-sail ship:

A ship has three sails, with one of them it can cover the Poreč to Venice journey in $1/3$ of a day, with the second it can do it in $1/4$ of a day, and with the third in $1/5$ of a day. How long will it take for the said ship to reach Venice hoisting all these sails?

This mathematical problem is illustrated in a fourteenth-century Venetian commonplace book by the very basic outline of round ship. It is a very essential drawing, without even a rudder, but the presence of a sternpost and an elevated bow clearly suggest a pot-bellied vessel.²⁶¹ Directly after this, another problem is set featuring a two-sailed vessel bound to Puglia. In this case, the ship is more detailed with a sternpost rudder and a slightly more precise design.

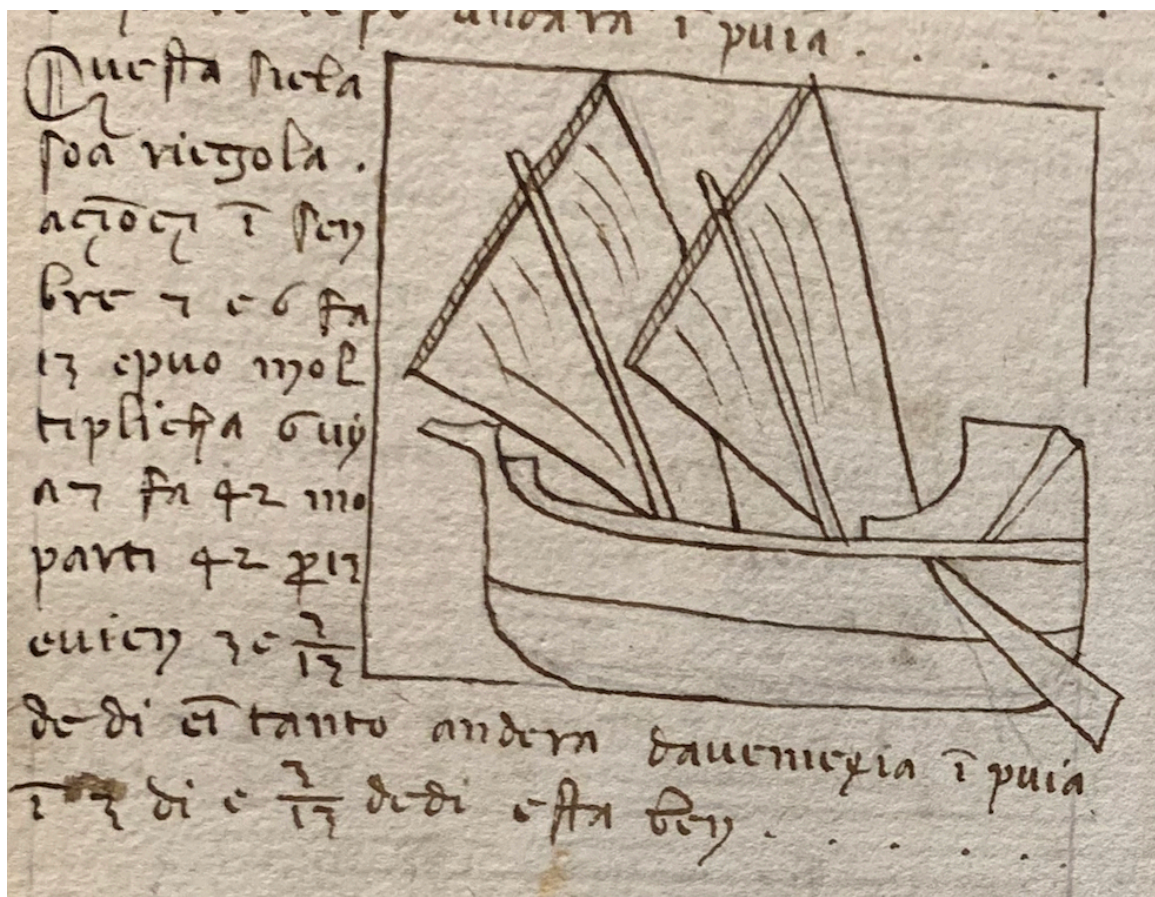
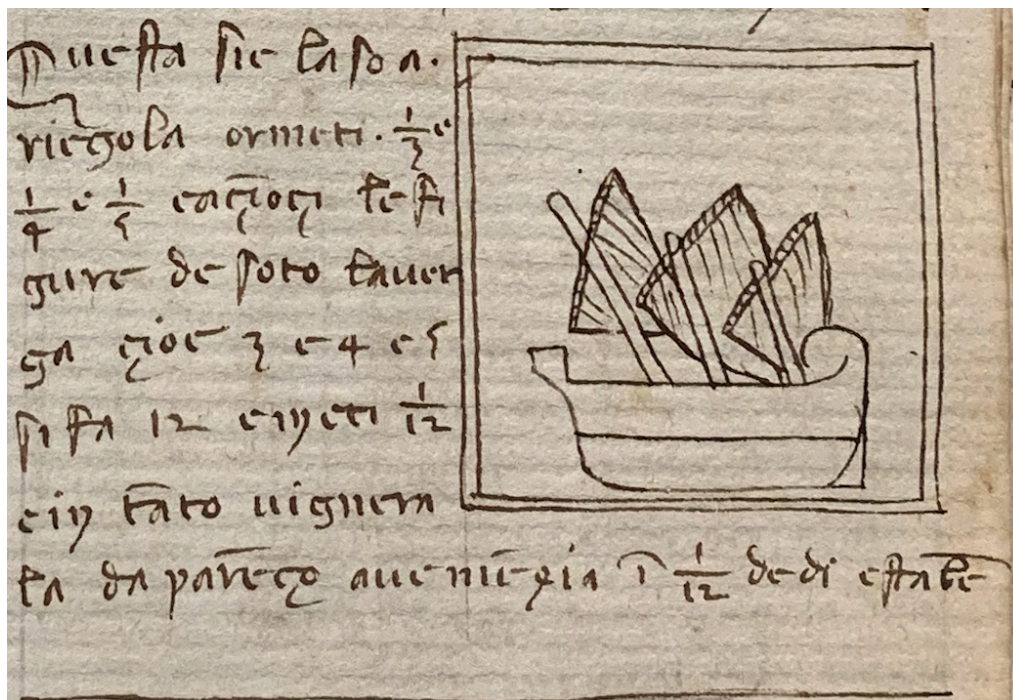
²⁶⁰ On commonplace books and their nautical knowledge see E. Wolynes, 'Migrant Mentalities: Reconstructing the Community, Identity and World of Venetian Merchants in the Late Medieval Mediterranean' (PhD thesis, University of Notre Dame, 2020) and E. Maglaque, 'Venetian Humanism in the Mediterranean World: Writing Empire from the Margins' (PhD thesis, University of Oxford, 2014).

²⁶¹ Bergamo, MA 334, f. 103r for both the problem and the drawing: 'Una nave si à 3 vele, cho(n) una de le vele/ la vien i(n)n u(n) $1/3$ de dì da Pare(n)ço a Veniexia/, cho(n) l'altra vela vien i(n) $1/4$ de dì e chon / l'altra vela vien i(n) $1/5$ de dì a Veniexia./ Adoma(n)do cholando tute 3 ste vele, i(n) qua(n)/to vignerala da Pare(n)ço a Veniexia ...'

Image 19

The arithmetical problem of the three-masted ship

Bergamo, Biblioteca civica Angelo Mai, MA 334, f. 103r, early 15th century, pen drawing



As In all the main Venetian commonplace books (*zibaldoni*) from the fourteenth century, we find drawings of ships ('Zibaldone da Canal', MS MA 334, 'Zibaldone Riccardiano').²⁶² It is a tradition not limited to the Trecento, as a mid-fifteenth-century Venetian manuscript also features a (more flat-bottomed) round ship to illustrate the same problem, but in this case the vessel is immersed in the water and its surface is divided into small squares, to reproduce the hull planking, not to mention a more detailed representation of the sternpost rudder.

Image 20

Drawing of a ship, Pen drawing, mid fifteenth century

Biblioteca Apostolica Vaticana, MS Vat. Lat. 4807, f. 72v



Ironically enough, the best representation of the ship associated with this problem is not in a Venetian but rather in a Tuscan *libro d'abaco* from 1440, a full-page round ship with detailed depictions of the two castles and the masts.²⁶³ It is quite evident that this type of representation had the goal of fostering maritime knowledge amongst younger merchants. *Zibaldoni* and *libri d'abaco* were primarily conceived as educational tools, and the representation of round ships in this context is significant as it was certainly part of the education of

²⁶² See for the 'Zibaldone da Canal' see Stussi (ed.), *Zibaldone*, cit., and for the Zibaldone riccardiano see *Lo zibaldone Riccardiano 2161. Una pratica di mercatura veneziana del primo Trecento*, ed. A. Bocchi (Udine, 2021).

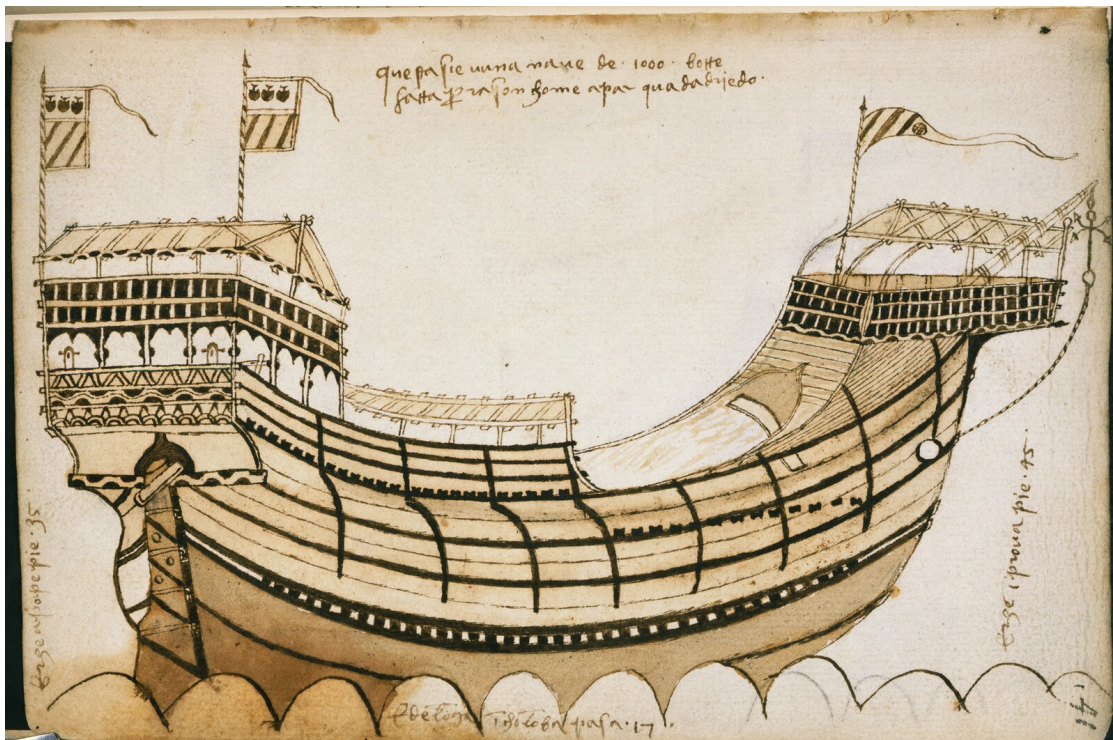
²⁶³ Florence, BNCF, Magl. XI, 86, f. 16v.

merchants even before they set foot on an actual ship. The use of representations of ships as part of the education of younger merchants is debated briefly but excellently by Federico Botana, according to whom seafaring was considered crucial by Florentine merchants.²⁶⁴ In the case of Venice, we can add to this corpus the representation of ships in nautical treatises, chief amongst them the ‘Books’ of Michael of Rhodes or Zorzi Trombetta, but we also occasionally find representations of ships on late medieval maps and portolan charts. A very famous and accurate drawing of a 1,000-*botti* ship can be found in the ‘Book of Zorzi Trombetta’ (1440s), in which notes on shipbuilding are interspersed with music and literary texts, whilst Michael of Rhodes also provides a unique insight into the appearance of a round ship and its sails.²⁶⁵

Image 21

A 1,000-*botti* ship, Pen drawing on paper, 1444-49

British Library, Ms Cotton Titus XXVI A (Zorzi Trombetta), f. 41



²⁶⁴ F. Botana, *Learning through Images in the Italian Renaissance. Illustrated Manuscripts and Education in Quattrocento Florence* (Cambridge, 2020), 209-225. On the use of images in *La Sfera* see H. Tann, ‘Merchants and their Cultural Horizons in Late Medieval Northern Italy’ (DPhil thesis, University of Oxford, 2022), 310-46.

²⁶⁵ The text on shipbuilding was probably copied from an earlier text, see M. Bondioli, ‘Early Shipbuilding Records’, cit.; D. McGee, ‘The Shipbuilding Text’, cit. and E. Rieth, ‘To Design and to Build Mediaeval Ships (Fifth to Fifteenth Centuries) - the Application of Knowledge held in Common with Civil Architecture of in Isolation?’, in Nowacki (ed.), *Creating Shapes*, cit., 119-146.

Cogs appear surprisingly late in Venetian maps and portolan charts, from 1367 onwards. In numerous instances, the map-maker placed incongruous ships, such as northern cogs instead of the Mediterranean type, or continued to draw cogs well into the fifteenth century, when they had in practice been replaced by the carrack.²⁶⁶ It is always difficult to tell how many, if any, of the extant maps were carried at sea. The scholarly debate surrounding a famous Venetian portolan from the fourteenth century seems to have been settled in favour of the opinion that it was not used for ordinary seafaring, given its luxurious appearance and the virtual absence of corrections.²⁶⁷ However, in the list of the goods plundered by the Genoese from the ship of Francesco Pampora in 1402, travelling from Cyprus to Beirut, we find two *carte de navegar* belonging respectively to the scribe of the ship and to a Benedetto Bullani.²⁶⁸ The Sicilian merchant Pino Campolo, who died in Venice in 1380, had a *carta de navegar* in the list of items found at his death.²⁶⁹ From a dossier of the Procuratori, we learn that Sara Badoer (d. 1344) had a *carta de navegar*, most probably of her late husband, valued at one *grosso* and eighteen *piccoli*, which means that a ducat (24 *grossi*), could have bought twenty-four such charts.²⁷⁰ Parts of ships could also feature amongst the goods owned by a merchant in his house. Common items of this kind are hammocks used on galleys (called *letexelo*).²⁷¹ We have seen that round ships could be and indeed were featured in several objects used daily by merchants, and were certainly

²⁶⁶ R. W. Unger, *Ships on Maps: Pictures of Power in Renaissance Europe* (Basingstoke, 2010), 55.

²⁶⁷ Oxford, Bodleian Library, Ms. Douce 390. I owe to the courtesy of the library the unique chance to have been able to consult the original. A facsimile edition with comments is now available. On Venetian portolans see P. Falchetta, 'Marinai, mercanti cartografi, pittori. Ricerche sulla cartografia nautica a Venezia, sec. XIV-XV', *Ateneo veneto*, 33 (1995), 7-109.

²⁶⁸ ASVe, Libri Commemorativi, Reg. IX, n. 252, f. 144 r/v (04/12/1402).

²⁶⁹ ASVe, Procuratori di San Marco, Commissarie (henceforth PSMC), Miste, *busta* 118 (Pino Campolo). Partially edited in A. Lombardo, 'Un testamento e altri documenti in volgare siciliano del secolo XIV', *Bollettino del Centro di Studi Filologici e Linguistici Siciliani*, 10 (1969), 46-83.

²⁷⁰ Original in ASVe, PSMC, Miste, *busta* 179 (Sara Badoer). From S. Coccato. 'Interni veneziani trecenteschi. La cultura materiale attraverso gli inventari di beni mobili dei Procuratori di San Marco (PhD thesis, Università Ca' Foscari - Venice, 2016), 271.

²⁷¹ Coccato, *Interni*, cit., 98.

part of their education. They also appear in texts written by merchants, such as chronicles. And they also featured on objects owned by traders.

4. 4 Ships in material culture

Ships were ubiquitous in the very fabric of Venice. For instance, the churches of Santo Stefano, San Polo, S. Caterina, and S. Giacomo dall'Orto feature lobed and modulated ceilings presently called 'reversed ship keels' ('carena di nave rovesciata') and 'in the shape of a galley' by Renaissance sources.²⁷² Unfortunately, we have no medieval graffiti of ships in Venice. The few that are extant from the Early Modern period (such as those in the Ospedale Civile and on a column in Saint Mark's Basilica) were carved as votive offerings.²⁷³ They thus had the same function as the sailors' *ex votos* represented in Carpaccio's 'Apparition of the Crucifixes of Mount Ararat in the Church of Sant'Antonio di Castello' (ca 1515). This miracle took place in the church of Sant'Antonio di Castello, a parish near the Arsenal, inhabited by seamen of modest means, eager to thank God for a successful journey. If we look at the *ex votos* in the church of Sant'Antonio di Castello hanging from a beam, represented by Vittore Carpaccio (ca 1515), two of them are round ships and one of them is a galley. There are only two extant examples of Venetian *ex votos* from the fifteenth century, namely a Venetian model ship in the cathedral of Toledo (1440) and a reliquary in the shape of a carrack in Padua.²⁷⁴ However, given the material and the function, these seem to have been deluxe versions of what was usually a more modest object, such as the Catalan *nao* of Matarò.²⁷⁵ Occasionally, Venetians left

²⁷² E. Concina, *Tempo novo: Venezia e il Quattrocento* (Venice, 2006), 240.

²⁷³ For Saint Mark see S. W. Helms, 'Ship Graffiti in the Church of San Marco in Venice', *The International Journal of Nautical Archaeology*, 4/2 (1975), 229-236; C. Beltrame and G. Boetto, 'Graffiti di navi a Venezia', *Archeologia subacquea*, 2 (1997), 239-245; A. Tosio Fei and D. Matangon (eds.), *I graffiti di Venezia* (Venice, 2022).

²⁷⁴ Ray Martin, *The Art*, cit., 140-41, no. 129. For ship models see A. Timmermann, 'The Ship in the Shop: an Art History of Late Medieval Ship Models', *The International Journal of Maritime History*, 33/2 (2021), 257-288.

²⁷⁵ L. Canetti, 'Gli ex voto marinari dell'Italia centro settentrionale', in *I santuari e il mare* (Bari, 2014), 215-234.

votive gifts in the form of ships made of wax,²⁷⁶ but few objects featuring ships survive for late-medieval Venice.

Image 22

Vittore Carpaccio, Ship as Ex Votos, Details from the Apparition of the Crucifixes of Mount Ararat in the Church of Sant'Antonio di Castello, ca 1515, oil painting, Gallerie dell'Accademia (Venice)



Unfortunately, very few earthenware or porcelain vessels represent ships in late medieval Venice, and the extant items are mostly luxury maiolica ware from the fifteenth century, such as the Leverton Plate from 1495 (Fitzwilliam Museum, Cambridge),²⁷⁷ in which we find the doge supervising the loading of cotton on galleys; a plate comparable to an earlier but equally luxurious representation of a round ship in a gold-glazed ceramic plate from Muslim Granada (1425-1450).²⁷⁸ Quite surprisingly, unlike in England, ships were seldom if ever represented on

²⁷⁶ ASVe, Procuratori di San Marco, De Ultra, Commissarie, *busta* 7, Alberto Bennasuto left in his will in 1313 a 'navem de cera'.

²⁷⁷ I owe the knowledge of this plate to the reading of R. Mueller (ed.), *Venezia nel Tardo Medioevo / Late Medieval Venice / Economia e Società / Economy and Society* (Rome, 2021), where it features as the cover image.

²⁷⁸ The piece is now at the Victoria and Albert Museum (London). *Bowl with Lustre-painted Depiction of a Sailing Ship*, Spain (Málaga), 1425-50, Accession number 486-1864 (<https://collections.vam.ac.uk/item/O85365/bowl-unknown/>) (30/05/25). For a description see A. W. Frothingham, *Lustreware of Spain* (New York, 1951), 91-93.

coins. Only in the eighteenth century would Doge Alvise III Mocenigo (1722-1732) represent a ship on a coin. Even at that point, it was for a ceremonial coin called an *osella*, not for a commercial coin struck by the mint in large numbers. We also have two examples of bas-reliefs featuring cogs: one has been identified in Murano and the other in the Scuola Grande della Misericordia of Venice, most probably good omens for maritime travels.²⁷⁹ As we have seen, images of round ships circulated also on daily objects, such as ex votos. They were also part of more complex pictorial representations, such as ceramics, bas-reliefs, maps and portolans.

We have seen that round ships were represented in several different contexts: hagiographical cycles, mythopoeia of the city's origins, *vedute* of the city, practical manuals, and material culture. I have chosen precisely these categories because each catered for a different audience. Public cycles of frescoes were clearly conceived as public displays of the wealth and power of a specific family (such as the Loredan). *Vedute* clearly reflected both Venetian self-representation and the reception of this model abroad. The coincidence of the representation of Venice between internal and external sources seems to me significant, and perfectly matches the emphasis on the ubiquitousness of round and flat-bottomed ships mentioned in accounts of pilgrims visiting Venice throughout the fifteenth century. It was such a widespread image that even the Syrian writer Abū l-Fidā (d. 1331) described the city as 'built on the sea, boats cross it for the most part bordering the houses. Each of them [the Venetians] has a boat moored at his gate.'²⁸⁰ After all, galleys rarely numbered more than thirty in medieval and Renaissance Venice, in a 'shipscape' dominated by other types of vessels. The presence of ships in non-official contexts and in non-elite spaces also speaks to the pervasiveness of this type of representation. Almost all ships represented in merchants' manuals, commonplace books, atlases, and maps were round vessels, and evidently catered for an audience that used them, as well as the sailors

²⁷⁹ Christ, 'Quelques observations', cit., 70-71.

²⁸⁰ F. Bauden, 'L'immagine di Venezia nelle fonti arabe' in M. P. Pedani et al. (eds), *Venezia e l'Egitto* (Milan, 2011), 75

who offered them as ex-votos.²⁸¹ Even though the ship, in this case, was clearly on dry land, it became part of a mediation between the deity and the worshipper. There is a strong correlation between sacred spaces and seafaring, as shown by Michele Bacci observing the geography defined by the invocations of saints or miraculous images (usually of the Virgin Mary) against danger at sea, the *sante parole*. For instance, despite the number of holy places in Famagusta, seafarers invoked Santa Maria della Cava, a small church within a cave where they prayed before or after a safe crossing towards Syria.²⁸² The fact that round ships appear both as sacred objects and in everyday material culture clearly indicates their role in late medieval Venice. Apart from being widespread, these images catered for several audiences and reinforced the link between Venice and the sea in a public context, circulated Venetian propaganda, conveyed maritime and geographical knowledge, and created sacred boundaries.

Conclusion

In this chapter, we have seen the type and quantity of Venetian ships, as well as their cultural and social significance. I have underscored how Venetian shipping rested on the integration of multiple types of vessels. Round ships, flat-bottomed vessels, and galleys served different and occasionally overlapping trade circuits, and should be seen as complementary rather than exclusive. Cogs could support journeys of galleys, and galleys did also carry commodities in bulk as ballast. More importantly, both in Venice and abroad, we must avoid a clearcut division between precious and bulky commodities, and different types of vessels. It is equally important to stress that the cog did acquire a significant role in Venetian trade, underpinning crucial trade activities like the cotton trade, and that it coexisted throughout the

²⁸¹ H. Baader, 'Vows on Water: Ship Ex-Votos as Things, Metaphors, and Mediators of Communality', in I. Weinryb (ed.), *Ex Voto: Votive Giving Across Cultures* (New York, 2016), 217-45.

²⁸² M. Bacci, 'Portolano sacro. Santuari e immagini sacre lungo le rotte di navigazione del Mediterraneo tra tardo Medioevo e prima età moderna', in G. Wolf and E. Thunø (eds.), *The Miraculous Image in the Late Middle Ages and Renaissance* (Rome, 2004), 230.

fourteenth century alongside lateeners and flat-bottomed *burchi*, *marciliane*, and *rascone*. The cog did not disrupt fundamentally the old trade networks, it simply gave Venetians a further element to diversify their shipping. As we have seen, the fourteenth century was in many ways experimental, with the establishment of annual voyages of galleys and the gradual introduction of the cog. The increased specialisation of the European economy in the late fourteenth century led to a further development with the race towards ‘gigantism’ and an overall increase in cargo capacity. It is particularly significant that this happened in a city that already numbered thousands of craft and which a foreign traveller described as ‘the most regal’ of all harbours of the world. The aquatic dimension of Venice is well conveyed by the German translation of Niccolò da Poggibonsi, with Venice seen as isolated block of houses almost drowning in a fantastical lagoon. The variety of shipping found in the *vedute* of Venice is mirrored by Venetian sources both before and after the plague. Foreigners did not just represent the city, but also contributed fundamentally to its trade. The concept of ownership in the case of a ship must necessarily account for shared ownership and for an investments structure where the carats of a ship could be even pawned or promised as a reward for a crime. Ships could be repurposed and even hoist a foreign flag if that was advantageous. We should thus discard the idea that wealth in the fourteenth century was solely linked to investments in the state galleys, as suggested by Puga and Treffler. In fact, the same merchant who invested in the state galleys could fit out a ship for free voyaging in the Adriatic. Well-off *popolani* could equally buy a *burchio* and engage in regional trade. Venetian shipping was tripartite, it was varied, and it enabled investments from all strata of society. In this regard, Venetian trade is perfectly comparable to that of Genoa or Barcelona. Venetian trade was not a state-sponsored effort. This is a conclusion that matches the image of Venetian shipping that we obtain from the records of the passage of Venetian ships in several Mediterranean ports and from internal sources showcasing the intensity of Venetian coastal trade. Coastal trade was also underpinned by intense fluvial

and terrestrial commerce.²⁸³ The mainland was an important dimension of Venetian trade even before it was annexed by the city of St Mark. Terrestrial, fluvial, and maritime exchanges complemented each other. In the next chapter, we will examine how this worked.

²⁸³ See the analysis of salt transported on the Po in the early fourteenth century in J.-C. Hocquet, 'Navigation padane et discrimination fiscale au Trecento', in F. Morenzoni and É. Mornet (eds.), *Milieus naturels, espaces sociaux. Études offertes à Robert Delort* (Paris, 1997), 521-542.

Chapter 2 :

Integrating Mediterranean trade circuits

In this chapter, I will propose a reassessment of two intertwined themes, namely the circuits of trade of the Republic, and the types of wares commercialised in Venice. I will advocate for a more comprehensive overview of Venetian trade by considering production, local consumption, and international exchange. I will do so by analysing extensive lists of products sold in Venice in the fourteenth and early fifteenth centuries, known as *valute di mercanzia*, mostly compiled by Tuscan merchants active in the city.²⁸⁴ Federigo Melis defined them as ‘price lists of wares assembled by a company gathering data from the marketplace or obtained through a third party, already filled out’.²⁸⁵ They were made, to quote Roberto S. Lopez, ‘when merchants grew more exact and expert in distinguishing kinds and grades’.²⁸⁶ They offer us a unique insight into a wide set of wares, numbering almost 300 commodities. They clearly show that Venice was not just an entrepôt but also a centre of production and a significant hub for regional trade, even before the annexation of the mainland.²⁸⁷ As remarked by Paola Lanaro:

From a commercial point of view, Venice had extended a kind of economic protectorate all along the Adriatic coast and along the rivers of the region.

Furthermore, during the fourteenth century the network of Venetian merchants effectively advanced in the region of the Po and in this way increasingly subjected all

²⁸⁴ For the self-perception of Florentines in Venice see P. Clarke, ‘The Identity Of The Expatriate Florentines In Venice In The Late Fourteenth And Early Fifteenth Centuries’, in W. J. Connell (Ed.), *Society and Individual in Renaissance Florence* (Berkeley, 2002), 384-408.

²⁸⁵ F. Melis (ed.), *Documenti per la storia economica dei secoli XIII-XVI* (Florence, 1972), 38 : ‘listini dei prezzi delle merci, che l’azienda costituiva raccogliendo da sè i dati sulla piazza o che otteneva di fuori, già compilati’. Examples from the Datini Archive were reproduced and transcribed in the same book at 298-321, no. 86-94 (no. 91-94 reproduce corresponding Venetian examples to the Tuscan ones).

²⁸⁶ R. S. Lopez and I. W. Raymond (eds.), *Medieval Trade in the Mediterranean World: Illustrative Documents* (London, 1955), 108. This type document is illustrated in the same book at 109-114. n. 42.

²⁸⁷ On the regional market in the Veneto see P. Lanaro, *I mercati nella Repubblica veneta. Economie cittadine e stato territoriale secoli XV-XVIII* (Venice, 1999). The case study of woollens has been studied extensively by A. Mozzato. See Id., ‘I drappieri di Venezia incontrano i lanaioli di Terraferma. Per una storia del lanificio veneto nel Quattrocento’, *Studi storici Luigi Simeoni*, 60 (2010), 47-60 and 61 (2011), 25-42, and Id., ‘Scelte produttive e commerciali dei drappieri di Venezia in area adriatica e levantina fra Tre e Quattrocento’, in D. Andreozzi et al. (eds.), *Acque, terre e spazi dei mercanti: istituzioni, gerarchie, conflitti e pratiche dello scambio dall’età antica alla modernità* (Trieste, 2009), 303-333.

the hinterland cities, drawing into its orbit the Treviso economy, which without Venice would have been unable to sustain its own development.²⁸⁸

This symbiotic relationship between Venice and the mainland has long been denied by Venetians themselves in the Middle Ages, even though perceptive foreigners observed it already in the fifteenth century. As remarked by Crouzet-Pavan in relation to foundation myths of the city, the ‘invented history of Venice, in celebrating the sanctuary of the lagoons, was obliged to deny the numerous exchanges between the city on the water and the mainland, as well as the evolving economic interpenetration which began several centuries before the territorial conquest.’²⁸⁹ We should thus consider both land and sea when analysing medieval trade, understanding the interlocking scales of trade. It is an approach that economic historians have employed for the study of other trade areas. Maarten Prak observed in a seminal contribution on early-modern economic regions that areas prospered thanks to both international trade and to ‘an economic structure that was already in place and had been created regionally.’²⁹⁰ In untangling these different scales, it is important to acknowledge the existence of local productions and not to draw a rigid boundary between different levels of production: glassmaking, for instance, catered for both the connoisseurs from Northern Europe, and for the local clientele ordering the characteristic long-necked bottles, known as *inghistere*.²⁹¹ I will gauge these circuits of trade by having recourse to the database I built with mentions of ships, giving us a useful tool to understand the regional and inter-regional communications sustained by Venice alongside international commerce. By providing the contents of the cargoes and the route plied by vessels, I will underscore the significance of the Adriatic as a market for Venice.

²⁸⁸ P. Lanaro (ed.), *At the Centre of the Old World: Trade and Manufacturing in Venice and the Venetian Mainland, 1400-1800* (Toronto, 2006), 23.

²⁸⁹ É. Crouzet-Pavan, ‘Venice and its Surroundings’, in *A Companion to Medieval Venice*, cit., 29.

²⁹⁰ M. Prak, ‘Regions in Early-Modern Europe’, in *Debates and Controversies in Economic History. Proceedings of the Eleventh International Economic History Congress* (Milan, 1994), 37-38, the point is made in reference to the rise of Amsterdam.

²⁹¹ For an example of these see Venice Glass Museum (Murano), *Inghistera Bottle*, late fourteenth century, Inv. Classe VI n. 1172, <https://www.visitmuve.it/en/galleria-delle-opere/inghistera-bottle/> (30/05/2025).

In this respect, I will also highlight the complementarity between precious materials and goods in bulk, which constituted a significant share of Venetian trade. The fact that the weight unit of commodities in bulk was the *millier*, that is 477 kg, gives us a scale of the significance of the import of these commodities. I will explain how wares in bulk (*mercationes grosse*) were often transported with precious objects (*havere subtile*), and how these seemingly straightforward terms hide a universe of different types of products. I will use case studies taken from the trials of the Avogaria di Comun to understand the practicalities of trade. A collection of fourteenth-century trials, known as Processi Originali, related to crimes committed by public magistrates has been preserved in the archives of the Avogaria di Comun, and these dossiers include witness statements by otherwise unknown individuals. The case study approach will be complemented by a quantitative analysis of the routes of Venetian trade in the period 1331-1335, using the register of pardons mentioned in the previous chapter. The register will be used more granularly to understand the trade routes plied by Venetian traders, and the cargoes of these vessels. It will be particularly instructive when compared to the case studies from the records of the Avogaria, mostly covering the second half of the fourteenth century, thus allowing us to gauge changes and continuities before and after the plague. Venetian trade was not simply maritime commerce, nor was it only terrestrial trade routes. It was the result of the integration of multiple maritime routes and multiple terrestrial paths, crossing the Alps or the Po Plain. I will thus study the Venetian economy using commercial, narrative, and archaeological sources to better understand how the integration of land and maritime routes influenced the patterns of trade. I will thus lay bare the extent of the import of raw materials in the city, including commodities in bulk like potash, fundamental for glass-making, or olive-oil, used extensively in the soap-making industry.

1. Land and sea

In one of the oldest Venetian chronicles, the ‘Chronicon Altinate’, we read: ‘this was a people who said that they lived neither on land nor in the water’ (‘hoc erat gentes dicentes: non in terra neque in aqua sumus viventes’).²⁹² In fact, the ‘terrestrial’ element of Venice characterised the city from the outset. The desire for control over the Po River, in particular, led to an unsuccessful war against Ferrara (1308-1309), an ecological border that still today divides the Veneto from Emilia-Romagna. We should also not forget that the single successful fourteenth-century territorial expansion of Venice on the mainland was the acquisition of Treviso (1339-1381), the arrival point of wares from the Alps.²⁹³ Venetians equally pursued either warfare or economic agreements with their neighbours to the east, the Friuli, a region criss-crossed by the many roads connecting Venice with Germany through cities like Venzone, Gemona, Tarvisio, Spilimbergo, Feltre, and Conegliano, strategically located next to the Alps.²⁹⁴ Venice did not just ‘venerate the sea’, as Chancellor Caresini noted, but also relentlessly pursued a policy of control over inland waterways and consolidation of mainland possessions such as Treviso, even before the outright annexation of the mainland.

The terrestrial dimension of Venice was not overlooked by perceptive foreign observers. Giovanni di Pagolo Rucellai (1403-1481), a prominent Florentine merchant who spent some years in Venice, observed as much in his ‘Zibaldone Quaresimale’. He noted that the success of Venice lay precisely in its location within a web of neighbouring rich provinces and was largely due to low transaction costs, thanks to the use of waterways to transport merchandise :

²⁹² *Chronicon Venetum quod vulgo dicitur Altinate*, ed. H. Simonsfeld (Hannover, 1883), 11, ch. 1, line 13.

²⁹³ See G. M. Varanini, ‘Appunti sul sistema stradale nel Veneto tardomedievale’, in T. Szabó (ed.), *Die Welt der europäischen Straßen: Von der Antike bis in die Frühe Neuzeit* (Köln, 2009), 97-118; Id., ‘Le strade del vino’, in G. Archetti (Ed.), *La civiltà del vino Fonti, temi e produzioni vitivinicole dal Medioevo al Novecento* (Brescia, 2003), 635-664; E. Orlando (ed.), *Strade, traffici, viabilità in area veneta. Viaggio negli statuti comunali* (Rome, 2010); G. Coppola and J. F. Bergier (eds.), *Vie di terra e d'acqua. Infrastrutture viarie e sistemi di relazioni in area alpina (secoli XIII-XVI)* (Bologna, 2007).

²⁹⁴ T. Vidal, ‘Specializzazione e integrazione. Il problema delle ‘regioni economiche’ rivisitato’, *Reti Medievali*, 24/1 (2023), 143-88; Id., ‘The Hinterland of Long-distance Trade. Regional Integration and Functional Development in North-Eastern Italy (1250-1450)’, in F. Miranda (ed.), *Essays on Production and Commerce in Medieval Iberia and the Mediterranean* (Coimbra, 2023), 79-112; Id., ‘Fiscality and Infrastructures, Fiscality as Infrastructure: the Role of Taxation in the Shaping of Economic Landscape in the Julian Alps (13th-15th Century)’, *Quaderni del M.A.E.S.*, 21 (2023), 15-50.

And truly it is said that the city of Venice is the best-located city in the world to carry out trade, not for its perfect location on the sea - for there are many other maritime polities far better placed for seaborne trade, both in the East and the West - but because Venice is in a site so conveniently located that it is much simpler to move wares by land here than elsewhere, and especially for it is close to Germany and since you can transport merchandise by water or by land with carts, at a modest price ... and also because it is close to the province of Lombardy, which being such a vast and well-populated region it involves much trade, and because the majority of Lombardy is on a plain, a vast one with large rivers, through which you can import merchandise from Venice thither easily and cheaply; and no other maritime nation, be they the Genoese or the Florentines, can match this, for they have to use donkeys and other beasts, which are by far more expensive. And, for this reason, I believe that city will never lack business, and on a vast scale, and I believe that were Venice to be razed to the ground in a war, you would have to rebuild it, for its perfect location, or alternatively, you would have to build one nearby to replace it.²⁹⁵

His words seem to echo the text of a pact between Venice and Ferrara signed in 1313, in which we read: 'from Venice, wares are transported towards northern Lombardy, and more

²⁹⁵ *Giovanni Rucellai ed il suo zibaldone*. Vol. 1. *Il Zibaldone Quaresimale* ed. A. Perosa (London, 1960), 125: 'E si dicie quello che è il vero, che la ciptà di Vinegia è meglio posta ciptà per fare merchatantia che alcuna altra ciptà del mondo, non perché di terre marine non ci sieno delle meglio poste quanto al mare (ché ci sono molte terre poste in più comodo sito al navichare per mare e a llevante e a ponente che non è Vinegia), ma la chagione perché si dicie che Vinegia è posta in più comodo sito per fare merchatantia che niuna altra, si è perch'ell'à più comodità allo spaccio delle merchatantie per terra ferma che niuna altra ciptà, e massimamente per essere vicina alla Magnia e per avere comodità di condurvi le merchatantie parte per aqua e parte per charrette con pocha spesa ... e ancora per essere vicini alla provincia della Lonbardia, che per essere grande provincia e bene popolata vi si spaccia merchatantia assai, et perché il forte d'essa è posta in piano e la pianura v'è grande, vi sono grossi fiumi, per gli quali fiumi si può condurre la merchatantia da Vinegia là con molta comodità e con piccholissima spesa, et niuna altra nazione che navichi, o Gienovesi o Fiorentini o altri, non può stare al pari di loro, per averle a conduciare co' muli e altre bestie con molto maggiore spesa di loro. Et però sono di questa oppenione che non possa mai mancare a quella ciptà fare grandi facciende di merchatantie, et credo che quando fusse disfatta, o per guerre o per altro, fino a' fondamenti, che sarebbe nicisità di nuovo riedificarla per essere in detto buono sito, o veramente riporne un'altra li vicina per soppire a quello medesimo'.

frequently from the said Lombardy towards Venice'.²⁹⁶ According to the tax records of Treviso analysed by Fabien Faugeron, between 1399 and 1400 alone Venice imported 10,987.25 *congia* or 856,825 litres of wine from that city, whence Venice also imported between 1433 and 1434 some 24,002 sheep and 6,376 cattle.²⁹⁷ Less statistically reliable but useful as an indication of scale, the fifteenth-century 'Morosini Chronicle' estimated at 100,000 ducats the astonishing value of the annual export of salt to Lombardy in 1402.²⁹⁸ What both Ruccellai's commonplace book and these customs registers can tell us is that the quantity of exports to and imports from the hinterland and the countryside was very significant. Rucellai rightly pointed out that Venice is not a particularly safe harbour, risky as its entrance was, but that the presence of a plain and numerous waterways eased trade and lowered costs for merchants. It was a city built not only on the salty marshes, but also on the brackish waters of the lagoon and the freshwater of the Adige, Po, and Brenta Rivers. As Michael McCormick observed perceptively: 'Venice coalesced in a zone of ecological transition. Situated on the sea edge of a great river delta, it was backed by the fresh or brackish water of the lagoon; in front of it flowed the salt water of the Mediterranean'.²⁹⁹

Only by studying all the dimensions of the port of Venice may we understand the success of the city: the inclusion of the city within the great trade artery connecting Barcelona to eastern Europe,³⁰⁰ its role as a pivot of long-distance trade and as a redistributing point of regional exchanges, as well as the exchange site for products from the countryside exported

²⁹⁶ ASVe, Pacta, Liber Blancus, I, f. 56v, rubrica 25, 'Pacta Ferrarie' (1313): 'de Veneciis merces versus Lombardiam superiorem ed de dicta Lombardia versus Venecias frequentius deportantur'

²⁹⁷ Faugeron, *Nourrir la ville*, cit., for cattle 369 and for wine 365-67.

²⁹⁸ *The Morosini Codex*, §63, ch. 05 (01/10/1402), [https://engineeringhistoricalmemory.com/post/1402-10-morosini-codex-%c2%a7063-0005/\(30/05/2025\)](https://engineeringhistoricalmemory.com/post/1402-10-morosini-codex-%c2%a7063-0005/(30/05/2025)): 'in vita del predito misier lo ducha hogni ano quello toleva sal da Veniexia per valor de duchati cento milia d'oro e holtra'.

²⁹⁹ M. McCormick, 'Where do Trading Towns come from? Early Medieval Venice and the Northern Emporia', in J. Henning (ed.), *Post-roman Towns, Trade and Settlement in Europe and Byzantium* (Berlin, 2007), vol. 1, 48.

³⁰⁰ F. Melis, 'Le comunicazioni transpeninsulari sostenute da Venezia nei secoli XIV e XV', in F. Melis (ed.), *I trasporti e le comunicazioni nel medioevo* (Florence, 1984), 143-161 and 'Da un bacino all'altro del Mediterraneo attraverso le penisola italiana', *Ibid.*, 162-175.

abroad. The recently edited account book of the Catalan Torralba Company, which sold wool in the Adriatic and Venice in 1433, shows that it was purchased not just by Venetians, but by diverse merchants from the mainland, such as Vicenza, Brescia, Bergamo, and from central Italy, as far as Fano and Urbino.³⁰¹ By analysing Venice as part of a complex web of trade routes spanning the Po Plain, we can better understand its trade circuits. Its merchants did not just ply the waters of the Aegean but also those of the many rivers connecting Venice to Lombardy and they also moved on the many land routes that stretched north, east, south, and west of the city. Bologna, Milan, and Friuli were as important for Venetian trade as Dubrovnik, Alexandria, and Cyprus.

Trade with the mainland and with the *contado nascosto* of the Adriatic catered for some vital needs of the city, such as ship-making and provided the city with victuals and wines. No fleet would have been built in Venice without lumber from the Cadore forests in Northern Italy,³⁰² no glass without pebbles from Lombardy, no building without the ubiquitous white *pietra d'Istria*.³⁰³ Food provisioning equally entailed vast imports: according to Marin Sanudo, provisioning the city with meat in 1529 required annually 14,000 cows; 13,000 calves and 70,000 'small animals' for a population of 120,000 inhabitants.³⁰⁴ These might seem large amounts, but they are confirmed by fiscal sources from the mainland. The customs registers of Conegliano, near Treviso, recorded that between 22 September 1428 and 28 February 1429, there passed through that toll-station '268 cows, 54 horses, more than 500 swine and sheep; 4,374 kg of wool, 98 carts loaded with bales of merchandise, 6,927 kg of steel' and 15 tons of iron, all probably earmarked for Venice.³⁰⁵ Provisioning a city of 100,000 people required a constant

³⁰¹ Basso et al. (eds.), *De Aragón a Venecia*, cit., 73-82.

³⁰² See K. Appuhn, *A Forest on the Sea – Environmental Expertise in Renaissance Venice* (Baltimore, 2009).

³⁰³ M. Šimunić Buršić et al., 'Kirmenjak-Pietra d'Istria: a Preliminary Investigation of its Use in Venetian Architectural Heritage', in B. J. Smith and R. Prikryl (eds.), *Building Stone Decay: From Diagnosis to Conservation* (London, 2007), 63-68 and R. J. Goy, *Building Renaissance Venice: Patrons, Architects and Builders, C. 1430-1500* (London, 2006), 79-82.

³⁰⁴ Faugeron, *Nourrir la ville*, cit., 371.

³⁰⁵ Vidal, 'Specializzazione e integrazione', cit., 157. See also also table 12 at 177.

influx of livestock and beverages. Similarly, the shipbuilding industry, both private and public, implied a large import of raw materials. A single Flanders galley built in the fifteenth century required 380 pieces of wood, 140 straight oak timbers, 280 oak timbers of large size, 36 planks of larch, 318 planks and 50 pieces of fir, 8,000 *libbre* of iron; 3,000 *libbre* of pitch and 3,000 *libbre* of oakum.³⁰⁶

In the previous chapter, we have seen how changes in shipping both underpinned and enabled the transport of merchandise in bulk from the fourteenth century onwards. The introduction of sturdy pot-bellied vessels like the cog and later the carrack led to an increased cargo capacity, whilst the differentiation of Venetian and Mediterranean shipping enabled multiple trade circuits, from the local to the global. I argue that the commercial development of Venice rested precisely on the integration and ‘interlocking’ of multiple scales of trade. It is important not to set a dichotomy between precious and bulky commodities, as spices and lead often travelled together.³⁰⁷ In fact, the very structure of a ship entailed the loading of voluminous materials and a ballast, normally coupled with more expensive wares.³⁰⁸ Similarly, Venice worked as a major redistribution hub, where wool from Catalonia could be sold to local merchants, and where metals carried through the Alps by German merchants could then be laden onto ships bound to Alexandria or Byzantium. It is thus important to understand how these trade circuits collaborated and to distinguish between three equally important elements of the Venetian economy, namely production, exchange in Venice, and trade circuits beyond the city. As for production, it is evident that Venice did not just produce luxury commodities but

³⁰⁶ Higgins, ‘The Venetian Galley of Flanders’, cit. 47-48.

³⁰⁷ A good example of the overstatement of the importance of spices is V. Scammell, *The World Encompassed. The First European Maritime Empires, c. 800-1650* (reprint Abingdon, 2018, original 1981), 101 ‘The essence of this commerce was the import of oriental luxuries, especially spices. [...] The fundamental Venetian import, the very milk and nourishment of the city’s being was the pepper of India and Indonesia’.

³⁰⁸ For Venice see J. E. Dotson, ‘A Problem of Cotton and Lead in Medieval Italian Shipping’, *Speculum*, 57 (1982), 52-62; Id., ‘Stowage Factors in Medieval Shipping’, in A. M. Vannini et al. (eds.), *Trasporti e sviluppo economico: Secoli XIII-XVIII* (Florence, 1986), 273-78. F. Ch. Lane, ‘Cotton Cargoes and Regulations against Overloading’ in Lane (ed.), *Venice and History*, cit., 253-262. How to balance the stowage of bulky and precious commodities was also the subject of arithmetical problems proposed to young merchants ‘a voler chanbiar piper con cera’: See Bocchi, *Lo zibaldone riccardiano 2161*, cit., 55-56 (f. 20v, par. 12).

also many everyday objects, such as very common glass wares and a specific type of ceramic. As for exchange, I will highlight how the marketplace of Venice was the meeting point for commodities not just from the eastern Mediterranean but also from France, Catalonia, Northern Africa, and of course the Italian mainland and the Adriatic. Lastly, I will show how the trade circuits of Venice encompassed local trade with neighbouring regions such as Emilia to the south and Friuli and Trentino to the north and east, and Lombardy to the west. They also included regional trade within the Adriatic, especially with the Marche, Puglia, Istria, and Dalmatia, key nexuses of Venetian trade from the twelfth century, and of course international trade with the whole Mediterranean.

2. Production.

As early as the twelfth century, the ‘Honorantiae urbis Papiae’ reminded the reader that Venice was inhabited by a people that ‘does not plough, does not sow, does not harvest grapes’.³⁰⁹ One might be tempted to add, ‘does not produce’; yet this would be misleading. The role of Venice as a major hub for international traffic is well known, its role as a production centre less so, especially before the ‘takeover’ of the textile industry in the fifteenth century. Even today, Venice is associated with a handful of high-end productions, such as brocades, paper, and glassmaking. Yet Lanaro, who has worked extensively on the proto-industries of Early Modern Venice, has shown their variety and their richness. They encompassed virtually every sector, from glass to textiles, from soap to cheese.³¹⁰ These industries were by no means confined to a handful of luxury products. As shown by Toffolo, this is a detail that tended to escape the narratives of foreigners visiting Venice, who were more likely to give prominence to precious

³⁰⁹ *Die Honorantiae civitatis Papiae. Transkription, Edition, Kommentar*, ed C. Bruhl and C. Violante (Köln-Wien, 1983), 18.

³¹⁰ P. Lanaro, *At the Centre of the Old world, cit.*, and U. Tucci, ‘Venezia nel Cinquecento: una città industriale?’, in C. Ossola and V. Branca (eds.), *Crisi e rinnovamento nell’autunno del Rinascimento a Venezia* (Florence, 1991), 68-83. Cf. for Venetian products E. S. Beauchamp (ed.), *Typical Venice? The Art of Commodities, 13th-16th Centuries* (Turnhout, 2019).

commodities such as glass or large complexes like the Arsenal, which were often part of the tours of memorable places offered by the Republic itself to foreign dignitaries.³¹¹ Despite the image of Venice as an international entrepôt, we should not forget that several local products found their way into the city, both as foodstuff and manufactured products, and that local productions continued to exist well into the modern period.³¹²

We know from archaeological data that Venice produced glass from the late thirteenth century. Excavations in Murano, and in particular around the Basilica of Santa Maria e Donato, have revealed that there was a vibrant production of local wares that were not aimed at the foreign market and that served a local clientele. A recent study by Veronica Occari has found that amongst the three groups of glass objects found in Murano, the second is unquestionably Venetian and comprised objects for everyday use: bottles known as *inghistere*, flat-based beakers, ampoules, hanging lamps, and window glass.³¹³ The archaeological finds point towards a rich production of local objects, even though some of them display both levels of silica and design comparable to contemporary Egyptian or Syrian glass. The second piece of evidence we can gather is that in the fourteenth century Venice produced a distinctive type of ceramic known to archaeologists as ‘roulette ware’, or more formally ‘graffita a spirale cerchio’ on account of its patterns. According to mineralogical analysis by Tiziano Mannoni, this was produced in the Venetian lagoon³¹⁴ and can be found as far afield as the Black Sea, where it has been discovered on board a ship - presumably directed to the Black Sea ports - sunk in the so-called Novy Svet

³¹¹ Toffolo, *Describing the City*, 132-141.

³¹² Cf. F. Trivellato, *Fondamenta dei vetrai. Lavoro, tecnologia e mercato a Venezia tra Sei e Settecento* (Rome, 2000), 14: ‘si può quindi affermare che in età moderna Venezia non si trasformò, come si è a lungo sostenuto, in semplice emporio, con il conseguente disgregarsi del proprio tessuto produttivo’.

³¹³ V. Occari, ‘Raw Materials and Technology of Medieval Glass from Venice: The Basilica of SS. Maria e Donato in Murano’, *Journal of Archaeological Science*, 37 (2021), 1-31.

³¹⁴ T. Mannoni et al., ‘Stato delle ricerche mineralogiche sulle ceramiche mediterranee’, in *La ceramica medievale nel Mediterraneo occidentale* (Florence, 1986), 601-609.

Shipwreck (13th century) near Sudak in Crimea.³¹⁵ In terms of the production of semi-manufactured goods, research by Margherita Ferri, who has mapped findings of lids of jars containing milk and compared them with known locations of *casaroli* in the period, has concluded that cheesemongers tended to settle around the peripheral areas of the city, especially areas recently reclaimed from the lagoon, where presumably more space was available for shepherding and more generally to feed the animals.³¹⁶ The commercialisation of cheese in Venice was not a mere redistribution of products fetched from elsewhere, but rather a process that entailed production, shepherding, and the use of specific skills, which evidently were readily available in Venice through immigrants from the mainland.

Venetian authorities intervened several times to protect local productions, granting fiscal incentives, banning the export of specific products, and ensuring the quality of products ‘made in Venice’. A deliberation of the Senato of 1329/1330 explicitly mentioned ‘drappariam laboratam Veneciis’, cloth of unspecified quality manufactured in Venice, in an export ban.³¹⁷ The Republic equally wanted to ensure quality standards of products.³¹⁸ In 1342, the Senato specified how soap made in Venice had to be marked with a specific symbol created by the Consoli dei Mercanti³¹⁹ Incidentally, it was a sign that the incentives devised in 1303, to resurrect ‘the craft of soap-making, which is of the utmost utility to the shipowners and the

³¹⁵ I. Morozova, ‘Graffiti on the Italian Ware from the Medieval “Novy Svet” Shipwreck in the Black Sea, Crimea’, in S. Gelichi (ed.), *Atti del IX congresso internazionale sulla ceramica medievale nel Mediterraneo* (Florence, 2012), 152-58; I. Teslenko, ‘Novy Svet Ware’, an Exceptional Cargo of Glazed Wares from a 13th-Century Shipwreck near Sudak’, *The International Journal of Nautical Archaeology*, 39/2 (2010), 357-75.

³¹⁶ M. Ferri, ‘Che si debino far li coverchi de cavi de late iusta la forma, et misura sottoscritta’, in *Jars and Large Containers Between the Middle Ages and the Modern Era* (Aix-en-Provence, 2016), 245-50.

³¹⁷ The ban on export from Venice featured copper, tin, lead, honey, olive oil, canvases, soap, and fabrics made in Venice and was contained in the now lost twelfth book (1329-1330) of the deliberations of the Senato. See G. Giomo, ‘Le rubriche’ (1880), cit., *Archivio Veneto*, 19, 109: ‘non possit extrahere hinc pro deferendo extra culfum rame, stagnum, plumbum, mel, oleum, caneatiam, saponem et drappariam laboratam Veneciis’.

³¹⁸ On seals used by Venetian officials see M. Rosada, ‘Sigillum Sancti Marci. Bolle e sigilli di Venezia’, in S. Ricci (ed.), *Il sigillo nella storia e nella cultura: mostra documentaria* (Rome, 1985), 109-148, in particular 142-148.

³¹⁹ *Venezia - Senato, Deliberazioni miste, Reg. XX (1341-1342)*, ed. F. Girardi (Venice, 2004), 243, no. 481 (13/08/1342): ‘Vadit pars quod de cetero fatientes fieri saponem in Veneciis non possint ponere plus quam unam bullam in suo sapone, scilicet illam que fuerit sibi constituta per consules mercatorum’.

merchants who travel overseas', must have worked.³²⁰ A few years later, in 1345, the overloaded Alexandria galleys could afford to unload ten tons of soap each.³²¹ Most likely Venetian authorities used the winged lion of St Mark as a trademark to certify a product as made in Venice. Venetian authorities fumed in the 1390s at a merchant who 'bought a certain fabric of foreign fustian to be worked as two sacks, and had the said foreign fabric stamped with the lead bull of St Mark, pretending that it was made in Venice'.³²²

We know more about production activities taking place in the city of Venice itself thanks to the excellent analysis of the Venetian medieval real estate market carried out by Wladimiro Dorigo. Already in 1236, Doge Giacomo Tiepolo granted a parcel of land to forty-five 'conciatores coreorum et pellium' (tanners of leather and hides) on the island of Giudecca, the main spot for - antisocial- industrial activities (other tanners did stay in the city itself, in San Tomà and San Pantalon). W. Dorigo has traced at least ten tileries active in Venice, mostly near S. Biagio and S. Gregorio on the Giudecca, in the fourteenth century alone. Blacksmiths were very active in the parish of S. Barnaba, where according to a senatorial decree of 1354 there had once been some forty forges, which had declined to just four or five by that date. This was not the only profession linked to metalworking to be found in the city: copper refiners were in San Geremia and bell-founders in S. Luca, S. Salvador, and S. Paternian.³²³ Private shipyards and the Arsenal employed numerous carpenters,³²⁴ especially in the areas of S. Martino and S.

³²⁰ *Venezia-Senato. Deliberazioni Miste. Registro I*, cit. 130, n. 213 (26/01/1303): 'cum ars savonarie sit maxima et utilissima pro comuni patronis et mercatoribus navigantibus'.

³²¹ *Venezia - Senato, Deliberazioni miste, volume 10. Reg. XXIII (1345-1347)*, ed. F. Girardi (Venice, 2004), 99, no. 271 (14/08/1345): 'trahauntur pro qualibet galearum miliaria quinquaginta grossa, videlicet de plumbo pro qualibet earum miliaria XXX et sapone XX'. 1 millier = 477 kg, hence 20 millier = 9,540 kg.

³²² ASVe, Avogaria de Comun, Raspe, Reg. 3645, f. 102r, 1st September 1399, Trial against Marino da Mosto and Bartolomeo Vitturi: 'Dum emissent quamdam peciam fustanei forinseci pro faciendo sibi fieri duos zachos, mandaverunt dictam peciam forinsecam bullari bulla plumbea sancti Marci, volendo ostendere quod foret facta Veneciis et dederunt ipsam ad tingendum uni tinctori sancte Marine'.

³²³ Dorigo, *Venezia romanica*, cit., volume 1, 425-35.

³²⁴ According to G. Luzzatto even more than the Arsenal, see Id., 'Per la storia delle costruzioni navali a Venezia', in *Studi di storia economica veneziana* (Padua, 1954), cit., 39: 'che l'industria privata assorbisse e attirasse una mano d'opera assai più numerosa e più scelta dell'industria di Stato, almeno in molti periodi più fortunati dei secoli XIII-XV, ci sembra sia attestato da molti indizi'.

Biagio, whilst Murano was not only the location of glassmakers but also of wool spinners. These activities led to considerable profits, so much so that the Vendramin family's fortune³²⁵ stemmed from their success in soap making (with oil and ashes), using as a base the parish of Santa Fosca, launching them towards the dogeship in 1476.³²⁶ Antonio Feleto, a lawyer, sneered that the Doge Andrea Vendramin was but a 'casarol', literally a cheesemonger, but more properly a merchant/maker of greasy products, like cheese, known as 'grascia'.³²⁷ The annalist Domenico Malipiero noted that Andrea Vendramin was worth 160,000 ducats, truly a 'zentilhomo rico', and that 'he was a great merchant in his youth, and when he was in a fraternal partnership with his brother Luca the two of them provided the cargo of one and a half galley bound for Alexandria, and many of his agents made a fortune managing his business.'³²⁸ Trading in bulky commodities was profitable enough to sustain the ambitions of Vendramin, even though the reproach shown by Feleto equally underscores how trade in mundane goods was not seen on equal footing as other commercial transactions.

Local production does not imply merely a local circulation of goods. Production entailed local, regional, and international trade.³²⁹ We can use glass as an example, given the multiple

³²⁵ The ascent of the Vendramin Family is reconstructed in great detail in Petkov, *The Anxieties*, cit., 27-66.

³²⁶ To give an idea of the scale of the enterprise it suffices here to mention that in 1441 Luca and Andrea Vendramin purchased 2,184 kintār of ashes in Tripoli, that is to say 393 tons of ashes for 4.905 ducats. See E. Ashtor and G. Cevidalli, 'Levantine Alkali Ashes and European industries', *Journal of European Economic History*, 12/3 (1984), 512 (Table XIII). For the weight of the kintār viz. 180 kg. see Ibid., 508.

³²⁷ Domenico Malipiero, 'Annali veneti dall'anno 1457 al 1500', *Archivio Storico Italiano*, 7/2 (1844), 667: 'I quarantuno no haveva altri da far dose che un casaruol', 'the forty-one electors had no one better to elect than a cheese monger'.

³²⁸ Ibid., 666: 'L'è stà zentilhomo rico de cento e sessantamile ducati. [...] L'è stà gran marcadante in zoventù; e quando l'era in fraterna con Luca, i soleva far el cargho d'una galia e meza in dō per Alessandria: e ha avudo molti fattori che ha fatto facultà con le so facende'.

³²⁹ For these three dimensions of trade, and a brief discussion of the concept of exchange see C. Wickham, *Framing the Early Middle Ages: Europe and the Mediterranean, 400-800* (Oxford, 2005), 693-700. Cf. J. De Vries, 'Playing with Scales: The Global and the Micro, the Macro and the Nano', *Past and Present Supplement*, 14 (2019), 23-36.

trade circuits it entailed.³³⁰ To be made, in its basic form, glass needs a former, a flux, a stabiliser, and a decolouriser. More sophisticated types of glass, such as enamelling, also require an adhesive to make colour adhere to the surface. As for the first element, the former, it would seem to be relatively easy. Silica can be found in many pebbles, and Venice being surrounded by the sea, finding pebbles should not have been a problem, but regrettably Venetian pebbles were faulty. Not all pebbles are apt for glass-making, as they naturally contain high levels of iron, which results in undesirable green shades in the glass. Whence did Venice then import these pebbles? The conundrum remained a mystery until Jacoby unearthed a document that provided an answer.³³¹ It was an official protest by glassmakers residing in the Duchy of Milan in 1394. They complained that a ban on the import of Levantine ashes had virtually thwarted their profession, and proposed to the Duke of Milan that he should retaliate in kind by banning the export of raw materials crucial for Venetian glass making. In their petition, the glassmakers from the Milanese Duchy mentioned explicitly pebbles from the Ticino River and Verona,³³² not yet part of Venetian territories, even though sand from Venice was also available. According to Jacoby, the same pebbles were also mentioned in several technical books with instructions for glassmaking from the late fourteenth century onwards. They came mainly from around Pavia, some 300 km away. They had to be pulverised to be used for glass making, a

³³⁰ On glass see P. W. McCray, *Glassmaking in Renaissance Venice. The Fragile Craft* (Aldershot, 1999); S. Garwood, 'Cross-Cultural Exchange in the Post-Medieval Adriatic. An Examination of Glass Artefacts from the 15th through Mid-18th Centuries' (PhD thesis, University of Sheffield, 2017); L. Burkart, 'Negotiating the Pleasure of Glass : Production, Consumption, and Affective Regimes in Renaissance Venice', in S. Burghartz (ed.), *Materialized Identities in Early Modern Culture, 1450-1750* (Amsterdam, 2021), 57-98; R. Scuro, 'Shaping Identity Through Glass in Renaissance Venice', *Ibid.*, 99-134; L. Zecchin (ed.), *Vetro e vetrai di murano: studi sulla storia del vetro*, 3 volumes (Venice, 1987-90). On the technique of Venetian glass-making, I am deeply indebted to W. Gudenrath and the Corning Museum for their excellent online course *The Techniques of Renaissance Venetian Glassworking* (<https://renvenetian.cmog.org> (30/05/2025)).

³³¹ D. Jacoby, 'Raw Materials for the Glass Industries of Venice and the Terraferma about 1370–about 1460', *Journal of Glass Studies*, 35 (1993), 65-90.

³³² M. Verità, 'Secrets and Innovation of Venetian Glass Between the 15th and the 17th Centuries: Raw Materials, Glass Melting and Artefacts', *Istituto Veneto di Scienze Lettere ed Arti. Atti della classe di scienze fisiche, matematiche e naturali*, 172 /1 (2013/14), 53-68 quote from 55 'since the mid-14th century, venetian glassmakers had obtained high quality products by replacing sand (*sablonum ad facendum vitrum*, from Levant, Sicily, Vicenza, etc.) with quartz pebbles (*cogulo*) from the rivers Ticino and Adige (inferior in quality), and their use continued in the following centuries.'

process done either in situ or in Venice. Several deposits of suitable pebbles could be found on the mainland, as in Treviso or Verona, but these territories were out of reach until the Republic conquered the mainland in the early fifteenth century. In theory, pebbles from Ticino were enough to obtain glass, but the use of a flux, or a product able to lower the melting point, was useful. Several elements could be used to achieve that goal, mainly ashes from plants and trees. Several other Italian states relied on local products, but Venice chose instead Levantine ash, known in Venetian as 'lume catine' or 'cenere grevellerà'.³³³ It was a wise choice, since ash tended to be relatively light and could be used as ballast on the cogs coming back from Alexandria and Beirut, two zones where excellent ash was to be found and was already used by local workshops. In the early fifteenth century, cogs coming back from Syria each carried 294 sacks of potash.³³⁴ The stabiliser served to preserve the glass from atmospheric agents. To this end, alumina, lime, and magnesia were employed. The provenance of this material is unclear, but medieval glass in Venice was largely a soda-lime-silica glass, and it is debatable whether stabilisers were added by chance or by design. Lastly, manganese dioxide was used as a decolouriser, to make the glass look colourless. The *lapis manganensis* appears in the list of items not to be exported from Milan to Venice, but it seems to have only transited through Milan, as it came from Germany, France and Catalonia, Tuscany, Liguria, and Piedmont.³³⁵ In the case of enamelled glasses, such as the Aldrevandin beakers, produced in Venice around 1330, an adhesive was applied to make the gold leaf and the enamel adhere to the glass.³³⁶ The main material used to this end was gum Arabic, a resin that again was not local. It was a gum obtained from the *Acacia Senegal*, native to East and West Africa. According to Francesco di Balduccio Pegolotti, in the mid-fourteenth century, *gommarabica* was sold in Constantinople,

³³³ G. Turner, 'Allume Catina and the Aesthetics of Venetian Cristallo', *Journal of Design History*, 12/2 (1999), 111-122 and Ashtor, 'Levantine Alkali', cit.

³³⁴ Ashtor, *Levant Trade*, cit., 266, Note B.

³³⁵ Jacoby, 'Raw Materials', cit., 77.

³³⁶ R. Ward, 'Coincidental Developments? The Aldrevandin Glasses and Ayyubid–Mamluk Glass', *Journal of Glass Studies*, 57 (2015), 137-146.

Alexandria, Famagusta, Messina, Mallorca, and Naples.³³⁷ This means that a single glass produced in Venice would have required components from all over the world, entailing all three circuits of trade. The silica was obtained from pebbles from either the mainland or the Milanese Duchy. The flux came from present-day Syria, Lebanon, Egypt, and Israel. The manganese came from Germany, France, Catalonia, and West Italy. If enamel had to be applied, gum Arabic had to be employed, a resin coming from a tree native to East and West Africa.³³⁸

Local production is a concept that needs problematisation. Products could be made in Venice with materials coming from all over the world; or they could be repurposed in Venice, as is the case of many sacred objects now in the treasury of St Mark, which were remounted in Venice. A 1277 treaty between Venice and Bohemond VII of Antioch mentioned, for instance, ‘broken glass loaded in Tripoli that served as raw material in Venice’.³³⁹ Commodities could also purport falsely to be Venetian, as did the fustians mentioned earlier. We can thus see that even ‘local products’ entailed in fact the overlapping of local, regional, and international trade circuits, as shown by glass. At the same time, it is important to underscore the presence of artisanal workshops in Venice, as well as tanneries, furnaces, tileries, and shipyards. There were products ‘made in Venice’, and the Republic often tried to favour them, imposing at the same time a quality control mechanism to ensure they were of the appropriate quality. Artisanal workshops were present in the very heart of the city, together with private shipyards. They served the local population but they also catered for the regional market, as well as providing the city with essential materials like tiles and wrought metal. Both retail and wholesale coexisted in Venice, as we shall see in the next section on exchange in Venice.

3. Exchange in Venice

³³⁷ Francesco Balducci Pegolotti, *La pratica della mercatura*, ed. A. Evans (Cambridge MA, 1936), 36 (Constantinople), 70 (Alexandria), 78 (Famagusta), Messina (108), Mallorca (123), Naples (179).

³³⁸ On enamel see I. Freestone and M. Bimson, ‘Early Venetian Enamelling on Glass: Technology and Origins’, in P. B. Vandiver (ed.), *Material Issues in Art and Archaeology IV* (Pittsburgh, 1995), 415-31.

³³⁹ R. E. Mack, *Bazaar to Piazza. Islamic Trade and Italian Art, 1300-1600* (Berkeley, 2002), 113.

To understand what was for sale in Venice, we have to rely on trade manuals, mostly written by Tuscans, reforms of Venetian excises, or letters that include details on products and prices. Only by acknowledging the variety of products for sale in Venice, can we start to appreciate the integration of circuits described above in the case of glassmaking. By having recourse simultaneously to merchants' manuals, lists of products, and proposed reforms of excises, we might fully appreciate to what extent the distinction between bulky and precious materials mattered in medieval commerce. The boundaries between the two were porous and the same term, 'spice', could and did refer to multiple products at once, some of which were in fact quite bulky (like cotton). It is thus important to understand whence these products came, and to what extent they were the result of local, regional, or international trade. Understanding how medieval traders classified their products is crucial to avoid the superimposition of modern labels upon the vast array of materials sold in medieval Venice. To this end, I have perused the thirty-five *valute di mercanzia* (price lists) relating to Venice preserved in the Datini archive in Prato, spanning the period 1383-1404.³⁴⁰ We know that they travelled alongside commercial correspondence, and were prepared by the agent of the company to inform the firm about the merchandise available, and the price thereof.³⁴¹ They followed a standard template, listing products and quoting their price and whether they were available (absence was also marked as 'non ne è' after the name of the product in question). The price referred to a standard weight unit, which is only occasionally mentioned, even though we can often infer it from trade manuals. Price lists also appear in a more fragmentary form in commercial letters. Some of these were copied in the *quaderni* of the Datini company, the 'Quaderni di carichi di nave e di

³⁴⁰ ASPr, Fondo Datini, b. 1171/I (*Valute di mercanzia*), n. 24, (Venice), pieces 1-34. Of these 29 are dated, and five are not.

³⁴¹ A price-list for Damascus in 1394 is still physically bound to a letter sent by the Benozzi Company from Venice to Francesco di Marco Datini's company branch in Florence. See ASPR, Fondo Datini, Fondaco di Firenze, b. 710, Ins. 2, Letter n. 507396 (27/11/1394). The valuta itself is dated 22/10/1394. On the Tuscan companies in Venice see Mueller, *The Venetian Money Market*, cit., 255-287.

valute di mercanzie',³⁴² and the paper slips circulated widely amongst merchants, and quoted wares as well as exchange rates.

I have transcribed all items mentioned in the price lists related to Venice for a total of 285 products, to which I have added another fifty-two items mentioned in the mid-fourteenth-century trade manual, the 'Pratica della mercatura' written by Francesco di Balduccio Pegolotti.³⁴³ Nine more items featured in an anonymous Venetian *tariffa*,³⁴⁴ known as 'Tariffa Marcello', of the early fifteenth century.³⁴⁵ Overall, I have been able to track the presence of 345 goods sold in Venice, the largest such list compiled so far.³⁴⁶ I will now use this list to outline the types of products for sale in the city, and the importance of commodities in bulk amongst these. I will cross-reference these lists with parallel lists of products mentioned in excise reforms of the fourteenth century to understand how the categorisation of goods differed between these external sources and the Venetians' own subdivision of goods into lightweight (*havere subtile*) and bulky commodities (*mercationes grosse*). Fiscal sources, such as reforms of excises, will illuminate another aspect, namely the amount of taxes levied on each category of commodities relative to their value per weight unit. *Valute* can thus lay bare the

³⁴² See ASPr, Fondo Datini, b. 1171, Ins. 4, 'Quaderni di carichi di nave', n. 7 (9302094), Quaderno dated 1398, f. 4v, 09/01/1398, headed '1398. Valuta di merchantia i(n) Vinegia, adj 9 di genaio 1398'.

³⁴³ Pegolotti, *La pratica*, cit.

³⁴⁴ A *tariffa*, unlike a *pratica*, was officially produced by Venetian officials and detailed the condition of a single marketplace. A merchant manual, or *pratica*, described instead the whole Mediterranean and was written by the merchants themselves. In the fourteenth century, the usage of the term must have been looser because this document, clearly a merchant manual related to multiple trade areas, is called 'tariffa'. On the distinction see U. Tucci, 'Tariffe toscane e libri toscani di mercatura', *Studi veneziani*, 10 (1968), 65-108. On Venetian *tariffe* see the edition by *Venezia e l'Egitto alla fine del Medioevo. Le tariffe di Alessandria*, ed. A. Sopracasa (Alexandria, 2013), on Tuscan *pratiche* instead *Pratiche di mercatura toscane del Trecento: fonti inedite per la storia del commercio italiano*, ed. A. Bocchi (Udine, 2022). More generally on trade manuals see J.-C. Hocquet and M. A. Denzel (eds.), *Kaufmannsbücher und Handelspraktiken vom Spätmittelalter bis zum beginnenden 20. Jahrhundert* (Stuttgart, 2002) and F. Lane, 'Manuali di mercatura e prontuari di informazioni pratiche', in Zibaldone da Canal, cit., XLVII-LVIII.

³⁴⁵ Published as *Tariffa zoè noticia dy pexi e mexure di luogi e tere che s'adovra marcadantia per il mondo* (Venice, 1925). It is a text with a number of transcription mistakes. The original is in ASVe, Procuratori di San Marco, De Ultra, Commissarie, b. 180 (Filippo Marcello).

³⁴⁶ See Appendix A for the list and the translation of all terms. J. Heers has also created price lists based on thirteen Datini *valute* on Venice but limited to pepper, ginger, sugar, lac, cotton, rock alum, mercury, kermes, and lead. See J. Heers, 'Il commercio nel Mediterraneo alla fine del sec. XIV e nei primi anni del XV', *Archivio Storico Italiano*, 113/2 (1955), 202.

circulation and the value of commodities of all sorts of products sold in Venice, complementing data from merchants' manuals, both Tuscan and Venetian.

3.1 Types of goods

Any categorisation of goods is arbitrary and attempts at generalisations inevitably clash against the piecemeal nature of documents such as price lists. To understand more granularly the types of products sold in Venice, I have decided to classify goods according to their intrinsic physical characteristics (metals, minerals, plants, animals, precious stones, raw materials, resins and dyes, and spices) or processing stage (manufactured goods and textiles). I want to stress that this was not how Venetians classified goods, as we shall see shortly. However, considering that medieval merchants put hundreds of products under the label 'spices', using the categorisation of the times would have been problematic. Attempts at classifying medieval goods have equally produced different categories. One of the very first studies on medieval commerce, the *Geschichte des Levantehandels im Mittelalter* by Wilhelm Heyd, published in 1879, only divided them into slaves, natural products, and manufactured products.³⁴⁷ In an equally wide-ranging survey of the late-medieval economy, published in 2008, Peter Spufford has adopted a similar approach, distinguishing goods (woollens, silk fabrics, linens and cottons, paper, metalworks, weaponry, brass, pottery, soap, soda ash, works of art, tapestries, ivory) and foodstuffs from raw materials (grain, wine and beer, salt, olive oil, honey and wax, sugar, spices, pearls and precious stones, building materials, metals, wool, cotton, flax and hemp, dyestuff and alum, furs) and slaves.³⁴⁸ Other historians have used different categories for their own field of inquiry. For instance, Halil Inalcik identified the following categories, to classify goods arriving at Caffa on the Black Sea in 1487-90: cotton, quilts, silk and satin, linen, hides and skins, animal

³⁴⁷ W. Von Heyd, *Geschichte des Levantehandels im Mittelalter* (2 vols, Stuttgart, 1879), II, 543-699.

³⁴⁸ P. Spufford, *Power and Profit. The Merchant in Medieval Europe* (London, 2008), 228-341.

products, metals, spices and dyes, grain, and ‘others’.³⁴⁹ More interestingly, studies on the Indian Ocean have proposed to classify goods as local, regional, or international. In his analysis of the medieval Indian Ocean before 1800, Kirti N. Chaudhury has proposed a distinction between three groups of goods, i.e. local products like ‘agricultural produce, industrial raw materials, textiles, and pottery’; products of regional trade; and beyond these the commodities of international exchange.³⁵⁰

The criteria I have adopted in itemising Venetian goods are reflected in the following table, based on Appendix A of the present thesis. It is a useful starting point for a general overview of Venetian trade, given the number of products included.

Table 3:
Number of products for each category of
goods sold in Venice according to the *valute di mercanzia* in Appendix A³⁵¹

Products	Number of products	Percentage of the products
Foodstuffs and liquids	48	13.91%
Manufactured products	11	3.18%
Metals	19	5.5%
Minerals	18	5.21%
Plants and animals	55	15.94%
Precious stones and rare metals	19	5.5%
Raw Materials	12	3.47%
Resins, dyes, and colours	57	16.5%
Spices (proper)	32	9.27%

³⁴⁹ H. Inalcik, *An Economic and Social History of the Ottoman Empire, 1300-1914* (Cambridge, 1997), Volume I, Table 1:58, 282-83.

³⁵⁰ K. N. Chaudhuri, *Trade and Civilisation in the Indian Ocean. An Economic History from the Rise of Islam to 1750* (Cambridge, 1985), 189.

³⁵¹ See appendix A.

Textiles, furs, and silk	75	21.73%
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The reader will find the complete list in Appendix A. In these *valute*, the most common subsets are *spezie menude* (cloves, nutmegs, mace, cinnamon, and cubeb) and *spezie grosse* (pepper, ginger, lac, indigo, frankincense, and sugar), followed by separate sections on metals and textiles. We can draw a number of considerations from these lists. Spices ‘proper’ like pepper amounted to about 10% of the number of products, even though clearly they amounted to more than 10% in terms of value. The majority of the other products were textiles (75 wares), resins and dyes (57 products), plants and animals (55 entries), and foodstuff and liquids (48 items). These four categories alone amount to 68% of all entries. More importantly about 100 of these products are identified with a place of origin. It must be taken as a very general indication, especially for spices defined as ‘from India’, or ‘from Baghdad’, but it does point to the broader region of origin of a product. Equally, for several products like metals that came from Germany the provenance was omitted. For all its faults, this list gives us nonetheless an idea of the marketplace of Venice, even though one clearly skewed towards the commodities that were of interest to foreign merchants, which explains the limited number of products from Northern Italy and Germany and the ample representation of expensive products like spices from the Mamluk territories or English and French wool.

Table 4:

Provenance of items in Appendix A with a stated toponym

Regions	Products
Northern Italy and Germany : 7 items	Apples from Lombardy, Azurite from Germany, Trementine from Carnia, Trementine from Cadore, Vitriol from Germany, Wax from Germany and Wool from Germany

Regions	Products
<p>Adriatic : 17 items</p>	<p>Almonds from Marche, Anise from Romagna, Apples from Romagna, capers from Puglia, Cassia fistula from Puglia, Cotton from Puglia and Basilicata, Cumin from Puglia, Gall nuts from Puglia, Kermes from Albania (Cimarre) , Kermes from Croatia (di Schiavonie), Paper from Marche, Paper from Viterbo, Saffron from the Marche, Saffron from Tuscany, Silk from Durrës, Squirrels from Croatia, Wax from Dubrovnik</p>
<p>Aegean and the eastern Mediterranean : 29 items</p>	<p>Cotton from Cyprus, Cotton from Hama, Cotton from Crete, Cotton from Santorini, Cotton from Syria, Cotton from Turkey, Dates from Alexandria, Frankincense from Alexandria, Frankincense from Damascus, Kermes from Corinth, Kermes from Crete, Opium from Egypt, Powdered white sugar from Rhodes, Powdered white sugar from Tripolis, Powdered white sugar from Cyprus, Rice from Turkey, Rosin from Greece (pecie greche), Sugar - and sugar waste - from Egypt (babilonio), Sugar - and sugar waste - from Damascus (damascino), Safflower from Alexandria, Scammony from Cyprus, Scammony from the Byzantine Empire (Romania), Silk from Andros, Silk from Patras, Turquoise from Tyre, Vairs from the Byzantine Empire, Wax from the Byzantine Empire (Romania), Wine from Crete, wine from the Byzantine Empire (Romania).</p>
<p>Western Mediterranean: 21</p>	<p>Almonds from Valencia, Alum from northern Africa (di Piuma), Brazil wood from Almeria, Cotton from Malta, Kermes from Provence, Kermes from Spain, Lambs' skins from Mallorca, Lambs' skins from Spain, Rice from Mallorca, Safflower from Catalonia, Saffron from Catalonia (Balaguer, merchadieri, orte), Saffron from Spain, Silk from Calabria, Tannic bark from Bougie (schorze Bugie), Tar from Spain (peghola spagnuola), Vitriol from Rome, White lead from Pisa, Wool from Mallorca, Wool from Provence, Wool from Catalonia (di San Matteo), Wool from Valencia</p>

Regions	Products
Non-Mediterranean products: 20	Aloe from Socotra, Brazil-wood from Kollam, Brocade from Tana, Frankincense from Tabriz, Ginger from Kollam, Ginger from Mecca, Indigo from Baghdad, Indigo from ‘the Gulf’, Myrobalans from Kabul, Myrobalans from India, Silk from Merv Chadijan, Silk called ‘Jewish’ (giudesche), Silk from Lahigan, Turquoise from India, Wool from the Cotswolds, Wool from Lindsey Riding, Wool from the Shropshire Marshes , Wool from Flanders, Wool from France, Wool from Winchester

This table gives us a precious insight into the Venetian marketplace. The first consideration to draw is that the four main areas, namely the Adriatic, the Aegean, the eastern Mediterranean and the western Mediterranean feature with a similar number of entries. This suggests the multiple trade circuits of Venice, not a focalisation on a single trade area, and the vast array of products available, from London to Tabriz. More interestingly a single product was often imported from a variety of localities. This is true both in the case of high-end dyes and resins, and in the case of more mundane foodstuffs.³⁵² As an example of the former, one can cite kermes,³⁵³ imported from places as far apart as North Africa, Corinth, Albania, Crete, Provence, Croatia, and Spain, spanning the whole Mediterranean. As one of the latter, hazelnuts came from the Marche, Puglia, and Valencia and capers from Puglia and Alexandria; and wines from the Adriatic and beyond, as far as Crete.³⁵⁴ Raw materials for the textile industry, fabrics, and woollens similarly involved multiple centres of production: high-end finished products like brocade could come from afar, like Tana, but raw products like cotton

³⁵² The 1279 statutes of the *terneri* already mentioned olive oil imported from Puglia, Romania (Byzantine Empire) and Marche. ‘Capitolare dei teneri’, *I capitolari delle arti veneziane sottoposte alla giustizia*, cit., vol. 3 (Rome, 1914), 6, n.42, lines 1-5.

³⁵³ On kermes and its use see M. Harsch, *La teinture et les matières tinctoriales à la fin du Moyen Âge. Florence, Toscane, Méditerranée* (Rome, 2024), in particular ch. 6.2

³⁵⁴ For a good summary of the multiple points of origin of Venetian food see J. M. Ferraro, *History of the Floating City* (Cambridge, 2012), 41-48.

and wool seem to have been at the centre of more complex import networks. This diversification was clearly associated with different qualities of the same product. For instance, Pegolotti explains that in the mid-fourteenth century, the best powdered sugar was from Cyprus, followed by the ones from Rhodes, Syria, Kerak, and Alexandria - 'the worse powdered sugar on earth'.³⁵⁵ As for wool and woollens, we know that a price differentiation operated already in 1339. In that year, in the context of a discussion in the *Maggior Consiglio* on excises on textiles, we are informed that 'lana francisca, brengondia, ingeleterra', that is to say wool from France, Burgundy, and England, was taxed at 10 *lire ad grossos* (91.9 *grossi*) each *millier* (477 kg). 'Lana theothonica', viz. wool from Germany was taxed at 6 *lire ad grossos* (55.14 *grossi*), Wool from 'Barbary' was taxed at 6 *lire ad grossos* (55.14 *grossi*) if scoured and 2 (18.38 *grossi*) if not. On all other types of wool (from Cyprus, Crete, Tana, Sicily, Puglia and Croatia) 'and coarse wool of any kind', an excise of 3 *lire ad grossos* (27.57 *grossi*) was levied if scoured, reduced to half if the wool was not washed.³⁵⁶ Equally, the hierarchy of cotton in Pegolotti is broadly reflected on the Venetian market with, in decreasing quality order, Hama, Syria, Cyprus, Basilicata, Malta, Calabria as points of origin.³⁵⁷ Similarly, we find a differentiation between types of saffron, from Tuscany, the Marche, and Catalonia, in decreasing value.³⁵⁸ Lastly, we can notice the array of materials coming from the western Mediterranean, especially in the domain of wool and foodstuffs. We also find tannic bark imported from North Africa and other dyes.

³⁵⁵ Pegolotti, *La pratica*, cit., 365: 'la più cattiva polvere di zucchero che sia'.

³⁵⁶ ASVe, *Maggior Consiglio, Deliberazioni, Spiritus*, f. 97 (29/07/1339): In primis, quod de omnibus lannis que intrarent Venecias, videlicet de lana Francisca, Brengondia, Ingleterra, solvant libras X ad grossos pro milliario, illa videlicet que erit empta per draparios dicte artis qui laborant in Veneciis. Item, de lana theothonica solvant libras VI ad grossos pro milliario lane. Item, de lana de Barbaria lavata, solvant libras V ad grossos pro milliario lane. Item de lana de Barbaria succida non lavata solvant libras II ad grossos pro milliario. Item, de lana Cypri, Crete, Thane, Sicilie, Appulie, Sclavonie et Judeche, et lane grosse cuiscumque condicionis sint, solvant libras tres ad grossos pro milliario dicte lane. The document has been published in E. Besta (Ed.), *Bilanci generali della Repubblica di Venezia*. Vol. 1/1. *Origini delle gravèzze e dei dazi principali* (Venice, 1912), 59-61, n. 64.

³⁵⁷ Pegolotti, *La pratica*, cit., 366-67.

³⁵⁸ *Ibid.*, 376.

3. 2 How Venetians categorised goods

We have seen how we can categorise items traded in Venice in the fourteenth century according to our modern understanding of categories. It is nonetheless important to understand how Venetian authorities distinguished between goods in bulk and precious commodities. A particularly important source are the *capitolari*, or the statute books, of a series of magistracies entrusted with the repression of smuggling or with the collection of the excises on commodities entering the port of Venice, namely the *Estraordinari*, *Levanti*, and *Cattaver*. If merchants categorised goods according to the weight unit used to weigh them, city authorities had an equally compelling reason to devise a way to distinguish goods for fiscal purposes. There was no single criterion for tax purposes, as certain goods were assessed by weight and others by value. We can trace, nonetheless, an overarching distinction between goods in bulk (*mercationes grosse*), lightweight precious items (*havere subtile*) and jewellery (*havere capselle*). Our starting point on how merchants measured goods can be the aforementioned early-fifteenth century ‘Tariffa Marcello’,³⁵⁹ in which we read:

These are the weights of Venice. In Venice there are two weights, one is the heavyweight (*pexo grosso*), and the other is the lightweight (*pexo sotil*), according to which all merchandise sold in Venice are measured. And by the heavyweight iron, copper, tin, lead, wool and gold, meat, cheese, honey, sonza (?), and all fruits, and resins are sold. And the other weight is the light weight, by which all merchandise from the Levant is sold.³⁶⁰

These two weight units were the basis for the subdivision of commodities into further subgroups. The terms *mercationes grosse* (bulk commodities) and *havere subtile* (light-weight goods) appear frequently in the deliberations of the Senato and the Maggior Consiglio. Normally the

³⁵⁹ See footnote 345.

³⁶⁰ *Tarifa zòè noticia, cit.*, 11.

two expressions appeared in contrast in decisions regarding the overloading of the commune-sponsored galleys, or mentioned in a ban on the import of precious commodities on unarmed vessels. In a rubric of the now-lost eighth book of the deliberations of the Senato (1324) we read: ‘no one shall import lightweight goods using unarmed vessels into the Gulf to unload them in Venice’.³⁶¹ Conversely, a heading from the tenth book (1328) stated: ‘be it granted to the galleys of Flanders the loading of 21 *anfore* of Cretan wine, and nothing else as a product in bulk’.³⁶² Privately-owned ships were allowed by the Senato to transport or unload *mercationes grosse* that could either not be loaded onto galleys at all or that had to be unloaded from the ‘overflowing’ vessels.³⁶³

What precisely this *havere subtile* was is more difficult to define. In the headings of the fourth book of the deliberations of the Senato (1313) we read: ‘it shall be forbidden to import from Cyprus and Armenia cotton, silk, pepper, rock alum and any other *havere subtile*’.³⁶⁴ It is clear that the term did not just include spices. A century later, in a passage of the ‘Morosini Chronicle’ dated 1423, we read: ‘and the nobleman Stefano Contarini was appointed captain, bound to set sail on the ... of March, being allowed to load all spices, and cotton, and other heavy and light products’.³⁶⁵ A deliberation of the Senato of 1360 defined *havere subtile* as ‘gold, silver, pearls, jaspers, struck coins, and gold thread, and other things’.³⁶⁶ We can thus surmise that the term *havere subtile* mostly referred to wares weighed by the lightweight pound.

³⁶¹ *Venezia-Senato. Deliberazioni Miste. Registro I*, cit., 249: ‘Nullus possit cum disarmato conducere intra Culfum havere subtile pro discaricando ipsum Veneciis nec alibi intra Culfum’.

³⁶² *Ibid.*, 239: ‘Concedatur galeis Flandrie quod possint caricare in ipsis galeis amforas XXI vini de Creta et non aliud in mercibus grossis’.

³⁶³ One of the very first such cases was in 1336, see *Ibid.*, 282, Deliberation n. 726 (30/12/1336): ‘quod havere quod portabitur cum dictis galeis possit adduci Venecias cum navigiis disarmatis recedentibus’.

³⁶⁴ *Ibid.*, 246: ‘Non possint adducere de Cypro et Armenia bombicem, setam, piperem, alumen roçe vel aliud havere subtile’.

³⁶⁵ *The Morosini Codex*, §64, ch. 1062, <https://engineeringhistoricalmemory.com/post/1423-03-29-morosini-codex-%c2%a7064-1062/> (29/03/1423) (30/05/2025): ‘posando levar tute specie e gotoni e altro aver grosso e sotil’.

³⁶⁶ ASVe, Senato, Deliberazioni, Misti, Reg. 29, f. 74v (olim 78v), 29/07/1360. Also quoted by K. Nehlsen-von Stryk, *L'Assicurazione marittima a Venezia nel XV secolo* (Rome, 1988), 140.

To further complicate matters, we occasionally find mentions of a third category, namely the *havere capselle*. The oath of the Conte di Pola, dating to the time of Doge Antonio Venier (1382-1400), reads: ‘And you will abide by the law mandating no light products (*havere subtile*), except gold, pearls, and what is understood as *havere capselle*, be exported to Venice with unarmed vessels’.³⁶⁷ The term *havere capselle* literally means goods in small boxes or coffers. It referred to items that could be transported in small boxes, such as jewellery, and the captain of the Alexandria Galley at the time of Michele Steno (1400-1413) swore ‘to take care and heed of the wares onboard my galley, and of *havere capselle* in particular’.³⁶⁸ In short, it seems that Venetian authorities distinguished three main categories, mainly *havere capselle* (precious metals and stones, and cash), *havere subtile* (mainly spices), and *mercationes grosse*. Onboard the ship, but not part of the cargo, was also the ballast, called *saorna* in Venetian.³⁶⁹

What, then, are *mercationes grosse*? Venetian authorities never precisely specified what products were considered as such, and a vast array of products were labelled as heavy goods, presumably those weighed by the heavyweight of 477 kg (the *millier*). We might gather a clearer impression from chronicles, such as two passages from the ‘Morosini Chronicle’. In 1421, a cog from Syria was described as being laden with ‘cotton, salt, and alum, and other heavy goods’.³⁷⁰ In 1413, a Venetian cog with a cargo estimated at 18,000 to 20,000 ducats was plundered by corsairs from Biscay, and laden onboard were ‘spices on its outbound journey, and wool and hides on its

³⁶⁷ B. Benussi (ed.), ‘Commissioni dei dogi ai podestà veneti nell’Istria’, *Atti e memorie della società istriana di archeologia*, 3/1 (1887), 71, ‘*Commissio comitis Pole*’, article 40,: Item observabis consiliurn continens, quod nullum havere subtile exceptis auro, perlis, et eo quod intelligeretur havere capselle, ullo modo conduci Venetias possit, cum navigio disarmato.

³⁶⁸ *Andar per mare, custodire il mare. Le commissioni ducali per i capitani veneziani di galea (sec. XV)*, ed. A. Rizzi (Venice, 2024), no. 4 (Commission of the Capitano delle galee di Alessandria), article 16, 90 : ‘Apponi facies mentem et curam de mercationibus galearum, et specialiter de havere capsele’.

³⁶⁹ The relationship between tonnage, freightage, and the transport of commodities in bulk has been amply explored in M. Tangheroni, ‘Trasporti navali e commercio marittimo nell’Italia del Quattrocento’, in T. Fanfani (ed.), *La penisola italiana e il mare* (Naples, 1993), 31-56.

³⁷⁰ *The Morosini Codex*, §64, ch. 906 (12/01/1421), <https://engineeringhistoricalmemory.com/post/1421-01-12-02-20-morosini-codex-§064-0906/>, (30/05/2025): ‘gotoni e sal e ’lume e altre cose grose’.

inbound route, with many other heavy goods to be carried to Venice'.³⁷¹ It is worth noting that when mentioning bulk commodities Venetians normally referred to two categories, mainly *victuaria* and *grassa*. For instance, we can read in the 'Morosini Chronicle' that the Republic authorised the export towards Padua in 1405 of 'vituaria e hogni grasa e spiziaria'.³⁷² While the first term is the standard designation of foodstuffs in the Middle Ages, the second is more ambiguous, literally meaning 'fat'. The term grouped several categories of different products. Faugeron in his analysis of food provision in late medieval and early modern Venice, has glossed the word as a 'generic term, usually a synonym for foodstuffs. In Venice, it refers more specifically to cheese, sturgeon, caviar, and greasy materials'.³⁷³ According to Andrea Nanetti, who has published the 'Morosini Chronicle', it refers to 'salted meat, cheese, salted fish, oil, wine, etc, grouped because the import tariff on these items was not the same as that levied on other merchandise'.³⁷⁴ Nanetti's extended comment stems from the introduction of a specific excise on these products. In 1469 Venetian authorities levied three independent excises on meat, oil, and *grassa*.³⁷⁵

However, the basic dichotomy between *peso grosso* and *sottile*, and *mercationes grosse* and *havere subtilis*, is not the only typology of Venetian trade proposed by contemporaries. Venetian lists of products can shed more light on how Venetian categorised goods.³⁷⁶ A mid-thirteenth century

³⁷¹ *The Morosini Codex*, §63, ch. 822 (11/07/1413), <https://engineeringhistoricalmemory.com/post/1413-07-11-morosini-codex-§063-0822/> (30/05/25): 'Le suo marchadantie fo specie a l'andar e lane e pelami per lo retorno, con altre asè chose grose per chondur a Veniexia'.

³⁷² *Ibid.*, §63, ch. 277 (21/11/1405) <https://engineeringhistoricalmemory.com/post/1405-11-21-morosini-codex-%c2%a7063-0277/>, (30/05/2025): 'fato far una crida zeneral a di XXI de novenbrio su le schale de Rialto e de Sem Marcho che chadauna persona, de hogni chondiciom se sia, voia portar vituaria e hogni grasa e spiziaria a Padoa, la debia portar'.

³⁷³ Faugeron, *Nourrir la ville*, cit., 832 (Glossaire, *ad vocem* *grassa*).

³⁷⁴ *The Morosini Codex*, entry 'Fat': <https://engineeringhistoricalmemory.com/MorosiniCodex.php?vis=sat&pid=31024&cid=> (30/05/2025).

³⁷⁵ D. Chambers and B. Pullan (eds.), *Venice: a Documentary History. 1450-1630* (Toronto, 2001), n. 3, 141.

³⁷⁶ For the ease of the reader the weights and measurements of Venice can be found in Appendix D of the present thesis.

text,³⁷⁷ a series of notes added as an appendix to a copy of the statutes, divided products into those which ‘debent solvere per pecias’, viz. cloth, those that ‘venduntur a statera grossa’ (sold by the heavyweight), ‘venduntur a statera subtili’ (sold by the lightweight), ‘venduntur a karico’ (pepper sold by the *carga*), merchandise sold ‘a centenario subtili’ (by the light hundred-weight), by the pound (‘a libra’) and by the mark (precious metals). The ‘Racione de Alexandria’, an early trade manual from 1278, simply mentions items sold by the ‘milliaro grosso’, ‘a sutil’, and ‘a libra’, thus millier, lightweight and pound.³⁷⁸ The Tuscan Pegolotti mentioned instead in the mid-fourteenth century the *migliaio grosso*, the *migliaio sottile*, the pepper *carica*, the pound (both light and heavy), the hundredweight (*centinaio*), the mark (*marca*, used for metals), the *staiio*, and the bale and *braccio* in the case of textiles.³⁷⁹ The ‘Zibaldone Riccardiano 2161’, a Venetian commonplace book from the late fourteenth century, albeit not offering a systematic overview of Venetian weights, offers a series of arithmetic problems related to ‘marchadantia che se ve(n)de a peso de 100 de lb, de 1000 de lb e de carga de 400 lb’ (merchandise sold by the hundredweight, the *millier* and the *carga* of 400 pounds), followed by a few others on precious metals quoted in marks, ounces, and karats.³⁸⁰ Another Venetian commonplace book from the late fourteenth century (Bergamo, MA 334) is more specific.³⁸¹ The author distinguished ‘weights’ from ‘measurements’, stating that ‘in Venice there are four weights’. The first one was

³⁷⁷ Venice, BMV, Marc. Lat. V. 130 (=3198), 36v-38v. Published in V. Formentin, ‘Il mercante veneziano del Duecento tra latino e volgare: alcuni testi esemplari, con annotazioni paleografiche di A. Ciaralli’, *Studi linguistici italiani*, 41 (2015), 3-53, text at 24-27.

³⁷⁸ The original is in Venice, BMV, MS Marc. It. XI, 87 (=7353). Published in B. Saletti, ‘The Racione de Alexandria: a Venetian Anonymous Merchant Manual on Mediterranean Trading in the Late XIII Century’, *Storie e linguaggi*, 10 (2024), text at 59, usefully compared with the earlier ‘Racio stateris’ at 13 and with the later ‘Tariffa Marcello’ at 28.

³⁷⁹ Pegolotti, *Pratica*, cit., 137. For their metric equivalent I used Faugeron, *Nourrir*, cit., XXI-XXII.

³⁸⁰ Bocchi (ed.), *Lo zibaldone riccardiano*, cit., 46-55 (f. 16r - 20r), quote from 46. The original is in Florence, Biblioteca Riccardiana, MS 2161.

³⁸¹ Bergamo, Biblioteca civica Angelo Mai, MS MA 334, f. 76r: ‘Qua chome(n)ça alcuni pesi e mesure de algune/ tere./Mesure e pesy de Veniexa / En Veniexia si è pesi 4. L’uno sè peso sotile/, a questo se pesa tute spleçie e peso goso, al qual se pesa formaio e tute marchadantie grose [...] e peso d’oro e de perle solame(n)te clamase Ɔ ee / honçe 12 per lb. E l’o(n)ça sia saçi 6 e l’ saço sia/lj charati 24./E peso d’arçe(n)to solame(n)te clamase marcha./[...] Measure. E lo se ve(n)e lo vin a mesure e clamase una/ a(n)fora. [...] E lo forme(n)to se ve(n)de a moço e a ster e a quar/ta e a quartaruol e fase marchado a ster/. [...] E la sal se ve(n)de a misura de moço./[...] E drapi e tele e çe(n)dadi se ve(n)de a mesure de/braçy e lo braçy si è quarte 4.

the ‘peso sotil, and this is used for all spices’, followed by the ‘peso grosso, by which all cheese and commodities in bulk are weighed’. Pearls and gold were measured instead with a ‘peso d’oro e de perle’, a pound of 12 ounces, each ounce equating 6 *saggi* and each *saggio* 24 karats. Lastly silver was weighed by the mark of 8 ounces. As for measurements, he mentioned the ‘anfora’ of 4 *bigonci* for wine, the ‘mozzo’ and the ‘ster’ for wheat, and the ‘braço’ for cloth and textiles. Yet another Venetian commonplace-book from the fourteenth century³⁸² (BMV, Marc. It. XI, 32) adds two further details, the *mozzo* (200 heavyweight pounds or 95.4 kg) used to measure salt, and a series of conversions of a unit of volume (the *staiio*) of fruits into its weight equivalent expressed in Venetian light pounds (0.3 kg), ranging from 132 pounds (carobs, 39.6 kg) to 260 (raisins, 78 kg).³⁸³ The early-fifteenth-century Tariffa Marcello mentions the ‘pexo grosso’ and the ‘pexo sotil’, the ‘cargò’ for pepper’, the heavy and light pound, the mark used for silver, gold and pearls, the ‘mier’ for olive oil and lastly the ‘braze’ for all textiles.³⁸⁴

We can thus surmise that Venetian authorities and merchants did in fact apply a differentiation between the heavyweight and the lightweight, but, at the same time, it does not entirely match our understanding of heavy and light products. This is all the truer considering that hides and textiles, for instance, exported and imported in bulk, were normally measured according to their length rather than their weight, and thus do not fit into the aforementioned classification. The subdivision may not have always been clear even to contemporaries, if in 1333 the merchant Belloccio della Croce was fined by the *Officiales super mercationibus levantis* (or Levanti) for having loaded the ship of the Michiel family with ammonium salt

³⁸² Venice, MV, Marc. It. XI, 32, f. 202r: ‘qui diremo i pexi de frute in / Veniexia. [...] Lo ster de le carobe pex(a) l. 132, / lo ster de l’va passa pexa lb. 260 a sotil’. Qui diremo come responde/el sal de alcuni luogi cum Veniexia / In Alexandria ribebe C tor/na a Veniexia moza 19 e pexa lo dito mozo l. 200 a gro/so. The manuscript is unpublished but its contents have been summarised in Wolynes, *Merchant mentality*, cit., 63, table 1.3.

³⁸³ This table of conversion can also be found in the earlier Stussi (ed.), *Zibaldone da Canal*, cit., 21. The conversion is discussed in J.-C. Hocquet, ‘A la jonction du commerce maritime et des trafics terrestres, les mesures de Venise : muid, setier et minot’, in H. Dubois et al. (eds.), *Horizons marins, itinéraires spirituels (Ve-XVIIIe siècles)*. Volume II (Paris, 1987), 3-19.

³⁸⁴ ASVe, Procuratori di San Marco, De Ultra, Commissarie, b. 180, (Filippo Marcello), Anonymous trade manual, f. 2v, ‘Questi son o li pexi dj Veniexia’. For an overview of the weights and measurements of Venice see Table X at the end of this thesis.

worth 240 ducats, believing it to be *havere grossum*, as he had heard by many ('sicut a multis intellexerat'), while, in fact, it was not, according to what many others said ('invenerunt a multis personis quod est havere subtile') and the rulebook prescribed of the Levanti.³⁸⁵ Quite tellingly, the 'opinions of many' were listed before the official legislation as the rationale for the decision. In medieval Venice, different systems of weight and measurements existed, and while they vaguely referred to light and heavy merchandise, they did not unequivocally categorise goods into a specific category. However, this distinction was used for fiscal purposes as early as 1339. In that year, the Senato passed a series of measures aimed at replacing the old system based on sworn value declarations by merchants with a more accurate system based on the actual weighing of the goods. This was coupled with an overall redefinition of dues and customs. The immediate cause for this change was most likely to have been a war with Mastino Della Scala, ruler of Verona - probably marking a period of especially high expenditure.³⁸⁶ The excise reform is particularly significant both for the study of the excise rate on different products and for an overview of the products for sale in the city in the fourteenth century.

Table 5

Customs duties agreed or proposed on merchandise shipped on unarmed vessels, according to the tax reform of 1339

(AsVe, Senato, Deliberazioni, Registri, Misti, Reg. 17, fols. 118v-119v,³⁸⁷

and Ibid., Reg. 18, ff. 1r-2v, and f. 61v)³⁸⁸

³⁸⁵ *L'Armeno-veneto. Compendio storico e documenti delle relazioni degli Armeni coi Veneziani* (Venice, 1893), volume I, no. 317, 172-73.

³⁸⁶ R. Cessi, *La regolazione delle entrate e delle spese nella Repubblica di Venezia nei secoli XIII e XIV* (Padua, 1925), LXXXVI-XC and 71.

³⁸⁷ Now published as *Venezia - Senato. Deliberazioni Miste. Registre XVII (1335-1339)*, ed. By F-X Leduc (Venice, 2007), n. 1226-1243 (18/01/1338, agreed), 468-474, items 1-14 of the table.

³⁸⁸ Now published as *Venezia - Senato. Deliberazioni Miste. Registre XVIII (1339-1340)*, ed. By F-X Leduc (Venice, 2005), n. 8-28 (11/02/1339, not agreed), 5-9, items 15-30 in the table, and n. 580 (28/09/1339, agreed), items 31-38.

Product	Translation	Tax	F i s c a l unit
Vinum de intra culfum et de extra culfum	Wine from inside and outside the Adriatic	2 <i>grossi</i> more than usual	<i>Anfora</i> (600 litres)
Vinum Ribolium	<i>Ribolla</i> wine	15 <i>grossi</i>	<i>Anfora</i> (600 litres)
Vinum Cretense	Wine from Crete	20 <i>grossi</i>	<i>Anfora</i> (600 litres)
Vinum Romanie	Wine from Greece	No less than 15 <i>grossi</i>	<i>Anfora</i> (600 litres)
Vinum terranum	Wine from the hinterland	12 <i>grossi</i>	<i>Anfora</i> (600 litres)
Vinum tribianum	Trebbiano wine	15 <i>grossi</i>	<i>Anfora</i> (600 litres)
Vinum de Marchia	Wine from Marche	22.5 <i>lire</i>	-
Oleum (tam Iadre quam Istrie)	Olive oil (also from Zadar and Istria)	2 <i>parvi</i> [62.5 <i>grossi</i> each <i>millier</i>]	<i>L i b b r a</i> (0.477 kg)
Carnes salitae	Salted meat	4 <i>lire ad grossos</i> (36.76 <i>grossi</i>)	<i>M i l l i e r</i> (477 kg)
Caseus	Cheese	4 <i>lire ad grossos</i> (36.76 <i>grossi</i>)	<i>M i l l i e r</i> (477 kg)
Candele de sepo	Tallow candles	2 <i>denari</i> (38,29 <i>grossi</i> each <i>millier</i>)	<i>L i b b r a</i> (0.477 kg)
Valania	Wheat	3 <i>grossi</i>	<i>Moggio</i> (333 litres)
Fustagni	Fustians	1 <i>grosso</i>	<i>Pezza</i>
Açali (sic) et ferrum laboratum	Steel and wrought iron	4 <i>lire ad grossos</i> (36.76 <i>grossi</i>)	<i>Millier</i> (477 kg)

Product	Translation	Tax	Fiscal unit
Ferrum	Iron	5 <i>soldi di grossi</i> (60 <i>grossi</i>)	<i>Millier</i> (477 <i>kg</i>)
Panni de Malinis, pannis de Borsella, de Doasio et de Ganto	Cloth from Malines, Brussels, Douai, and Ghent	12 <i>grossi</i>	<i>Pezza</i>
Vergati francischi	Striped fabrics from France	50 <i>grossi</i>	<i>Pezza</i>
Omnes alii vergati	All other striped fabrics	9 <i>grossi</i>	<i>Pezza</i>
Panni de Coltray, de Brozes, de Villazes, Tornay, Lila	Cloths from Courtrai, Bruges, Tournai, Lille	10 <i>grossi</i>	<i>Pezza</i>
Cohoperte	Blankets	4 <i>grossi</i>	<i>Pezza</i>
Tentinlane de Florencia et misci Florentini	Tintilana and mixed fabrics from Florence	10 <i>soldi ad grossos</i> (45,95 <i>grossi</i>)	<i>Pezza</i>
Omnes telle nove tam greçe quam dealbate	Canvases, both coarse and whitened	1% of the value	
Zaffaranus	Saffron	1 <i>grosso</i>	<i>Libbra</i>
Straçaria	Rags	6 <i>piccoli</i>	1 <i>lira</i> of value
Drapamenta de lino et lana et de bombice et de seta	Drapes (linen and wool, cotton and silk)	6 <i>piccoli</i>	1 <i>lira</i> of value
Cappares, sinapis et carobe	Capers, Mustard, and Carobs	12 <i>denari</i>	1 <i>lira</i> of value
Limones	Lemons	6 <i>grossi</i>	<i>Millier</i>
Tele veteres et mantilia et toallie	Old canvases, mantles and tablecloth	6 <i>denari</i>	<i>Libbra</i>

Product	Translation	Tax	F i s c a l unit
Arma	Weapons	2 <i>soldi</i>	1 <i>lira</i> of value
Gottonus	Cotton	4.5 <i>lire</i>	<i>Millier</i>
Pulvis çucari	Sugar powder	4 <i>lire</i>	<i>Millier</i>
Corii	Hides	22.5 <i>lire ad grossos</i> (206.77 <i>grossi</i>)	<i>Millier</i>
Cavaline integre	Whole Cowhides (cavalline)	12 <i>lire</i> and 10 <i>soldi ad grossos</i> (114.875 <i>grossi</i>)	<i>Millier</i>
Cavaline incise	Incised Cowhides	6 <i>lire</i> and 5 <i>soldi</i> <i>ad grossos</i> (57.43 <i>grossi</i>)	<i>Millier</i>
Allumen subtile a tingendo de Constantinopoli et imperio	Light alum used as a mordant from Constantinople and its empire	30 <i>soldi ad grossos</i> (13.785 <i>grossi</i>)	<i>Millier</i>
Allumen de allis partibus	Alum from all other places	30 <i>soldi ad grossos</i> (13.785 <i>grossi</i>)	<i>Millier</i>
Cera	Wax	10 <i>soldi ad grossos</i> (4.595 <i>grossi</i>)	<i>Millier</i>

The table above summarises the main products available in Venice, followed by the excise applied to each specific good in a given weight unit. The excise rates specified here were the basic rates applied to Venetians. Foreigners would have paid a different rate depending on the treaties they signed with the Republic. If we keep in mind that 1 ducat equalled 24 *grossi* we might appreciate that the excise rate on bulky commodities was relatively low, considering that

half a ton of steel was taxed 1.5 ducats and that excises on an *anfora* of wine (600 litres) oscillated between half a ducat and a ducat. According to Pegolotti, a 5% flat rate excise was applied on all goods transported on unarmed round vessels from the eastern Mediterranean, except wheat, whilst a 1% flat rate was applied to wares being exported out of Venice. In short, a merchant entering Venice with a cargo of cheese from Crete would have had to pay a 5% flat rate, plus a brokerage fee known as *senseraggio*, then a weighing fee for the use of the municipal steelyard (the *stadera*), and more or less additional levies depending on his nationality.³⁸⁹ We can thus conclude that Venetian authorities did not have a single way to describe and categorise commodities. They often did so by having recourse to weight units or the value of products, but the detailed description of weights and measurements that we find in Pegolotti is significantly more specific than the reforms of tax excises enacted by the Republic. The main items mentioned in the table are foodstuff and beverages, with several types of wine, followed by metals such as irons and by a vast array of textiles of different quality. As we might observe, several weight units were employed, but they seem to convey a sense that certain categories of goods were grouped together. The *millier*, or 477 kg, was used for products in bulk (salted meat, cheese, steel, iron, cotton, hides, alum, and wax). All wine was assessed by the *anfora* of 600 litres, while most fabrics were taxed by the *pecia*, a standard unit of length. The pound (*libbra*) was clearly reserved for more high-end goods such as drapes, saffron, and capers. There is also one case, namely weapons, where the excise was levied not on the pound of weight but rather on a *lira* of value, that is either a *lira di grossi* or a *lira a grossi*.

The tax reform of 1339, however, only gives us a partial impression of the impact of the excise on the value of these goods. We know how much they were taxed, but not their value, making it difficult to understand why certain products, despite being similar, were taxed differently. Moreover, in some cases, raw commodities figure as ballast, benefiting from a particularly low excise. In 1405, soda ash imported from Syria, being considered as such, paid

³⁸⁹ Pegolotti, *Pratica*, cit., 137-143.

just three ducats for every 477 kilograms: this is quite telling of the substantial scale of importation of bulky commodities.³⁹⁰ Luckily, we can complement this information with another tax reform passed by the Maggior Consiglio in 1346, much briefer, but this time mentioning the value of a *millier* of selected items. The reform was considered at the behest of the Ufficiali alla ternaria, who asked the Maggior Consiglio to enact a reform whereby certain products would be taxed by weight and not by value. The proposal, put forth by the Provveditori de Comun, lists the products, their estimated value, and the amount of the tax as a percentage of the value. It was clearly aimed at rationalising the tax on commodities in bulk, dispensing with the need to establish the value case by case, applying instead a standard tax rate by weight, divided into broad categories. Remarkably, the products are itemised in the vernacular, and not in Latin, like the rest of the register, most likely to avoid confusion when customs officers had to apply customs and duties. The two tables do not overlap completely but they do provide us with a general overview of the value of bulky commodities in Venice, within a reasonably close timeframe to the previous list - only seven years apart. It also allows us to gauge to what extent the Republic favoured the import of these commodities by lowering excises and dues.

Table 6 : Survey of the 1346 excise reform

(ASVe, Maggior Consiglio, Deliberazioni, Registri, Spiritus, f. 147v-148r)³⁹¹

³⁹⁰ Jacoby, *Raw materials*, cit., 69-70.

³⁹¹ The text has been published twice. An early edition of the text may be found in B. Cecchetti, 'Dei primordi della lingua italiana e del dialetto in Venezia', *Atti del Reale Istituto Veneto di Scienze, lettere ed arti*, 15/3 dispensa 5 (1869/70), 1585-1626, the document is at 1611-12. A more accurate edition is in E. Besta (ed.), *I bilanci generali della repubblica di Venezia*. Vol. I, tomo I/1) *Origini delle gravezze e dei dazî principali (976-1579)* (Venice, 1912), 61-62, n. 65,. The part of the text devoted to Croatia has been also published in S. Ljubić (ed.), *Listine o odnošajih između južnoga slavenstva i mletačke republike*. Vol. 2 (1336-1347) (Zagreb, 1870), 388, n. 706. NB Kermes from Croatia and Romania bassa, and folleselli and falloppi, are quoted in 'centener' and not in 'millier'. I have converted those values in millier by multiplying them by ten, a *centener* being a tenth of a *millier*.

Products	Translation	Value of a millier (477 kg)	Tax for each millier	As percentage of the value
Lana grossa de fin in Crede	Coarse wool coming from up to Crete	50 <i>lire ad grossos</i> (459.5 <i>grossi</i>)	10 <i>soldi ad grossos</i> (4.595 <i>grossi</i>)	1%
Lin grosso de Roman(ia)	Coarse linen from the Byzantine Empire	50 <i>lire ad grossos</i> (459.5 <i>grossi</i>)	10 <i>soldi ad grossos</i> (4.595 <i>grossi</i>)	1%
Lume de feça	Recte <i>allume di feccia</i> or potash	50 <i>lire ad grossos</i> (459.5 <i>grossi</i>)	10 <i>soldi ad grossos</i> (4.595 <i>grossi</i>)	1%
Lume chatina bla(n)cha de savo(n)	white soda ashes for soap-making	50 <i>lire ad grossos</i> (459.5 <i>grossi</i>)	10 <i>soldi ad grossos</i> (4.595 <i>grossi</i>)	1%
Solfere de oagna p(ar)te	Sulphurs from everywhere	50 <i>lire ad grossos</i> (459.5 <i>grossi</i>)	10 <i>soldi ad grossos</i> (4.595 <i>grossi</i>)	1%
Datali	Dates	50 <i>lire ad grossos</i> (459.5 <i>grossi</i>)	10 <i>soldi ad grossos</i> (4.595 <i>grossi</i>)	1%
Galle	Gall-nuts	50 <i>lire ad grossos</i> (459.5 <i>grossi</i>)	10 <i>soldi ad grossos</i> (4.595 <i>grossi</i>)	1%

Products	Translation	Value of a millier (477 kg)	Tax for each millier	As percentage of the value
Bosso	Boxwood	50 <i>lire ad grossos</i> (459.5 <i>grossi</i>)	10 <i>soldi ad grossos</i> (4.595 <i>grossi</i>)	1%
Morona	Sturgeon	50 <i>lire ad grossos</i> (459.5 <i>grossi</i>)	10 <i>soldi ad grossos</i> (4.595 <i>grossi</i>)	1%
Savo(n) tenero	Soft soap	50 <i>lire ad grossos</i> (459.5 <i>grossi</i>)	10 <i>soldi ad grossos</i> (4.595 <i>grossi</i>)	1%
Tegname	Storax (resin)	50 <i>lire ad grossos</i> (459.5 <i>grossi</i>)	10 <i>soldi ad grossos</i> (4.595 <i>grossi</i>)	1%
Ruça integra	Madder	50 <i>lire ad grossos</i> (459.5 <i>grossi</i>)	10 <i>soldi ad grossos</i> (4.595 <i>grossi</i>)	1%
Gothon de Puia	Cotton from Puglia	100 <i>lire ad grossos</i> (919 <i>grossi</i>)	1 <i>lira ad grossos</i> (9.19 <i>grossi</i>)	1%
Lana da l'isola de Crede in fin in Çepro	Wool from Crete to Cyprus	100 <i>lire ad grossos</i> (919 <i>grossi</i>)	1 <i>lira ad grossos</i> (9.19 <i>grossi</i>)	1%
Çifflor	Safflower	100 <i>lire ad grossos</i> (919 <i>grossi</i>)	1 <i>lira ad grossos</i> (9.19 <i>grossi</i>)	1%
Lin çitego	Linen/flax ?	(919 <i>grossi</i>)	(9.19 <i>grossi</i>)	

Products	Translation	Value of a millier (477 kg)	Tax for each millier	As percentage of the value
Seme	Seeds	100 <i>lire ad grossos</i> (919 <i>grossi</i>)	1 <i>lira ad grossos</i> (9.19 <i>grossi</i>)	1%
Lume	Alum	100 <i>lire ad grossos</i> (919 <i>grossi</i>)	1 <i>lira ad grossos</i> (9.19 <i>grossi</i>)	1%
Çuchara e de plui n'à	Sugar of many types	100 <i>lire ad grossos</i> (919 <i>grossi</i>)	1 <i>lira ad grossos</i> (9.19 <i>grossi</i>)	1%
Sede de cavallo	Horse bristles	100 <i>lire ad grossos</i> (919 <i>grossi</i>)	1 <i>lira ad grossos</i> (9.19 <i>grossi</i>)	1%
Ruça massenada	Minced madder	100 <i>lire ad grossos</i> (919 <i>grossi</i>)	1 <i>lira ad grossos</i> (9.19 <i>grossi</i>)	1%
Canafistola	Cassia fistula	100 <i>lire ad grossos</i> (919 <i>grossi</i>)	1 <i>lira ad grossos</i> (9.19 <i>grossi</i>)	1%
Arçe(n)to vivo da Maiuolicha	Mercury from Mallorca	200 <i>lire ad grossos</i> (1838 <i>grossi</i>)	2 <i>lire ad grossos</i> (18.38 <i>grossi</i>)	1%
Seme(n)çe da v(er)mi	Wormseed	200 <i>lire ad grossos</i> (1838 <i>grossi</i>)	2 <i>lire ad grossos</i> (18.38 <i>grossi</i>)	1%

Products	Translation	Value of a millier (477 kg)	Tax for each millier	As percentage of the value
tamare(n)di	Tamarind	200 <i>lire ad grossos</i> (1838 <i>grossi</i>)	2 <i>lire ad grossos</i> (18.38 <i>grossi</i>)	1%
Gothon fillado della Ma(r)cha	Spun cotton from Marche	200 <i>lire ad grossos</i> (1838 <i>grossi</i>)	2 <i>lire ad grossos</i> (18.38 <i>grossi</i>)	1%
C a r t e b(er)ghamena	Translucent paper (lit. Parchament paper)	200 <i>lire ad grossos</i> (1838 <i>grossi</i>)	2 <i>lire ad grossos</i> (18.38 <i>grossi</i>)	1%
Goma rabicha	Gum Arabic	200 <i>lire ad grossos</i> (1838 <i>grossi</i>)	2 <i>lire ad grossos</i> (18.38 <i>grossi</i>)	1%
Vernisse	Sandarac	200 <i>lire ad grossos</i> (1838 <i>grossi</i>)	2 <i>lire ad grossos</i> (18.38 <i>grossi</i>)	1%
Lana de Cavo Borsan in çosso infina Maiolicha lavada	Scoured wool from Cape B r u z z a n o (C a l a b r i a) southwards until Mallorca	175 <i>lire ad grossos</i> (1608.25 <i>grossi</i>)	1 <i>lira ad grossos</i> and 15 <i>soldi ad</i> <i>grossos</i> (16.08 <i>grossi</i>)	1%
Agnelline	Lambskin	175 <i>lire ad grossos</i> (1608.25 <i>grossi</i>)	1 <i>lira and 15 soldi</i> <i>ad grossos</i> (16.08 <i>grossi</i>)	1%

Products	Translation	Value of a millier (477 kg)	Tax for each millier	As percentage of the value
Lana sussa de queste p(ar)te	Greasy wool 'from these lands'	-	1 <i>lira</i> and 5 <i>soldi</i> <i>ad grossos</i> (11.48 <i>grossi</i>)	-
Arçento vivo	Mercury	160 <i>lire ad grossos</i> (1470.4 <i>grossi</i>)	8 <i>lire ad grossos</i> (73.52 <i>grossi</i>)	5%
Oro	Gold	160 <i>lire ad grossos</i> (1470.4 <i>grossi</i>)	8 <i>lire ad grossos</i> (73.52 <i>grossi</i>)	5%
Plumbo de Çepro et de Romania	Lead from Cyprus and Greece	160 <i>lire ad grossos</i> (1470.4 <i>grossi</i>)	8 <i>lire ad grossos</i> (73.52 <i>grossi</i>)	5%
Arçucho	?	200 <i>lire ad grossos</i> (1838 <i>grossi</i>)	10 <i>lire ad grossos</i> (91.9 <i>grossi</i>)	5%
Lana ma(r)ina	Overseas wool			
Oppio thebaucho	Theban opium			
Gothon filado de outra ma(r)	Spun cotton from overseas			
Cerra da Duraço e da Vallona	Wax from Durrës and Vlorë	180 <i>lire ad grossos</i> (1,654 <i>grossi</i>)	5 <i>lire ad grossos</i> and 8 <i>soldi</i> (49.62 <i>grossi</i>)	3%
Grana da Duraço e da Vallona	Kermes from Durrës and Vlorë	1,000 <i>lire ad</i> <i>grossos</i> (9,190 <i>grossi</i>)	30 <i>lire ad grossos</i> (275.7 <i>grossi</i>)	3%
Grana della Romania Bassa	Kermes from the Aegean	1,000 <i>lire ad</i> <i>grossos</i> (9,190 <i>grossi</i>)	50 <i>lire ad grossos</i> (459.5 <i>grossi</i>)	5%

Products	Translation	Value of a millier (477 kg)	Tax for each millier	As percentage of the value
Draganti della Romania Bassa	Tragacanth from the Aegean	200 <i>lire ad grossos</i> (1,838 <i>grossi</i>)	10 <i>lire ad grossos</i> (91.9 <i>grossi</i>)	5%
Grana p(er) la Sclava(n)ia infin Ragux(i)	Kermes from Croatia until Dubrovnik	500 <i>lire ad grossos</i> (4,595 <i>grossi</i>)	10 <i>soldi ad grossos</i> (4.595 <i>grossi</i>)	1%
Cera p(er) la Sclava(n)ia infin Ragux(i)	Was from Croatia until Dubrovnik	200 <i>lire ad grossos</i> (1838 <i>grossi</i>)	2 <i>lire ad grossos</i> (18.38 <i>grossi</i>)	1%
Grongo p(er) la Sclava(n)ia infin Ragux(i)	Conger fish ? From Croatia until Dubrovnik	Not stated [1470 <i>grossi</i>]	1 <i>lira ad grossos</i> and 12 <i>soldi ad grossos</i> (14.7 <i>grossi</i>)	1%
Follexeli p(er) tuta la Marcha e Romagna	<i>Follesello</i> cloth from Marche and Romagna	1000 <i>lire ad grossos</i> (9,190 <i>grossi</i>)	200 <i>soldi ad grossos</i> (91.9 <i>grossi</i>)	1%
Fallopì, struoxi e straçe de seda p(er) tuta la Marcha e Romagna	Low quality silk fabrics from Marche and Romagna	Not stated [1000 <i>lire ad grossos</i> (9,190 <i>grossi</i>)]	100 <i>soldi ad grossos</i> (45.95 <i>grossi</i>)	0.5%

This list of items suggests that commodities in bulk enjoyed a particularly low excise rate, normally amounting to 1%. It also helps us to identify the different categories of goods according to their value. To the first group, those valued at about 50 *lire ad grossos* (that is 19 ducats, 3 *grossi* and 16 *piccoli*) and each millier belonged both raw materials like alum, raw textiles like unwashed wool, manufactured goods like soap, and foodstuffs, as well as resins. To give an idea of the relative value, a resident tutor in 1381-1385 would have been paid a salary of 21.5

ducats and the reimbursement of living costs was quoted at 25 ducats.³⁹² Thus the total wage of a resident tutor could have bought roughly 2.4 *mier* of these items, while a master stonemason could have bought 4.14 *mier*. To the second group, between 100 and 200 *lire ad grossos*, belonged instead cotton, wool, hides and mercury, as well as wax and lead from overseas. Kermes from Croatia and Greece was the most expensive material, priced at 9,190 *grossi*. This table also allows us to gather a more precise idea of the price differentiation between products sold by the millier, from coarse wool to kermes. It also perfectly conveys the variety of the Venetian marketplace, as the items mentioned in the table could be raw materials like alum, used as a mordant for cloth, semi-manufactured goods like spun cotton and wax, and a significant number of fabrics and dyes. This table also lays bare an important element, namely the multiple points of origin of several materials sold on the Venetian marketplace, especially evident in the case of wool and kermes.

4. Trade circuits

In the previous pages, we have looked at the types of commodities for sale in the city of Venice, and their places of origins. In this section, we will be looking at the trade circuits that underpinned the import and export of those wares. To understand Venetian commerce, we must look at all three dimensions of shipping, namely cabotage, medium-range exchanges and international trade routes, as well as considering Venice as a maritime-terrestrial node of crucial trade routes spanning the Po Plain. In this section, I will focus in particular on the saliency of regional and fluvial trade within the trade circuits of the Republic. Cabotage has been studied before, but normally in relation to Venetians abroad, rather than between the two Adriatic shores, sometimes bypassing Venice. Already in 1952, Freddy Thiriet explained the Venetian presence in Thessaloniki in the first half of the fourteenth century - a city that was not a

³⁹² Mueller, *Banks*, cit., 651.

stopping point of the state convoys of galleys - noting that ‘the traffic with the Macedonian port was thus left to the ships of private citizens, also called unarmed vessels (*navigia disarmata*), not bound to the same stringent regulations set out for the galleys of *mudae*. [...] On the contrary, they only transported mundane goods. [...] These are the vessels that sailed to Thessaloniki and engaged in cabotage’.³⁹³ The thorough analysis of notarial records from Crete, carried out by Mario Gallina in 2008, has revealed the extent of cabotage trade between Crete and Turkish Asia Minor.³⁹⁴ And similar conclusions on the role of Venetians in local trade have been drawn by Reinhold C. Mueller in his study of the commercial activities of the Giustinian family in Corfu between 1440 and 1442.³⁹⁵ The presence of Venetian round ships and their use for cabotage or regional trade seems in fact to be a characteristic of several areas of the Mediterranean, not just the Aegean. Christ noticed a similar pattern in Alexandria in the early fifteenth century,³⁹⁶ and Christian A. Neumann in his book on the Iberian peninsula and Venice has examined thoroughly the enterprise of the Cocco brothers, trading with round ships around Mallorca with Catalonia and Venice.³⁹⁷ Recent research on Seville and Venice by Raúl González Arévalo, centred upon the merchants Angelo Venier and Luca Falier trading in Spain with round ships in the early fifteenth century, concluded that ‘the picture that emerges is the vivacity and rapidity of exchanges organised by private vessels, thus confirming the division and specialisation of merchandise between institutional galleys and private vessels.’³⁹⁸ It is thus

³⁹³ F. Thiriet, ‘Les Vénitiens à Thessalonique dans la première moitié du XIVe siècle’, *Byzantion*, 22 (1952), 328.

³⁹⁴ M. Gallina, ‘La navigazione di cabotaggio a Creta nella seconda metà del Trecento dai registri notarili candioti’, *Thesaurismata*, 38 (2008), 23-103. On Crete see D. Jacoby, ‘Creta e Venezia nel commercio del Mediterraneo orientale sino alla metà del Quattrocento’, in G. Ortalli (ed.), *Venezia e Creta: atti del convegno internazionale di studi Iraklion-Chanià, 30 settembre-5 ottobre 1997* (Venice, 1998), 73-106.

³⁹⁵ R. Mueller, ‘A Venetian Commercial Enterprise in Corfu (1440-1442)’, in: Id. (ed.), *Venezia nel tardo medioevo: economia e società* (Rome, 2021), 553-566.

³⁹⁶ G. Christ, ‘Passagers clandestins? Rôle moteur des galères vénitiennes et concurrence des navires rondes à Alexandrie au début du XVe siècle’, in D. Valérian (ed.), *Espaces et réseaux en Méditerranée (VIe-XVIe siècle)* (2 vols, Paris, 2010), II, 275-290.

³⁹⁷ C. Neumann, *Venedig und Aragon im Spätmittelalter (1280-1410). Eine Verflechtungsgeschichte* (Leiden, 2017), on Nigro Cocco 130-133, on the Cocco Family 401 - 416.

³⁹⁸ R. González Arévalo, ‘Et scribatur viro nobili ser Angelo Venerio, consuli nostro Sibilie’, *Medievalismo*, 31 (2021), 214.

clear that Venetians engaged in tramping and local exchanges abroad. We are less informed about whether this was the case in the Adriatic as well. I will explain which merchants partook in regional Adriatic trade and its main routes by having recourse to two different types of sources, namely a selection of case studies from the *Avogaria di Comun* and a table of the routes of vessels fined in 1331-1335 for illegal trade. This will allow me to combine a case study approach, albeit limited by the constraints of the surviving documents, with a quantitative analysis of the routes plied by Venetian vessels in the first half of the fourteenth century. This will be conducive to a recognition of the importance of medieval cabotage and to the acknowledgment of the agency of non-Venetians within the Adriatic. Refocusing Venetian trade vis-à-vis the framework of local connectivity proposed by Horden and Purcell means giving agency to traders from other polities and recognising that the Adriatic was not just a Venetian Gulf, but a contested space where several polities projected their influence, be they the Angevins or Dubrovnik. Equally, refocusing the study of the Venetian economy by underscoring cabotage and local trade allows us to appreciate a dimension of trade that coexisted alongside journeys of galleys, and to understand how Venetian merchants collaborated with those of other polities as brokers, shippers, and investors. By looking at sources like pardons and notarial and judicial records, we can fully appreciate the variety of Venetian shipping routes, including those theoretically forbidden by the Senato.

4. 1 Long-, medium- and short-distance trade: a qualitative and quantitative analysis

The four case studies that I present in the following pages, dated 1330, 1377, 1400, and 1434 belong to the archives of the *Avogaria di Comun*. The *Avogaria* was entrusted with safeguarding the interests of the state, guaranteeing that due process was being followed and that state officials had not committed any wrongdoing. To understand this magistracy, we must

remember that Venetians operated a distinction between ‘offices’ and ‘councils’. *Consilia* were the Council of Forty (Quarantia), the Small Council (Minor Consiglio), the Great Council (Maggior Consiglio), the Pregadi (or Senato), and the Council of Ten (Consiglio di Dieci). *Officia* instead referred to all other magistracies dealing with judicial or administrative matters,³⁹⁹ called *de intus* if located in Venice and *de extra* if overseas. *De intus officia* were located in two key places of the city, the Rialto and the Great Palace.⁴⁰⁰ The Venetian judicial system rested on six courts or *curiae palatii / corti di palazxo* (Esaminador, Forestier, Mobile, Petizion, Proprio, and Procurator).⁴⁰¹ The fourteenth-century lawyer Jacopo Bartaldo defined these six as the ‘Curie ordinarie’,⁴⁰² characterised by the presence of *advocatos* or patrician lawyers,⁴⁰³ and Filippo Nani would still define them in the seventeenth century as ‘the foundation of civil justice’.⁴⁰⁴ To these six courts, we can add the Giudici del Piovego. Initially they had the task to maintain, and prevent encroachments on public streets, waterways, and common property,⁴⁰⁵ but in the

³⁹⁹ M. Caravale, ‘Le istituzioni della repubblica’, in *Storia di Venezia*, vol. 3, cit., 327: ‘Gli storici sogliono distinguere tra consilia ed officia, i primi costituiti dalle grandi assemblee - minor consiglio, maggior consiglio, consiglio dei rogati o dei pregadi o senato, consiglio dei quaranta o quarantia, consiglio dei dieci -, i secondi dalle magistrature minori’.

⁴⁰⁰ A. Padovani, ‘Curie ed uffici’, in *Storia di Venezia*, vol. 2, cit., 331-348.

⁴⁰¹ For their overlapping jurisdictions see C. Passarella, ‘La procedura civile veneziana tra istanze di giustizia ed esigenze di riforma’, *Vergentis. Revista de investigación de la cátedra internacional conjunta Inocencio III*, 1/6 (2018), 279-317; *Guida generale*, cit., 988-992 and Mueller, *The Procuratori*, cit, 138-141; G. Zordan, *L’ordinamento giuridico veneziano* (Padua, 2005), 60-62 and A. Politi et al. (eds.), *Guida alle magistrature. Elementi per la conoscenza della repubblica veneta* (Sommacampagna, 2003), 75-78. For the Corte del forestier and the rights of foreign merchants see M. Fusaro, ‘Politics of Justice/Politics of Trade: Foreign Merchants and the Administration of Justice from the Records of Venice’s *Giudici del Forestier*’, *Mélanges de l’École française de Rome - Italie et Méditerranée modernes et contemporaines* (MEFRIM), 126/1 (2014), 139-159.

⁴⁰² Jacopo Bertaldo, *Splendor venetorum civitatis consuetudinum*, ed. by F. Schupfer (Bologna, 1895), 9, par. 2: ‘Dicitur etiam iudicium locus specialiter deputatus ad discutiendas et diffiniendas causas et quaestiones, quem locum, karissime, secundum usum Venetiarum nos appellamus curiam et specialiter que est curia ordinaria, videlicet que habent proprios advocatos, ut proprii, mobilium, forinsecorum, procuratorum et petitionum, alie autem sunt extraordinarie’.

⁴⁰³ On lawyers in Renaissance Venice see S. L. Jones, ‘Servants of the Republic: Patrician Lawyers in Quattrocento Venice’ (PhD thesis, Swansea University, 2010).

⁴⁰⁴ F. Nani, *Prattica Civile delle Corti del Palazzo Veneto* (Venice, 1668), 3: ‘A questi magistrati si trattano la maggior parte de negotij più gravi, & importanti, mà privati, e sono come il fondamento del Foro Civile’. For a précis of their functions see F. Argellati, *Prattica del foro veneto, che contiene le materie soggette a ciaschedun magistrato, il numero de’ giudici, la loro durazione, l’ordine che suole tenersi nel contestare le cause, e le formule degli atti più usitati* (Venice, 1737), 3-15 for the Petizion, 15 for the Esaminador, 22-25 for the Forestier, 25-27 for the Mobile, 27-30 for the Procurator and 31-36 for the Proprio.

⁴⁰⁵ *Codex Publicorum. Codice del Piovego*, ed. B. Lanfranchi Strina, 2 vols (Venice, 1985-2006).

fourteenth century they became responsible for illicit and fictitious contracts.⁴⁰⁶

Until the mid-fourteenth century, verdicts in matters of civil law by any of the courts or by the Venetian rectors could be appealed to the Quarantia. In 1343, the Maggior Consiglio established an intermediate level of appeals, called Auditori Vecchi alle Sentenze, with the right to hear appeals on any civil judgment passed ‘in the city of Venice, and from Grado to Cavarzere, and in the city of Treviso’.⁴⁰⁷ The Avogaria di Comun gradually emerged in the twelfth century with two main functions, to secure the respect of existing laws (for this reason the Avogadori had to be present to any council) and the safeguarding of the interests of the state.⁴⁰⁸ In this function of state attorneys they could *intromittere* all lawsuits from the lower courts, a jurisdiction limited to only criminal cases after 1343. The *intromissio* was not strictly speaking an appeal. It was a judgement on whether there were legal grounds for an appeal. It was an act that annulled the effects of a verdict until the case was heard by the Quarantia. Each of the three Avogadori acted independently, so either the claimant or the defendant who suspected wrongdoing in a trial could appeal to them. If the Avogadori decided there were legal grounds to proceed, they would then present the case in front of the Quarantia.⁴⁰⁹ Records of these trials survive in two forms. The summaries of most of the cases on which a verdict was passed are transcribed - starting from 1324 - on parchment registers called Raspe. A separate set of records, known as the Miscellanea Civile e Penale, contains the loose papers of

⁴⁰⁶ J. Shaw, ‘Contracts Damned by God and by the World : Litigating the Just Price in Early Modern Venice’, *Quaderni storici*, 1 (2020), 185-210 and Id., ‘The Informal Economy of Credit in Early Modern Venice: Rules, Practices, Transcripts’, *Historical Journal*, 61/3 (2018), 623-642.

⁴⁰⁷ ASVe, Maggior Consiglio, Deliberazioni, Spiritus, f. 132r (07/09/1343): ‘Vadit pars quod eligantur in maiori consilio tres auditores quibus committatur quod audiant omnes conqueri volentes de sententiis latis hactenus et de cetero ferendis non acceptis de parcium voluntate in civitate Rivoalti et a Grado ad Caput Arggeris et in civitate Tarvixii’.

⁴⁰⁸ *Guida generale*, cit., 921: ‘organo investito della rappresentanza e difesa dei diritti e interessi del comune in sede amministrativa e giurisdizionale’. See also Argellati, *Pratica*, cit., 43-50 and on its origin V. Sandi, *Principi di storia civile della repubblica di Venezia dalla sua fondazione sino all' anno di n. s. 1700*. Part 1/2 (Venice, 1755), 514-522 (Book Four, Chapter 3).

⁴⁰⁹ C. Setti, ‘L’Avogaria di Comun come magistratura media d’appello’, *Il diritto della regione*, 1 (2009), 143-171 and Id., ‘La terza parte a Venezia: l’Avogaria di Comun tra politica e prassi quotidiana (secoli XVI-XVIII)’, *Acta Histriae*, 22/1 (2014), 127-144.

the trial, normally including witness depositions, ranging from the fourteenth to the eighteenth century. A largely neglected set of sources is a collection called ‘Processi originali’, most likely the result of the nineteenth-century reordering of the archive to preserve a collection of fourteenth- and fifteenth-century original records of trials, including witness statements. I have chosen four particularly interesting cases, insofar as they relate to commerce and they shed light on the ‘peripheries’ of Venetian trade, evoking the agency of non-patricians. The four cases I present also cover 1330 to 1434, approximately the same timespan as the present thesis.

On the last day of August 1330, Stefano Malusato (elsewhere called Stevano Zoti ‘the innkeeper’), an inhabitant of Torre delle Bebbe, appeared before the Avogadori de Comun for a trial lasting until October, to which the judges dedicated no less than ten pages of written statements.⁴¹⁰ The lawsuit stemmed from a claim by Malusato against the behaviour of the Podestà of Torre delle Bebbe, Andreolo da Molin. Stefano was importing wine from Istria into Venice with a *barca* (a boat) laden with ten *anfore* (6,009 litres) of *ribolla* wine and approached the entrance to the Venetian lagoon from its southernmost edge, near Chioggia. The Podestà had the task of inspecting the incoming ships and their cargoes, extracting the dues, and upon payment issuing a *bulleta*, a written receipt that authorised the import of the products into Venice. It seems that Andreolo was not particularly inclined to comply, according to Stefano because of a grudge caused by the fact that Stefano had complained about him to Andreolo’s brother. He accused Stefano of importing wine illegally and he also made it clear that the wine could not be stored all in the same place, namely in Stefano’s house or warehouse. Stefano complained that it was perfectly legal and common to import wine into Venice and to sell it ‘on tap’ (in the Latin of the source, ‘pro vendendo ipsum ad spinam, ut est consuetus’).⁴¹¹ To add insult to injury, Andreolo ordered the wine be stored in a safe warehouse where it was to be kept under lock and key, at the behest of the *podestà*. Andreolo then accused innkeepers in

⁴¹⁰ ASVe, Avogaria de Comun, *busta* 3601, ‘Processi originali’. The trials are unnumbered paper folders. The present lawsuit is titled ‘querella Stephani Malusati de la turre de Babia’ (henceforth Malusato trial).

⁴¹¹ Ibid., Malusato trial, Statement dated 10th October, unnumbered.

general of selling wine directly without his official receipt, selling bread at inflated prices, and ‘dragging men into taverns, where they get drunk’.⁴¹² Once the locked warehouse was opened, it turned out that two *vaselli* of wine (worth the considerable sum of ten ducats, according to Stefano) had been tampered with and that the wine had spilled out onto the floor. Stefano suspected the culprit was none other than the *podestà*, who defended himself by saying that a man (a certain Bertani) had been arrested for the theft. He had allegedly committed a ‘theft on hire’, being paid 2.5 ducats by Nicola dalle Armi to spill the wine.⁴¹³ In Bertani’s words, the *podestà* had helped collect the spilled wine with a *sessola* (a bailer) but had also mocked Stefano, telling him his wine was vinegar (‘dicebat quod esset bonum pro faciendo acetum’). We see in another account (dated 10 October) that the wine was recovered in tubs by ‘the female servants of Stefano’ (‘femine dicti Stevani recollebant dictum ribolium sparsum per terram in mastellos’).

In 1377, Nicola Cavasanti from the parish of San Nicolò al Lido appeared before the Avogadori to denounce Zanino Piloto, who had once been hired by him as helmsman (*nauclerius*) of a 200-*millier* (95-tons) ship once belonging to merchants of Ancona. The ship now belonged to Zannino Pilota (most likely a Venetian) or Matteo da Zara (presumably from Zadar), and it was bound for Senji in Croatia. Nicola, who was no longer the ship’s helmsman, but happened to be in Senji at the same time, learnt from a passing *barcosio* (a caravel-like round ship) that Zannino was also in Senji, where he was loading armed men and weapons onto his ship bound for Famagusta. The Senato had forbidden sailing towards Famagusta due to political uncertainty, but the ship hoisted an Anconitan flag and bypassed the law, presumably to help either the Genoese or the Venetians in the southern Mediterranean, ‘ad probandum meam venturam’⁴¹⁴.

⁴¹² Malusato trial, Statement dated 5th October, unnumbered, ‘ipsi ponunt vinum ad manum sine meo verbo, ipsi vendunt panem plus quam debent, ipsi conducent homines in taberna et faciunt eos inebriari’.

⁴¹³ Ibid., Malusato trial, Document dated 11th October.

⁴¹⁴ Avogaria de Comun, *busta* 3601, Processi originali, Trial against Zannino Piloto (27/04/1377).

On 7 February 1400, Cato Faxuol, owner of a ship named 'San Geremia', made an unwelcome discovery. He was due to set sail towards Puglia ('pro eundo ad viagium Apulee'), when he noticed, just in front of the Ponte della Paglia in Venice, that a whole bale of cloth was missing. The cloth, worth a considerable 130 ducats, had been dyed in Venice (eight pieces), Padua (one piece) and Verona (one piece) and was laden on the ship under the name of Geminiano di Maso, 'merçarius' from Florence. The scribe of the ship, Cato's son, looked for it in vain above deck, which had been closed with chains but not with locks. The bale was stolen through the large door next to the stern mast by two servants, Ognibene and Stefano from Segna (Senj, Croatia).⁴¹⁵

In 1434, Antonio Firmano, scribe on board Lazzaro Paolo's ship, appeared before the Avogadori to explain how he had been instructed by Benedetto Foscarini on the Rialto to convey to his master's ship, bound to Puglia, the message that it was not to set sail until the other ships had left Venice.⁴¹⁶ According to another witness, the *patronus* was one Andrea da Polignano. Regardless, the ship was certainly bound for Trani, despite a - supposed - senatorial decree passed on the 24th of June 1434, explicitly ordering the three ships bound to the fairs of Trani that year to set sail as a convoy on account of piracy.⁴¹⁷ Firmano quickly joined the ship using a *barca* on which he had laden four bales of textiles, and relayed the message. The *patronus* did not heed the commands of the Senato and, on the return journey, the ship was attacked by pirates in the waters between Vieste and San Felice on the Gargano Peninsula in Puglia, near Monte Sant'Angelo. Filippo, agent of Valerio di Francesco d'Arezzo, a Tuscan,

⁴¹⁵ ASVe, Avogaria di Comun, busta 3601, Processi originali, Cato Faxuol Trial (07/02/1400).

⁴¹⁶ ASVe, Avogaria di Comun, busta 3601, Processi originali, Antonio Firmano Trial, 1434, Loose paper titled 'Querela de Filipo d'Arezo'.

⁴¹⁷ In the same dossier, loose paper, copy of the senatorial decree dated 24/06/1434: 'Copia. 24 Junii 1434, in Rogatis. Cum hanc ad nundinas Trani die proximo sint iture tres nostre naves venete cum multis mercationibus et propter galeotam que ad piraticam de novo se interposuit ipse faciliter possent aliquid periculum incurrere, vadit pars quod ipse tres cochine recedere et ire debeant simul de conserva et navigare usque Tranum unite sub gubernatione et obedientia nobilis viri Benedicti Foscareno, qui cum altera ipsarum ad illas partes profiscitur et hoc manifestum fiat patronus ipsorum navigiorum, quod sub pena duc. C debeant usque Tranum observare.' I have not found this deliberation in the registers of the Senato for the month of June of that year see ASVe, Senato, Deliberazioni, Misti, Reg. 59, f. 56r-62v and ASVe, Senato, Deliberazioni, Secreti, Reg. 11, 74v-86r.

claimed to have been robbed of 380 ducats in cash. ‘Maestro’ Zuan from Portogruaro, presumably the ship’s captain, claimed that he had been thrown overboard. He soon reckoned that the pirates did not come from Catalonia but rather from Puglia. Two members of his crew, presumably well informed as they also hailed from Puglia, named Filippo de Brignis and Piero Converza from Polignano, concurred with him. The pirates robbed him of 128 ducats in bullion, three *mier* of caciocavallo (1,431 kg) worth fifty-one ducats, five *mier* of Apulian cheese (2,385 kg) worth seventy-one ducats, tallow worth thirty-two ducats, hazelnuts worth twenty-two ducats, capers worth five ducats, and several of the *corredi* of the ship, including the mizzen mast or sail (*artimone*), valued alone at thirty-seven ducats, the damages totalling at least 346 ducats.

These four cases are significant precisely because they do not concern significant merchants, and because they offer an unusually ‘unfiltered’ look at merchants in their own words, through spontaneous and vivid depositions. They all enlighten some characteristics of Venetian trade that are useful for a wider discussion on the characteristics of Venetian trade. The first trial concerned a dispute over wine in Torre delle Bebbe. This location is not coincidental, as the place was at the very edge of the lagoon, just before the territory of Padua. An innkeeper imported 6,000 litres of wine into Venice from Istria and an alleged plot was laid to deprive him of his wares. This was not the only time that he imported wine from Istria, as it seemed to be normal for innkeepers to transport wine directly into the city. If we assume a consumption of two litres of wine a day, this quantity would have sufficed for 100 adults a day for a month. In the second case, a ship probably belonging to Anconitan merchants was sold to a Croatian. A Venetian, its previous helmsman, was overheard saying in Senji, where the ship was stopping over, that its crew was bound to Famagusta in spite of a senatorial ban on such journeys. In 1400, a merchant bound to Puglia found out that an expensive bale of cloth was missing. His ship contained products from Venice, Padua, and Verona, laden under the name of a Florentine merchant. In 1434, a merchant set sail towards Puglia, despite a ban on such journeys, and was

robbed of several tons of cheese. He recognised the pirates, which betrays an assiduous frequentation of those coasts. The ship was plundered whilst sailing near the Gulf of Vieste, and on board the ship there were seamen from that same region. These cases perfectly illustrate the importance of the wine trade between Istria and Venice, inter-regional trade with Puglia, and the importance of islands on the Istrian and Dalmatian coast as stopover points for medieval merchants. These four cases are backed up by narrative sources such as the ‘Morosini Chronicle’ and ‘El sommo della condizione di Vinegia’ by Jacopo d’Albizzotto Guidi, according to whom some vessels ‘carry olive oil, wheat and grains (*valonie*) / others carry cheese coming from the Greek lands (*Romania*),/ and many carry ash and cotton / coming from the Levant and Syria’.⁴¹⁸ A deliberation of 1394 by the Venetian Maggior Consiglio listed four main uses for privately-owned vessels, namely to carry wines from Crete and the Greek territories, to load cotton in Syria, to transport wheat from Turkey and Greece, and finally to import salt, ‘whose travels were almost all those that supported our unarmed vessels’.⁴¹⁹ In 1415 the ‘Morosini Chronicle’ noted that ‘endless ships and other smaller vessels left Poreč and Rovinji, from all Istria, to load wine from the Marche and Crete, and cotton from Siria, and wine, cheese, and alum, and other greasy food to be sold’.⁴²⁰ These four cases allow us to appreciate the link between production, consumption and exchange in the city, with particular reference to beverages and commodities in bulk. They also highlight the importance of inter-Adriatic

⁴¹⁸ Jacopo d’Albizzotto Guidi, *El sommo*, chapters 3 and 4, online edition <http://www.bibliotecaitaliana.it/testo/bibit000236> (30/05/25).

⁴¹⁹ASVe, Maggior Consiglio, Deliberazioni, Leona, f. 76v (18/07/1394): ‘et si umquam fuit tempus dandi largitatem et subventionem navigiis disarmatis est modo de quibus per Dei gratiam terra nostra satis est bene furnita, quorum iuvamentum multum deficit, specialiter propter conditionem vinorum Crete et Romanie, pro quibus navigia non sunt itura ad insulam nostram Crete nec Mothonum, sicut solebant et eciam (sic) propter novitates Syrie, pro quibus navigia euntia ad dictas partes non haberent suum drictum de gothonis ac eciam (sic) non est opus quod dicta navigia vadant ad partes Romanie nec Turchie pro conducendo huc frumentum, sicut est satis omnibus manifestum, nec eciam (sic) dicta navigia habent iuvamentum ad eundum pro sale, quia non possunt se sustinere ad viagium salis, que quidem viagia erant illa de quibus quasi omnia navigia nostra disarmata se sustinebant et habebant iuvamentum,

⁴²⁰ *The Morosini Codex*, §64, ch. 323 (03/11/1415) <https://engineeringhistoricalmemory.com/post/1415-11-03-morosini-codex-%c2%a7064-0323/> (30/05/2025): ‘Avesemo eciamdio de nuovo, lo luni di avanti, di tre del mexe dito de novenbrio de M IIII cento XV, // a partise da Parenzo e Rovigno, per l’Istria tuta, pluxor nostre nave, e altri pluxor naviliu pizoli da vini de la Marcha e de Chandia e de Soria da gotoni, vini e formaio, e ’lume, e altra grasa de marchadantia’.

exchanges and the collaboration of Venetian merchants with those of other cities on both shores of the Adriatic, such as Ancona or Dubrovnik.

If we look at one of the very few surviving fiscal sources from the fourteenth century in Venice, the register of pardons for smuggling (which in medieval Venice included direct trade between the shores of the Adriatic without putting into Venice) for the years 1331-34, already mentioned in the previous chapter, we notice this same pattern.⁴²¹ By looking at these pardons, fully summarised in Appendix E of this thesis, we can notice several patterns. First, we might notice the frequent presence of citizens of other Adriatic cities - such as Rimini, Pag, Rhodes, Puglia, Ancona, Grado, Koper, Ravenna, Piran, Trieste, Muggia and Dubrovnik - onboard Venetian vessels. More importantly we might surmise the importance of coast-to-coast shipping, an activity dominated in by non-patricians, including butchers, barbers, and sheath-makers. Of the roughly 115 pardons, only fifteen concern patricians, while the remaining 100 were granted to artisans, boatmen, or non-patrician merchants. The trade routes described in this table clearly illuminate the multiple dimensions of trade: coastal and regional trade (between Turkey and Alanya, Rimini and Venice, Ravenna-Mantova-Rimini, Istria and Venice, Abruzzo to Pesaro, Latisana to Venice, Poreč-Umag, Constantinople to Cyprus, Turkey-Crete, Venice-Cres, Crete-Cyprus, Aquileia-Grado, Koper-Chioggia, Poreč-Pula) as well as international trade with Puglia, Crete, Trabzon, Constantinople, Cyprus, Sicily, Mallorca. There is no doubt, too, that Venetians were present in the western Mediterranean . Nigro Cocco triangulated between Venice, Sicily, Cagliari, and Mallorca, in addition to making frequent crossings between the two shores of the Adriatic (Trani-Zadar-Venice, Zadar-Rimini-Venice, Aquileia-Grado-Puglia, Trieste-Vrsar-Zadar).

A look at Appendix E suggests that coastal trade was not limited to a single commodity, as we find all sorts of merchandise: agricultural products like wheat, raw commodities like timber and alum, semi-manufactured products like cotton and flax, and also textiles and furs, animals,

⁴²¹ ASVe, Cassiere della bolla ducale, Grazie, Reg. 5, fols. 1-51v, 1331-1334. The full register has been summarised for the period 1331-1334 in Appendix E.

beverages, foodstuffs including salt, and metals such as iron. We can also appreciate how often Venetian ships bypassed Venice altogether, either tramping along the coasts of places like Istria or the Marche or crossing the Adriatic. In the pardon granted to Andreolo Martinazzo we read explicitly that he ‘did not import the wheat into Venice, as he should have, following the said orders’.⁴²² Despite Venetian legislation mandating Venice as a port of call, most of the ships fined simply avoided the port of Venice, and often triangulated between the two shores of the Adriatic, from Puglia to Dubrovnik and thence to Venice, thus Puglia, Marche and Istria feature prominently in this summary of Adriatic connectivity, often in conjunction with fluvial trade coming from the Po river. We can also appreciate the different scales of investment, ranging from the modest sixteen ducats of Marco Petenario to the 2,640 ducats of Nigro Cocco. This source captures an important moment of Venetian trade, when the *muda* system was not yet fully operational. It also bears witness to the variety of Adriatic shipping and to the importance of the import of foodstuffs, beverages, and raw materials like alum into Venice. The references in Appendix E clearly show that Venetian trade did not have a single privileged direction, but that several trade routes overlapped through the Adriatic. For all the pretensions of the Venetians, the Adriatic was not the Venetians’ Gulf, but was a space inhabited by the merchants of several other Adriatic polities. As Rowan Dorin remarked in relation to the thirteenth century ‘the influence of Venice was felt throughout the Adriatic, but not all sea routes led inexorably toward the lagoon city. Because the sea was navigable, intra- Adriatic trade was conducted both laterally (that is, along a given coast) and transversally (between opposing coasts).’⁴²³ We can also appreciate how trade did not just include the patricians. In fact, we have seen both in the four case studies and in the register of pardons that non-patricians had their own agency in the import / export of raw commodities, even modest boatmen or innkeepers.

⁴²² ASVe, Cassiere della bolla ducale, Grazie, Reg. 5, f. 2r (16/11/1331) : quia certam quantitatem frumenti onerati in partibus Turchie Venecias conducendi vendidit vel expedit ad partes Candelor, non conducens ipsum Venetias, ut debebat per ordines antedictos.

⁴²³ R. W. Dorin, ‘Adriatic Trade Networks in the Twelfth and Early Thirteenth Centuries’, in C. Morrisson (ed.), *Trade and Markets in Byzantium* (Washington, 2012), 252.

5. Venice compared

We have seen that Venetian shipping rested on the integration of multiple trade circuits and on the transport of multiple types of commodities. By looking at production, local exchange, and commerce, we have been able to see how Venice was also an important production centre; that it was not merely an entrepôt for international change but also a redistribution point for local wares; and that non-patricians dominated coastal trade, a key dimension of Venetian shipping. In order to gauge whether this was a unique feature of Venice or whether this was a pattern shared by other Mediterranean cities, I will present here a comparison with the main counterparts of Venice, that is Genoa and Barcelona, based on the existing bibliography. This is all the more worthwhile because Genoa and Venice are sometimes simplified as two opposing polarities of trade, one prospering thanks to trade in bulk and the other thriving on the transport of precious materials. This was the framework, for instance, of a debate between two leading historians of Venice and Genoa of the last century, Lane and Lopez. In 1964 Lane penned a polite but firm rebuke of an article by Lopez regarding the decline of Genoa after the Black Death. The Genoese historian had identified one main reason behind what he defined as ‘an irreparable setback’ in the late fourteenth century, namely the shift from precious products to commodities in bulk as the staples of Genoese commerce. As the author put it: ‘had the Genoese been content with shifting from quantity to quality in every economic sector, they would have been lumped together with the other Italian merchants’.⁴²⁴ At the end of the article Lopez argued that the transition from galleys to round ships was the main cause of economic decline, leading to vessels so large that they were physically unable to put into smaller ports. The increased efficiency in the sailors-to-cargo ratio induced by the carracks would have spelled doom for thousands of seamen. Lane refuted Lopez’s argument relating to Genoa, which he suspected to be directed at him, affirming that the use of private ships and the specialisation of

⁴²⁴ R. S. Lopez, ‘Market Expansion: the Case of Genoa’, *The Journal of Economic History*, 24/4 (1964), 445-64.

shipping was not, *per se*, a factor of decline, quite the contrary. He concurred with Lopez on Venetians abandoning tramping in favour of longer voyages, but he also remarked that it was Genoa that ‘made a specialty of the kind of ship best fitted for the transport of a key commodity, alum, on a very long voyage, from the Aegean to the English Channel’.⁴²⁵

The contention that Venice traded mainly in precious products, and that Genoa shipped mainly commodities in bulk has been challenged by historians of both cities. The role of cabotage has been acknowledged for Genoa perhaps more than it has been for Venice. Recent studies on Savona, the port devoted to cabotage trade, have shown how Genoa used it to operate a distinction between the different types of shipping, channelling tramping and regional trade towards Savona.⁴²⁶ More recent studies, like those of Enrico Basso, have equally challenged the idea that alum was the only dimension of the Genoese economy, highlighting the role of other commodities in bulk like oil, and the small but economically significant import of spices. According to Pegolotti, 54,000 *cantara*, that is 2,573 tons,⁴²⁷ of alum were exported each year by the Genoese, but they also imported spices from the western Mediterranean, as well as precious mastic, even though the staples of their trade were bulk commodities. As Basso recently summarised:

If we analyse the commodities most frequently mentioned in notarial records, apart from alum, we find a limited presence, significant as it may be in terms of absolute value, of spices and luxury products. The majority of cargoes were made of salt, grain, and woad, wine, oil and dried fruit shipped towards the Atlantic ports. All these cargoes, from the 1330s, were not shipped on galleys, but on *naves*, a sign of

⁴²⁵ F. Ch. Lane, ‘Discussion of Lopez Paper’, *The Journal of Economic History*, 24/4 (1964), 466.

⁴²⁶ L. Balletto, ‘Commercio interno e navigazione di cabotaggio in Liguria nel basso medioevo’, in *Mercati e consumi. Organizzazione e qualificazione del commercio in Italia dal XII al XX secolo* (Bologna, 1986), 261-74. On the economy of Savona see A. Nicolini, *Savona alla fine del Medioevo (1315-1528). Strutture, denaro e lavoro, congiuntura*, 2 volumes (Novi Ligure, 2018).

⁴²⁷ Pegolotti, *La pratica*, cit., 367-370.

the ongoing change.⁴²⁸

Genoese trade could not be reduced to a single product. This has been shown convincingly in a magisterial work by Maria Giagnacovo,⁴²⁹ who has used the records of the Prato merchant Francesco di Marco Datini to trace the types of products for sale in Gena. They ranged from textiles to alum, but the core of its trade remained commodities in bulk, harvested all over the western Mediterranean, the Black Sea, and Syria, as well as slaves. The comparison between Genoa and Venice suggests that both specialised in the transport of commodities in bulk after 1348, and that they pursued the same strategy of employing round and flat-bottomed ships (*naves* in the case of the Genoese, cogs in the case of Venetians), despite one operating mainly in the western Mediterranean, and the other in the eastern half. In both cities, raw commodities like alum or potash were crucial, either for redistribution or for local consumption. More importantly, the very distinction between precious and bulk needs to be blurred. As the anthropologist Arjun Appadurai remarked in *The Social Life of Things*:

The fact is that the line between luxury and everyday commodities is not only a historically shifting one, but even at any given point in time what looks like a homogeneous, bulk item of extremely limited semantic range can become very different in the course of distribution and consumption. Perhaps the best example of a humble commodity whose history is filled with cultural idiosyncrasies is sugar. [...] The distinction between humble commodities and more exotic ones is thus not a difference in kind, but most often a difference in demand over time or, sometimes, a difference between loci of production and those of consumption. From the point of view of scale, style, and economic significance.⁴³⁰

⁴²⁸ E. Basso, 'Tra apogeo, crisi e trasformazioni: gli spazi economici di Genova nel Trecento fra Mediterraneo, Atlantico e Mar nero', in G. Petralia et al. (eds.), *Spazi economici e circuiti commerciali nel Mediterraneo del Trecento. Atti del Convegno Internazionale di Studi Amalfi, 4-5 giugno 2016* (Amalfi, 2017), 192.

⁴²⁹ M. Giagnacovo, *Appunti di metrologia mercantile genovese. Un contributo della documentazione aziendale Datini* (Florence, 2014).

⁴³⁰ A. Appadurai, *The Social life of Things: Commodities in Cultural Perspective* (Cambridge, 1986), 40.

The reliance on bulk commodities is in fact a leitmotif of Mediterranean trade. Describing the Mediterranean between 300 and 1100, Archibald R. Lewis noted in 1978 that ‘most commerce which made use of the Mediterranean and Black Seas – perhaps as much as 90 percent of it – always consisted of bulk commodities like wheat, olive oil, fish, and other foodstuffs or salt, timber, metals, wool, and hides. Finished wares, luxury goods, and high-priced commodities like spices, though very valuable, were always only the frosting on the maritime commercial cake’.⁴³¹ His conclusion mirrors closely the results of Jessica Goldberg’s analysis of Cairo’s Geniza, a fundamental repository of commercial documents from eleventh- and twelfth-century Egypt. A thorough analysis of 687 such commercial letters has led Goldberg to conclude that ‘everyone relied on regional production – which usually meant processed primary production. Greater wealth and political connections did not lead merchants to abandon such regional production for transit goods or high-end luxuries’.⁴³² Equally, speaking of medieval Muslim trade in the later Middle Ages in the *New Cambridge History of Islam*, Olivia R. Constable remarked that ‘many of the commodities traded within the Mediterranean were bulky and heavy items that were more useful than luxurious’.⁴³³ Nor was this variety of products a characteristic of the Islamic world alone.

Two other trading cities of the medieval Mediterranean present a similar pattern. In the case of Valencia around 1450, the staples of its trade with Italy were wheat, salt, and Iberian wool exchanged for spices, dyes, textiles, metals, and different types of papers from Liguria; fruit, salt, sugar, furs, and clothes in exchange for cereals, alum and textiles from Tuscany and Lazio. As for trade with Venice, the main items of the exchange were canvases, slaves, and wool,

⁴³¹ A. Lewis, *Mediterranean Maritime Commerce, A.D. 300-1100. Shipping and Trade* in A. R. Lewis (ed.), *The Sea and Medieval Civilizations. Collected studies* (London, 1978), Essay XII, 1-2.

⁴³² J. Goldberg, *Trade and Institutions in the Medieval Mediterranean. The Geniza Merchants and their Business World* (Cambridge, 2012), 289.

⁴³³ O. R. Constable, ‘Muslim Trade in the Late Medieval Mediterranean World’, in M. Fierro (ed.), *The New Cambridge History of Islam: Volume 2, The Western Islamic World, Eleventh to Eighteenth Centuries* (Cambridge, 2010), 638.

exchanged for cloths, spices, and Mediterranean leather.⁴³⁴ In the fourteenth century, exports seem to have been even more precisely limited to bulk commodities, being confined chiefly to fish, tallow, candles, tar, metals, and timber.⁴³⁵ This is a trend that continued well into the fifteenth and sixteenth centuries. The work by Jacqueline Guiral-Hadziiossif on the economy of Valencia in the Early Modern period has highlighted how the main export of the city in the fifteenth century was wheat, and that the main imports were raw materials, and manufactured or semi-manufactured goods.⁴³⁶ Notable examples include cheese, fish, and oil (also used for soap). Another staple of the imports were raw materials for the textile industry (such as cotton, flax, and hemp).

The economy of medieval Barcelona was equally linked to the transport of commodities in bulk. Gloria Polonio Luque has reconstructed the products mentioned in *commenda* contracts from Barcelona between 1349 and 1450: 44% of documents mentioned cloth and canvases, 7% cash and precious metals, 6% coral, 5% saffron, 3% honey, and 2% leather, oil, and hazelnuts.⁴³⁷ The 2005 study by Damien Coulon on the oriental trade of Barcelona has reached similar conclusions, even though it has also laid bare the importance of spices starting from the last decades of the fourteenth century. Even so, the export of Barcelona clearly still constituted a variety of commodities in bulk, such as cloth. Coulon describes in great detail all the different exports of the city, spanning textiles, both Catalan and foreign, precious metals, metals, and foodstuffs, underlining how ‘between 1330 and 1430, except for coral, more expensive items

⁴³⁴ D. I. Luis, *Valencia e Italia en el siglo XV. Rutas, mercados y hombres de negocios en el espacio económico del Mediterráneo occidental* (Vilareal, 1998), 410-11.

⁴³⁵ J. Hinojosa Montalvo, ‘Aspectos del comercio exterior valenciano en el siglo XIV (1351-1378)’, *Anales de la Universidad de Alicante*, 12 (1999), 214-216

⁴³⁶ J. Guiral-Hadziiossif, *Valence: Port méditerranéen au XVe siècle (1410-1525)* (Paris, 1986), 293. For export-import see chapter 5 passim (293-333).

⁴³⁷ G. Polonio Luque, ‘Exportación e importación en y desde el Mediterráneo en la Baja Edad Media. Mercaderes, mercancías y rutas comerciales (1349-1450)’ (PhD thesis, Universitat de Barcelona, 2012), 276. On Catalans in the medieval Mediterranean see F. Sabaté, *The Crown of Aragon: A Singular Mediterranean Empire* (Leiden, 2017). For further bibliography M. Ladero Quesada, ‘La historia económica medieval hispánica’, in F. Ammannati (ed.), *Dove va la storia economica? Metodi e prospettive. Sec. XIII-XVIII – Where is Economic History Going? Methods and Prospects from the 13th to the 18th Centuries* (Florence, 2011), 105-42.

decline in favour of the cheaper ones'. He also highlights how exports were not made up of spices only, but included resins and dyes, cotton and flax, sugar, and textiles, while slaves featured prominently.⁴³⁸ In short, exactly as in the case of Genoa, the economy of Catalonia rested upon the commercialisation of commodities in bulk, and shows the same variety as that of Genoa.

We can appreciate, in the cases of Genoa, Venice, Valencia, and Barcelona, that commodities in bulk and raw materials played a crucial role in the economy of the fourteenth century. Local connectivity mattered and in a sense the observations by Lewis on the characteristics of medieval trade in the early Middle Ages are echoed by the trade circuits of the fourteenth century. Genoa, Venice, Valencia, and Barcelona, despite differences in their shipping, all clearly benefited from the increased cargo capacity of large vessels. The case of Venice prompts us to reflect more carefully on the interplay between the state-owned galleys, the large cogs that supported travel of galleys or that were bound together for cotton-harvesting in Syria, and the 'background noise' of tramping and cabotage that coexisted alongside international trade in all the centres we have mentioned. The tripartition of shipping makes Venice comparable to its medieval counterparts. Equally, it is clear that the diversification of commodities was a characteristic shared by all of these cities.

Conclusion

Michel Balard, one of the leading historians of Genoa in the twentieth century, and a thorough explorer of Genoese imports from the Levant, described the medieval Mediterranean and medieval shipping in these terms:

Some larger vessels for spices; a multitude of vessels, from the smallest boats to specialised ships to carry grains; a focus on the export of luxury commodities by the

⁴³⁸ Coulon, *Barcelone et le grand commerce*, cit., Chapter VI and VII, quote from 424.

great harbour metropolis, but also a wide-ranging redistribution; a fragmentation of the trade flows of cereals. These are the contrasts between the two great flows of foodstuffs that dominate Mediterranean shipping.⁴³⁹

His conclusion echoes closely the dynamics of exchange in Venice. In this chapter, we have seen three important inter-related aspects, namely the interplay between precious and voluminous commodities, the products for sale in medieval Venice and the circuits of regional trade, and the merchants who undertook these ventures. On the first point, I have argued that exotic wares and mundane goods were complementary, and have noted that Venetians described goods referring to weight units, rather than their value. I have also shown, in the first section, how production in Venice was not confined to a handful of precious commodities. Venice was a city of craftsmen, not just of merchants: the presence of bell-founders, blacksmiths, and tilers in the city was essential to serve the local population and for regional trade. As shown by Dorigo's survey of the topography of medieval Venice, artisanal activities were spread across the city, not just confined to the Giudecca, the Arsenal, or Murano, and did not stop at enamelled glass and brocades. As for exchange, I have shown the hundreds of products that could be found in Venice, be they commodities in bulk, dyes and resins, foodstuffs, beverages, or textiles. Venice was a city where very mundane goods like capers could come from places as far apart as Manfredonia in Puglia and Alexandria, and wool arrived from the entire Mediterranean, furnishing the customer with the option among different qualities, normally minutely described in trade manuals as Pegolotti's. The strong entanglement between trade and industries whose raw materials had to be fetched from outside Venice is another important element of this analysis. Woad and alum enabled the boom of the textile industry in Venice and Northern Italy, while potash and olive oil, as well as pebbles, were crucial for the making of soap and glass. In the section about trade, I have reflected on the overlapping of trade circuits based on both a quantitative analysis of shipping and a qualitative analysis of four

⁴³⁹ M. Balard, 'Les transport de denrées alimentaires en Méditerranée à la fin du moyen âge', in: K. Friedland (ed.), *Maritime Food Transport* (Cologne, 1984), 104.

case studies from the archives of the Avogaria. Both have revealed how Venetians did not simply ‘pass by the Adriatic’ but inherited distinct trade areas, as well as highlighting the role of foreigners and non-patricians in the trade networks of the Republic. Local, regional, and transnational trade are not at all antithetical and, as happened in the Geniza where some of the richest merchants invested in flax, so in Venice a family like the Vendramin made its fortune through soap-making. When we compare Venice with other Mediterranean centres we might appreciate both similarities and differences. Cabotage, for instance, was important for Genoa, Catalonia, Valencia, and Venice in equal measure. The registers of pardons, capturing actual trade routes rather than theoretical prescribed itineraries, are particularly illustrative of the intense coastal trade sustained by the merchants of Venice or by foreign merchants bound for Venice. In the absence of fiscal sources, they point to an important dimension of trade that coexisted alongside the large cogs and the *mude*. Equally, the variety of products for sale in Venice is mirrored by the extensive list of produced wares produced in Genoa for the Datini Company and studied by Giagnacovo. Technical advancements of shipping and the increasing demand of proto-industries, one mutually influencing the other, clearly encouraged the transport of voluminous items, especially when they could be stowed as ballast. Even though Venetian and Genoese shipping were apparently different, in fact they both relied on a tripartite shipping system and on the integration of multiple trade circuits. As for Venice, it should be noted that unarmed vessels were crucial within the trade networks of the city, that non-patricians dominated regional trade, and that there was no dichotomy between light and bulky commodities.

Chapter 3

The merchants of - and in - Venice

In this chapter I will address three distinct yet interrelated themes: the vocabulary for trade and traders in medieval Venice, the mentality and education of the Venetian merchant, and the form of partnerships between merchants, and the trust-building mechanisms that underpinned them.

In the first section, I will focus in particular on who was identified as a merchant in medieval Venice, using both commercial and deliberative sources, highlighting how this term also referred to shipowners, qualified artisans, *cittadini* (a social category described in the previous chapter), and the *popolo*.⁴⁴⁰

In the second section, I will reflect on two virtues required of the merchant: *pratica* - or experience -and morality. I will show what notions were inherent to the education of the merchants and what moral virtues he was urged to adhere to. The mentality of the Venetian merchant has mostly been explored either through commercial correspondence⁴⁴¹ or by reference to the dossiers of individual merchants, such as the account books of Andrea Barbarigo studied by F. Lane.⁴⁴² Here, I will focus instead on commonplace books - a distinctive feature of Venetian mercantile culture. Building on seminal research by Eve C. Wolynes and Erin Maglaque,⁴⁴³ I will underscore how these texts can offer us a unique insight into the ethics of the Venetian merchant. These texts provide us with an important source on

⁴⁴⁰ On the agency of the *popolo*, shipwright in particular, through charitable donations see I. Iordanou, 'Pestilence, Poverty, and Provision', cit. and more generally C. Judde De Larivière and R. Salzberg, 'The People Are the City. The Idea of the Popolo and the Condition of the Popolani in Renaissance Venice', *Annales. Histoire, Sciences Sociales*, 68/4 (2013), 1111-1140. The upper level of the *popolo* has been branded 'a wealthy petite bourgeoisie', see Hocquet, *Merchant*, cit., 12.

⁴⁴¹ U. Tucci, 'La psicologia del mercante veneziano nel Cinquecento', in Id. (Ed.), *Mercanti, navi, monete nel Cinquecento veneziano* (Bologna, 1981), 43-94.

⁴⁴² Lane, *Barbarigo*, cit.. and also Id., 'Ritmo e rapidità di giro d'affari nel commercio veneziano del Quattrocento', in *Studi di onore di Gino Luzzatto* (Milan, 1949), vol. 1, 254-273.

⁴⁴³ E. Wolynes, 'Migrant Mentalities', cit. and E. Maglaque, 'Venetian Humanism', cit.

the multifaceted knowledge required of a young man entering the trade.⁴⁴⁴ This included history, arithmetic, geometry, seafaring and astronomy.⁴⁴⁵ They belong to a tradition of arithmetical treatises known as *libri d'abaco*,⁴⁴⁶ which often contain both abstract mathematical problems and what has been termed 'recreational math'. We have seen one such example in chapter 1 of this thesis, in the discussion of ships and their representation in mercantile culture.⁴⁴⁷ I will use commonplace books to investigate the moral values they circulated, cross-referenced with the language found in merchants' wills - a field of inquiry pursued for Venice by Mueller, especially in relation to the wills of bankers.⁴⁴⁸

In the third part of this chapter I will focus on the way that capital could be entrusted to fellow merchants, and the ties that were so created, and the mechanism of trust that underpinned them. I will highlight in particular one aspect that distinguished Venetian merchants from their Tuscan or Genoese counterparts, namely the reliance on *fraterne* - literally, fraternal partnerships - as the main form of commercial association in late-medieval Venice,⁴⁴⁹ often coupled with short-term ad-hoc companies, as shown by the case study of Marco

⁴⁴⁴ U. Tucci has explained how *libri d'abaco* provided both mercantile knowledge and moral norms, see U. Tucci, 'La formazione dell'uomo d'affari', in F. Franceschi et al. (Eds.), *Il rinascimento italiano e l'Europa*. Volume 4. *Commercio e cultura mercantile* (Vicenza, 2007), 483. For the entanglement between merchants and morality in these manuals see Tann, 'Merchants', cit., 128-135.

⁴⁴⁵ On education in Venice see G. Ortalli, *Scuole e maestri tra Medioevo e Rinascimento. Il caso veneziano* (Bologna, 1996), largely based on E. Bertanza and G. Dalla Santa, *Documenti per la storia della cultura in Venezia*. Vol. 1. *Maestri, scuole e scolari in Venezia fino al 1500* (Venice, 1907). A sixteenth-century survey estimated that in Venice in 1587 there were 245 teacher and about 4,625 pupils, roughly 26% of the male population aged 6-15. See P. F. Grendler, *Schooling in Renaissance Italy: Literacy and Learning, 1300-1600* (Baltimore, 1991), 42-70.

⁴⁴⁶ For a very detailed survey of the extant specimina (about 300) see W. Van Egmond, *Practical Mathematics in the Italian Renaissance. A Catalog of Italian Abacus Manuscripts and Printed Books to 1600* (Florence, 1980). For their use as educational tools see F. Botana, *Learning through Images*, cit. 156-189. For the types of arithmetical problems proposed in these books, often linked to the practicalities of trade see J. Sesiano, *Mathematical Recreations in the Middle Ages* (Lausanne, 2023), on currency exchanges in these books see instead L. Travaini, *Monete, mercanti e matematica: le monete medievali nei trattati di aritmetica e nei libri di mercatura* (Milan, 2020).

⁴⁴⁷ See Image 19.

⁴⁴⁸ R. Mueller, 'Sull'establishment bancario veneziano. II banchiere davanti a Dio (secoli XIV-XV)', in G. Borelli (ed.), *Mercanti e vita economica nella Repubblica Veneta (Secoli XIII-XVIII)* (Verona, 1985), vol. 1, 45-103.

⁴⁴⁹ For an example of their functioning see Mueller, *Money*, cit., 516-543 and M. Ryabova, 'Venetian Trading Firm of the Soranzo Brothers (1406-1434) and Its Commercial Network', in G. Nigro (ed.), *Reti marittime come fattori dell'integrazione europea* (Florence, 2019), 229-254 and S. Montemezzo, 'Fra pubblico e privato: la fraterna veneziana nel commercio del secondo Quattrocento', *Ricerche di Storia Economica e Sociale*, 3/1-2, 7-34.

dall'Ingegneri. I will also reflect upon the way that trust was maintained between merchants, using various sources including wills, memoranda, and letters, underscoring the challenges faced by Venetian traders in finding reliable agents and in ensuring that written instructions were carried out even after the death of a merchant.

1. The vocabulary for trade and traders in medieval Venice

1.1 *Mercadante, mercato, mercanteggiare* - words for trade and traders

It is important to clarify who could trade in medieval Venice in order to understand who could be identified as a merchant. The possibility of trading in Venice was granted or curtailed depending on political and economic considerations, and was also the subject of treaties that Venice signed with other polities. As a general outline, one can say that in Venice there was a hierarchy, with the patricians at its pinnacle, followed by the *cittadini originarii*, the citizens *de intus* and *de extra*, those only *de intus*, then the subjects of Venetian dominions, and all others.⁴⁵⁰ Patricians were the ruling elite of the city, *cittadini originarii* were native-born of Venice,⁴⁵¹ whilst the citizens *de intus* and *de extra* acquired citizenship after a period of dwelling in the city, provided that they paid *onera et factiones* - that is, all taxes imposed upon native Venetians.⁴⁵² The

⁴⁵⁰ Bellavitis, *Identité*, cit., 19-63; R. Mueller, *Immigrazione e cittadinanza*, cit.; S. R. Ell, 'Citizenship and Immigration to Venice, 1305–1500' (PhD thesis, University of Chicago, 1976).

⁴⁵¹ On the *cittadini originari* see J.-C. Hocquet, 'Solidarités familiales et solidarités marchandes à Venise au XIVe siècle', in C. Gauvard (ed.), *Les élites urbaines au Moyen âge* (Paris, 1997), 227-255; A. Zannini, *Burocrazia e burocrati a Venezia in età moderna: i cittadini originari (sec. 16.-18)* (Venice, 1993); M. Casini, 'La cittadinanza originaria a Venezia', cit; R. C. Mueller, 'Espressioni di status sociale a Venezia dopo la serrata del Maggior Consiglio', in *Studi Cozzzi*, cit., 53-60; Grubb, 'Elite citizens', cit. and G. Zordan, *Le persone nella storia del diritto veneziano prestatutario* (Padua, 1973). On the economic activities in the second half of the fifteenth century see J. R. Wheeler, 'The Sestiere of San Polo. A Cross Section of Venetian Society in the Second Half of the Fifteenth Century' (PhD thesis, University of Warwick, 1995), in particular 117-129 and 226-228.

⁴⁵² On foreigners acquiring Venetian citizenship see A. Bellavitis, 'Per cittadini metterete : La stratificazione della società veneziana cinquecentesca tra norma giuridica e riconoscimento sociale', *Quaderni storici*, 89 (1995), 359-83; L. Molà and R. Mueller, 'Essere straniero a Venezia nel tardo Medioevo: accoglienza e rifiuto nei privilegi di cittadinanza e nelle sentenze criminali', in S. Cavaciocchi (ed.), *Le migrazioni in Europa. Sec. XIII-XVIII* (Florence, 1994), 839-51.

key difference was that *de intus* citizenship granted the privilege to trade fully within the city, as well as to invest in real estate in the city, while the *de extra* meant that a foreigner could trade with the Levant as well, or, to be more precise, ‘non-Venetian merchants were not allowed to use Venice as a transit-station for trade with the Levant’.⁴⁵³ Venetian citizenship was clearly an economic tool. As Fusaro has remarked: ‘the level of citizenship had important consequences for economic activities, especially trade. This was highly regulated, and participation in its most lucrative branch – the Levant – was allowed on the basis of citizenship’.⁴⁵⁴ This distinction was not lost on foreigners, either. Francesco di Balduccio Pegolotti remarked that ‘in Venice, no goods from the Levant can be shipped by land or by sea by a foreigner, but only by citizens, under pain of losing 50% of the value of the cargo’.⁴⁵⁵ To quote Isabella Cecchini and Pezzolo, ‘while there were no juridical limitations for anyone willing to participate in local trade, there were specific regulations to access medium-and long- range trading’.⁴⁵⁶ When the Republic allowed all foreigners to trade freely in the city, it normally did so by using expressions such as ‘may the land be open to foreigners’ (*terra aperiatur forensibus*). In 1296, the Maggior Consiglio stipulated that ‘the land will be open to foreigners, who might sell, and buy, and store in their warehouses all products coming by sea, except *grassa*’,⁴⁵⁷ even though the matter of whether a ship belonging to a Venetian could be sold to a foreigner was more contentious.⁴⁵⁸ In 1355, however, the same Maggior Consiglio concluded that ‘opening of our land to foreigners clearly goes against our interests and benefit’, since any merchant who moved to

⁴⁵³ M. Van Gelder, *Trading Places. The Netherlandish Merchants in Early Modern Venice* (Leiden, 2009), 36.

⁴⁵⁴ M. Fusaro, *Political Economies of Empire in the Early Modern Mediterranean. The Decline of Venice and the Rise of England, 1450–1700* (Cambridge, 2015), 178.

⁴⁵⁵ Pegolotti, *Pratica*, cit., 140: ‘In Vinegia non si può mettere nullo avere di Levante, nè per terra nè per mare per nullo forestiere che non sia cittadino di Vinegia sotto pena di lire 50 per libbre 100’.

⁴⁵⁶ I. Cecchini and L. Pezzolo, ‘Merchants and Institutions in Early-modern Venice’, *The Journal of European Economic History*, 41/2 (2012), 97.

⁴⁵⁷ ASVe, Maggior Consiglio, Deliberazioni, Luna, Zaneta, Pilosus, Section Pilosus, f. 203v (29/03/1296): ‘Capta fuit pars quod terra aperiatur foresteriis, qui possint in Veneciis emere, vendere et incanipare omnes mercationes que veniunt per mare sicut quilibet Venetus, salvo quod non possint incanipare grassam’.

⁴⁵⁸ Ibid., 203r, March 1296, ‘Cum per consilium de .XXX. fuit elargatum quod naves possent vendi forensibus’.

Venice and paid taxes could ‘sell and trade his wares as our citizens do, and they can also export the said merchandise and goods - viz. products in bulk and lightweights items and even silver - on our ships, both armed and unarmed’, paying only 1% more than Venetians.⁴⁵⁹ Foreigners could trade in Venice,⁴⁶⁰ but Venetian authorities could restrict the places where they lodged in the city, as in the case of the *fondaco dei Tedeschi*,⁴⁶¹ and they could be explicitly banned from trading in certain items or be excluded from international trade altogether.⁴⁶²

Given this overarching classification of Venetians citizens and the ambivalence over the involvement of foreign traders, we can now examine how Venetians referred to themselves in relation to trade. The first known Venetian merchants - that is the two *negotiatores* Bonus and Rusticus, who smuggled the body of St Mark from Alexandria into Venice in 827 - appear in the very foundation myth of the town, the ‘*Translatio Sancti Marci*’ (ninth century).⁴⁶³ The

⁴⁵⁹ ASVe, Maggior Consiglio, Deliberazioni, Novella, 51r, 09/08/1355: ‘quod ellargare terram forensibus manifeste contradicit utilitatibus et comoditatibus nostris’ [...] quod quicumque forensis, undecumque fuerit, qui de cetero venerint cum sua familia ad habitandum Veneciis et qui ad presens in Venetiis habitans, facientes et supportantes omnia onera et factiones nostri communis realiter et personaliter sicut faciunt proprii cives nostri possint mercari et negociari suum havere et suas mercaciones in Veneciis, sicut facere possunt alii cives nostri et ipsas mercaciones et avere, scilicet mercaciones, tam grossas quam subtiles necnon argentum, quod et quas haberent possint navigare et extrahere de Veneciis cum omnibus nostris navigiis tam armatis quam disarmatis’.

⁴⁶⁰ The bibliography on foreigners in Venice is extensive. I will point here to some introductory works in chronological order. É. Crouzet-Pavan, ‘Strangers in the City? : The Paradoxes of Communitarianism in Fifteenth-Century Venice’, In M. Skoblar (ed.), *Byzantium, Venice and the Medieval Adriatic: Spheres of Maritime Power and Influence, c. 700-1453* (Cambridge, 2021), 365-384; D. Jacoby, ‘Venetian Citizenship and Venetian Identity in the Eastern Mediterranean, Twelfth to Fifteenth Century’, in *Cultures of Empire*, cit., 125-152; R. Salzberg, ‘Mobility, cohabitation and cultural exchange in the lodging houses of early modern Venice’, *Urban History*, 46/3 (2019), 398-418; E. Orlando, *Migrazioni mediterranee. Migranti, minoranze e matrimoni a Venezia nel basso medioevo* (Bologna, 2014), B. Ravid, ‘Venice and its Minorities’, in *A companion to Venetian History*, cit., 449-486 A. Zannini, *Venezia città aperta: Gli stranieri e la Serenissima XIV-XVIII sec.* (Venice, 2009); D. Calabi and P. Lanaro (eds.), *La città italiana e i luoghi degli stranieri XIV-XVIII secolo* (Bari, 1998); D. Calabi, ‘Gli stranieri e la città’, in A. Tenenti and U. Tucci (eds.), *Storia di Venezia*, vol. 5, *Il Rinascimento. Società ed economia* (Rome, 1996), 913-946; and G. Fedalto, ‘Le minoranze straniere a Venezia tra politica e legislazione’, in H.-G. Beck et al. (eds.), *Venezia: Centro di mediazione tra oriente e occidente, secoli xv-xvi: aspetti e problemi*, vol. 1 (Florence, 1977), 143-162.

⁴⁶¹ See P. Braunstein, *Les Allemands à Venise (1380-1520)* (Rome, 2016), 75-199. More generally E. Concina, *Fondaci: Architettura, arte, e mercatura tra Levante, Venezia, e Alemagna* (Venice, 1997) and O. Remie Constable, *Housing the Stranger in the Mediterranean World. Lodging, Trade, and Travel in Late Antiquity and the Middle Ages* (Cambridge, 2004), 306-354.

⁴⁶² Orlando, *Venezia e il mare*, cit., 92: ‘era stata interdotta ai forestieri la partecipazione al commercio internazionale: nessuno scambio poteva essere effettuato se non con la mediazione di un sensale veneziano autorizzato; [...] era vietato agli stranieri acquistare direttamente nelle piazze orientali merci destinate a transitare per il porto’.

⁴⁶³ See M. McCormick, *Origins of the European Economy: Communications and Commerce, A.D. 300-900* (Cambridge, 2001), 238-240 and H. Zug Tucci, ‘Negotiare in omnibus partibus per terram et per aquam’, in *Mercati e mercanti dell’alto medioevo. L’area euroasiatica e l’area mediterranea* (Spoleto, 1993), 51-84.

term *mercadante* features in one of the earliest documents written in Venetian: a treaty agreed by Venice in 1207/1208 with the Ayyubid emir of Aleppo. The version that survives today is a vernacular translation of the *amān* (safe passage) granted by Al-Zahir Ghazi to the Venetians, in which we read that the treaty will cater for ‘all merchants of Venice. Be they safe and sound in their persons and goods’ (‘et avemolo fato a tuti li marcadanti de Venesia, salvi et seguri en aver et en persone’).⁴⁶⁴ The term *mercadante* reappears in an interesting collection of proverbs and poems located in a commonplace book (MS Saibante Hamilton 390 of the Staatsbibliothek, Berlin) dated ca. 1280. The verses from the Latin play *Pamphilus* - ‘convenit externos mercari sepe labores, emptus et ut capiat premia digna labor’ - were therein translated as ‘it usually befits the merchant to take on extreme hardships, to receive suitable prizes from the undertaken toil’ (sovençe fiade coviene ali mercadanti conprar le dererane fadige, açoqué la conprada fadiga dibia recevre degni gueerdoni).⁴⁶⁵

The same text contains one of the earliest mentions of the word *mercato* as an abstract noun in Venetian, as the proverb, ‘pare foro’ (respect the law), was translated as ‘obedis’ alo mercato’ (‘respect the commercial conventions’).⁴⁶⁶ By 1313/15, the verb *mercatanteggiare* appeared in the ‘De regimine rectoris’ by Paolino Veneto, in the metaphorical sense of transforming something into something else: ‘patience is very wise in *marcadandar*, for it transforms vile things into precious ones, such as displeasures into eternal glory’.⁴⁶⁷ The related term *mercadantia* appears in a similar context in another passage of the same work, where Paolino claims that the middle ground between fear and bravery is like the fair price (the *justo presio*) found at the end of a

⁴⁶⁴ G. Belloni and M. Pozza, ‘Il più antico documento in veneziano. Proposta di edizione’, in M. Cortelazzo (ed.), *Guida ai dialetti veneti*, XII (Padua, 1990), 22-23. On Venetian early treaties with Aleppo see M. Pozza (ed.), *I trattati con Aleppo, 1207-1254* (Venice, 1990).

⁴⁶⁵ *Il manoscritto Saibante-Hamilton 390*, ed. M. L. Meneghetti (Rome, 2019), 171, f. 131r, lines 314-15. The translator must have had a Latin version featuring ‘extremos’ rather than ‘externos’.

⁴⁶⁶ *Ibid.*, 4, 3v, line 5, commented at 220 as ‘ubbidisci alle regole della mercatura’.

⁴⁶⁷ Paolino Veneto, *Trattato De regimine rectoris*, ed. A. Mussafia (Vienna-Florence, 1868), 53, ch. 40, lines 30-34: ‘Et è da considerar ke [paciencia] è molto savia da marcadandar, chè de vil cose ella incambia per tropro preciose, çoè desplaxeri per gloria eterna’.

bargain.⁴⁶⁸ By 1366, the cognate term *merçeria* designated an area next to the Rialto, where retailers sold fabrics and cloth.⁴⁶⁹

Without recourse to further examples, it is worth highlighting two important elements. The word *mercadante* appears mostly in the plural, as a label for a whole category rather than as a title for an individual trader. The verb *mercare* and the noun *mercado* refer generically to investments, as in the expression *mandar denari a mercado* - investing money in a given enterprise. The aforementioned case in Paolino suggests that this Franciscan and other authors had objectified the market, giving concrete definition to a complex of practices and norms that regulated - Venetian - trade. The word 'mercato' can also refer in the abstract to the act of selling or exchanging something, as in the case of the 'De regimine rectoris'. In the statutes of the oil measurers, dated 1227, we already find this meaning: 'If I will be informed that any foreigner has traded olive oil (*fecerit mercatum*) with another foreigner, I shall inform the *giustizieri* forthwith'.⁴⁷⁰ In this case, it seems clear that the *mercato* entailed an increase in value and was thus distinct from *baratare*, or bartering goods - a term appearing already in the testament of Pietro Viglioni, written in Tabriz in 1263.⁴⁷¹ The cognate term *merceria*, in medieval Venetian as in modern Italian, refers to the activity of selling textiles and fabrics. The statutes of the mercers, approved in 1271, authorised them to sell 'any type of silk fabric' but also altar linens,

⁴⁶⁸ Ibid., 13, ch. 11, lines 10-15: 'Ancora è da sapere che questo star in meço si è tal como è el presio de le merchadantie, lo qual no è a ponto. Unde si co nu vedemo che per comprar una mercadantia uno pouco più [cara] o un pouco meno no muda justo presio, così declinar un poco o [vos] ad ardimento o [vos] a paura no destruge la vertude de forteca.'

⁴⁶⁹ *Il Capitolare degli Ufficiali sopra Rialto. Nei luoghi al centro del sistema economico veneziano (secoli XIII-XIV)*, ed. A. Princivalli and G. Ortalli (Milano, 1993), 54, ch. 120: 'E li ditti bastasi possa star sotto lo portego, dredo la merçaria da dredo, nanti dali ovetteri'.

⁴⁷⁰ 'Capitolare dei misuratori dell'olio', in *I capitolari delle arti veneziane sottoposte alla giustizia e poi alla giustizia vecchia dalle origini al MCCCXXX*. Volume I, ed. G. Monticolo (Rome, 1896), 77, ch. 4: 'Si sciero quod aliquis forinsecus fecerit mercatum cum aliquo forinseco, manifestabo cicius quam potero illis iusticiariis'.

⁴⁷¹ A. Stussi, 'Un testamento volgare scritto in Persia nel 1263', *L'Italia dialettale*, 25 (1962), 29: 'Ed ancho lasso a questo ser Giorgio piena bailia e podestade di vendere, di baratare, d'i[n]vestire, d'alogare e de conducir queste cose i mano del bailo di Venesia in Achan a rischo e aventura de questa avere.'

flags, canvases, and leather purses.⁴⁷² Having now seen the origin of these words used to describe trade and traders, it is now time to reflect on their use - *mercator* in particular - in the context of late medieval Venice.

1. 2 A city without merchants ?

A paradox of Venice is the absence of the term *mercator* as a title used by merchants. Venetian traders almost unanimously avoided the term in their wills. Even when testators wrote holographic wills (handwritten and not notarised), they adhered to the traditional template: ‘I, [first name and family name], son/daughter/wife of [X, or of the late X], from the parish of [X], so order and dispose my will.’⁴⁷³ Notarised wills followed the same format. The most famous Venetian merchant of the Middle Ages styled himself as ‘I, Marco Polo, from the parish of San Giovanni Crisostomo’ in his testament (1323).⁴⁷⁴ Marin Sanudo Torsello, the author of a celebrated work on the reconquest of the Holy Land, described himself as

⁴⁷² ‘Capitolare dei merciai’, in *I capitolari delle arti veneziane sottoposte alla giustizia e poi alla giustizia vecchia dalle origini al MCCCXXX*. Volume 2, ed. G. Monticolo (Rome, 1905), 308, ch. 2: ‘debeat vendere omnem setam et omne opus sete et omne opus contrafactum, aurum, grisolimam, planettas, panos de altari, cruces, conphalones, bendas, bireta et infullas’; 319-320, ch. 38: ‘quod de cetero omnia laboreria pannorum, cendati et tellarum ecclesiarum [...] facere debeant et teneantur de tella nova; 321, ch. 42 : ‘neque audeat vendere aliquam bursam de corio scletam nec fractam’. In fact, by 1446 the mercers had expanded considerably the list of products they could sell. See R. MacKenney, ‘The Guilds of Venice: State and Society in the Longue Durée’, *Studi veneziani*, 34 (1997), 31-33.

⁴⁷³ On Venetian wills see F. Rossi, ‘Notai e testamenti a Venezia’, in R. Santoro (ed.), *Gli ordinamenti originari degli archivi* (Trieste, 2018), 125-153; F. Sorelli (ed.), *Ego Quirina. Testamenti di veneziane e forestiere (1200-1261)* (Rome, 2015); C. Judde De Larivière, ‘Procédures, enjeux et fonctions du testament à Venise aux confins du Moyen Âge et des Temps modernes. Le cas du patriciat marchand’, *Le Moyen Âge*, 108/3 (2002), 527-563 and M. Ferro, *Dizionario del diritto comune e veneto*, volume II, 2nd ed. (Venice, 1847), 787-788: ‘In quattro modi in Venezia si può fare testamento, cioè a viva voce, alla presenza del notajo e di due testimonii chiamati e pregati, e questo chiamasi nuncupativo. [...] Il secondo modo di far testamento è quello in scriptis, cioè con cedola scritta presentata dal testatore al notajo, alla presenza di due o tre testimonii. [...] Per le venete leggi si può testare anche senza solennità, e cioè in due casi; quando cioè taluno viene colpito da un male improvviso, che non dia speranza di sopravvivere, può disporre dei suoi beni a viva voce alla presenza di due testimoni chiamati e pregati, e questa volontà del testatore viene rilevate ed autorizzata dal consiglio di XL civil nuovo e vale quanto un solenne testamento, che dicesi per brevuario. L’altro caso si verifica quando si trova appresso il defunto una carta tutta scritta e sottoscritta di sua mano, col giorno, mese, ed anno, la quale pure, venendo autorizzato dal consiglio di XL civil vecchio, ha forza e valore di testamento.

⁴⁷⁴ See T. Plebani (ed.), *Ego Marcus Paulo volo et ordino : i segreti del testamento di Marco Polo* (Venice, 2017) and Id. (ed.), *Il testamento di Marco Polo : il documento, la storia, il contesto* (Milan, 2019).

‘Marinus Sanuto, de confinio sancti Severi’ (1343).⁴⁷⁵ There was nothing preventing testators from expressing their profession in their wills. Foreign traders in Venice did so.⁴⁷⁶ For instance, Nicola *quondam ser* Dino Lombardo, from Lucca, styled himself as a ‘silk merchant, inhabitant of Venice’.⁴⁷⁷ Interestingly, however, the only taxpayer explicitly identified as a ‘merchant’ in the 1379 cadastre was a foreigner, Fosco di Zuan Santi, from Rimini, ‘padrone di nave, mercante di vino’, shipowner and wine-merchant, living in the parish of S. Salvador with assets worth 500 ducats.⁴⁷⁸ Venetian authorities applied the label of ‘mercator’ mostly to foreigners. When the Senato granted Venetian citizenship in 1366 to the Cypriot Parisio dei Bonaiuti they specified that he was a ‘providus et discretus vir’, but also a merchant.⁴⁷⁹

Furthermore, even though Venetian merchants seldom referred to themselves as ‘merchants’ whilst in Venice, they were explicitly identified as such abroad. Even a merchant from a modest patrician family, Prosdocimo dalle Frascade, was identified as ‘civis et mercator

⁴⁷⁵ ASVe, PSM, De Ultra, *busta* 253 (Marin Sanudo Torsello). Last will, Parchment, 9th May 1343.

⁴⁷⁶ Germans, for instance, often stated their profession. See C. Hollberg, *Deutsche in Venedig im späten Mittelalter. Eine Untersuchung von Testamenten aus dem 15. Jahrhundert* (Göttingen, 2005).

⁴⁷⁷ ASVe, Notarile, Testamenti, *busta* 571 (Giorgio Gibellino), n. 119, undated (ca 1400): ‘Io Nicolao ser Dini Lunbardi, di Lucha, merchadante di seta, abitatore in Vinegia, in della chontrada di San Leo dello sestieri di Castello’.

⁴⁷⁸ Database *Estimo veneziano del 1379*, R. Mueller (ed.), Entry ‘Fosco di Zuan Santi’, https://estimoveneziano1379.it/record?estimo_id=890 (30/05/25).

⁴⁷⁹ Database *Cives Veneciarum*, R. Mueller (ed.), entry ‘Parisio dei Bonaiuti’, https://www.civesveneciarum.net/dettaglio?lingua=ita&titolo=dettaglio&collocazione=LCR3%3A61%2CN353%20C7%3A72R%20SP1%3A62V%20G16%3A58R&nome_italiano=BONAIUTTI%20%28DEI%29%20PARISIO%20DEI%20FU%20BONAIUTO (30/05/2025).

Venetiarum’ by the Angevin court (1275-77).⁴⁸⁰ The title was not reserved exclusively for patricians, as non-patrician Venetian merchants were also identified as such when acting abroad. A notary from Piran (1299-1305) mentioned ‘Benedictus Cauianus’ as ‘mercator venetus’.⁴⁸¹ Similarly, when Venetian traders operated abroad, they were identified by Venetian notaries as ‘nunc mercator in...’, i.e. ‘now a merchant in...’. The same notary would thus identify the same merchant as merely ‘X, of the parish Y’ in Venice, while specifying that the merchant was a trader when drafting acts abroad.⁴⁸² Venetians abroad identified themselves by the collective term *mercatores*, as in a protest lodged in 1425 against the king of Aragon, in which they affirmed ‘that we have never dealt in illicit contracts, as we are proper and law-abiding merchants’.⁴⁸³ Venetians were only identified as ‘merchants’ when abroad, where they were referred to collectively as ‘merchants’ or singularly as *mercator venetus* or *nunc conversans in partibus ...*’

Foreigners coming to Venice had the impression of a city where merchants thrived. The

⁴⁸⁰ *I registri della cancelleria angioina, volume 13 (1275-1277)*, ed. R. Filangieri (Naples, 1959), 14 (no. 77) and 89 (no. 201). The Dalle Frascade family was a minor patrician family. Niccolò della Frascada was one of the forty-one electors of the doge in 1343, see the database *The Rulers of Venice 1332-1524*, A. Mozzato, B. G. Kohl and M. O’Connell (eds.), <http://rulersofvenice.org/search> (30/05/25), entry surname ‘Frascada’. Presumably the same Nicolò was named ‘sapiens pro factibus Pole’ in 1341. See *Venezia-Senato. Deliberazioni, Reg. XX*, cit., 274, n. 529, 23/09/1342. In 1381, only two Dalla Frascada were inscribed on the cadastre: Nicolò (valued at 500 ducats) living in the parish of S. Marina and Marco (5,000 ducats), living in the parish of S. Giovanni di Rialto, see the database *Estimo Veneziano 1379*, Entry ‘Nicolò dalla Frascada’ https://estimoveneziano1379.it/record?estimo_id=358 and Marco dalla Frascada (https://estimoveneziano1379.it/record?estimo_id=1887), (30/05/25). On the 14th of March 1347, Cecilia, widow of Marco della Frascada drafted her last will. She had a dowry of 1,200 *lire di piccoli* or 375 ducats. See Mueller, *Money*, cit., 423. It is uncertain how far-ranging were their economic activities. In 1335 Marino della Frascada and two associates shipped six *millier* of iron (2,862 kg), worth 37 ducats, in 34 barrels to Constantinople. ASVe, Cassiere della bolla ducale, Grazie, Reg. 5, f. 60v, 12/01/1335: Quod similis gratia fiat Marino de la Frascada, Marco de Creta et Mapheo Francho, fidelibus nostris, qui cum galea Trapesonde in Constantinopoli portaverunt milliaris sex ferri veteris et rupti, videlicet bertanelle, claves et cavacias agudorum valoris lbr. III grossorum et s. XV [...] et officiales dicunt quo per eorum confensionem habent ipsos portasse dicta ferramenta que erant posita in barilibus XXXIII et sunt stricta et non possunt extrahi’.

⁴⁸¹ *Piranske notarske knjige (Zvezek 5). Fragmenti (1289–1305). The Notary Books from Piran (Vol. 5). Fragments (1289–1305)*, ed. Darja Mihelič (Ljubljana, 2009), volume V, 156-159.

⁴⁸² In a loan contract drafted by Nicola de Boateriis in Famagusta in 1360 we find ‘Gracianus Georgio de Veneciis de confinio sancti Moisis nunc mercator in Famagusta quia habui et recepi mutuo gratis et speciali amore nomine nobilis viri domini Pantaleonis Barbo de confinio sancti Pantaleonis’. Only the recipient of the loan is identified as a merchant, not the Venetian lender. See *Nicola de Boateriis. Notaio in Famagosta e Venezia (1355-1365)*, ed. A. Lombardo (Venice, 1973), 27, n. 21 (09/10/1360).

⁴⁸³ Neumann, *Venedig und Aragon*, cit., 304, note 1781: ‘numquam consueverunt facere tales contractus illicitos, sed sunt reales et legale mercatores’.

aforementioned Niccolò da Poggibonsi,⁴⁸⁴ a friar who lived a mere fifteen miles from Siena and thirty from Florence, two significant commercial hubs, was still surprised in the mid-fourteenth century by the fact that ‘tutta gente sono mercatanti’ in Venice, ‘everyone is a merchant’, insofar as they had to fetch any commodities ‘from far abroad’.⁴⁸⁵ Similarly, Jacopo d’Albizzotto Guidi, a century later (1442), remarked that ‘they all learned how to sail, and they were of such shrewdness that they became so conversant in trade that everyone now lives of that profession’ (‘che gl’impararon tutti a navigare; / e fu di tanto ingegno queste genti / che diventarono sì mercatanteschi / che di tal arte tutti fûr contenti’).⁴⁸⁶ In the case of these two ‘Tuscans’, the term ‘merchant’ seems to designate merchants who engaged in international trade, specifically those who traded and sailed overseas. Even the Byzantine envoy to Venice, Demetrios Kydones, who visited Venice in the 1350 and the 1390s, remarked: ‘I would not know what to do there, were I to spend some time therein, for this city - since its inception - has been nothing but the fatherland of traders, and without doing some sort of barter with them or being sent everywhere for trade, staying there idly is very difficult and completely senseless’.⁴⁸⁷ The Milanese Pietro Casola, who dwelt in Venice in 1495, was struck by the variety of merchandise for sale. He was only disappointed by the butchers, and he explained the poor quality of meat for sale by remarking that ‘I do not know how that can be, but for the fact that Venetians are not too concerned with food, intent as they are on trading’.⁴⁸⁸ It is significant that despite

⁴⁸⁴ See images 7-10 and the discussion therein.

⁴⁸⁵ Niccolò da Poggibonsi, *Libro d’oltramare*, ed. A. Bacchi Della Lega, vol. 1 (Bologna, 1881), 6.

⁴⁸⁶ Jacopo d’Albizzotto Guidi, *El sommo*, cit., chapters 3 and 4.

⁴⁸⁷ Démétrius Cydonès, *Correspondance*, ed. G. Cammelli (Paris, 1930), 16, n. 6: ‘Πάλιν δ’ οὐκ ἔχων ὅπερ ἂν αὐτοῦ καθήμενος πράττοιμι, ἐμπόρων γὰρ μόνον ἄνωθεν ἢ πόλις ὡς καὶ αὐτὸς οἶσθα πατρις, καὶ χαλεπὸν καὶ ἄδοξον κομιδὴ μάρτην καθῆσθαι τινα μῆτ’ αὐτοῦ καπηλεύοντα μῆτ’ ἐπ’ ἐμπορείᾳ πλανᾶσθαι πανταχόσε στελλόμενον’. Cf. tr. in French by Cammelli *ibid.* at 16: ‘mais je ne savais, de nouveau, que faire, arrêté là, car tu le sais également, cette ville n’est depuis son origine que la patrie des commerçants et il est bien difficile et bien stupide d’y séjourner sans raison, si l’on n’a pas à y spéculer et si l’on n’est pas envoyé pour errer partout, pour raison de commerce.’

⁴⁸⁸ Pietro Casola, *Viaggio di Pietro Casola a Gerusalemme, tratto dall’ autografo esistente nella biblioteca Trivulzio*, ed. G. Porro (Milan, 1855), 8: ‘Non so da che procedere se non che Veneziani non se curano troppo da mangiare per essere loro tanto intenti a le mercantie’.

foreigners identifying Venetians as chiefly merchants, the inhabitants of the city rarely did so while talking about themselves. Even in their business correspondence, Venetians referred to one another through the language of amicability, e.g. ‘friend and beloved brother’ (‘amigo e fradello carissimo’),⁴⁸⁹ or ‘honourable and beloved elder brother’,⁴⁹⁰ seldom referring even to foreign traders as ‘merchants’.

There are several possible explanations for the absence of a moniker to qualify a merchant as such. I argue that, in the case of Venice, the term did not have a single currency but referred to a plethora of different professions loosely related to trade (including middlemen and artisans). In her studies on the merchants of Zadar, Sabine F. Fabjaneč concluded that the appearance of the term *mercator* in the city from the thirteenth century onwards reflected the gradual formation of a specific social group, culminating with ‘the final closure of the Zadar patriciate and the gathering of non-noble citizens around the school of Sv. Jakov (St James), founded in 1407, in which rich merchants played a crucial role’.⁴⁹¹ In Zadar as in Venice, the term *mercator* appeared in the thirteenth century as a collective noun for a category, as a transient label for someone ‘presently trading in X...’ or as a moniker used when a Zadratine merchant was abroad. In the case of Zadar, a *scuola* was the constituent element for merchants to be easily identified as such. As reconstructed by Andrea Castagnetti, in the Venetian hinterland only Verona had a strong guild of merchants (the *negotiatores*), while in fourteenth-century Padua the *negotiatores* were assimilated with *mercatores pannorum*, viz. cloth merchants, as

⁴⁸⁹ The language informed even official correspondence. The Provveditori al Sal addressed the Conte di Sebenico as ‘spectable et egregio simele de honorevele fradel carissimo’ in 1442. See *Spisi Kancelarije Šibenskog Kneza Fantina de Cha de Pesaro, 1441-1445*, ed. J. Kolanović (Šibenik, 1989), 11 (11/09/1442). As remarked by F. Trivellato, *The Sephardic Diaspora, Livorno, and Cross-Cultural Trade in the Early Modern Period* (New Haven, 2009), 181: ‘The language of friendship, love, and affection was highly utilitarian: it implied reciprocity’.

⁴⁹⁰ ASVe, Miscellanea carte non appartenenti ad alcun archivio, busta 21, Letter from Hama, Pietro to Donato Soranzo, 24th August 1415: ‘honoreveli et amado mahor fradello’.

⁴⁹¹ S. F. Fabjaneč, ‘Pojava profesije mercator i podrijetlo trgovaca u Zadru u XIV. i početkom XV. stoljeća’, *Zbornik Odsjeka za povijesne znanosti Zavoda za povijesne i društvene znanosti Hrvatske akademije znanosti i umjetnosti*, 19 (2001), 90: ‘Te bio završen početkom XV. stoljeća konačnim staleškim zatvaranjem zadarskog patricijata i okupljanjem bogatih neplemenitih građana oko škole sv. Jakova, osnovane 1407. godine, u kojoj su vodeću ulogu imali upravo bogati trgovci’.

happened also in Vicenza and Treviso.⁴⁹² In Genoa as in Venice, the absence of corporations of merchants is often explained by the identification between the ruling elite and trade, rather than manufacturing.⁴⁹³ In fact, the term merchant appears in Venice in the context of the *scuole*.

One aspect of Venetian society which is unique to the city is the proliferation of lay confraternities known as *scuole*, open to Venetians and non-Venetians, patricians and *popolani*.⁴⁹⁴ As Pullan explains: ‘Venetians used the term Scuola to denote several forms of religious society among the laity, many of which were professional associations designed to encourage piety and mutual aid’.⁴⁹⁵ The *scuole* were one of the few domains where the *popolo* had some agency in Venice. As Romano noted: ‘even a cursory examination indicates that the scuole drew their members from a variety of professions and social groups, even including the *popolo minuto*’.⁴⁹⁶ They were also open to women, and in fact the Scuola di San Gregorio only accepted women.⁴⁹⁷ The main distinction between the scuole was between the *scuole piccole* and the *scuole di flagellanti*, also known as *scuole grandi*.⁴⁹⁸ The two differed in terms of size, social

⁴⁹² A. Castagnetti, *Mercanti, società e politica nella marca veronese-trevigiana (secoli XI-XIV)* (Verona, 1990): for Padua, 92, for Vicenza, 106, for Treviso 111.

⁴⁹³ G. Petti Balbi, *Una città e il suo mare: Genova nel Medioevo* (Bologna, 1991), 136 and E. Maccioni, *I tribunali mercantili nei comuni italiani. Giustizia, politica, economia (secoli XII-XV)* (Rome, 2024), 25. F. Lane concluded as much see Lane, *Venice. A Maritime*, cit., 104: ‘Venetian merchants engaged in international trade felt no need of any special organizations, such as guilds, to look after their commercial interests, for their communal government made that its chief concern. No rival in that field was needed or would have been tolerated.’

⁴⁹⁴ To have an idea of the extent of the phenomenon, see G. Vio, *Le scuole piccole nella Venezia dei dogi. Note d'archivio per la storia delle confraternite veneziane* (Costabissara, 2004); F. Ortalli, *Per salute delle anime e delli corpi. Scuole piccole a Venezia nel tardo Medioevo* (Venice, 2001) and P. Fortini Brown, ‘Le scuole’, in A. Tenenti and U. Tucci (eds.), *Storia di Venezia, 5, Il Rinascimento. Società ed economia* (Rome, 1996), 307-354

⁴⁹⁵ Pullan, *Rich and Poor*, cit., 33.

⁴⁹⁶ Romano, *Patricians and Popolani*, cit., 91-118.

⁴⁹⁷ R. MacKenney, ‘Continuity and change in the scuole piccole of Venice, c. 1250–c. 1600’, *Renaissance Studies*, 8/4 (1994), 393.

⁴⁹⁸ G. Ortalli (ed.), *La Scuola grande di San Marco e le scuole in Venezia tra religiosità laica e funzione sociale* (Rome, 2015); J. Glixon, *Honoring God and the City: Music at the Venetian Confraternities, 1260-1807* (Oxford, 2003), 3-42; B. Pullan, ‘The ‘Scuole Grandi’ of Venice: Some Further Thoughts’, in T. Verdon et al. (eds.), *Christianity and the Renaissance Image and Religious Imagination in the Quattrocento* (New York, 1990), 273-301; Pullan, *Rich and Poor*, cit., 33-98. On state control over the scuole see instead W. Wurthmann, ‘The Council of Ten and the Scuole Grandi in Early Renaissance Venice’, *Studi veneziani*, 17 (1989), 15-66 and L. Sbriziolo, ‘Per la storia delle confraternite veneziane: dalle deliberazioni miste (1310-1476) del Consiglio dei Dieci. Le scuole dei Battuti’, in *Miscellanea Gilles Gérard Meersseman*, vol. 2 (Padua, 1970), 715-763.

prestige, and membership, which in the case of the latter tended to drawing members from *cittadini* of Venice rather than foreigners or people bound by a common profession.⁴⁹⁹ The *scuole* were unique insofar as their main offices were restricted in 1410 to *cittadini* who had been in the scuola for at least twenty years,⁵⁰⁰ thereby excluding patricians and the clergy.

In the context of the *scuole piccole*, we find at least three bearing the title ‘dei mercanti’, such as those of Santa Maria e San Francesco dei mercanti at the Frari (1261), San Nicolò dei mercanti (1319), and San Cristoforo dei mercanti (1377).⁵⁰¹ However, as G. Zanon noted, ‘the Scuola dei Mercanti did not attract merchants and traders alone, but rather it gathered together several cittadini from different professional backgrounds’.⁵⁰² It should also be noted that these were not the only confraternities merchants could join. The Scuola di San Giovanni Evangelista, one of the *scuole grandi*, made an exception in 1359 to the quotas of admitted members, to include ‘great merchants of the city of Venice’.⁵⁰³ Merchants may have been motivated to join these confraternities with variegated memberships for diverse reasons, including the need to develop and maintain relationships with individuals in other trades, and also a desire to be seen to participate in the socially useful and morally virtuous activities of these organisations. It is clear from the list of brethren that the term ‘merchant’ did not just refer to traders, and certainly not to great merchants alone. Following the analysis of Marco Pozza, we can clearly see that the list of members from 1319 of the Scuola di Santa Maria e san Francesco dei Mercanti included not only Marco Polo the traveller, but also scribes, chancellors, and even priests, physicians, middlemen, and several craftsmen such as goldsmiths, sellers of *samiti* (precious silk textiles), pharmacists, tailors, shop owners, furriers, cheese sellers, and

⁴⁹⁹ P. Fortini Brown, *Venetian Narrative Painting in the Age of Carpaccio* (New Haven, 1988), 9-30 and D. Romano, *Venice: The Remarkable History of the Lagoon City* (Oxford, 2024), 149-154.

⁵⁰⁰ Pullan, *Rich and Poor*, 108.

⁵⁰¹ See A. Stahl, *The House of Condulmer. The Rise and Decline of a Venetian Family in the Century of the Black Death* (Philadelphia, 2024), 24-28.

⁵⁰² G. Zanon, *Cittadini of Venice Shaping Identities between Networks and Patronage. (c.1530–1690)* (Leiden, 2024), 13.

⁵⁰³ Pullan, *Rich and Poor*, cit., 73.

merciers.⁵⁰⁴ All the *scuole* of merchants explicitly accepted ‘mercadanti et naviganti’ as members, thus opening their ranks to non-patricians and in the case of the Scuola di Santa Maria also to women.⁵⁰⁵ It is clear that in the context of the scuole the term *mercadanti* was coterminous with artisans and seamen, and that the *scuole di mercanti* provided merchants and artisans with a place that provided welfare and also a common sense of belonging. The term *mercadante* thus does appear in Venice, but mostly in a non-patrician context and in association with craftsmen and seafarers.

Notarial records point towards the use of the term *mercator* referring to a community, a transient condition, or as the label to identify foreign traders. By expanding the analysis to the *scuole*, a more complex framework emerges, whereby the term designated patricians and non-patricians engaged in trade (mostly *cittadini*), craftsmen, and shipowners. In this sense, whoever engaged in commercial exchange continuously with the goal of achieving a profit would have been considered a merchant, from the innkeeper who bought wine in Istria for his tavern to the Corner brothers in Cyprus. Merchants were not just a specialised group coinciding with the patriciate, as the term referred to all those who engaged in trade and included Venetians and non-Venetians, destitute patricians, and rich *cittadini*.

2. The culture(s) of the merchant

Having reviewed the vocabulary for traders in Venice, I will now address two themes connected to the education of the merchant: mercantile knowledge and the acquisition of moral values. The two were clearly linked to each other in the thought of Venetian merchants. Using commonplace books I will illustrate how Venetian education for the merchant centred

⁵⁰⁴ M. Pozza, ‘Marco Polo Milion: an Unknown Source Concerning Marco Polo’, *Mediaeval Studies*, 68 (2006), 287-88. On the blurred boundaries between *cittadini* and merchants see U. Tucci, ‘Carriere popolari e dinastie di mestiere a Venezia’, in A. Guarducci (ed.), *Gerarchie economiche e gerarchie sociali. Secoli XII-XVIII* (Florence, 1990), 817-852.

⁵⁰⁵ L. Monego, ‘Le mariegole latine della Scuola di Santa Maria e San Francesco dei mercanti ai Frari’ (MA dissertation, Università Ca’ Foscari -Venice, 2013), at 2, 28, and 104-105.

on basic notions of history, seafaring, arithmetic and the gauging of prices and qualities of products. At the same time, I will underscore how morality loomed large over the actions of Venetian merchants, and how they were able to square their ledgers in the name of God and profit.

2. 1 Spiritual gains - 'senza ofender Dio'

Next to the Rialto stands the church of San Giacomo. On the side of the church facing the bridge, we find a twelfth-century inscription reading: 'Your cross, Christ, be true salvation for this place. Around this temple let the merchants' law be just, their weights true, and their contracts fair'.⁵⁰⁶ Moral and economic worlds were strictly related to each other, and Venetians saw the education of a merchant as the key to acquire not just the ability to trade and to gauge the value of items, but also as the acquisition of moral values that deeply influenced their life.

The mentality of the Venetian merchant was based not only on the acquisition of wealth but also on adherence to moral principles.⁵⁰⁷ This section examines the moral values that guided Venetian merchants and the type of education recommended to them. A compelling example is the will of Andrea Donà. When he drafted his testament on 10 September 1390, he

⁵⁰⁶ SIT CRUX TUA VERA SALUS | HUIC CHRISTE LOCO. | HOC CIRCA TEMPLUM SIT IUS MERCANTIBUS AEQUUM: PONDERA NEC VERGANT NEC SIT CONVENTIO PRAVA. The inscription and its translation are taken from M. Agazzi, 'The Medieval Rialto: The Transformation of an Area in the Developing City', in Id. et al. (eds.), *Layers of Venice. Architecture, Arts and Antiquities at Rialto* (Venice, 2023), 9.

⁵⁰⁷ As an introduction to this theme see L. B. Robbert, 'Domenico Gradenigo: a Thirteenth-Century Venetian Merchant', in E. E. Kittell and T. F. Madden (eds.), *Medieval and Renaissance Venice* (Chicago, 1999), 27-48; U. Tucci, 'L'economia veneziana nel Quattrocento', in V. Branca (ed.), *Storia della civiltà veneziana. Autunno del medioevo e Rinascimento* (Florence, 1979), 155-167; S. Chojnacki, 'In Search of the Venetian patriciate: Families and Factions in the Fourteenth Century', in J. R. Hale (ed.), *Renaissance Venice* (London, 1973), 47-90; G. Luzzatto, 'L'economia veneziana nei secoli '400 e '500', *Bergomum*, 58 (1964), 57-71; U. Tucci, 'Alle origini dello spirito capitalistico a Venezia: la previsione economica', in *Studi in onore di Amintore Fanfani*, vol. 3 (Florence, 1962), 545-557; G. Luzzatto, 'L'economia', in J. Ortega y Gasset (ed.), *La civiltà veneziana del Trecento* (Florence, 1956), 85-109; G. Luzzatto, 'Il mercante veneziano del tempo di Marco Polo', in R. Almagià et al. (eds.), *Nel VII centenario della nascita di Marco Polo* (Venice, 1955), 241-254; R. S. Lopez, 'Venezia e la grandi linee dell'espansione commerciale nel secolo XIII', in R. Bacchelli (ed.), *La civiltà veneziana del secolo di Marco Polo* (Florence, 1955), 67-84; Y. Renouard 'Mercati e mercanti veneziani alla fine del Duecento', *Ibid.*, 85-108; G. Luzzatto, 'L'attività commerciale di un patrizio veneziano del Quattrocento', *Rivista di storia economica*, 8 (1943), 1-22.

was incensed with his son and ultimately disinherited him. In the relevant section of his will, he stated:

Of Bartholomew (Bortolamio), my son. Whereas countless times have I endeavoured to educate him, sending him to sea and ensuring he was properly instructed, and I strove in every way I knew and could to make him a man capable of self-discipline (*rezer*), leadership (*governar*), and profit-making (*guadagnar*), all was in vain and to the disappointment of myself and his mother. I have therefore decided, and so I desire my will to be upheld, that no part of my estate, whether assets or cash, shall ever be left to him, under any circumstances, and that he shall never lay hands on it.⁵⁰⁸

Andrea must have had multiple concerns relating to his son. He had four: Giacomello, Geronimo, Cristofalo, and Bortolamio. He nominated all but the last as his executors, ‘provided that they live honestly; otherwise, they shall not administer my estate’. His estate probably included commercial ventures, as he referenced a logbook, ‘which *quaderno* must be given credence’ (‘al qual quaderno se debia creder’). Bortolamio, however, appeared to be his principal concern, far more than his debts. Living honestly was considered important by a merchant. The term ‘rezer’, derived from ‘reggere’, implies both ‘to sustain’ and ‘to behave’ or ‘to control oneself’. *Reggere*, *governare*, and *guadagnare* are key concepts: self-control enables control over others and facilitates profit-making. This thinking aligns with Benedetto Contrugli, who, in his ‘De la mercatura’ (ca 1458), urged merchants to adhere to moral standards, reminding them that the goal of trade is ‘the will and desire to acquire wealth with honour and without offending God or one’s neighbour’ (‘volontà e desiderio d’aquistare roba con honore et

⁵⁰⁸ ASVe, PSMC, De Ultra, busta 119 (Andrea Donà), Inserto II, Will of Andrea Donà (10/09/1390) (Copy from the acts of Pietro de Compostelli): ‘De Bortolamio mio fio, conzosia ch’io habia fato molte esperientie verso lui si in farlo navegar si in farli insegnar, si per zascauna altra via ho sapudo et possudo per poderlo redur a saverse rezer, et governar, et guadagnar et de questo molte et infinite melanconie mi et soa mare habiamo habude, vezando niente haver zovado, però voio et così lasso che la parte si del mobele come del stabele che li podesse toccar nè vegnir quella ditta parte per algun modo via ne forma el non possa tocar ne haver in le mani debia.

senza offendere Dio et lo proximo').⁵⁰⁹ Cotrugli also emphasised the importance of the *pratica*, the period of commercial training that Andrea evidently believed his son had failed to complete. Cotrugli cited a well-known proverb, 'it takes longer to make a merchant than a lawyer' (più vol ad fare uno mercante, che uno iudecie de legie'),⁵¹⁰ underscoring the value of experiential learning, especially aboard ship.

The proactive attitude towards knowledge and the obligation to uphold moral standards appears also in one of the few Venetian texts concerning merchant ethics: an admonition to a young merchant found in the fourteenth-century 'Zibaldone Riccardiano':

Learn, as if you were to live forever. Live honestly, as if you were to die tomorrow. Speak honestly, as if God were listening. Do not treat others in ways you would not wish to be treated. Do not do anything in secret that would shame you if revealed. The wisest and strongest man is he who overcomes sloth and base vices. Do not seek vengeance on all those you hate; no king or emperor has ever succeeded in doing so. Do not fight battles that do not concern you. He who listens, observes, and remains silent lives in peace. What is seen and heard need not be gossiped about. Wise men keep their mouths in their hearts; fools, their hearts in their mouths. If you wish to learn how to answer, first learn to speak. Remember what you learn, so it may serve you and others, for those who forget are like sacks ripped at the bottom, unable to hold what they carry. Wealth derives from a good nature and resolute will. Learn and profit while young and strong, so you may live with honour and ease in old age. Do not fear learning too much, but fear learning too little, for man cannot be too wise. Time waits for no one; those who wait for time lose it. This applies first to the soul, then to worldly matters. A wise man understands much from few words; he who hears but understands not is either a

⁵⁰⁹ Benedetto Cotrugli, *Libro de l'arte de la mercatura*, ed. V. Ribaudo (Venice, 2016), 38.

⁵¹⁰ *Ibid.*, 39.

fool or feigning. Learn names and numbers, weights and measures, for calculating. Use leads to mastery; neglect leads to decay. Write in your heart and not just on paper, so that should the paper be lost, wisdom remains (ut si charta cadat techu(m) sapie(n)çia vadat). The beginning of wisdom, my son, is to love and fear God, and always remember your mortality.⁵¹¹

Learning was thus a process involving listening, more than speaking, and remembering; otherwise one would be 'like a sack ripped at the bottom' (an image surely familiar to merchants).⁵¹²

Merchants were expected to master arithmetic, weights and measures, and abide by social and religious norms: suppressing anger, restraining vice, avoiding hatred, and possessing a good nature and determined will. These moral attributes were essential to a merchant's success. Venetian correspondence often invoked divine favour: 'May the lord God preserve you, and lead you home in good health and with a good profit', wrote Natal Donato to Biagio Dolfin in 1419.⁵¹³ Indeed, there was no strict separation between economic rationality and spirituality. As G. Todeschini noted 'the main problem lies in a historiography that asserts a forced and timeless separation between the lay and religious rationalities and assumes an everlasting conflict between economic and moral codes'.⁵¹⁴ Venetian merchants were not just profit-bound but they often tallied up spiritual gains, not merely earthly profits. Perhaps the most telling

⁵¹¹ Bocchi, *Lo Zibaldone Riccardiano 2161*, cit., 37.

⁵¹² Pegolotti admonished the merchant to 'cercare bene' the sack of cotton. Pegolotti, *Pratica*, cit., 367: 'E ricordoti, imperò che quasi tutti i cotoni si comperano in grosso insaccati, e quanto àe migliore sacca e più saldi tanto sta meglio'

⁵¹³ ASVe, PSMC, Mistre, *busta* 161, Inserto IX, Commissaria Tommaso Malipiero, Letter of Nadal Donato to Biagio Dolfin, 29th May 1419: 'pre/gando mis(er) Domenedio che si ve c(on)serva e si ve c(on)duga a chaxo vostro [...] sa/lude e co(n) on vadagno.' On the language of Venetian letters see B. Doumerc, 'Par Dieu écrivez plus souvent ! La lettre d'affaires à Venise à la fin du Moyen Âge', in *La Circulation des nouvelles au Moyen Âge. XXIVe Congrès de la S.H.M.E.S.* (Rome, 1994), 99-109; D. Nebbia, 'Les rapports entre Venise et le Liban: une collection des lettres commerciales inédites du XVe siècle', in C. Aboussouan (ed.), *Le livre et le Liban jusqu'à 1900* (Paris, 1982), 98-116, in particular 98-107.

⁵¹⁴ G. Todeschini, 'Theological Roots of the Medieval/Modern Merchants' Self-Representation', in M. C. Jacob and C. Secretan (eds.), *The Self-Perception of Early Modern Capitalists* (New York, 2008), 18.

aspect is the restitution of the *male ablata* - the sums deriving from illicit trade⁵¹⁵ - which was taken seriously by Venetian testators, even when that illegal commerce had taken place outside Christendom.⁵¹⁶ Modesty was also a feature of wills of Venetian bankers. Mueller has shown that, even though the majority of these wills did not mention trade, many did recommend ‘nessuna pompa’ in their funerals,⁵¹⁷ and asked for their body to rest clothed in a Franciscan or Dominican tunic, rarely commissioning ornate funerary monuments.

The balance between morality and profits was certainly a difficult one to strike, but the invocation ‘in the name of God and good profit’ seems to have been not just the incipit of many account books but also a moral compass.⁵¹⁸ A good merchant was endowed with *pratica* and morality. We have seen what morality meant in the Venetian context, and it is now time to turn our attention to *pratica*. If morality alluded to honesty and the respect of social norms, including the restitution of illicit gains on the deathbed, *pratica* alluded in the Venetian context to a vast number of topics that a merchant had to master:⁵¹⁹ arithmetic, seafaring, literature, history, knowledge of foreign languages, and the reckoning of spices and wares, as well as acquiring direct experience of foreign marketplaces, as the provision of a physician, Simone de Valentini, on his deathbed in 1420 makes clear.

May my son be sent to learn arithmetic and to learn how to carry out trade, and if were possible for you to teach him (classical) authors and logic and philosophy, that would be dear to me, as long as he becomes neither a physician nor a lawyer, but

⁵¹⁵ For a general introduction see the studies in G. Todeschini (ed.), *Male ablata. La restitution des biens mal acquis, XIIIe-XVe siècle* (Rome, 2019). For Venice see M. Rossetti, ‘Le restituzioni dei male ablata nei testamenti veneziani del XIII secolo’ (MA dissertation, Università Ca’ Foscari-Venice, 2020).

⁵¹⁶ Nicolò Contarini quondam Francesco explicitly mentioned having defrauded the ‘sultan of Babylon’ in the restitution of the *male ablati*s. ASVe, PSMC, Miste, busta 126 (Nicolò Contarini), Last will, 1312.

⁵¹⁷ R. Mueller, ‘Sull’establishment bancario veneziano’, cit.

⁵¹⁸ On the use of invocation of God in accounting see J. Aho, *Confession and Bookkeeping: The Religious, Moral, and Rhetorical Roots of Modern Accounting* (Albany, 2005).

⁵¹⁹ On Venetian schooling of merchant see G. Ortalli, *Scuole e maestri*, cit.

rather a merchant.⁵²⁰

2. 2 Pratica: ‘learn as if you were to live forever’

The tool to learn and acquire *pratica* was the commonplace book, one of the few genres of sources with a strongly commercial complexion preserved in Venice.⁵²¹ Armando Petrucci described these composite texts produced by sailors and merchants as ‘libri da bisaccia’, saddlebag books, recognisable by their lack of ornamentation, cursive script, and the inclusion of sundry texts on several matters.⁵²² As remarked by Maglaque, this description ‘does not wholly describe the formal characteristics of the Venetian composite manuscripts, ticking some boxes but not others. They are usually cursive but range vastly in size and contain one or more scribally-produced quires; some were made of paper; others of parchment; in some cases, they contain marginalia and readers’ notes; and very often the texts were carefully ordered and arranged’.⁵²³ Several commercial/maritime *zibaldoni* or commonplace books produced in Venice survive from the thirteenth to the fifteenth century.⁵²⁴ These sources have been the subjects of two separate and yet related theses. Wolynes has underlined how these texts were largely the result of the experience of Venetian merchants abroad, focusing in particular on the

⁵²⁰ *Documenti per la storia della cultura in Venezia*, volume I, cit. 299 (03/10/1420): ‘quod mictantur ad scholas donec sciunt bene loqui liberaliter et scribere, deinde mictantur ad abachum et discant facere mercantias et si possibile foret quod ipsi discerent auctores et loycam et philosophiam esset mihi carum, sed non fiant medici nec iuriste, sed solum mercatores’.

⁵²¹ See D. Romano, *Venice: The Remarkable History*, cit. 197-199 for their use as instructional tool.

⁵²² A. Petrucci, ‘Alle origini del libro moderno. Libri da banco, libri da bisaccia, libretti da mano’, in *Libri, scrittura e pubblico nel Rinascimento*, ed. A. Petrucci (Bari, 1979), 142-143.

⁵²³ Maglaque, ‘Venetian Humanism’, cit., 62.

⁵²⁴ For an excellent introduction see Wolynes, ‘Migrant Mentalities’. On the culture of the Venetian merchant, see A. Stussi, ‘Il mercante veneziano’, in M. Cortelazzo (ed.), *Cultura popolare del Veneto. Arti e mestieri tradizionali veneti* (Padua, 1989), 47-66; G. Folena, *Culture e lingue nel Veneto medievale* (Padua, 1990); G. Baglioni (ed.), *Il veneziano “de là da mar”* (Berlin, 2019); R. Eufe, «*Stia lengua ha un privilegio tanto grande*». *Status und Gebrauch des Venezianischen in der Republik Venedig* (Frankfurt, 2006); V. Formentin, *Prime manifestazioni del volgare a Venezia. Dieci avventure d’archivio* (Rome, 2018); L. Tomasin, *Europa romanza: sette storie linguistiche* (Turin, 2021) and M. Cortelazzo, ‘La cultura mercantile e marinaresca’, in *Storia della cultura veneta*, ed. G. Arnaldi, vol. 1 (Venice, 1986), 671-91.

development of a sense of community amongst Venetians residing abroad.⁵²⁵ Studying a larger corpus, Maglaque has remarked how these texts were part of humanist literature, mostly produced by and for the elite who ruled the Venetian empire. In this context, Venetian patricians:

collected the technical writings and maps - sailing directions, shipbuilding manuals, naval regulations, portolan charts - that were resonant with the governance of and trade within their maritime empire, bound them in fine stamped leather and preserved them in the chests of their studies.⁵²⁶

It is significant that the oldest of these texts, Venice, Biblioteca Nazionale Marciana, It. XI, 87, contains a rudimentary merchant manual, a list of weights, and a descriptive portolan. In all likelihood, as Jacoby has discovered, it was compiled in Akkon (Acre), in the late thirteenth century.⁵²⁷ Even though the use of the portolan at sea is dubious, it is beyond doubt a fact that seafaring was an important part of texts included in commonplace books.⁵²⁸ The experience of living abroad certainly informed the formation of Venetian merchants. The aforementioned Saibante manuscript found its way to Famagusta, where it was most likely owned, read, and partially corrected by the Corner family.⁵²⁹

⁵²⁵ Wolynes, *Migrant Mentalities*, cit., 11: 'We have yet to address the question of how the very act of migration, living abroad and participating in a community unbound by geographic limitations changed their perceptions of the world as a whole, of their communities, and of themselves.' She has also proposed that the 'Zibaldone da Canal' was written by a merchant who traded in North Africa, given the ample space allotted to that area in the text, see *Ibid.*, 96.

⁵²⁶ Maglaque, 'Venetian Humanism', cit., 11.

⁵²⁷ D. Jacoby, 'A Venetian Manual of Commercial Practice from Crusader Acre', in *Id.* (ed.), *Studies on the Crusader States and on Venetian Expansion* (London, 1989) part VII, 403-428.

⁵²⁸ D. Jacoby, 'An Unpublished Medieval Portolan of the Mediterranean in Minneapolis', in R. Gertwagen (ed.), *Shipping, Trade and Crusade in the Medieval Mediterranean. Studies in Honour of John Pryor* (Farnham, 2012), 71: 'It has been suggested that the truncated portolan was used by a merchant and reflected his interest in specific itineraries. However, rather than being an original compilation, its garbled structure suggests that it was copied from an existing portolan by a somewhat confused merchant or notary'.

⁵²⁹ *Il manoscritto Saibante*, cit., LXXI-LXXIV.

The presence of portolans⁵³⁰ is not just a passing detail of Marc. It.. XI, 87, as they feature often in Venetian *zibaldoni*. An example appears in the fourteenth century in an anonymous mercantile *zibaldone* (Bergamo, Biblioteca Civica Angelo Mai, MS MA 334). The manuscript reads at f. 32v: 'Questo si è un portolan trato de lo cho(m)paso e cho/mença da Chavo Malo chon tuto l'arcipielego / e dentro de çio el Mar Ma(n)sior, chon tuta la sta/ria e le isole dentro e quele de l'arcipielego/ tuto p(er) singolo chomo le se schore', namely 'this is a portolan copied from a *Compasso*,⁵³¹ and it starts from Cape Maleas, with all the Aegean Sea, including the Black Sea, with all the coastline and the islands thereof and the islands of the Aegean, all described separately as you find them sailing (lit. passing over)'. This portolan covers fols. 32v-35r, describing the Greek islands; it is followed by a Black Sea portolan (ff. 35v-36r) a feature shared by the *Compasso*: 'Questo si è uno portola(n) del Mar Maçior fina a / la bocha del mar de la Tana, parta(n)dose da la bocha/ de la Giro, anda(n)do per staria', that is, 'this is a Portolan of the Black Sea, as far as the estuary of the Sea of Tana, starting from the Straits of the Sea of Marmara, tramping along the coast'. At ff. 36r-38r we find yet another portolan, this time called 'portola(n) de tarifa', a portolan copied from a *tariffa*, a trade manual, covering Spain, Galicia, Brittany, Normandy, and England; it is marked by a drawn pointed finger. Its practical function

⁵³⁰ The term is now used improperly to designate portolan charts. For a useful list of specimina on portolan charts see R. Pfloderer, *Census of Portolan Charts & Atlases, as Reported and Listed by the Noted Scholars of the Genre in their Works Ranging from 1897 to 2008* (USA, 2009); T. Campbell, 'Census of Pre-Sixteenth-Century Portolan Charts', *Imago Mundi*, 38 (1986), 67-94 and M. De La Roncière and M. Mollat du Jourdin (eds.), *Les portulans, cartes marines du XIIIe au XVIIe siècle* (Freiburg, 1984). As a general introduction, R. Nicolai, *The Enigma of the Origin of Portolan Charts. A Geodetic Analysis of the Hypothesis of a Medieval Origin* (Leiden, 2016); R. J. Pujades i Bataller, *Les cartes portolanes : la representació medieval d'una mar solcada* (Barcelona, 2007); T. Campbell, 'Portolan Charts from the Late Thirteenth Century to 1500', in J. B. Harley and D. Woodward (eds.), *Cartography in Prehistoric, Ancient, and Medieval Europe and the Mediterranean*, vol. 1. *History of Cartography* (Chicago, 1987), 371-463. There are far fewer studies on descriptive portolans, that is list of ports and their distance. For a list of specimina see J. E. Kelley, 'A Survey of Periplus and Portolani from Ancient Times through the End of the Fifteenth Century', *Research Notes in Progress* (1994). For a general introduction see K. Kretschmer, *Die italienischen Portolane des Mittelalters : Ein Beitrag zur Geschichte der Kartographie und Nautik* (Berlin, 1909) and for one of the few editions of a descriptive portolan, that of Graziano Benincasa, dated 1435 see *Il portolano di Grazioso Benincasa*, ed. M. V. Biondi (Recanati, 1998).

⁵³¹ The term *compasso* refers to a type of descriptive portolan see *Lo Compasso de Navegare: edizione del codice Hamilton 396 con commento linguistico e glossario*, ed. A. Debanne (Bruxelles, 2011).

this time is noted by the compiler of the *zibaldone* (f. 38r): ‘questo portolan sí è bon p(er) quely che usa chon/le galie de Flandres e p(er) saver li porti e / luogi e le plene de l’acqua e le seche, sí che chi/l’usa lu porave çovar a usarlo’, viz. ‘this portolan is useful to those who go with the galleys to Flanders, and to know the ports and places and the waters and the shoals, so that whoever uses it will have some benefit’. In the mid-fifteenth century, the mariner Michael of Rhodes⁵³² copied in his own *zibaldone* a portolan of Flanders written by Zuan Pires, ‘pilot of the Flemish Sea’, one of Apulia, one of the gulf of Saloniki, one of the gulf of Venice, one from Venice to Constantinople, another from Cape Maleas to Famagusta, and lastly one from Venice to Tana.⁵³³

Further evidences of the practice of including portolans in Venetian nautical or commercial texts is found in two fifteenth-century examples. The first (Florence, BNCF, Magliabechino XIII, 71) is a codex dated 1480 featuring a portolan written in a neat calligraphic hand.⁵³⁴ However, the codex is truncated at f. 4 and has lost the majority of its contents. Luckily, a parchment used as a cover allows us to reconstruct the lost contents: days perilous for seafaring, instructions for sailmaking, calculations of lunar cycles and the epact (the number of days by which the solar year exceeds the lunar year),⁵³⁵ determination of Easter, the rule of marteloio,⁵³⁶ a *tariffa* equating Venetian weights with those of other places, a description of

⁵³² For Michael of Rhodes see this thesis, 79 and also Image 2.

⁵³³ For the portolan in Michael of Rhodes see A. Conterio, ‘L’arte del navigar: cultura, formazione professionale ed esperienze dell’uomo di mare veneziano nel XV secolo’, in *L’uomo e il mare nella civiltà occidentale: da Ulisse a Cristofor Colombo* (Genoa, 1992), 187-225 and P. Falchetta, ‘The Portolan of Michael of Rhodes’, in P. O. Long et al. (eds.), *The Book of Michael of Rhodes. A Fifteenth-century Maritime Manuscript. Volume 3: Studies* (Cambridge MA, 2009), 193-210. Text at Ibid., *Volume II*, 120a-127a; 190b-193b, 205a-210b.

⁵³⁴ A folio of the text is reproduced in Melis, *Documenti per la storia economica*, cit., 554-55, no. 198.

⁵³⁵ E. Dekker, ‘Epact Tables on Instruments: Their Definition and Use’, *Annals of Science*, 50 (1993), 303-24.

⁵³⁶ As explained in G. Van Brummelen, *Heavenly Mathematics. The Forgotten Art of Spherical Trigonometry* (Princeton, 2013), 151: Marteloio was part of a group of methods known today as “dead” (short for “deduced”) reckoning, which use information about the ship’s speed, direction, and time of travel to update from a previously known position to the current one. See also F. Masiero, ‘La raxon de marteloio’, *Studi Veneziani*, 8 (1984), 393-412.

spices, a list of the customs of Alexandria, and a list of excises to be paid in Venice on imported and exported merchandise.⁵³⁷ The contents of the manuscript closely resemble those of yet another text, a late fifteenth-century manuscript (Museo Correr, Portolano 12),⁵³⁸ whose text served as the basis for the first printed portolan in 1490.⁵³⁹ However, the original manuscript included a series of texts⁵⁴⁰ such as perilous days, instructions for shipbuilding ('lo amaistramento de far una nave'), calculations to find Easter, calculation of the epact, recreative mathematics problems (including one implying the knowledge of the winds),⁵⁴¹ a table of the planets, lists of patron saints and the rule of *marteloio*.

The most recent *zibaldone* that I present here, the 'Cornaro Atlas' (British Library, Egerton MS 73), was composed at the end of the fifteenth century. The codex is heavy, elegantly bound and richly illuminated. This is most certainly not a manuscript ever carried on a ship, more a display book than an actual book of seamanship. Yet it seems to hail from precisely the tradition of Venetian commonplace books and nautical treatises, containing the courses of the sun and the moon, the rule of *marteloio*, a *tariffa*,⁵⁴² and calculations for the epact. Unlike Michael of Rhodes' book, as remarked by P. Falchetta, the 'Cornaro Atlas' is the result of 'a

⁵³⁷ Florence, BNCF, Magl. XIII, 71, parchment used as cover of the text, dated 1st March 1482: 'le tempore & algunj pessimj zornj'; 'Raxo(n) a voler far una nave velle sartie timoni e tute cosse fa de mestier a nave'; 'A voler sav(er) la portada de Ja nave', 'quando vie(n) la Pasqua p(er) Ja ma(n) che mostra'; 'a sav(er) che chore d'epatta'; 'quando che fa la luna'; 'el navegar de marteloio'; 'tariffa de div(er)sj pexj del mo(n)do chomo se reze c(on) Venex(ia) & alt(ri) luogi 1° c(on) l'alt(r)o'; 'chognosim(en)to de tute spezie & alt(r)e merze'; 'tariffa de Alesandria'; 'dazio se paga de tute marchada(n)tie i(n)tra & esse i(n) Venex(ia).

⁵³⁸ *Navigare e descrivere: isolari e portolani del Museo Correr di Venezia XV-XVIII secolo*, ed. C. Tonini et al. (Venice, 2001).

⁵³⁹ On which see A. Bocchi, 'On the Earliest Printed Portolano', *International Journal of Maritime History*, 32/3 (2020), 729-735. The text is titled *Questa è una opera necessaria a tutti li naviga(n)ti chi vano in diverse parte del mondo, per la qual tutti se amaistrano a cognoscere starie, fundi, colfi, vale, porti, corsi d'acquee e maree, comi(n)ciando da la città de Cadex in Spagna, dretamente fina nel porto de le Schiuse, passando p(er) i canali fra la ixola de Ingelterra e la terra ferma, scorendo le/ba(n)che de Fia(n)dra fina ala ixola de Irlanda, mostrando tuti i corsi e traversi dal ponente fino al levante, dove exercitano naviganti chi vano per mar e per ogni parte del mondo, cu(m) i loro navili naviga(n)do* (Venice, 1490).

⁵⁴⁰ BMCV, Portolano 12, f. 53r. It is a section on shipbuilding ending at 57v.

⁵⁴¹ BMCV, Portolano 12, Ibid., f. 61v: 'Anchora te vogio mostrar un'altra / bella raxon, el son do nave che se / parte da una ixolla, una nave chamina / a la volta de ostro garbin mia 250, l'altra tie(n)/ la volta in griego levante mia 300, queste / nave si tuol tute do la volta. In che vento // sviegnirale a inschontrar queste do nave una con/ l'altra?'

⁵⁴² On *tariffe* see Sopracasa, *Venezia e l'Egitto*, cit.

process of cultural transformation that was taking place during those years, as a consequence of which traditional cartographic-nautical knowledge was recontextualised and took on meanings and values unlike those aimed toward the maritime trades, within which such knowledge had operated up to that time'.⁵⁴³ The 'Cornaro Atlas' was in a sense both the heir of a long tradition and the embodiment of change. With its collection of heterogeneous texts, it perfectly encapsulated what might be called the 'zibaldone culture'. The 'Cornaro Atlas' is part of a tradition of texts that conveyed practical knowledge such as seafaring notions, but also recreational mathematical problems and historical knowledge. To give an example of the contents of a Venetian commonplace book, the 'Zibaldone da Canal' contains mathematical and mercantile material, an excerpt of a romance about Meliodas, astrological material, advice on injuries, excerpts on the use of vultures and corals, lists of the ten commandments, a calendar, a chronicle of Venice, moral precepts and poems.⁵⁴⁴ Another *zibaldone*, of the early fifteenth century (Venice, MS BMV, Marc. It. XI, 32), contains the trial of Marin Faliero, paternosters, the ten commandments, astrology, excerpts from Aristoteles' *Physiognomica*, the calculation of the dates of Easter, a collection of psalms, a merchant manual, and two itineraries for pilgrimages to Rome and Santiago.⁵⁴⁵ Mercantile knowledge was not restricted to marketplaces, arithmetic and seafaring. It also included basic notions of the history of the city, astrology, and philosophy, as well as recipes and memorable phrases. These texts clearly suggest a proactive approach to knowledge, evidenced by expressions like 'fame questa raxon', 'calculate this !', and ultimately shows the importance of practical knowledge in mercantile culture, crucial - for instance - to determine the quality and value of products.

3. Entrusting capital - economic and social

⁵⁴³ Piero Falchetta, 'The Portolan of Michael of Rhodes', cit. 201.

⁵⁴⁴ See the handy list in Wolynes, *Migrant mentalities*, cit., 58-59.

⁵⁴⁵ *Ibid.*, 63.

In this section, I will address the ways in which capital was entrusted to another merchant, either through impersonal mechanisms like *colleganze* or debt, or relying instead on kin, as happened often in the case of brothers. In fact, in Venice two brothers were automatically considered to be business partners unless they took legal steps to rescind this. This section will be divided into three subsections. In the first one, I will emphasise how we should avoid drawing conclusion about Venetian trade by relying uniquely on a small sample of contracts, and how we should instead pay attention to the full extent of financing available to a trader, including debt. In the second section, I will show Venice's unique reliance on fraternal partnerships to buttress trade not just in the city but all over the Mediterranean, pointing out how they were in common usage not just among patricians, but also between *cittadini* and artisans. By using the case study of Marco dall'Inzegneri, a *cittadino* who set up a *compagnia* to trade wine from Greece, I will show how the *fraterne* coexisted alongside short-term companies, often founded for the establishment of a craft, for a single commercial journey or for a part-time commercial endeavour. In the last part of this contribution, I will focus instead on how trust was maintained outside of the *fraterna*, either relying on formal constraints such as written memoranda and accounts itemised in ledgers, or instead on 'buona fama'. I will show that the two mechanisms were not mutually exclusive, and that in fact both reputation and formal enforcements of contracts acted as deterrents against cheating. I will show how memoranda in particular set a constraint on agents, even though enforcing them could be challenging. We will see instances in which the instructions of a merchants were carried out even after his death.

3. 1 Loans, sea loans and *colleganze*

A merchant who desired to invest money in commercial ventures⁵⁴⁶ in late medieval Venice had several options,⁵⁴⁷ such as the loan, the sea loan, the *colleganza* and partnerships.⁵⁴⁸ The main difference between loans and the *colleganza* is that the loan and the sea loan were based on debt financing - that is, borrowing money to be repaid with interest - while *colleganze* involved selling shares of the business in exchange for capital.⁵⁴⁹ Before discussing the *colleganza* and the partnership, it is worth clarifying the difference between a loan and a sea loan. Venetians inherited the sea loan from Roman law, where it was called *pecunia traiectica* (money sent overseas) or *faenus nauticum* (sea loan). In its basic form (Dig. 2.22.1), ‘Traiectica ea pecunia est quae trans mare vehitur’ (‘loaned money sent across the sea is called *traiectica*’).⁵⁵⁰ As N. Ziha explains: ‘the essential characteristics that differentiated it from ordinary loans (*mutuum*) were the transfer of risk to the lender, an unlimited interest rate whose amount depended on risk assessment, and the informal conclusion of a contract.’⁵⁵¹ In terms of the allocation of

⁵⁴⁶ Investment in commodities coexisted alongside purely financial transactions, such as the dry exchange, or the bill of exchange. See for Venice Mueller, *Banks*, cit., 288-355 and J. Bolton and F. Guidi-Bruscoli, ‘Your Flexible Friend’: the Bill of Exchange in Theory and Practice in the Fifteenth century’, *The Economic History Review*, 74/4 (2021), 873-891.

⁵⁴⁷ For a very useful presentation of early specimens of these contracts see G. Migliardi O’ Riordan and A. Schiavon (ed.), *Tipologie di documenti commerciali veneziani. Nolo, mutuo, prestito a cambio marittimo, colleganza* (Venice, 1998). More generally on the use of agents see R. S. Lopez, ‘Proxy in Medieval Trade’, in W. C. Jordan et al. (eds.), *Order and Innovation in the Middle Ages. Essays in Honor of Joseph R. Strayer* (Princeton, 1976), 187-194 and on associations of merchants U. Santarelli, *Mercanti e società tra mercanti: lezioni di storia del diritto* (Turin, 1987). For a useful comparison with Genoa see V. Piergiovanni, ‘Il diritto dei mercanti genovesi e veneziani nel Mediterraneo’, in G. Ortalli and D. Puncuh (eds.), *Genova, Venezia, il Levante nei secoli XII-XIV* (Genoa, 2001), 59-72.

⁵⁴⁸ These were not the only options. Another type of investment was the *rogadia*. As explained in R. S. Lopez, *The Commercial Revolution of the Middle Ages (950-1350)* (Cambridge, 1976), 73: ‘Under the stated terms of *rogadia* a merchant pledged to transport goods of another, and presumably to trade with them, as a friendly gesture and without compensation’. For an early Venetian example see J.-C. Hocquet, *Les monastères vénitiens et l’argent. Le temporel des monastères bénédictins* (Rome, 2020), 27-48: In 1026, ‘Stefano Morosini a versé au Candiano la moitié du capital et l’intérêt en titres de collegancia, rogadia, comendacio, prestitum atque negocium, c’est-à-dire en capital mobilier et marchand’, <https://books.openedition.org/efr/10287> (30/05/25). The *commendacio* was a simple deposit. See M. Weber, *Zur Geschichte der Handelsgesellschaften im Mittelalter nach sudenropäischen Quellen* (Tübingen, 2008, or. 1889), 173, note 27: ‘commendacio ist wohl, wie sonst oft, Depositum’.

⁵⁴⁹ The distinction is addressed with great clarity in D. V. Williamson, ‘The Financial Structure of Commercial Revolution: Financing Long-Distance Trade in Venice 1190– 1220 and Venetian Crete 1278–1400’, in Id. (ed.), *The Economics of Adaptation and Long-Term Relationships* (Northampton MA, 2019), 166-220

⁵⁵⁰ Justinian, Digest, Book 22, <https://www.thelatinlibrary.com/justinian/digest22.shtml> (30/05/25).

⁵⁵¹ N. Ziha, ‘The Insurance Function of Roman Maritime Law’, in P. Hellwege and G. Rossi (eds.), *Maritime Risk Management. Essays on the History of Marine Insurance, General Average and Sea Loan* (Berlin, 2021), 36.

risk, the lender took the risk from the day that the ship left the port, but their risk ended when the ship docked, in other words it lasted only for the duration of the journey, ‘salva nave’ or, as the Venetian would later say, ‘salvi in terra’.⁵⁵² This means that in a sea loan, the borrower was exempted from repaying the loan if the ship was wrecked. Precisely for this reason, the borrower was authorised to charge a higher interest rate than in a normal loan.⁵⁵³ When the sea loan was revived in the Middle Ages, two further types developed: the bottomry loan, secured against the value of the ship itself, and the *respondentia*, a loan secured by the cargo.⁵⁵⁴

A second way to entrust money was the *commenda*, called *colleganza* in Venice.⁵⁵⁵ The *colleganza* was mentioned in a Venetian document as early as 976, and the first notarial deed

⁵⁵² É. Jakab, ‘Loans and Securities: Tracing Maritime Trade in the Archive of the Sulpicii’, in P. Candy and E. Mataix Ferrándiz (eds.), *Roman Law and Maritime Commerce* (Edinburgh, 2022), 140-141. The relevant passage is Dig. 22.2.3: ‘In nautica pecunia ex eo die periculum spectat creditorem, ex quo navem navigare conveniat’, <https://www.thelatinlibrary.com/justinian/digest22.shtml> (30/05/25). On the expressions used in sea loans see L. Goldschmidt, *Handbuch des Handelsrechts*, vol. 1 (Stuttgart, 1891), 345-354 and 412-417 and Y. González de Lara, ‘Enforceability and Risk-Sharing in Financial Contracts: from the Sea Loan to the Commenda’ (PhD thesis, EUI, 2000), 219-312.

⁵⁵³ R. Harris, ‘General Average and All the Rest: The Law and Economics of Early Modern Maritime Risk Mitigation’, in Fusaro, Addobbati, Piccinno, *General Average*, cit., 52. This echoes I. Pontoriero, ‘Aspetti giuridici delle attività delle imprese di navigazione: il fenus nauticum’, *Studi urbinati*, 72/1-2 (2021), 185: ‘L’assunzione del *periculum maris* da parte del finanziatore costituisce un elemento strutturale del prestito marittimo’.

⁵⁵⁴ C. B. Hoover, ‘The Sea Loan in Genoa in the Twelfth Century’, *The Quarterly Journal of Economics*, 40/3 (1926), 526-528.

⁵⁵⁵ The bibliography on *colleganze* is significant. I will note here M. Cristina Molinari and J. J. Merelo-Guervós, ‘An Analysis of Colleganza Contracts in the Republic of Venice and its Relationship to the Serrata of the Great Council’, *Social Network Analysis and Mining*, 15 (2025), <https://link.springer.com/article/10.1007/s13278-025-01460-9> (30/05/25); E. Shadrina, ‘Sedentary Merchant Triumphant: the Transformation of Venetian Trading Patterns in the Long Twelfth Century’, *Business History Review*, 98/1 (2024), 37-80; Puga and Trefler, ‘International Trade and Institutional Change’, cit.; Y. González de Lara, ‘The Secret of Venetian Success: a Public-order, Reputation-based Institution’, *European Review of Economic History*, 12/3 (2008), 247-285; G. Rösch, ‘Mercatura e moneta’, in G. Cracco et al. (eds.), *Storia di Venezia dalle origini alla caduta della Serenissima*. Vol. 1. *L’età ducale* (Rome, 1992), 549-573; D. Puncuh, ‘Il documento commerciale in area mediterranea’, in A. Rovere et al. (eds.), *All’ombra della Lanterna. Cinquant’anni tra archivi e biblioteche, 1956-2006*. Vol. 2 (Genoa, 2006), 785-882; Kedar, *Merchant in Crisis*, cit.; R. De Roover, ‘The Organization of Trade’, in M. Postan et al. (eds.), *The Cambridge Economic History of Europe from the Decline of the Roman Empire. Volume 3: Economic Organisation and Policies in the Middle Ages* (Cambridge, 1963), 42-118; A. Scialoja, *La commenda nel diritto comune del Mediterraneo dei secoli XI-XIII* (Rome, 1946); G. Luzzatto, ‘Capitale e lavoro nel commercio veneziano dei secoli XI e XII’, *Rivista di storia economica*, 6/1 (1941), 1-24; G. Luzzatto, ‘La commenda nella vita economica dei secc. XIII e XIV con particolare riguardo a Venezia’, in *Atti della Mostra bibliografica e Convegno internazionale di studi storici del diritto marittimo medievale* (Naples, 1934), 139-164; G. Astuti, *Origini e svolgimento storico della commenda fino al secolo XIII* (Casale Monferrato, 1933); R. Cessi, ‘Note per la storia delle società di commercio nel Medio Evo in Italia’, *Rivista italiana per le scienze giuridiche*, 59 (1917), 1-85 and 181-224; A. Arcangeli, ‘La commenda a Venezia specialmente nel secolo XIV. Contributo alla storia delle società commerciali’, *Rivista italiana per le scienze giuridiche*, 33 (1902), 107-164; A. Sacerdoti, ‘Le colleganze nella pratica degli affari e nella legislazione veneta’, *Atti del reale Istituto Veneto di Scienze, lettere ed Arti*, 59/2 (1899-1900), 1-45.

recording one is dated 1073.⁵⁵⁶ Lopez famously affirmed that the commenda ‘was a medieval innovation of the highest importance and contributed greatly to the faster growth of maritime trade as compared to the slower progress of capitalistic forms in land trade’.⁵⁵⁷ As explained by Lane:

Another form of credit unknown to Roman lawyers but in use since the tenth century was what the Venetians called a *colleganza*. It was a kind of profit-sharing sea loan or agency having some of the features of a partnership. Of the two parties to the contract, one, the *tractans* or *procertans*, undertook to travel and trade with the fund which was the subject of the contract. He may be called the active or traveling merchant. The other, who is often referred to as the *stans* or stay-at-home, I think it generally best to call the investor, for whether he moved about or stayed put was not essential to the contract. The essential was that he put up funds on which he took the risk of loss by shipwreck or piracy and on which he received a return that depended on profitable trading conducted by someone else. If there was profit, he received three fourths of it, the other fourth going to the traveling merchant.⁵⁵⁸

The *colleganza* took two main forms: unilateral and bilateral. In the unilateral *commenda* the fund provider would supply capital to a travelling partner, and if the returns were higher than the original investment, then the profits would be shared giving 3/4 of the exceeding value to the *stans* and 1/4 to the *tractans*. The second form was known as the bilateral *colleganza*.⁵⁵⁹ It is called bilateral because both the *stans* and the *tractans* would provide funding - typically, the

⁵⁵⁶ J. H. Pryor, ‘The Origins of the Commenda Contract’, *Speculum*, 52/1 (1977), 13.

⁵⁵⁷ Lopez, *Commercial Revolution*, cit., 76.

⁵⁵⁸ F. C. Lane, ‘Investment and Usury in Medieval Venice’, *Explorations in Entrepreneurial History*, 2/1 (1964), 4.

⁵⁵⁹ The mechanism of the Venetian *colleganza* are described in detail in Y. Gonzalez de Lara, *The Impact of Formal Monitoring on Financial Innovation: from Debt to Equity in Late Medieval Venice* (2017), https://www.unige.ch/sciences-societe/dehes/files/8615/0713/5354/sar_fall_2017_gonzalez_monitoring_financial_innovation_venice.pdf (30/05/2025), according to whom the shift from the sea loan to the *colleganza* depended upon ‘the state regulated the operation of trading ventures in a manner that made profits more readily observable and less dependent on the merchant’s choice of action and effort’, *Ibid.*, 18.

former provided two-thirds of the capital and the latter one-third.⁵⁶⁰ The allocation of profits in a bilateral commenda worked precisely as in the unilateral one.⁵⁶¹ In later usage, the term *colleganza locale* or *mutuum ad negotiandum in Rivoalto* became a purely speculative endeavour. As highlighted by Luzzatto, it was a loan to be used by the borrower for his business or enterprise, which had to be paid back at a certain time with a specified interest.⁵⁶² As explained by R. Mueller, ‘as in all local colleganze, the return was not so much a share in profits as a form of interest, the rate of which varied according to the market. This rate, often pegged to the rate paid by another leading banking firm or firms, was determined only at the maturity of the loan (generally after one year), a practice that protected the contract and the lender from the accusation of usury.’⁵⁶³

The three forms of commercial funding, that is the loan, the *colleganza*, and the sea loan, existed or coexisted at different times in Venetian history. Before explaining the chronology, it must be stressed that the vast majority of conclusions related to Venetian trade in the thirteenth and fourteenth centuries are drawn from a limited dataset, largely made of the commercial contracts transcribed in two collections by Antonino Lombardo and Raimondo Morozzo della Rocca.⁵⁶⁴ The problem lies in the fact that these are mostly parchments preserved in the archives of Venetian monasteries, such as S. Giorgio or S. Zaccaria, rather than full notarial

⁵⁶⁰ A. J. Wilson and G. Kim, ‘Put-call Parity, the Triple Contract, and Approaches to Usury in Medieval Contracting’, *Financial History Review*, 22/2 (2015), 205-233.

⁵⁶¹ Lane, ‘Investment and usury’, cit., 5: ‘The two-sided colleganza thus gave exactly the same claim on profits as a one-sided.’

⁵⁶² G. Luzzatto, ‘Les activités économiques du patriciat vénitien (Xe-XIVe siècles)’, *Annales d’histoire économique et sociale*, 9 (1937), 39.

⁵⁶³ Mueller, *Banks*, cit., 98. A rush of bank failures made the tool unpopular by 1375, see *Ibid.*, 147.

⁵⁶⁴ *Documenti del commercio veneziano nei secoli XI-XIII*, ed. R. Morozzo della Rocca and A. Lombardo, 2 volumes (Turin, 1940) and *Nuovi documenti del commercio veneto dei sec. XI-XIII*, ed. A. Lombardo and R. Morozzo della Rocca, 2 volumes (Venice, 1953). The database used by Puga and Trefler for ‘International Trade’, cit., coincided with this two books, with the addition of two edited notaries, namely Felice de Merlis and Domenico, prete di S. Maurizio. See D. Puga, *Data and Replication Files for ‘International trade and Institutional Change: Medieval Venice’s Response to Globalization*, <https://diegopuga.org/data/venice/> (30/05/25).

registers.⁵⁶⁵ Amongst these sources we observe two important trends. One is a stark reduction in sea loans after 1182. In the period 1126-1182, out of a total of 435 contracts, sea loans accounted for 77% of all contracts, declining to 29% in 1183-1218, and plummeting to only 4.3% in 1219-1261.⁵⁶⁶ Yadira Gonzalez de Lara explains this decline as a result of political action. She claims that the shift from sea loans to commenda was due to better state control over trade and to the creation of mechanisms, such as the courts, that enforced contracts.⁵⁶⁷ De Lara affirms that the problem of cheating in particular was solved as ‘by the thirteenth century the state controlled the actual personnel of the trading fleet’, through the issuing of licences.⁵⁶⁸

The other turning point occurred in the late thirteenth century, when the *colleganza* declined rapidly. Puga and Trefler observed this pattern using their database of 381 *colleganze* spanning the period 1073-1342, viz. 1.4 *colleganza* contracts each year. They attribute this decline to the Serrata of the Maggior Consiglio and the subsequent implementation of a cap on investments in foreign trade known as *Officium de navigantibus*.⁵⁶⁹ In their view, ‘economic restrictions enacted during the Serrata were effective not only in restricting the use of the *colleganza* to the newly created nobility but in restricting it to the most powerful of these nobles’, at which point ‘nobles then have a strong incentive to impose economic restrictions on commoners. A second restrictive measure voted by the Great Council can exclude nonmembers from investing in international trade’.⁵⁷⁰ The reasoning behind the article is that a) *colleganze*

⁵⁶⁵ Shadrina, ‘Sedentary Merchant’, cit., 48, note 46 : ‘The early documents survive in clusters shaped by the archives in which they were initially kept as well as by their subsequent use as evidence in later property transactions (especially in cases where property had figured as security in a loan) and legal disputes (especially regarding inheritance). This clustering, coupled with low overall numbers, makes it impossible to use the early documents to draw any meaningful statistical conclusions’. Cf. G. Luzzatto, ‘Capitale e lavoro nel commercio veneziano’, cit., 3: ‘I documenti veneziani non riguardano che eccezionalmente affari di compra-vendita commerciale, per i quali era ben raro che si ricorresse all’opera del notaio; nella loro grande maggioranza essi si riferiscono alla stipulazione od alla liquidazione di affari di credito’.

⁵⁶⁶ Gonzalez de Lara, ‘Enforceability’, Cit., Table 1, 167 and Table 2, 170.

⁵⁶⁷ De Lara, ‘The Secret’, cit..

⁵⁶⁸ De Lara, ‘Enforceability’, 163-164.

⁵⁶⁹ On which see Cessi, *Officium de navigantibus*, cit.

⁵⁷⁰ Puga and Trefler, ‘International trade’, cit. 757-758 and 778.

declined, b) *mude* yielded the highest return on investments of any other maritime enterprise, and c) *mude* were only open to patricians, who monopolised that rent - and, increasingly, fewer of them.⁵⁷¹ The problem is that the authors only considered *colleganza* contracts in their own dataset, even though *colleganze* appear in the records of the Procuratori di San Marco throughout the fourteenth century. In fact, as late as 1409, the administrators of the estate of Marco de' Orlandi kept a detailed account of their investments in *colleganze*. At the end, we find an entry stating: 'overall the value of these *colleganze*, minus liabilities, as shown in this sheet, amounts to 309 *lire*, s. 16 d. 10' ('tute le golleganze e debeto apar i(n) su q(ue)sto ffolio i(n) s(umma) l. 309 s. 16 d. 10').⁵⁷² The idea that *mude* were exclusively the most lucrative aspect of Venetian trade is not demonstrated, as no comparison is made with the yields of privately-owned vessels. Moreover, the closure of trade through the Officium de navigantibus should be framed as a restriction enacted in 1324, 1331-1338 and 1361-1363, a total of roughly ten years over a century.⁵⁷³ The conclusions of Puga and Trefler have been recently echoed by Juan Julián Merelo-Guervós and Maria Cristina Molinari, who found that commercial capital acquired through *colleganze* could be turned into political capital, maximising the chance of being selected among families belonging to the Maggior Consiglio.⁵⁷⁴ I would argue instead that, as Luzzatto noted, 'there is nothing more absurd than to consider the political regime that consolidated its power in the fourteenth century as a plutocratic aristocracy'.⁵⁷⁵ It is important to consider all the investment tools available to Venetian merchants, including journeys on privately-owned vessels, local *colleganze*, and the purchase of state bonds.

⁵⁷¹ It has even been claimed in H. Van der Wee, 'Structural Changes in European Long-distance Trade, and Particularly in the Re-export Trade from South to North, 1350-1750' in J. D. Tracy (ed.), *The Rise of Merchant Empires. Long-distance Trade in the Early Modern World, 1350-1750* (Cambridge, 1990), 23, that: 'Venice also had some vital assets in the field of commercial policy, which was characterized by a spirit of aggressive state mercantilism'.

⁵⁷² ASVe, PSMC, Miste, *busta* 12A, Marco de' Orlandi, 'Quaderno delle colleganze'.

⁵⁷³ Hocquet, 'Solidarités', cit., 251-252.

⁵⁷⁴ Guervós and Molinari, 'An analysis', cit.

⁵⁷⁵ Luzzatto, *Storia economica*, cit., 132.

It is unquestionable that the *colleganza* declined, but there is less research on what replaced it - namely, whether Venice fully embraced the principal-agent structure⁵⁷⁶ or whether it continued to rely on kinship-based associations. We should also not forget a third option, namely debt. Dean Williamson, using notarial records from fourteenth-century Crete, has demonstrated that the financing of commercial ventures through loans saw a boom. He used 1,701 contracts from the cartularies of 28 notaries to show the division of contracts into commende, debts, and 'pool contracts', indicating 'the number of shares in a vessel that the parties have purchased'.⁵⁷⁷ This is all the more interesting because Quentin Van Doosselaere found that 93% of commercial agreements drafted in Genoa in the period 1154-1300 were *commende*.⁵⁷⁸ The way out of this conundrum was indicated by Lane, who noted how: 'By the fourteenth century the *colleganza* was being replaced by a new style of business organization which used commission agents and joint ventures. In this very fluid situation, family ties supplied a strong element of continuity. We need more investigation of how the Venetian family operated in its heyday as a business unit.⁵⁷⁹ I will do precisely this, focusing in the next section on family partnerships.

3. 2 The fraternal partnership or *fraterna*

⁵⁷⁶ Lopez, *Mediterranean Trade*, cit., 212-220.

⁵⁷⁷ Williamson, 'Financial Structure', cit., 180-181.

⁵⁷⁸ Q. Van Doosselaere, *Commercial Agreements and Social Dynamics in Medieval Genoa* (Cambridge, 2009), 64: 'An analysis of the various types of agreement that bonded the participants in the maritime trade from 1154 to 1300 reveals that over 93% of all maritime commercial ties coded in the data set were organized through commenda contracts (6,764 out of 7,221)'.

⁵⁷⁹ F. C. Lane, 'Recent Studies on the Economic History of Venice', *The Journal of Economic History*, 23/3 (1963), 317.

The fraternal partnership in Venice can be traced back to at least the twelfth century.⁵⁸⁰ The earliest mention of a *fraterna compagnia* amongst the documents published by Morozzo Della Rocca and Lombardo dates from March 1188.⁵⁸¹ That fraternal partnership seems to have included four brothers: Iannone, Domenico, Pancrazio, and Zaccaria. It was dissolved at the behest of Domenico and Iannone, who attested the dissolution of the partnership with their brothers: ‘the *fraterna compagnia* that, from time immemorial until today, bound us together’ (‘de tota fraterna compagnia quam ab ime usque modo insimul habuimus’); the properties remaining nevertheless undivided. Already in 1242, the statutes approved by Doge Jacopo Tiepolo featured a section entitled ‘de fraterna compagnia’:

We desire that once the father passes away, the brothers remain in a *fraterna compagnia* (fraternal partnership), until they are separated. This also applies to the brothers’ full sons, between themselves and with their paternal uncles. [...] However, sisters, amongst themselves, and in relation to their brothers, will not be bound by a *fraterna compagnia*, but will settle singularly what each of them receives by virtue of bequests of their fathers, older relatives (*avo*), or any other older male relative in their ascending line, but brothers shall remain in a *fraterna compagnia*, unless they decide by themselves to split up.⁵⁸²

⁵⁸⁰ G. Zordan, ‘I vari aspetti della comunione familiare di beni nella Venezia dei secoli XI-XII’, *Studi Veneziani*, 8 (1966), 127-194. On the *fraterna* see also P. S. Leicht, ‘Fraterna’, in *Enciclopedia Italiana* (1932), [https://www.treccani.it/enciclopedia/fraterna_\(Enciclopedia-Italiana\)/](https://www.treccani.it/enciclopedia/fraterna_(Enciclopedia-Italiana)/) (30/05/2025); S. Chojnacki, ‘Kinship Ties and Young Patricians in Fifteenth-Century Venice’, *Renaissance Quarterly*, 38 (1985), 240-70; D. Raines, ‘La “fraterna” et la ramification en branches de familles du patriciat vénitien, XVe-XVIIIe siècles’, in *Frères et sœurs du Moyen-Âge à nos jours*, ed. C. Dousset et al. (Bern, 2016), 33-58 and Lane, *Andrea Barbarigo*, cit., 87-90. More generally on fraternal partnerships see T. Kuehn, *Patrimony and Law in Renaissance Italy* (Cambridge, 2022), 100-136, and Y. Gonzalez de Lara, ‘Business Organization and Organizational Innovation in Late Medieval Italy’, in H. Wells (ed.), *Research Handbook on the History of Corporate and Company Law* (Cheltenham, 2018), 65-87 and C. Fumagalli, *Il diritto di fraterna nella giurisprudenza da Accursio alla codificazione* (Turin, 1912).

⁵⁸¹ Morozzo della Rocca-Lombardo, *Documenti del commercio veneziano*, cit. 360. Original in ASVe, S. Zaccaria, Pergamene, *busta* 35, no. 145, March 1188.

⁵⁸² *Gli statuti veneziani di Jacopo Tiepolo del 1242 e le loro glosse*, ed. R. Cessi (Venice, 1938), 124-125 (Book 3, Article 4 ‘de fraterna compagnia’) quoted and commented in V. Crescenzi, ‘Il diritto civile’, in *Storia di Venezia. Volume III*, cit., 409-474, in particular note 56. The Statutes recite: ‘volumus quod fratres, mortuo patre remaneant in fraterna compagnia quamdiu divisi non fuerint. Item in germanis, consanguineis, fillis fratrum inter se, sive cum patris. Et non precedat ultra fraterna compagnia. Sorores autem, inter se et cum fratribus, non sint in fraterna compagnia, sed faciant inter se sorores rationes eorum tantum quantum habuerint a patre, vel avo, vel aliquo alio de superioribus masculis per lineam ascendentem?’.

The boundaries of the *fraterna* were clearly set out in the statutes. As the name suggests, it involved brothers, but not sisters. It also applied to half-brothers, nephews, and sons of brothers⁵⁸³ This latter aspect is in sharp contrast with what happened elsewhere. As Max Weber already noted in his doctoral thesis of 1889: ‘...in other Italian cities later the situation was exactly the opposite; that is, the characteristic of being a coheir does not already constitute the status of a *socius*’.⁵⁸⁴ In medieval Venice, however, this was the norm. In 1461, for instance, the Valier brothers declared in front of the Giudici di Petizion that ‘at the time of the death of our honourable father we were four brothers, the elder being the said Antonio, and we remained undivided in a fraternal partnership as stipulated by our laws’.⁵⁸⁵ As explained by Lane, ‘even after the family partnership became the dominant form of business organization in Venice, it continued to be more than a mere business partnership. All the property inherited from the father—houses, land, furniture, and jewelry as well as ships and merchandise—was entered in the books of the *fraterna* unless withdrawn from it by special agreement’.⁵⁸⁶

The default setting of a *fraterna* had one important consequence for documentation, namely that it voided the need for a notarised act to set it up. Rather, the only paper trail left by fraternal partnerships is either books of account, the dissolution of a fraternal partnership to allow a partner to trade autonomously, or litigation in court.⁵⁸⁷ A problem lies in the fact that even though the dissolution of fraternal partnerships should have been registered with the

⁵⁸³ Hocquet, *The Merchant*, cit., 253. He also blames the *fraterna* for social immobility, Ibid., 217: they came from a society that favoured family ties and based the activities of its members on the “*fraterna societas*”, a guarantee of wealth that continued beyond the first generation.

⁵⁸⁴ M. Weber, *The History of Commercial Partnerships in the Middle Ages* [*Zur Geschichte der Handelsgesellschaften im Mittelalter*, 1889] (tr. London, 2003), 107.

⁵⁸⁵ ASVe, Giudici di Petizion, Sentenze a Giustizia, Reg. 133, ff. 93r-110r ‘Al tempo de la morte del spettabile nostro padre che fo del 1448, see atrovessamo quattro fradeli di qual el mazoro iera ser Antonio predicto et romagnisemo indivixi in *fraterna* compagnia chomo dispone le leze nostre’. Quoted in F. Faugeron, ‘The Venetian Nation in Sicily in the Second Half of the Fifteenth Century’, in *Union in Separation*, ed. G. Christ (Rome, 2015), 629, note 24.

⁵⁸⁶ Lane, ‘Family Partnership and Joint Ventures’, cit.

⁵⁸⁷ For a very significant example, the Soranzo *Fraterna* from the early fifteenth century see M. Ryabova, ‘The Account Books of the Soranzo *Fraterna* (Venice 1406–1434) and Their Place in the History of Bookkeeping’, *Accounting Historians Journal*, 45/1 (2018), 1–27. For the jurisdiction of the Petizion over *fraterne* see Cassandro, ‘Curia di Petizion’, cit., 20–21, 46, 103–104 and 110.

Cancelleria Inferiore, the fourteenth-century registers are missing or fragmented.⁵⁸⁸ Andrea Dandolo ordered notaries to register the deeds certifying the end of *filialis subjectio* (the legal act whereby a son was no longer subject to his father)⁵⁸⁹ and of fraternal partnerships no later than one year after they had been agreed in a register of the chancery.⁵⁹⁰ The disappearance of part of these registers and of the records of the Corte del Proprio, dealing with partnerships, makes almost impossible a quantitative analysis of such deeds.⁵⁹¹ The dissolution of a fraternal company is often found amongst the dossiers of the Procuratori di San Marco in the late Middle Ages, as it marked the independence of the individual from both the inheritance and the assets and liabilities of his brother-partners. Alternatively, as the assessment of the value of properties and assets was a long and burdensome process, brothers could opt for the dissolution of the *fraterna* solely in regard to *beni mobiles*. This is what happened with the inheritance of Francesco da Pesaro, who died in 1348, alongside his wife, as his sons Marino and Nicoletto da Pesaro decided on the dissolution of the *fraterna*, ‘retaining nonetheless in a fraternal partnership (*fraterna societate*) all properties belonging to the said brothers’.⁵⁹² Even so, as explained by J. R. Wheeler, ‘though fraterne were dissolved, they might be seen as a sort of “limiting structure” within which family identity and neighbourhood ties unfolded’.⁵⁹³

The uncertainty surrounding the *fraterna* is evidenced by the rather different definitions

⁵⁸⁸ See what remains in ASVe, Cancelleria Inferiore. Notai. Miscellanea, b. 7. For the emancipazioni instead ASVe, Cancelleria Inferiore, Notai, Miscellanea, b. 32 and 33.

⁵⁸⁹ On the filial subjection see L. Margetic, ‘Il diritto’, in L. Cracco Ruggini et al. (ed.), *Storia di Venezia*, vol. 1. *Origini-età ducale* (Rome, 1992), 680 and B. Pitzorno, *Le consuetudini giudiziarie veneziane anteriori al 1229* (Venice, 1910), 39.

⁵⁹⁰ *Novissima veneta statuta ac Venetarum legum volumen*, ed. A. Mocenigo (Venice, 1729), 87: ‘I nodari astrecti a sacramento siano obbligadi di mettere tutti i preghi di fraterna compagnia in cancelleria’.

⁵⁹¹ See Tiepolo, *Guida Generale*, cit. 988-989.

⁵⁹² ASVe, PSMC, Mistre, *busta* 150, Nicoletto da Pesaro, Parchments, dissolution of the *fraterna* (28th October 1351).

⁵⁹³ Wheeler, ‘The Sestiere’, cit. 100.

proposed by scholars.⁵⁹⁴ Stefania Montemezzo has defined as ‘a family business, with no branches abroad, managed by kin living under the same roof and relying for the most part on agents for international affairs’.⁵⁹⁵ This definition conflates two distinct institutions, one being the principal-agent relationship, and the other being the fraternal partnership. Kedar has defined it as a partnership ‘among close relative who would operate from different commercial centers over a long period of time’.⁵⁹⁶ Crouzet-Pavan’s definition is: ‘A family-based economic association that automatically applied to men to the third degree of consanguinity’.⁵⁹⁷ There is more research to be carried out on the *fraterna*, which Anna Bellavitis has defined as ‘the fundamental economic structure’ of the Venetian economy.⁵⁹⁸

It is worth reflecting here on the fact that *fraterne* provided merchants with an important mechanism to maintain trust, as kinship provided merchants with a significant link to other members of the partnership.⁵⁹⁹ Historians like Avner Greif have looked at the fundamental problem of incentives to behave correctly, in other words, why a merchant who was entrusted with a sum by his investor would not embezzle it, and the mechanisms in place to enforce the

⁵⁹⁴ Cf the older definition in M. Ferro, *Dizionario del diritto comune e veneto*, 2nd ed., Volume I (Venice, 1845), 772-774: ‘Si dicono esser in fraterna compagnia quei fratelli che dopo la morte del comun padre continuarono la comunità dei beni, nè fecero ancora le divisioni. Dura la medesima compagnia anche fra i nipoti e germani maschi fino a tanto che divengano alla divisione’.

⁵⁹⁵ S. Montemezzo, ‘Galley Routes and Merchant Networks between Venice and the North Sea’, in A. Caracausi and C. Jeggler (eds.), *Commercial Networks and European Cities, 1400-1800* (London, 2014), 157.

⁵⁹⁶ Kedar, *Merchants*, cit., 27.

⁵⁹⁷ É. Crouzet Pavan, *Venice Triumphant. The Horizons of a myth* (Baltimore, 2002), English translation of *Venise triomphante: les horizons d’un mythe*, 1999), 334.

⁵⁹⁸ A. Bellavitis, ‘Family and Society’, in *A Companion to Venetian History*, cit., 335.

⁵⁹⁹ The bibliography on trust and reputation is large. I note here C. Magras, ‘La réputation du marchand au Moyen Âge. Un mécanisme informel au service de la sécurité des échanges’, *Questes*, 42 (2021), 109-122; A. Tikhomirov, ‘Trust and Distrust in Exploring the Human Past: An Interview with Geoffrey Hosking, Francesca Trivellato, and Ian Forrest’, *Journal of Modern European History*, 18/4 (2020), 381-407; E. Kadens ‘The Medieval Law Merchant: The Tyranny of a Construct’, *Journal of Legal Analysis*, 7/2, (2015), 251–289; ‘Trust’ in G. Rosser, *The Art of Solidarity*, cit., 149-186; Goldberg, *Trade and Institutions*, cit., 120-184; G. Calafat, ‘Familles, réseaux et confiance dans l’économie de l’époque moderne Diasporas marchandes et commerce interculture’, *Annales. Histoire, Sciences Sociales*, 66/2 (2011), 513-531; Q. Van Doosselaere, *Commercial Agreements*, cit., 57-60 and 100-117; S. Ogilvie, ‘The Use and Abuse of Trust: Social Capital and its Deployment by Early Modern Guilds’, *CESifo Working Paper No. 1302* (2004), A. Greif et al., ‘Coordination, Commitment, and Enforcement: The Case of the Merchant Guild’, *Journal of Political Economy*, 102 (1994), 745–776; D. North et al., ‘The Role of Institutions in the Revival of Trade: the Law Merchant, Private Judges, and the Champagne Fairs’, *Economics and Politics*, 2/1 (1990), 1-23.

restitution of the investment in the case of an untrustworthy agent.⁶⁰⁰ Greif has reflected in particular on the role of formal and informal constraints, in simpler terms whether merchants were constrained by reputation or by formally enforced laws.⁶⁰¹ His studies applied the principal-agent problem, an important strand of contemporary economic theory, to the medieval realities of Jewish merchants active in eleventh-century Egypt (the Maghribi traders) and Italian businessmen.⁶⁰² North observed, regarding the ways to maintain control of agents involved in long-distance trade, that ‘in medieval and early modern times... the use of kinship and family ties to bind agents to principals... provided some assurance to the principal that the order and direction of the principals were effectively carried out’.⁶⁰³ The problem has recently been reconsidered in the light of Social-Network Analysis or SNA.⁶⁰⁴ A study of the Soranzo *fraternal* has assessed the degrees of proximity between members of the network.⁶⁰⁵ Christ, studying the network of Venetian merchants in Alexandria in 1399-1401, has remarked that

⁶⁰⁰ A major contribution to this debate is A. Greif, ‘Reputation and Coalitions in Medieval Trade: Evidence on the Maghribi Traders’, *Journal of Economic History*, 49/4, 857–82.

⁶⁰¹ A. Greif, *Institutions and the Path to the Modern Economy. Lessons from Medieval Trade* (Cambridge, 2006), 59: ‘A credible threat of collective, multilateral punishment supported the beliefs that the short-run gain from cheating today was less than the long-run benefit of being honest. [...] The Maghribis’ code of conduct was a social norm, a rule that is neither promulgated by an official source, such as a court or a legislator, nor enforced by the threat of legal sanctions but is nevertheless regularly complied with and Ibid., 63: ‘In some situations, a legal system can surmount a commitment problem inherent in a central transaction by linking it to a coercive (legal) transaction. Beliefs in legal sanctions deter misconduct’.

⁶⁰² A useful summary is in J. Heath, ‘The Uses and Abuses of Agency Theory’, *Business Ethics Quarterly*, 19/4 (2009), 497-528; K. M. Eisenhardt, ‘Agency Theory: an Assessment and Review’, *Academy of Management Review*, 14 (1989), 57-74; J. W. Pratt and R. Zeckhauser (eds.), *Principals and Agents: the Structure of Business* (Boston, 1985).

⁶⁰³ D. North, *Institutions, Institutional Change and Economic Performance* (Cambridge, 1990), 126. On the pros and cons of family firm vis-à-vis networks see R. Harris, *Going the Distance. Eurasian Trade and the Rise of the Business Corporation, 1400–1700* (Princeton, 2020), 173-225.

⁶⁰⁴ I note here three foundational works C. Wetherell, ‘Historical social network analysis’, *International review of Social History*, 43 (1998), 125–144; M. Emirbayer and J. Goodwin, ‘Network Analysis, Culture, and the Problem of Agency’, *American Journal of Sociology*, 99/6 (1994), 1411-1454, and the essays collected in B. Wellman and S. D. Berkowitz, *Social Structures: a Network Approach* (New York, 1988). For two excellent précis of the state of the art on the subject see M. Pompermaier, ‘Introduction’ and E. M. Dermineur, ‘Historical Social Network Analysis and Early Financial Exchanges’, in Eid. (eds.), *Credit Networks in The Preindustrial World. A Social Network Analysis Approach* (Cham, 2025), 1-56 and S. Selzer and U. C. Ewert, ‘Netzwerke im europäischen Handel des Mittelalters. Konzepte – Anwendungen – Fragestellungen’, in G. Fouquet and H-J. Gilomen (eds.), *Netzwerke im europäischen Handel des Mittelalters* (Ostfildern, 2010), 21-47. On networks in general see A. Molho and D. Ramada Curto, ‘Les réseaux marchands à l’époque moderne’, *Annales. Histoire, Sciences Sociales*, 58/3 (2003), 565-579 and S. Subrahmanyam, *Merchant Networks in the Early Modern World* (Brookfield, 1996).

⁶⁰⁵ Ryabova, ‘Venetian Trading Firm’, cit.

SNA may refer to two inter-related yet distinguishable concepts: either ‘data on connections between a set group of persons at a certain place and time are measured against a set of predefined criteria’, or the data may ‘structurally describe a specific group of people interacting regularly with varying degrees of institutionalisation, i.e. a structure that is *a priori* defined as a network such as a merchants' guild or the merchants joined by shared investments into a galley’.⁶⁰⁶

The combination of history, economics, and sociology can bear important fruit for the study of an institution like the *fraterna*, which is an economic institution embedded in kinship structures. I borrow the notion of ‘embeddedness’ as defined by Mark Granovetter, who criticised two opposite positions, namely those who believed in a rational market-oriented *homo oeconomicus* and those who conversely only conceived human decisions to be directly related to overarching structures of human actions.⁶⁰⁷ As he pointed out in another article: ‘By "embeddedness" I mean that economic action, outcomes, and institutions are affected by actors' personal relations, and by the structure of the overall network of relations’.⁶⁰⁸ This notion is important to understand how firms in the Middle Ages were far from being impersonal companies but were, rather, deeply situated within social relations.

The family in Venice⁶⁰⁹ informed the funding of any commercial enterprise and even though other investment vehicles were available, the *fraterna* remained a characteristic of Venice for centuries, so much so that we find them as late as 1772.⁶¹⁰ Lane commented on this persistence of family associations alongside the state that ‘the Venetians found in the supervisory role of

⁶⁰⁶ G. Christ, ‘Beyond the Network - Connectors of Networks: Venetian Agents in Cairo and Venetian News Management’, in S. Conermann (ed.), *Everything is on the Move: The Mamluk Empire as a Node in (Trans-)Regional Networks* (Bonn, 2014), 30.

⁶⁰⁷ M. Granovetter, ‘Economic Action and Social Structure: The Problem of Embeddedness’, *American Journal of Sociology*, 91/3 (1985), 481-510.

⁶⁰⁸ M. Granovetter, ‘The Old and New Economic Sociology’, in *Beyond the Marketplace*, ed. R. Friedland (Hawthorne, 1990), 98.

⁶⁰⁹ For a précis of the Venetian family see Romano, *Patricians and Popolani*, cit., 39-64.

⁶¹⁰ Raines, *La fraterna*, cit., 24.

the Senate, in the great family partnerships, and in short-lived joint ventures institutions that met their economic need and also were in harmony with their inherited ideals of state leadership and family solidarity'.⁶¹¹

The *fraterna* was born out of physical proximity, namely brothers living in the same house - often with their married families - with the aim of making equity and capital available immediately to all brothers.⁶¹² It continued as an institution even if that proximity no longer always existed, and it became a way to avoid the dispersal of the family assets and to mobilise resources to be used both for trade and later to buy offices or acquire influence.⁶¹³ It was truly an institution in the sense given to this word by North, according to whom 'institutions are the humanly devised constraints that structure political, economic and social interactions.'⁶¹⁴ It was at the same time an economic and a social institution, insofar as it ensured (usually) the cohesion of the family and was in itself a result of the powerful ties between members of the same family (in the Venetian sense of the *ca*), encompassing two generations of patrilineal kins.⁶¹⁵ It was narrower in scope than the Florentine family companies,⁶¹⁶ and more similar to Genoese *alberghi* (associations of noble families), which were also born out of proximity and

⁶¹¹ F. Lane, 'Family Partnerships and Joint Ventures in the Venetian Republic', *The Journal of Economic History*, 4/2 (1944), 196.

⁶¹² Leicht, 'La fraterna', cit.: 'Così a Venezia, ad esempio, si formò l'istituto della "fraterna compagnia" per la quale i fratelli e i loro discendenti mantenevano in comunione i loro beni e interessi. Il nome "compagnia" è caratteristico, dacché deriva dalla *communio ad eundem panem et vinum*, cioè accenna al convivere domestico'. See also J. C., Davis, *A Venetian Family and its Fortune, 1500-1900: The Dona and the Conservation of Their Wealth* (Philadelphia, 1975), 7-8.

⁶¹³ We find a similar goal of the fraternal partnership in Dubrovnik, where the father could even prescribe the partnership to last until his youngest son was 40. Z. P. Vardić, 'Youth and Age: Families of Wealthy Commoners in Late Medieval Dubrovnik', in *Generations in Towns: Succession and Success in Pre-Industrial Urban Societies*, ed. K. Szende (Newcastle, 2009), 31.

⁶¹⁴ North, 'Institutions', cit., 97.

⁶¹⁵ G. Trebbi, 'La società veneziana', in G. Cozzi (ed.), *Storia di Venezia*. Vol. 6 (Rome, 1994), 153: 'rimase invece invariata attraverso i secoli la norma che consentiva di abbracciare sotto il nome di fraterna anche la comunione fra zii e nipote, così come quella tra primi cugini, ma vietava di allargare la fraterna al di là di questo grado di parentela'.

⁶¹⁶ For a general introduction see L. Tanzini, *1345: la bancarotta di Firenze: una storia di banchieri, fallimenti e finanza* (Rome, 2018), S. Tognetti, *Le compagnie mercantili-bancarie toscane e i mercati finanziari europei tra metà XIII e metà XVI secolo*, *Archivio Storico Italiano*, 173/4 (2015), 687-718; R. A. Goldthwaite, *The Economy of Renaissance Florence* (Baltimore, 2009), 63-113 and E. S. Hunt, *The Medieval Super-companies: a Study of the Peruzzi Company of Florence* (Cambridge, 1994).

based on a common heritage.⁶¹⁷ The *fraterna* was thus an important element of Venetian trade. It was both a way to perpetuate the tradition of undivided assets amongst brothers, and a tool to raise the necessary funds for commercial enterprises.⁶¹⁸

The advantages of the fraternal partnership have been clearly outlined by Pezzolo:

The advantages of this family partnership were considerable, and analogous to those of the Genoese alberghi. In the first place, the higher degree of uncertainty regarding long-distance commerce encouraged the heads of families to choose, not a single heir but rather to involve all of the male heirs in the family business, thus diversifying the risk. [...] Second, the family wealth remained intact and could be managed by the brothers according to their individual specialties. Third, this allowed sons to build political careers that often took them away from Venice, to foreign courts or aboard a warship. Finally, this practice created a sort of an economy of scale, in which shared living quarters allowed for more modest expenses on the home front.⁶¹⁹

⁶¹⁷ See P. Guglielmotti, 'Famiglie e alberghi genovesi nel Trecento: per un censimento dei segni di distinzione e di appartenenza', *Reti medievali*, 23/2 (2022), 96: 'consociazioni prevalentemente nobiliari che riuniscono per lo più linee derivate da uno stesso ceppo, sempre caratterizzate, come va ribadito, da una spiccata contiguità residenziale'. In the seventeenth century, we find also in Genoa fraternal partnerships named *fratrie* almost identical to Venetian *fraterne*, save for the fact that they had to be constituted in front of a notary, see A. Zanini, 'Famiglia e affari nella Genova del Seicento: il ruolo delle "compagnie di fratria"', in S. Cavaciocchi (ed.), *La famiglia nell'economia europea, secc. XIII-XVIII / The Economic Role of the Family in the European Economy from the 13th to the 18th Centuries* (Florence, 2009), 471-80. On the *alberghi* in general see D. Bezzina, 'Families, Alliances, Clientage and Urban Space: the Case of the Late Medieval Genoese Alberghi (Thirteenth-Fifteenth centuries)', *Studi di storia medioevale e di diplomatica*, 7 (2023), 309-330; G. Petti Balbi, *Governare la città. Pratiche sociali e linguaggi politici a Genova in età comunale* (Florence, 2007), Y. Kamenaga, 'Changing to a New Surname: an Essay Regarding the 'Albergo' in Medieval Genoa', *Mediterranean World*, 16 (2001), 221-235; E. Grendi, 'Profilo storico degli alberghi genovesi', *Mélanges de l'École Française de Rome. Moyen Âge-Temps modernes*, 87/1 (1975), 241-302, J. Heers, *Le clan familial au Moyen Âge: Étude sur les structures politiques et sociales des milieux urbains* (Paris, 1974) and A.-É. Sayous, 'Aristocratie et noblesse à Gênes', *Annales d'histoire économique et sociale*, 9 (1937), 366-381. For case studies on Genoese *alberghi* see M. Balard, 'I Giustiniani: un modello degli alberghi?', in *Ianuensis non nascitur sed fit. Studi per Dino Puncuh*, vol. 1 (Genoa, 2019), 131-140, D. Bezzina, 'I de Nigro fra Due e Trecento: progetti familiari e modalità consociative di un albergo genovese. Prime ricerche', *Atti della società ligure di storia patria*, 58 (2018), 5-22 and P. Guglielmotti, *Agnacio seu parentella. La genesi dell'albergo Squarciafico a Genova (1297)* (Genoa, 2017).

⁶¹⁸ The link between trade and fraternal partnership is clear from the contemporary example of fifteenth-century Split. See E. Orlando, *Strutture e pratiche di una comunità urbana. Spalato, 1420-1479* (Venice, 2019), 75: 'non sorprende affatto la diffusione dell'istituto nelle classi superiori, dedite ai traffici e al commercio'.

⁶¹⁹Pezzolo, 'The Via Italiana', cit., 277.

It is clear that the *fraterna* was a business-oriented institution intended to preserve the core assets without division.⁶²⁰ The *fraterna*, to be understood both in the narrow sense of a partnership of brothers or a larger business venture encompassing up to two lines of patrilineal kins, was a key feature of Venetian society.⁶²¹ To an extent, this was a natural development, as sons were usually already engaged in business with their fathers at a young age. The merchant Fresco Querini, for instance, in the 1340s was actively operating in the trade of precious metals with his sons Leone and Maddaleno, who acted as his agents.⁶²² The brothers shared full liabilities and profits, ‘as a partner of the partnership’ (*‘sì como compagno in la compagnia’*), to quote an arbitration from 1332.⁶²³ When the *fraterna* was overburdened with debts, both brothers had to answer with all their assets, as we may infer from the bankruptcy in the 1320s of the Falier *fraterna*.⁶²⁴ The *Sopraconsoli dei Mercanti*, the magistrature entrusted with the settlement of bankruptcies,⁶²⁵ in one instance had a register of creditors completed, and titled it ‘*Quaternus rationis Nicoleti et Bertuçii Faletro fratrum*’. In fact, rather than being an account of the *fraterna*, it is a list of creditors of the failed enterprise. It is a parchment register, 29 cm long and 22 cm wide, running for several pages, and detailing the astronomical debt accrued by the two brothers: according to an entry halfway through the document, ‘the total debt sums up to 1,527 *lire*, and 10.5 denari di grossi’ (‘s. tuto debito lb. MDXXVII dr 10 1/2 de gss’), or 15,275 ducats. The debt was paid in instalments, until the brothers reached a settlement with their creditors, as all their resources had already been sold. First, the two brothers sold their assets, such as wares brought back from Euboea (Negroponte) or sold locally, fetching fourteen

⁶²⁰ See F. Lane, ‘Società familiari e imprese a partecipazione congiunta’, in *I mercanti di Venezia*, ed. F. Lane (Turin, 1982), 237-255.

⁶²¹ For a comparison with Tuscany see J. S. Grubb, *Provincial Families of the Renaissance: Private and Public Life in the Veneto* (Baltimore, 1996), 84-91.

⁶²² ASVe, PSMC, Miste, busta 100, Fresco Querini, Letters.

⁶²³ Mozzato-Marrella, *Arbitrato*, cit., 147, n. 35.

⁶²⁴ ASVe, PSMC, De Ultra, busta 125, Nicoletto Falier, *Quaternus rationis*, including loose papers inside.

⁶²⁵ On bankruptcies see Cassandro, *Le rappresaglie e il fallimento*, cit.

(140 ducats) and more than 200 *lire di grossi* (2,000 ducats), respectively. They then sold the state bonds they owned, worth 200 *lire*, and the ownership of fishing waters. In 1331 roughly twenty creditors agreed to withdraw further requests, but the dire financial situation of Bertuccio Falier is laid bare by his agreement with his creditors, in which he described himself as destitute and hopeless ('deserto d'aver e de persona').⁶²⁶

It is also important to stress that fraternal partnerships were also established by Venetians outside Venice, as shown by the protocols of Nicola de Boateriis, a Venetian notary active in Famagusta (1355-1365).⁶²⁷ They could also include properties or assets located outside of Venice. Marco Polo the Elder (the uncle of Marco Polo) specified in his will of 1280 that he was in a fraternal partnership with his two brothers, and that he owned a house in Soldaia (Sudak), where his son and daughter resided.⁶²⁸ It was also possible to set up multiple inter-related fraternal partnerships. For instance, the Corner family constituted several *fraterne* in the fourteenth century to set up sugar plantations in the island of Cyprus, also including associates not belonging to the family.⁶²⁹ *Fraterne* were so ubiquitous that they were employed even by Venetian citizens banned from the city. When the Venetian authorities repressed the Tiepolo-Querini conspiracy in 1310, they faced difficult decisions regarding the division of properties and assets owned by non-conspiring relatives of the Tiepolo and Querini families. The *fraterna* partnership between Giacobino and Pietro Querini, banned from Venice, lasted until 1325, despite both being away from the city.⁶³⁰

⁶²⁶ ASVe, PSMC, De Ultra, *busta* 125, Nicoletto Falier, Agreement with the creditors, loose paper (19/08/1334): 'chomo chollu ch(e)/ non à nie(n)te e p(er) tal ovra jo son deserto d'aver e de persona'.

⁶²⁷ Nicola de Boateriis *notaio in Famagosta e Venezia*, cit., 26, n. 19 (08/10/1360): 'Cum tu Brancha habeas vel habueris de pluribus rationibus pannos fratris mei Benedicti Batalii et partem de ipsis vendideris et partem habeas adhuc in manibus tuis et cum dicto fratre meo Benedicto sim adhuc in fraterna compagnia'

⁶²⁸ D. Jacoby, 'Marco Polo, His Close Relatives, and His Travel Account: Some New Insights', *Mediterranean Historical Review*, 21 (2006), 194.

⁶²⁹ M. L. Bertelli, 'Nuove acquisizioni per la protostoria del codice Hamilton 390', *Critica del testo*, 1 (2012), 99. See also G. Luzzatto, 'Capitalismo coloniale nel Trecento', in *Studi di storia economica veneziana*, cit., 117-123.

⁶³⁰ F. Faugeron, 'L'art du compromis politique', cit., 410.

By the fourteenth century, the fraternal arrangement started shifting towards a fully-fledged partnership, often allowing for external partners to join (even though the brothers retained the majority of the partnership).⁶³¹ As remarked by Franz-Julius Morche, ‘the compagnia thus combined the entrepreneurial flexibility of the commenda/colleganza with the institutional security of the *fraterna* while also extending the scope of potential partnerships, which no longer had to be based on nuclear family structures.’⁶³² This explains why we find several instances of the dissolution of a *fraterna*, only to be replaced by another partnership between the same two brothers. This was a business-oriented decision that enabled the partners to invest in the new company at their will, without having to settle the division of properties, and as independent brothers rather than brothers linked by ‘filial subjection’ to their father. One such instance comes from the notarial records of Angioletto da Venezia, and it is preserved by chance, having been used as the cover of one of the registers of the acts of the notary. On 26 March 1400, Lorenzo and Nicola Morosini, sons of Gasparino Morosini, both autonomous and independent from their father⁶³³ (‘ambo a dicto patre nostro divisi et emancipati’), set up a society and company, ‘to do business, to trade, and to ship goods’ (‘ad mercandum, negotiandum, et traficandum’), investing 2,000 ducats each, to ‘make business as merchants’ (‘more mercatorio traficare’). The list of activities of the company is interesting, albeit formulaic: namely, to sell merchandise, to barter, and to engage in forward sales (‘ad baratum et ac etiam ad terminum’), to invest the sum in commercial enterprises, to make purchases, to sell and to ship products ‘by land and sea, at our own risk and peril’ (‘et tam per terram quam per

⁶³¹ For a recent assessment of the Venetian business model see Montemezzo, *Networks*, cit, in particular 19-75. The shift also affected Venetians abroad, see N. Di Cosmo and L. Pubblici, *Venezia e i Mongoli. Commercio e diplomazia sulle vie della seta nel Medioevo (secoli XIII-XV)* (Rome, 2022), 210-216.

⁶³² F.-J. Morche, ‘Profit and Commitment. Lorenzo Dolfín and the Commercial Family in Venetian Long-Distance Trade, c. 1399-1475’ (Inauguraldissertation, University of Heidelberg, 2019), 45, https://archiv.ub.uni-heidelberg.de/volltextserver/27656/1/Morche_Profit_and_Commitment.pdf (30/05/2025).

⁶³³ For the ‘emancipation’ of sons see A. Lattes, *Il diritto commerciale nella legislazione statutaria delle città italiane* (Milan, 1884), 124-125. The institute of the ‘emancipation’ of sons has not been studied in depth for Venice, but an essay on Florence is a useful guide on its use, namely being freed of paternal power. See T. Kuehn, *Emancipation in Late Medieval Florence* (New Brunswick, 1982).

mare, ad risicum et periculum’), and generally ‘to invest and to use them in the way that is clearly laid out in our ledger (‘investivimus et de eis fecimus secundum quod per quaternum [soci]etatis nostre evidentius continetur’).⁶³⁴ The fraternal partnership thus evolved more and more into a standard partnership including external investors.

There are further elements of *fraterne* that warrant attention. First, the fraternal partnership could and did extend to associations of craftsmen. In 1388, for instance, we find an agreement between Franceschino di Salvatore, ‘lanarius’ (maker of woollens) from Florence and the brothers Giacomo and Bartolomeo Nigro (‘bareter’, viz. cap makers) to settle the disputes which had arisen within their fraternal company.⁶³⁵ Second, it could also be used as an investment vehicle for shares of the state galleys or private ships.⁶³⁶ Third, the range of activities covered by a fraternal partnership could be wide, and might cover several areas of the Mediterranean and investment in trade and manufacturing at the same time. In 1388, for instance, Luca Bragadin entered a lawsuit against Jacopo Bragadin and his son Lorenzo. Jacopo and his son declared their intention to settle in Bruges for the following six years, a choice due to their intense trade with that area. The *fraterna* seems to have been active in all sorts of trade: forty *lire* of *tornesi grossi* (i.e. *livres tournois*) were spent to ship cloths to Sicily, according to an entry in a now lost series of registers of Luca Bragadin (‘visis quaternis ser Luce’). The same merchant received merchandise in Flanders, and bought wool, apparently being accused by his partner of having overstepped the original agreements (‘viso quaterno dicti ser Luce, in quo apparet eum posuisse plus de emenda dictis lanis eo quod non debeat’).⁶³⁷ There is no doubt that the amount of trade undertaken by a *fraterna* could be considerable,⁶³⁸ and it is significant

⁶³⁴ ASVe, Cancelleria Inferiore, Notai, b. 225, Angioletto da Venezia, Parchment cover of the register, 26 March 1400.

⁶³⁵ ASVe, Cancelleria Inferiore, Notai, b. 168, Marco de Rafanelli, 1388 Protocol, f. 3r, Deed n. 5, 16/03/1388.

⁶³⁶ D. Stöckly, *L’Incanto*, 248. See also for a fifteenth-century case study Montemezzo, ‘Fra pubblico e privato’, cit.

⁶³⁷ Mozzato, *Arbitrato*, no. 45, 156-158.

⁶³⁸ A comprehensive list of *fraterna*-based banks can be found in Mueller, *Money*, cit., 92-110.

that some of the ledgers preserved in Venice were produced by *fraterne*. To name a few, the Florentine brothers Zaccaria and Tommaso Talenti were part of a *fraterna* already in 1380;⁶³⁹ the three brothers, Bernardo, Polo and Girolamo Giustinian, formed a fraternal partnership between 1417 and 1426;⁶⁴⁰ and another Giustinian (Alvise di Donato) was a member of a *fraterna* between 1428 and 1444.⁶⁴¹ A little later, Polo and Giacomo di Marin Sanudo formed a *fraterna* lasting from 1448 until 1451.⁶⁴²

3. 3 Fraterna-cum-compagnia ? The Dall'Inzegneri case study

Venetian *fraterne* often operated in conjunction with short-lived *compagnie*.⁶⁴³ The latter term in Venice referred to two slightly different types of partnerships, namely manufacturing partnerships, normally with a capital of some hundred ducats set up for a specific production (e.g. wool, silk, glass, hides),⁶⁴⁴ or larger commercial partnerships used to pool capital to fund larger trade ventures.⁶⁴⁵ The rationale for the absence of large companies was that the Venetian economy was trade-oriented. Larger enterprises could be funded either through the *fraterna* or pooling capital with a short-termed company, while smaller ventures would be backed through credit, by entrusting money to an agent, or by entering a commenda contract. A case study of the activities and range of a *fraterna* and its interrelated business conducted through a limited

⁶³⁹ ASVe, PSMC, De Citra, *busta* 141, Tommaso Talenti, List of debtors and creditors, 1380.

⁶⁴⁰ ASVe, PSMC, Mistre, *busta* 91A, Carte Giustinian, Mastro, 10th June 1417-20th August 1427.

⁶⁴¹ ASVE, PSMC, Mistre, *busta* 10, Carte Alvise e Zaccaria Giustinian, Compilation of accounts, 1428-1444.

⁶⁴² ASVe, Miscellanea carte non appartenenti ad alcun archivio, *busta* 29, Ledger of the Sanudo *fraterna*, 1448-1451.

⁶⁴³ See Lane, 'Partnerships and Joint ventures', cit.

⁶⁴⁴ For instance, in 1388, Zannino, capsellarius (chest-maker) and Giovanni Schiavo formed a company for the making of glass 'in arte et ministerio de vitris', with a capital of 500 ducats. ASVe, Cancelleria Inferiore, Notai, b. 168, Marco de Rafanelli, 1388 Protocol, f. 34v, 05/09/1388. On these *compagnie* see Lanaro, *Old World*, cit., 88 and 92, note 86 (wool) and 229-230 (silk).

⁶⁴⁵ One such example is the company between Alvise Balbi, Antonio Dandolo, and Nicoletto Querini, all living in Crete, with a capital of 25,000 *hyperpera*, constituted in 1396 to trade in Venice, Crete, Turkey, and Syria for five years. ASVe, Cancelleria Inferiore, Notai, b. 169, Marco de Rafanelli, 1396 Protocol, ff. 12v-13r.

partnership is offered by the dossier of Marco dall'Inzegneri, who was both a member of a *fraterna* and an investor in a *compagnia* set up with Lunardo Casaro in the 1360s.⁶⁴⁶ The *fraterna* was composed of three brothers, namely Pietro, Marco, and Bonaventura, whereas the time-limited *compagnia* with Lunardo was established for a business venture headed to Koroni or Methoni in Greece.

What we know about Marco dall'Inzegneri largely comes from the cache of documents regarding him assembled by the Procuratori di San Marco. He styled himself as 'Marcus de Inçignerii, filius quomdam domini Silvestri, de confinio sancti Johannis baptiste' (Marco degli Inzegneri, son of the late Silvestro, from the parish of S. Giovanni in Bragora) in his will, drafted on 17 November 1366.⁶⁴⁷ He named as his executors the Procuratori, Nicoletto Grioni 'mio parente' ('my relative') and Napoleone Passamonte 'mio compagno', 'my associate' and his wife Beatrice. He mentioned that his wife Beatrice had received a dowry of 1,000 ducats, which he allocated to his daughter Cataruzza, leaving 100 ducats to his wife and the same sum to 'Lena', his illegitimate daughter (*filia naturalis*), and the rest to his brothers and his nephew Maffeo. We also know that he had one short-lived son, called Silvestro, who 'lived from the 11th day of February up until the 25th of June past', viz. February-June 1367.⁶⁴⁸ He must have also rented a plot of land in the territory of Treviso and a 'stacio apothecarie', an apothecary's shop.⁶⁴⁹ In the same dossier we find the will of his father Silvestro, married to a Marina, dated 25 August 1351.⁶⁵⁰ He left a property to his son Jacomello, named Marco his executor and said

⁶⁴⁶ ASVe, PSMC, Miste, busta 66, Marco dell'Inzegneri, Papers, Constitution of a company, 20 July 1366.

⁶⁴⁷ ASVe, PSMC, Miste, busta 66, Marco dell'Inzegneri, 'Quaternus commissarie ser Marci Inçignario olim sancti Iohannis Bragole', n. 1, Exemplum testamenti (17/11/1366): 'sanam mentem, integrumque consilium habens, quamvis aliqua corporis infirmitate gravatus'.

⁶⁴⁸ Ibid., 'Expensas', Incrongrously numbered 7r on the top right corner, 'dictus Silvester vixit a die XJ mensis februarii usque diem XXV mensis junii nuper elapsi, qua die dictus filius obiit'. Payment to a babysitter, 14 ducats

⁶⁴⁹ Ibid., 8v: 'Quos noster commissus dare tenebatur ser Johanni Favacio sancti Vitalis de bonis fraterne societatis pro afictu unius tereni positi in districtu Tarvisii unius anni elapsis in festo sancti Martini nuper preteriti et pro leguminibus et aliis rebus stationis apothecarie'.

⁶⁵⁰ ASVe, PSMC, Miste, busta 66, Marco dall'Inzegneri, Loose parchment, Last will of Silvestro dall'Inzegneri, 25/08/1351.

that if his wife, who was pregnant, had a son, ‘sia in fraterna co(m)mpagnia, zoè Marco e Bonave(n)tura’, viz. ‘let him be in a fraternal partnership with Marco and Bonaventura’. He also added an interesting caveat: ‘I also want my sons not to part from each other until the youngest will reach the age of 18, and until they are all married’.⁶⁵¹ Silvestro must have had some doubts regarding the behaviour of Marco, because he explicitly stated that if he wronged the ‘fantolini’, his young brothers, he was to be disinherited. He also asked the fraternal partnership to bequeath 20 *soldi di grossi* (10 ducats) for his own soul every year. Luckily, we have a detailed post-mortem inventory of Marco’s movable goods,⁶⁵² completed on 21 January 1367. We know from this inventory that his wife, Beatrice had to surrender a series of items ‘belonging to the fraternal partnership’.⁶⁵³ On 22 September 1368, a series of *testificationes* were rendered in front of the Corte del Procurator. Bonaventura formally acknowledged that Pietro was older than twelve but younger than eighteen. If Silvestro was waiting for a son in 1351, he was probably sixteen or seventeen. Pietro, for his part, asked to be liquidated ‘de toto eo quod petere possem ratione et occasione nostre fraterne societatis’, in other words exiting the fraternal partnership. Cataruzza, also older than twelve but younger than eighteen and then wife of Andreollo da Porto from the parish of S. Cassiano, confirmed she had been given back the dowry ‘of my late mother’, meaning that Beatrice must have died before September 1368.⁶⁵⁴ The *fraterna* started with Marco and Bonaventura. It was significant enough to be mentioned in their father’s will as a condition for their inheritance. The duties of the older brothers, Jacomello and Marco, were explicitly stated in the will. The *fraterna* only ended when Marco died and the two brothers,

⁶⁵¹ Ibid., ‘Item voio che mie fioli no se possa partir l’un da l’altro fina che lo menor no averà anni XVIIJ e sia/tuti maridadi.

⁶⁵² It has been fully transcribed in S. Coccato, ‘Interni veneziani trecenteschi, La cultura materiale attraverso gli inventari di beni mobili dei Procuratori di San Marco’ (Phd Thesis, Ca’ Foscari, 2016), 363-388, commented at 69-73 and 98-99.

⁶⁵³ Coccato, ‘Interni’, 387, *recte* ‘MCCLXVIJ m(en)se de luio, di XXIIIJ le infrasc(ri)pte cosse/avemo ricevudo da dona Biatrixe, relita del n(ost)ro comesso/le qual aspeta ala frat(er)na c(om)pagnia’.

⁶⁵⁴ ASVe, PSMC, Miste, busta 66, Marco dall’Inzegneri, Loose parchment, *Testificationes* in front of the Corte del Procurator, 22/09/1368.

Bonaventura and Pietro, decided to part ways. The *fraterna* was envisaged by their father as the kind of semi-permanent institution that could perpetuate his memory by distributing pious bequests every year. Marco left the biggest share of his wealth to his brothers and his nephew Maffeo. The physical proximity that had underpinned the *fraterna* did not vanish. A Pietro dell'Inzegneri (possibly the same), still living in the parish of S. Giovanni in Bragora, was registered in the 1379 cadastre for 4,000 ducats.⁶⁵⁵ A Giannetta, daughter of a Maffeo dell'Inzegneri (possibly Marco's nephew) still lived in the parish of S. Giovanni in Bragora in 1398.⁶⁵⁶

We know from his post-mortem inventory that Marco traded in wine.⁶⁵⁷ In a storage space in his house (a *canipa*) he had eight *caratelli* of ribolla, one of malmsey, one of 'wine from the Marche' and one with 'wine from Romania', viz. the Byzantine Empire, as well as four empty barrels. Outside the storage, he stowed several empty barrels and one barrel with 'vin teran', i.e. local wine, together with two *stera* of flax seeds. Most likely he pressed these to obtain linseed oil, as the document also mentions 'tine VIII da oio de lin', eight vats to collect linseed oil.⁶⁵⁸ We know that one of his wine barrels was sold for 12 *lire di piccoli*, or 3 ducats and 18 *grossi*.⁶⁵⁹ Giovanni Pilipario appeared in front of the Corte del Procurator to claim an unpaid debt of 42 ducats owed by Marco dell'Inzegneri as a payment for the barrels.⁶⁶⁰ And lastly he owed 16.5 *soldi di grossi* (or 8 ducats and 12 *grossi*) to Marco Gruato for one *vegeta* 'vini de Apulia', of wine from Puglia.⁶⁶¹ We also know that he must have kept books of account, even

⁶⁵⁵ Estimo Veneziano 1379, Entry 'Piero Inzegner', https://estimoveneziano1379.it/record?estimo_id=59 (30/05/2025).

⁶⁵⁶ Petkov, *Anxieties*, cit., 31.

⁶⁵⁷ Coccato, 'Interni', cit. 386, she reads 'baratelo I° cum VIII de marcha', I read instead 'karatelo J co(n) vin d(e) Marcha'. See ASVE, PSMC, Miste, busta 66, Marco dell'Inzegneri, Paper inventory (22/01/1367).

⁶⁵⁸ Coccato, 'Interni', cit., 387.

⁶⁵⁹ ASVE, PSMC, Miste, busta 66, Marco dell'Inzegneri, Ibid., Loose parchment, Carta securitatis of Marco Pelacan, 14/05/1367: 'de libris duodecim parvorum pro una bota vini per me vendita'.

⁶⁶⁰ Ibid., Loose parchment, Carta securitatis of Giovanni Pilipario, 10/08/1367: 'de ducatis quadraginta duobus monetis quos suprascriptus vester commissus mihi dare tenebatur, qui sunt pro caratellis vacuis'.

⁶⁶¹ Ibid., Loose parchment, Carta securitatis of Marco Gruaro, 11/08/1368.

though they are no longer extant: a judgement passed by the Corte del Procurator dated 22 November 1367 referred to a ‘ledger of the said late Marco degli Ingegneri, bound with white parchment, and marked with a D’.⁶⁶²

Marco held this wine and kept those accounts as part of the activities of a partnership (a ‘compagnia’) that he established with Lunardo Casaro on 20 July 1366. The extrinsic characteristics of the company are set out in the articles of association. The full document is transcribed in Appendix C of the present thesis.⁶⁶³ The first lines recite: ‘Let it be known that I, Lunardo Casaro, have established a company with Marco degli Ingegneri, to undertake the journey to Methoni or Koroni.’⁶⁶⁴ The contract enabled Lunardo to ‘loan, to trade, and to do whatever he deemed appropriate with the capital’ (‘noleçare, merchadare e fare tuto quello cha me Lunardo parerá’), stipulating that one third of all ‘profit that God will grant upon us’ (‘de tuto lo guadagno che Dio ne darà’) was to be given to Marco, and two thirds to Lunardo, while liabilities were to be shared in equal parts. Both partners would invest 350 ducats, in cash and in kind. Lunardo in particular would have provided a large wine vat, a *caldiera*, personally undertaking the journey (‘metere la mia persona e andare al dito viaço). Marco entrusted his brother Bonaventura as his agent, without a salary, but granted him the reimbursement of his expenses.

The happenstance of survival of two voyage charters dated 13 July 1367 in the same cache, first highlighted by Luzzatto,⁶⁶⁵ makes it possible to reconstruct the journey. The first one is an agreement between Tommaso Malipiero as shipowner and Marco dell’Ingegneri as hirer. Tommaso agreed to charter his ‘good ship, called St. James of Galicia and St. Anthony,

⁶⁶² Ibid., Loose parchment, Judgment passed by the Corte del Procurator, 22/11/1367, ‘viso quaterno dicti quondam ser Marci Inçegnerio cooperto carta membrana alba, signato de D’.

⁶⁶³ Ibid., Carte, Constitution of a company (20th July 1367). See Appendix C, no. 3.

⁶⁶⁴ Ibid., ‘Sia manifesto a çascaduna p(er)sona chomo io, Lunardo Chaxaro, ho fato una cho(m)pagnia cho(n) s(er) Marcho I(n)çigniero/p(er) andar al viaço de Modon o dj Choro(n)’

⁶⁶⁵ Luzzatto, *Storia economica*, cit., 15 image 4 and 19 image 5.

the captain of which shall be Salomone de Nicola, to the voyage of Methoni'.⁶⁶⁶ Tommaso agreed to fit the ship with fourteen men, including two coopers and three soldiers, by 8 August. Marco could load onboard whatever he wanted, but he also agreed that the ship was to leave Methoni or Koroni no later than 8 October, the price of the charter being agreed at 56 *lire di grossi* or 560 ducats. Tommaso was responsible for finding and paying the crew for two and a half months, each sailor being paid 15 *soldi di grossi* a month, thus averaging about 19 ducats each for the voyage. On the same day, Marco signed what was essentially a sub-charter, subleasing the vessel to Antonio Rizzo and Giovannino d'Aragona.⁶⁶⁷ The two were to load onboard empty barrels, returning with fifty full barrels of wine, laden in September in Methoni, and they agreed to pay four ducats and a third of the wine as payment. As we have seen, the Marco dall'Inzegneri dossier reveals the entanglements between the *fraterna* and the short-term company that a relatively wealthy *cittadino* set up with Lunardo Casaro, using his brother as his agent, and setting up a company with a capital of 700 ducats for a single journey trading Greek wine.

Fraterne were employed for a variety of purposes, to trade not just in Venice, but often in other parts of the Mediterranean. They provided a flexible structure that allowed several members of the family to join the business, ensuring the indivisibility of the assets. At the same time, members could opt out of the partnership to establish their own enterprise. This did not mean that they severed their fraternal bonds. Moreover, members of a *fraterna* were allowed to keep their account 'in persona' or 'in specialità', that is his own personal account separate from the *fraterna* when trading on his own.⁶⁶⁸ *Fraterne* were coupled with *compagnie/ società*, viz.

⁶⁶⁶ The contract is fully transcribed as Appendix C, Document n. 1, Charter agreement between Tommaso Malipiero and Marco dall'Inzegneri, 13th July 1366: 'Mis(er) Tomado Malipiero si chomo parçenevole de la bona nave clamada sen Iachomo de Galiçia e sent'Antuonio, de la qual va paro(n) s(er) Salamo(n) de Nichuola, si à noliçado la dita na/ve a s(er) Marcho I(n)çegnur (sic) al viaço de Modon.'

⁶⁶⁷ See Appendix C, Document n. 3, Sub-charter between Marco dall'Inzegneri and Antonio Rizzo and Zannino Ragonese, 13th July 1366.

⁶⁶⁸ A. Sangster, 'Venetian 15th Century Bookkeeping as Taught by Marino de Raphaeli', *De Computis*, 19/1 (2022),68: Voyages *in persona* are treated as separate businesses with their profit or loss recorded in the merchant's capital account, not through his main account for profits and losses.

partnerships which could be formed for a single voyage, for the establishment of an artisanal enterprise, or for the setting up of a trade company, normally limited in time to a few years. The basic unit of Venetian trade was thus intimately familiar, and ‘non-familiar’ companies could stem from fraternal partnerships, or mimic their idea of the equality of partners. The *commenda* did not disappear, but it was increasingly used alongside debt-financing when securing investment from those who were outside of the family.

3. 4 Building trust : account books, *recordationes*, and agents

In this section, I will examine an important aspect of Venetian mercantile culture: how trust was maintained, using account books, wills, and memoranda as sources. I will show how the development of the agent system led to the production of documents that established the obligations of agents *ex ante* and the *ex post* production of accounts to justify expenses and sustain trust.⁶⁶⁹ I will also demonstrate that trust in a merchant could outlast the trader's lifespan, and how wills and *recordationes* were used to ensure that debts were honoured even after the merchant's death.

As North remarked, ‘as the size and scope of merchant trading empires grew, the extension of discretionary behavior to others than kin of the principal required the development of more elaborate accounting procedures for monitoring the behavior of agents’.⁶⁷⁰ Instructions vary

⁶⁶⁹ As explained in F. Trivellato, ‘A Republic of Merchants?’, in A. Molho et al. (eds.), *Finding Europe. Discourses on Margins, Communities, Images ca. 13th-ca 18th Centuries* (Oxford, 2007), 144 ‘Obligation promises, rewards, threats and complaints were all articulated in merchants’ letters according to rhetorical conventions that incorporated legal and customary norms and at the same time served to enact actual relations of power. On the basis of information about the successes and failures of various agents, for example, correspondents could enforce collective sanctions. Business correspondence thus helped lay a bridge between mercantile communities who shared a common search for profit but lacked powerful institutional deterrent against dishonesty’.

⁶⁷⁰ North, *Institutions*, cit., 126.

however in scope and in the degree of freedom enjoyed by the agent.⁶⁷¹ Greif refers to ‘incomplete contracts’ in reference to letters which gave ample power to agents, as ‘merchants often authorised their agents to do whatever they deemed best if none of the prespecified contingencies occurred’.⁶⁷² The problem was, as Raymond De Roover noted, that ‘independent merchants, unfortunately, were entirely at the mercy of the correspondents to whom they sent goods on consignment. Usually there was no remedy against agents who were ill-chosen and proved to be either insufficient or dishonest’.⁶⁷³ As Francesca Trivellato pointed out, ‘trust was a precious and fragile commodity; it built on constant reinforcements that buttressed one’s reputation and on the multiple cross-references that correspondence networks helped forge’.⁶⁷⁴ Indeed, when Francesco Corner started trading with Francesco di Marco Datini in 1396, he explicitly mentioned the ‘perfeta e buona fama’, the high esteem in which Datini was held, supported by ‘the relation we received from Zanobi di Taddeo and your associate in Barcelona’.⁶⁷⁵ North, Paul Milgrom and Barry R. Weingast have argued that the remedy against cheating was a reputation system: ‘even if no pair of traders come together frequently, if each individual trades frequently enough within the community of traders, then transferable reputations for honesty can serve as an adequate bond for honest behavior if members of the

⁶⁷¹ A good example is the debate surrounding the principle-agents relationship in the case of the Gheniza merchants of eleventh-century Cairo. On which see J. Edwards and S. Ogilvie, ‘Contract Enforcement, Institutions, and Social Capital, the Maghribi Traders Reappraised’, *Economic History Review*, 65/2 (2012), 421-444 and J. Goldberg, ‘The Use and Abuse of Commercial Letters from the Cairo Geniza’, *Journal of Medieval History*, 38/2, 135: ‘Letters were the main vehicle that conveyed one’s orders to agents – both the recipient and third parties, and conveyed reports from the agents back to the principal. Agency law required the agent, who had no ownership stake in the goods, to act according to instructions’. For a comparison between Mediterranean and Northern Europe see M. Kallioinen, ‘Medieval Merchants’ Letters in Northern Europe’, *Scandinavian Journal of History* (2018), <https://doi.org/10.1080/03468755.2018.1501417> (30/05/25).

⁶⁷² Greif, *Institutions*, cit., 69.

⁶⁷³ De Roover, ‘Organization of trade’, cit., 88.

⁶⁷⁴ F. Trivellato, ‘Merchants’ Letters Across Geographical and Social Boundaries’, in F. Bethencourt and F. Egmond (eds.), *Cultural Exchange in Early Modern Europe. Volume 3. Correspondence and Cultural Exchange in Europe, 1400-1700* (Cambridge, 2007), 89.

⁶⁷⁵ ASPr, Datini, Fondaco di Maiorca, busta 1082, ins. 12, no. 424414 (copy no. 424415), Letter of Francesco Corner to Ambrogio Rocchi (19/03/1396): ‘Fradello carissimo, p(er) relacio(n) habuda da s(er) Zanobio de Tadio e da i vostri da Barzelona semo i(n)fo(r)mate/ de la vostra p(er)feta e bona fama’.

trading community can be kept informed about each other's past behavior'.⁶⁷⁶

Two case studies from Venice demonstrate the challenges of establishing and maintaining trust, and that trust was a crucial factor in selecting one agent over another.⁶⁷⁷ As Lane has shown, Andrea Barbarigo employed as his agent in Palestine in 1431 Alberto Dolceto, a commission agent who worked with multiple traders. The problem was that 'the commission agent who bought for so many principals could determine arbitrarily within certain limits which of the principals received the cheaper or better cotton and which received the more expensive or poorer cotton'.⁶⁷⁸ Andrea Barbarigo, then a relatively minor trader, received the inferior goods and was not favoured by Dolceto. Guglielmo Querini, a merchant active during the same period, also had a negative experience with his agent in Ravenna, Ferondo Ferondi, and encountered so many issues with other agents that Luzzatto concluded he must have been 'bersagliato da avversa fortuna', 'targeted by bad luck'.⁶⁷⁹ As Montemezzo has recently highlighted: 'Managing agents and intermediaries involved deploying a suite of strategic approaches designed to balance control with trust, aiming to secure optimal cooperation from individuals who might operate in markets far from Venice, often outside its jurisdiction'.⁶⁸⁰ The problem was compounded by the fact that agents could also trade abroad on their own.

We can observe multiple ways in which trust was created and sustained by referring to the will drafted in 1371 by Pietro Venier *quondam* Marino, a resident of the parish of San Moisè. He instructed his executor to pay whatever Vettor Barbarigo was owed for a venture in Trebizond 'trusting his mere words' ('suo simplici verbo'). In the same text, Venier referred to other registrations, and other creditors were evidently less trustworthy. Sixty *somme* sent to Tabriz had to be paid to Vettor Barbarigo according to the account of that enterprise ('per illam

⁶⁷⁶ Milgrom, North, Weingast, 'The role of Institutions', cit., 3.

⁶⁷⁷ On *fama* in the context of medieval merchants see the recent Tann, 'Merchants', cit., 347-420.

⁶⁷⁸ Lane, *Barbarigo*, cit., 102.

⁶⁷⁹ G. Luzzatto, 'L'attività commerciale', in *Studi*, cit., 173.

⁶⁸⁰ Montemezzo, *Networks*, cit., 163.

rationem’), whilst Pietro Mocenigo, despite being a kinsman, was to be repaid a loan based on Venier’s ledger (*prout apparet per quaternum meum magnum*).⁶⁸¹ Simultaneously, Mocenigo was to be trusted on his word concerning an unspecified joint venture with the deceased (*de quadam ratione quam habemus ad faciendum insimul*). Trust was thus established either by using formal constraints, such as registration in a ledger, or by a mere oral instruction to be given credence by an agent or a relative.

An early reference to a note written in the creditor’s own hand in a *quaderno* - a method used in the thirteenth century to prevent fraud - appears as early as 1270.⁶⁸² By 1315, in the accounts of the merchant Benedetto Pagan, we find an entry reading: ‘the son of the late ser Zan Lovarin owes to me, Benedetto Pagan, for the outstanding charge from an account, four gold ducats, ‘as it is noted on my account styled “A”, at folio one’ (*como apar sul quaderno signado .de .a. a k. 1*).⁶⁸³ Unfortunately, account books were often lost or dispersed after the merchant’s death. In 1361, Federico Bon wrote from Bruges regarding the unsettled affairs of the late Giacomello Gabriel, who traded bales of unspecified goods. Gabriel had died, and consultation of his books was necessary to ascertain debts and credits. Federico wrote:

And it came to my attention, by other means, that he had mentioned a large ledger bound with a black cover, which must have been owned by the said ser Giacomo, and which had been sought by ser Gabriel Erizzo in the house of the deceased. And he received no answer or explanation about its whereabouts, when he asked for it

⁶⁸¹ ASVe, Cancelleria inferiore, Notai, *busta* 167, Notary Leone de Rovolon, loose parchment, Last will of Pietro Venier *quondam* Marino of the parish of San Moisè (01/02/1371): ‘Item volo quod de una ratione summorum sexaginta quam ego misi in Toris quamquidem rationem dominus Iohannes Barbadico debet ordinate notare et dictus meus commissarius debeat dictum ius suum unicuique, prout apparebit per illam rationem. Item volo quod dictus meus commissarius debeat dare et solvere ser Victori Barbadico illud quod ipse dicet expendisse pro me in Trapesonda, credendo suo simplici verbo. Item volo quod dictus meus commissarius debeat dare ser Petro Mocenigo consanguineo meo libras mille imprestitorum que ipse michi mutuavit puro amore ad suum beneplacitum et prode ipsorum, prout apparet per quaternum meum magnum. Item volo quod dictus meus commissarius debeat credere simplici verbo dici ser Petri Mocenigo de quadam ratione quam habemus ad faciendum insimul et sit contentus de eo quod dabit sibi ipse ser Petrus.’

⁶⁸² V. Formentin, ‘Estratti da libri di mercanti e banchieri veneziani del Duecento’, *Lingua e stile*, 50 (2015), 25-62. On Polo 37, on the 1270 *quaderno*, 43.

⁶⁸³ ASVe, PSMC, Miste, *busta* 126, Maddalena Pagan, ‘Quadernetto’ of Benedetto Pagan, f. 1v.

from the owner of the house where he once lived, asking him if he knew anything about the said ledger. He replied by saying that he had found the ledger bound with a black cover, which he has lent to me. And in the *quaderno* I found no mention of news pertaining to this voyage.⁶⁸⁴

This passage illustrates several key features of ledgers in late medieval Venice. First, they were documents that could outlast the merchant's life. Piero Gabriel in 1402 noted in his will that 'what others owe me will be found out by consulting one small *quadernetto*, written by my own hand'.⁶⁸⁵ Account books and letters were used in litigation, debt collection, and inheritance disputes.⁶⁸⁶ The text of the book constituted a legally binding order that had to be executed even posthumously. This is not surprising, as across medieval Italy, books of accounts served as evidence in commercial trials. Baldo degli Ubaldi, the fourteenth-century jurist and lawyer in the court of merchants of Bologna, concluded that if a merchant owed money to someone else, that credit could be claimed merely by exhibiting the books, as 'this book of accounts is almost like an authentic public account, because merchants have almost a public office'.⁶⁸⁷ Nonetheless, ledgers could easily be lost or destroyed. Their dispersal was likely a common fate once their contents had been reconciled. In Federico Bon's case, he was concerned with an entry about a *viaço*, presumably to Bruges.

Trust-building was not confined to ledgers but extended to written instructions sent to merchants abroad. The *recordatio* (*recordazion* in the vernacular) was a written memorandum

⁶⁸⁴ ASVe, PSMC, Miste, busta 67, Giacomello Gabriel, Letter of Federico Bon (17/03/1361): 'abiandove p(er) alltre I(n)ttexo ch'avevj fatto me(n)çio(n) de un quaderno grando dalla chuvertta negra, llo qual devea aver abudo llo dito /s(er) Jacomo, de llo qual avea doma(n)dado s(er) Chabriel Enriçi i(n) chasa de chi llo era pasado de questa vitta e ninte ne nde avea sa/pudo responder, argum(en)ttar, adomandar el par(on) i(n) chasa de cha llo era stado p(ri)ma, se d'el ditto quaderno savese dir alguna / cosa. Resposeme aver trovato uno so quaderno chon lla chuvertta negra, llo qual luy me lla apreatado. Sullo quat(erno)/no trovo scritto cosa alguna de nuove che p(er)ttegna a questo viaço'.

⁶⁸⁵ ASVe, Miscellanea Carte non appartenenti ad alcun archivio, *busta* 8, Will of Piero Gabriel (08/05/1402).

⁶⁸⁶ Lane, *Barbarigo*, cit., 98: 'Account and letters were basic to legal action for enforcing the responsibility of the overseas agents tot he merchants resident in Venice'.

⁶⁸⁷ Baldo degli Ubaldi, 'De constituto', in *Mercator iurisperitus id est: Tractatus de mercatura locuples et rebus ad eam pertinentibus* (Cologne, 1599), volume 1, 845: 'iste liber est codex rationum, & est quemadmodum liber authenticus publicus, quia mercatores gerunt quasi publice officium'

containing instructions to a business associate or firm representative, which set the terms of the principal-agent relationship and mention the behaviour expected of the agent.⁶⁸⁸ It mandated how to invest funds, with whom to correspond, and from whom to gather information. For instance, in 1367, Andrea Bredani and Maffio Iuda sent written instructions, in the guise of a normal merchant's letter, to Franceschino Bredani, bound for the island of Corfu on a ship of Marco Valier, instructing him to meet with their business associates in Corfu. They admonished him:

And please keep in mind that you will have to note whatever you receive in my name and belonging to the company, and you will have to put everything in writing and send every account individually to me in Venice, so that I may inform our associates in Venice. And you must note the quality of whichever merchandise you will receive, specifying how much it is going to affect the capital of the company.⁶⁸⁹

The written memorandum was thus both an instruction and a binding document, setting the limits of the agent's authority, the scope of transactions, and determining how the accounts were to be produced *ex post facto*.⁶⁹⁰ It remained valid even after the principal's death. In 1400, for example, Francesco Bon was asked to send all funds belonging to the late Lorenzo Grasendino to the *Procuratori*, his executors. Francesco replied that he intended to repay Lorenzo's creditors according to a memorandum written by Lorenzo himself, and confirmed

⁶⁸⁸ Formentin, *Prime manifestazioni*, cit., XII.

⁶⁸⁹ ASVe, PSMC, Miste, *busta* 10, Alvise e Zaccaria Giustinian, Fascicolo IV ('Contratti Vari') (14/03/1367): 'E abié a mente che tutto q(u)ello vui p(er) mio nome rizeverè delle (sic) c(om)pa/gnia ditta di notare e tutto ed ognio coxa mandarme p(er) scritto / a Veneixia p(er) singollo, aziò ch'io mi possa intendere co(n) q(ue)sti mie co(m)pagni /de qua et dee scriver il pregio ad ogni choxa p(er) q(ue)llo che gli sta de/ chavidal ~~a~~ alla co(n)pagnia'.

⁶⁹⁰ An interesting Venetian memorandum written in Venice in 1407 by Costantino di Priuli for Donato Soranzo has been published in B. Arbel (ed.), *Venetian Letters (1354-1512) from the Archives of the Bank of Cyprus Cultural Foundation and Other Cypriot Collections* (Nicosia, 2007), 58-67, n. 2, commented at 28-30.

that he had purchased twelve *pani* of sugar, ‘as he asked me to do’, in Crete.⁶⁹¹ These written instructions constrained the agent’s actions, though enforcement was often hampered by the fundamental asymmetry of information between principal and agent, who had to rely on submitted lists of expenses without full knowledge of market prices.

Trust could be established in various ways: through formal partnerships notarised officially, written memoranda (*recordationes*), or even orally, by mere words (*suo simplici verbo*). As Venetians relied on commission agents serving multiple principals, it is understandable that the *fraterna* afforded greater trust. Nevertheless, *recordationes* and ledgers were considered valid and enforceable even after a merchant’s death, despite the risk of them being lost, altered, or concealed. Loans, sea loans, the *commenda*, partnerships, and principal-agent arrangements all entailed the entrusting of funds to others. Trust is a concept which cannot be simply reified but needs always to be historicised and contextualized. The medieval merchant might have said he had *buona fama*. The meaning of trust must be evaluated within each specific context. Venetians did not adhere to a single investment model, nor was the state the sole enforcer of contracts. Familial networks coexisted alongside impersonal mechanisms like debt and *commende*, while both reputation and the threat of lawsuits served as deterrents. Short-term companies equally served the purpose of a single commission, which could be renewed if the endeavour proved profitable. The flow of information through letters revealed the trustworthiness of agents, providing principals with a means to gauge the reliability of their representatives.

Conclusion

⁶⁹¹ ASVe, PSMC, Miste, *busta* 66, Lorenzo Grasendino, Letter of Francesco Bon to the Procuratori (25/04/1400): Egregij signori. Adi p(rim)o del p(re)xente, io r(ezevi) una v(ostr)ra letera dada in Veniex(ia) adi 15/fevre(r), p(er) la qual vuy me sc(ri)vese dela mo(r)te de s(er) Lore(n)zo Grassendin, del qual vuy era/romisi c(om)mes(sar) et ch(e) io ve debia ma(n)dar tuti denero ch(e) io me trova hav(er) del so/et c(etera), ala qual p(er) q(ue)sta ve fazo a saver como lo dito Lore(n)zo i(n) la soa pa(r)tida / me lassè algune soe cosse et alcuni soi debitori de piçola q(uan)titade, le qual cosse et/debitori son notadi de soa ma(n) in una soa recordaso(n) fata a s(er) Stadi Balbi et a mi /et i(n)tro le altre cosse son pani 12 de çucarò et q(ue)l çucarò ben ho vendudo sego(n)do/come luy com(m)esse.

To describe Venetian merchants is certainly a challenging task, given the chasm between the abundance of studies on them and the relative paucity of ledgers that would fully do justice to their commercial activities. Like Luzzatto,⁶⁹² we must therefore rely on the caches of documents found in the *commissarie* of the Procuratori di San Marco and on notarial records. In this chapter, I have examined three interrelated themes: how trade and traders were described in medieval Venice, the morality and education of the Venetian merchant, and the types of partnerships between merchants, reflecting on the trust-building mechanisms that buttressed them. In all these instances, we can observe the deep relationship between social and economic history.

In the case of the definition of the merchant, we have seen that the term was used either in the plural or as the moniker for a transient condition. I argued that this term can be better understood by reflecting on the meaning of ‘merchant’ in the case of the *scuole di mercanti*, where the word encompassed several strata of the Venetian population, and was applied to non-patricians, to subjects, and to foreigners. There was certainly a difference in scales of trade, but there was no clear-cut difference between ‘small’ and ‘large traders’. As remarked by Armando Saporì in 1972, ‘another criterion we should avoid is separating the wholesale trader from the retailer, because it happens that large companies like those of the Peruzzi and Bardi in Florence, with their warehouses stuffed with a large amount of cloth to be sold worldwide, had a retailer shop in the city, where they sold half a bolt of fabrics and even scraps to make gloves, socks, and caps’.⁶⁹³ In Venice, as elsewhere, the key to the definition of the merchant was his position within a web of social relations and his ability to exploit kinship networks. This is probably the reason why the funding of a commercial undertaking was primarily a ‘family business’ well into the eighteenth century, even though external funding could be secured

⁶⁹² G. Luzzatto, ‘Les activités’, cit.,

⁶⁹³ A. Saporì, *La mercatura medievale* (Florence, 1972), 31: ‘Un altro criterio da scartare è quello di separare il mercante all’ingrosso dal mercante al minuto perché accade che grandi «compagnie» – le fiorentine dei Bardi e dei Peruzzi, per esempio, continuamente richiamate –, le quali ammassavano in capaci magazzini ingenti partite di panni da portare in tutti i mercati e su tutte le piazze di affari, avessero in città un negozio dove vendevano una mezza pezza e magari scampoli di fare guanti, calze, berretti’.

through sea loans and *commende*. The physical proximity of brothers in a house led to the formation of the *fraterna*, and the management *pro indiviso* of the assets of the family. It was such a powerful partnership that legal steps were required to rescind it and two brothers were assumed to be by default members of a *fraterna compagnia*. Limited term companies and fraternal partnerships were the two key ingredients of the Venetian economy.

In Venice, partnerships never reached the scale of their Florentine counterparts, not even in banking, and since the investments of Venetian merchants comprised a myriad of undertakings, it was necessary to build trust with the agents who represented them abroad. As we have seen, some merchants had such confidence in their colleagues that they instructed their executors to pay a debt based solely on another merchant's word. In other cases, written documents such as ledgers or *recordationes* were used to set the boundaries of the commission, while still allowing the agent discretion to act according to market conditions. Both Andrea Barbarigo and Giovanni Querini relied on commission agents who worked for several merchants, and, whenever possible, they turned to kin to establish new enterprises. A vulnerability of this system was, as Christ noted, that 'the factor's accounts, especially their statements of expenses, were notoriously unreliable'.⁶⁹⁴

Trust was certainly a key element of late medieval Venice, a city where social relations were essential, and not only within the patriciate. The *cittadino* Marco dall'Inzegneri was a member of a *fraterna*, and his father explicitly requested that the partnership continue until all his sons were eighteen. Trust could be acquired, like the knowledge of good merchandise, through *pratica*. *Pratica* and morality were the two tenets that allowed the merchant to close his accounts 'in the name of God and good profit'. They also enabled him to navigate social relationships and to find reliable partners. To minimise risks, impersonal funding - through short-term companies, debt, or *colleganza* - coexisted alongside fraternal partnerships.

⁶⁹⁴ Christ, *Trading Conflict*, cit., 44.

Chapter 4

Organisations in late medieval Venice

In the previous chapter we saw the social dimension of the Venetian merchants, and the ‘institutions’ that underpinned trade, such as the fraternal partnerships. In this section, by contrast, we will focus on the role of organisations such as the Senato in organising trade, looking at statutory legislation, deliberative bodies, officials, and the courts. When we use terms like ‘state’, ‘public’ or ‘private’, we should avoid generalisations and contextualise what these words meant in their specific historical setting.⁶⁹⁵ The problem for Venice is, as Judde De Larivière pointed out, that ‘a significant number of researcher have equally been seduced by the image of [Venice as] a medieval centralising and well-organised state that paved the way for what has been defined as a commercial pre-capitalism’.⁶⁹⁶ Significantly, the same author also concluded that ‘the owners [of round ships] are free to exploit them according to calendars and routes of their choosing, even though they have to comply with precise legislation and the control of the state’.⁶⁹⁷ We have already seen that terms like *mainmise* are often employed to connote the intervention of Venetian authorities in trade, or - as Lane put it - ‘communally controlled capitalism’.⁶⁹⁸ Jong-Kuk Nam has remarked that in Venice ‘the State intervened more strongly than in other maritime cities’ and that ‘the direct management of the shipping enterprise by the state and its savvy intervention were the main reason for the success of

⁶⁹⁵ See G. Chittolini, ‘The Private, the Public, the State’, in J. Kirshner (ed.), *The Origins of the State in Italy, 1300-1600* (Chicago, 1995), 34-61; for Venice A. Tenenti, ‘Il senso dello stato’, in *Storia di Venezia*, vol. 4, cit., 313: ‘Nello stesso tempo appare chiaro che l’ambiente politico si avvale contemporaneamente di una molteplicità di riferimenti proprio perché la realtà statale era multidimensionale e nello stesso tempo ciascuno di essi possedeva una sua valenza ed una sua validità’. More generally G. Gullino, ‘L’evoluzione istituzionale’, *Ibid.*, 347-378.

⁶⁹⁶ De Larivière, *Naviguer*, cit, 34: ‘bon nombre de chercheurs ont également été séduits par l’image d’un État médiéval centralisateur et compétent laissant néanmoins se développer ce qui a été défini comme un «pré-capitalisme» marchand.’

⁶⁹⁷ Judde De Larivière, ‘Entre gestion privé et contrôle public’, cit., 59.

⁶⁹⁸ Lane, *Maritime Republic*, cit. 2.

Venetian commerce'.⁶⁹⁹ Hocquet remarked in 1997 that 'state monopolies and the direct involvement of the government in the commercial enterprise belonged to an ancient tradition and the merchants who ruled the Republic acquiesced'.⁷⁰⁰ Or, as he put it more recently, 'the state was everything, omnipresent. [...] it regulated the use of boats both public and private [...] the state is everything, but the State is the patriciate'.⁷⁰¹ Doumerc concluded that 'in Venice, the commercial enterprise was conceived by the State and run by [patrician] families'.⁷⁰² Similar considerations have been echoed by economic historians and sociologists. Gonzalez de Lara concluded that 'the state created rents, monitored merchants, and punished cheaters with legal and administrative (rent-exclusion) sanctions'.⁷⁰³ It is a conclusion that mirrors the view of an oligopolistic patriciate promoted by Puga and Trefler, who have spoken of the 'coercive power of the state' in the case of Venetian international trade.⁷⁰⁴ It is not a new idea. Cracco affirmed that in 1967 that in the early fourteenth century 'the great companies triumphed, being so intricately bound to each other to form a single *trust*. These companies monopolised the flows of trade, either through the ownership of their own vessels or - due to the large availability of capital - through the exploitation of the state galleys'.⁷⁰⁵

Yet, the term state masks the extreme complexity of the Venetian constitution, characterised in fact by what Ivone Cacciavillani has called 'the gigantism of the administration

⁶⁹⁹ Nam, *Coton*, cit., 207: 'L'État intervenait plus fortement que dans les autres villes maritimes'. [...] La gestion directe par l'État de Venise sur l'ensemble de la navigation et son intervention efficace représentaient les raisons principales du succès du commerce vénitien'.

⁷⁰⁰ Hocquet, 'I meccanismi', cit.: 'I monopoli di Stato e la partecipazione diretta del governo agli affari appartenevano a una antica tradizione e i mercanti che governavano la Repubblica vi acquiescevano volentieri'.

⁷⁰¹ Hocquet, *Merchant of Venice*, cit., 2.

⁷⁰² Doumerc, 'Il dominio del mare', in *Storia di Venezia. Dalle origini alla caduta della Serenissima*. vol. 4. A. Tenenti and U. Tucci (eds.), *Il Rinascimento. Politica e cultura* (Rome, 1996), 150: 'A Venezia l'impresa commerciale era concepita dallo Stato e gestita dalle famiglie'.

⁷⁰³ Gonzalez de Lara, 'The Secret', cit., 249.

⁷⁰⁴ Puga and Trefler, 'International Trade', cit., 777.

⁷⁰⁵ G. Cracco, *Società e stato nel medioevo veneziano : secoli 12.-14* (Florence, 1967), 376: 'Trionfavano le grandi compagnie mercantili, strettamente collegate fra loro fino a formare un unico trust, le quali, o perché possedevano navi proprie, o perché, disponendo di grandi capitali, erano le sole a poter affittare quelle dello stato'.

and the plethoric membership of magistracies'.⁷⁰⁶ In this chapter, I will investigate the significance of organisations - viz. enforcer of constraints, in the definition of North⁷⁰⁷ - in the structuring of Venetian shipping. I will focus on how Venetian authorities regulated trade in the fourteenth centuries, shedding light on four key tenets of the system: statutes, deliberative councils, fiscal and economic magistracies, and the courts. Regarding the statutes, I will argue, following Lane, that they were of limited use in the regulation of shipping, as thirteenth-century legislation could hardly be used to regulate shipping a century later.⁷⁰⁸ As for deliberative bodies, I will posit that the Maggior Consiglio had an important role in shaping commercial policies alongside the Senato, and that the latter was often the forum for highly contentious debate over the nature of Venetian shipping. This will counter the view that the Maggior Consiglio was nothing more than - as Cracco defined - 'a parking lot for noblemen who waited for their chance' or 'an employment agency'.⁷⁰⁹ Moreover, the Senato, far from displaying 'the remarkable level of cohesion' evoked by Silvia Gasparini,⁷¹⁰ was often divided in its efforts to ensure the delicate equilibrium between state galleys and incentives for privately-owned vessels. As Cassandro remarked 'the Venetian state was not just made up of four or five large *consilia*. Besides them and below them there is a rich flourishing of *officia* that cannot all be defined as executive organs'.⁷¹¹ I will highlight how the absence of an overarching legal framework and the overlapping jurisdictions of fiscal magistracies fragmented the application of commercial policies and created redundancies in the payment of dues and customs. The

⁷⁰⁶ I. Cacciavillani, *La costituzione di Venezia* (Padua, 2018), 100: 'il gigantismo dell'amministrazione e la pletoricità della composizione degli organi.

⁷⁰⁷ North, 'Institutions', cit. cf 47-49 of this thesis for the difference between organisations and institutions.

⁷⁰⁸ Lane, 'Venetian maritime law', cit.

⁷⁰⁹ G. Cracco, 'Il senato veneziano', in *Il senato nel medioevo e nella prima età moderna*. Vol. 2 (Rome, 1997), 338: 'un'area di parcheggio per nobili in attesa di fortuna' [...] or 'un ufficio di collocamento'.

⁷¹⁰ S. Gasparini, 'Venezia e il suo ordinamento giuridico. Un'esperienza singolare', in G. Zordan et al. (eds), *Società, economia, istituzioni. Elementi per la conoscenza della Repubblica veneta* (Sommacampagna, 2002), vol. 1, 38.

⁷¹¹ G. I. Cassandro, 'Concetto, caratteri e struttura dello Stato veneziano', *Rivista di storia del diritto italiano*, 36 (1963), 39: 'Va da se che lo stato veneziano non si esaurisce nei quattro o cinque grandi *consilia*. C'è accanto o al di sotto di essi una ricca fioritura di *officia*, che non tutti possono essere qualificati come organi esecutivi'.

deluge of ad-hoc laws and their inconsistency often troubled Venetian magistrates.⁷¹² It is tempting to adopt the old dictum by Heinrich Kretschmayr that ‘lawlessness prevailed in this constitution’.⁷¹³ In the case of the courts, the system - far from displaying effectiveness in the enforcement of contracts - was plagued by overlapping jurisdictions and coexisted alongside private-based dispute resolution through arbitration. Fusaro has highlighted how the *Giudici del Forestier* and those of the *Petizion* already experienced jurisdictional conflict already in 1287.⁷¹⁴ I will show that in Venice the ‘state’ mattered as much as informal systems of dispute resolution or kinship ties, and that rather than speaking of ‘the state’ as a reified, atemporal entity, we need to situate it within the actual historical context. For this reason, I will discuss Venetian organisations by presenting these magistracies and the functions thereof, explaining their jurisdictions and their relevance in the regulation, control, or organisation of trade.

1. The Venetian constitution

Historians of Venice normally operate a distinction between *consilia* and *officia*.⁷¹⁵ The five main *consilia* were the Consiglio di Dieci, Consiglio dei XL, Maggior Consiglio, Senato, and the Minor Consiglio⁷¹⁶. At the head of the Republic stood the Doge, the supreme representative of Venice, chosen through a complex process involving ten scrutinies and elected by forty-one

⁷¹² Pansolli, *La gerarchia*, cit., 101-110.

⁷¹³ H. Kretschmayr, *Geschichte von Venedig. Volume II. Die Blüte* (Gotha, 1920), 132: ‘Sonst aber galt, dürfte man sagen, in dieser Verfassung die Regellosigkeit’.

⁷¹⁴ Fusaro, ‘Politics of Justice’, cit., 145, note 33. She has explored the theme of overlapping jurisdictions in M. Fusaro, ‘Migrating Seamen, Migrating Laws? An Historiographical Genealogy of Seamen’s Employment and States’ Jurisdiction in the Early Modern Mediterranean’, in S. Gialdroni et al. (eds.), *Migrating Words, Migrating Merchants, Migrating Law Trading Routes and the Development of Commercial Law* (Leiden, 2018), 54-83.

⁷¹⁵ Padovani, ‘Curie ed uffici’, cit. To avoid confusion all the name of magistracies in this section will be quoted in Venetian.

⁷¹⁶ For an introduction to the structure of the Venetian state see M. Caravale, *Ordinamenti giuridici dell’Europa medievale* (Bologna, 1994), 670-679; G. Zordan, *L’ordinamento giuridico veneziano*, cit., reprint as a digital edition (Padua, 2024), 101-114; R. Cessi, *Storia della repubblica di Venezia* (Milan, 1946) vol. 2, 4-26. For a useful summary of the existing bibliography on this topic see G. Zordan, *Repertorio di storiografia veneziana : testi e studi* (Padua, 1998), 144-154.

electors, who had to be male members of the Maggior Consiglio aged over thirty.⁷¹⁷ Second in rank, were the Procuratori di San Marco, elected for life by the Maggior Consiglio. They were divided into three groups: *de supra* (responsible for administering the Basilica of St Mark), *de citra*, and *de ultra* (tasked with the administration of bequests and charitable legacies on either side of the Grand Canal). They numbered six in total in 1319, increased to nine in 1443.⁷¹⁸ The Doge was assisted by six Consiglieri, forming what was known as the Minor Consiglio.⁷¹⁹ The Doge and the six Consiglieri - one for each *sestiere* - were members of three other committees: the Signoria (composed of the six councillors, together with the three Capi della Quarantia), the Pien Collegio, and the Consiglio di Dieci. The Pien Collegio consisted of the six councillors plus the Collegio. The Collegio or Consulta, in turn, was composed of three *mani*, or types, of Savi. As explained by Giuseppe Maranini, the Collegio originated from the practice of creating extraordinary committees of experts on specific matters.⁷²⁰ It grouped together three categories of 'experts' entrusted with the drafting of proposals to be submitted for discussion in the Senato or Maggior Consiglio. These were the six Savi del Consiglio (or Savi Grandi), established around 1380;⁷²¹ the five Savi alla Terraferma, introduced in the fifteenth century for matters concerning the mainland; and the five Savi agli Ordini, who dealt with maritime trade and shipping.⁷²² The Consiglio di Dieci, responsible for the safety of the state, was elected by the Maggior Consiglio and, despite its name, was composed of seventeen members: the Doge, the

⁷¹⁷ M. Cristina Molinari, 'How the Republic of Venice chose its Doge: Lot-based elections and supermajority rule', Working Paper of the Department of Economics (Ca' Foscari University of Venice), <https://iris.unive.it/bitstream/10278/3696103/1/SSRN-id3103618.pdf> (30/05/25).

⁷¹⁸ Tiepolo, *Guida generale*, cit. 885-887. See Also Mueller, *The Procuratori*, cit. and M. Takada, 'Commissarii mei procuratores Sancti Marci'. Ricerche sulle competenze dell'ufficio della Procuratia di San Marco', *Archivio veneto*, 137 (2006), 33-58.

⁷¹⁹ On the Minor Consiglio see Tiepolo, *Guida generale*, cit., 888-889.

⁷²⁰ G. Maranini, *La costituzione di Venezia dopo la serrata del Maggior Consiglio* (Venice, 1931), 326.

⁷²¹ *Ibid.*, 331-333.

⁷²² *Ibid.*, 333-344. On the savi agli ordini see F. Rossi, 'Le magistrature', in in *Storia di Venezia. Dalle origini alla caduta della Serenissima*. A. Tenenti and U. Tucci (eds.), Vol. 12. *Il mare* (Rome, 1991), 687-695.

six Consiglieri, and at least one Avogadore di Comun.⁷²³ The Quarantia⁷²⁴ was a deliberative body of forty members that evolved from a thirteenth-century organisation ‘entrusted with the proposal of laws and actively participating in the functions of government’⁷²⁵ into the main appellate tribunal of the Republic. It was presided over by three Capi, elected from within its membership. Since 1324, members of the Quarantia also sat *ex officio* in the Senato.⁷²⁶ The Senato/Consiglio dei Pregadi (pronounced pregàdi)/Consiglio dei Rogati (pronounced rogàti), responsible chiefly for the foreign policy of Venice,⁷²⁷ was composed of sixty elected members, plus the Quarantia, plus a *zonta* (adjunct members) that ranged between twenty and sixty patricians, as well as several *ex officio* members. Its total membership could reach approximately 200, though not all participants enjoyed the right to propose motions (‘porre parte’) or to vote (‘metter ballota’).⁷²⁸ The Maggior Consiglio, by contrast, was the assembly representing all male patricians aged over twenty-five. Patricians could enter the Maggior Consiglio at the age of twenty by drawing a lucky ballot in the *balla d’oro* or *barbarella* (held on St Barbara’s Day, 4 December).⁷²⁹ Alternatively, they could be elected as one of the twenty Avvocati di Palazzo (also at age twenty), or else had to wait until the age of twenty-five. Only one-fifth of the aspirants succeeded in drawing the gilded ballot and gaining access to the assembly before they

⁷²³ Tiepolo, Guida, 898-899. On his powers see S. Romanin, *Storia documentata di Venezia*, vol 3 (Venice, 1912), 52-79.

⁷²⁴ An illuminated version of its *capitolare* on vellum is now Oxford, Bodleian, MS Douce 339.

⁷²⁵ *Le deliberazioni del consiglio dei XL*, ed. A. Lombardo. Volume I (Venice, 1957), X.

⁷²⁶ On its attributions see Tiepolo, *Guida*, cit., 891-893.

⁷²⁷ It was particularly concerned with shipping. See E. Besta, *Il senato veneziano*, cit. 121: ‘essendo il Pregadi il regolatore del commercio e della navigazione, cui spettava mettere le navi ai viaggi, sorvegliarne il carico e l’armamento, prescrivere le rotte, soprintendere alle merci di importazione e alla esportazione stessa, proteggere gli interessi commerciali all’estero’. More generally on the Senato, G. Magnanti, ‘Il Consiglio dei Rogati a Venezia dalle origini alla metà del sec. XIV’, *Archivio Veneto*, Fifth Series, 1 (1927), 70-111.

⁷²⁸ Tiepolo, *Guida generale*, cit., 894-895. On the Senato see also Cracco, ‘Il senato veneziano’, cit.

⁷²⁹ On the families who were thus selected see J.-C. Hocquet, ‘Oligarchie et patriciat à Venise’, *Studi Veneziani*, 17/18 (1975-1976), 401-410 and G. Gullino, ‘Il patriziato’, in *Storia di Venezia*, vol. 4, cit., 379-413.

were twenty-five.⁷³⁰ Maria Teresa Todesco has estimated that the fourteenth-century meetings with the highest attendance were that for the election of the Procuratori in 1339 (870 members) and the ordinary Session of March 3, 1342 (777 noblemen).⁷³¹ The Maggior Consiglio was, alongside the Senato, one of the two main deliberative bodies on all matters of governance. In theory, one vestige of popular power persisted: the *concio* or *arengo*, a popular assembly with only minimal authority, which nonetheless survived until 1423, functioning mostly to formally ratify the election of the Doge.⁷³² These were the principal *consilia* of Venice. ‘Beside’ and ‘below them’, to quote Cassandro, there existed numerous *officia*, employing hundreds of patricians.⁷³³ Given their number and disparate functions, it is difficult to present a single overview of their roles. I will limit myself to noting that my attention will be drawn to the six Corti di Palazzo mentioned in the previous chapter, and to those magistracies that dealt primarily with the repression of smuggling or the collection of customs and dues. In the following pages, I will assess state intervention in trade using, as a proxy, the statutes, the deliberations of the Senato and the Maggior Consiglio, the jurisdictions of *officia*, and the decisions of Venetian courts.

2. The statutes

Legal historians often praise the Venetian statutes for their regulation of shipping, especially the two collections of nautical laws known as the Statuti Tiepolo of 1229 and the Statuti Zeno

⁷³⁰ S. Chojnacki estimated that between 1444 and 1464, about half of new members of the council were elected with the *balla d'oro*, a quarter became advocates and another quarter at the age of 25, see S. Chojnacki, ‘Kinshhip Ties’, cit., 244, note 10.

⁷³¹ M.-T. Todesco, ‘Andamento demografico della nobiltà veneziana allo specchio delle votazioni nel Maggior Consiglio (1297-1797)’, *Ateneo Veneto*, 176 (1989), 12.

⁷³² G. Fiastrri, ‘L’assemblea del popolo a Venezia come organo costituzionale dello stato’, *Archivio veneto*, 25 (1913), 340-380.

⁷³³ I. Cacciavillani, *La costituzione*, cit., 98-99. For a list in the period 1400-1540, see A. Zannini, ‘L’impiego pubblico’, in *Storia di Venezia*, vol. 4, cit., ‘Appendice’ at 459-463.

of 1255.⁷³⁴ Riniero Zeno claimed in his *Storia del diritto marittimo Italiano* (1946) that ‘with the statutes of Doge Zeno, the maritime legislation of Venice reaches its maximum splendour’.⁷³⁵ Albrecht Cordes, writing as recently as 2020, stated that ‘it regulated all aspects of seafaring (military and commercial), in particular in those regards which were important for the state. This is quite close to a codification of the law in the modern sense’. He also added that ‘all in all, 13th century navigation in Venice, even if it was privately financed, very much takes on the appearance of a state-sponsored enterprise’.⁷³⁶ In fact, as Guido Bonolis observed almost a century ago, the regulation on rigging and outfitting onboard did not apply to smaller crafts,⁷³⁷ and Venetian legislators ‘reserved their attention to larger vessels, bound for sea crossings outside the Adriatic’.⁷³⁸ He noted that ‘the Statutes Tiepolo gave no precise indication as to the crafts of fewer than 200 *milliaria* (95 tons)’.⁷³⁹ The main issue is that, as Vettor Sandi already observed in 1755 in relation to the Statuti Zeno of 1255, ‘their validity was limited, because, as for the regulation of Venetian shipping, the only laws to remain valid were those contained in

⁷³⁴ As an introduction see C. M. Moschetti, ‘La nave’, in *Enciclopedia del diritto*, vol. 27 (Varese, 1958), 565-661; for the Adriatic in particular *Ibid.*, ‘Il diritto intermedio, section I. La legislazione marittima dell’Adriatico e del Tirreno’, 576-592 and on Venice E. Besta, ‘L’ordinamento giudiziario del dogado veneziano fino al 1300’, in C. Cipolla (ed.), *Scritti storici in memoria di G. Monticolo* (Venice, 1922), 249-273. On the relevant bibliography see F. Mazzarella, ‘The Italian Historiography on Commercial Law. Old Tendencies and new Perspectives’, in L. Brunori et al. (eds.), *Pour une histoire européenne du droit des affaires : comparaisons méthodologiques et bilans historiographiques* (Toulouse, 2020), 17-65.

⁷³⁵ R. Zeno, *Storia del diritto marittimo italiano nel Mediterraneo* (Milan, 1946), 164.

⁷³⁶ A. Cordes, ‘Conflicts in 13th Century Maritime Law: A Comparison between five European Ports’, *Oxford U Comparative L Forum* 2 (2020), <https://ouclf.law.ox.ac.uk/conflicts-in-13th-century-maritime-law-a-comparison-between-five-european-ports/> (30/05/25).

⁷³⁷ On the safety measures of Venetian vessels see F. Lane, ‘The Crossbow in the Nautical Revolution of the Middle Ages’, in *Id. et al. (eds.), Studies in Venetian Social and Economic History* (London, 1987), Essay VI, 161-171.

⁷³⁸ G. Bonolis, ‘Il diritto marittimo medievale dell’Adriatico’, *Rivista internazionale di scienze sociali e discipline ausiliarie*, 60/238 (1912), 157: ‘Le navi veneziane piccole dovevano limitarsi ai viaggi lungo le coste, non lungi dal porto, e quindi di poca importanza e di poco rischio, onde il legislatore non si curava d’imporre un’attrezzatura che sarebbe riuscita superflua o gravosa, e riserbava la sua sollecitudine alle navi più grandi, destinate alle lunghe traversate extra culphum’.

⁷³⁹ G. Bonolis, *Il diritto marittimo medievale dell’Adriatico* (Pisa, 1921), 74: ‘Negli statuti del Tiepolo per la nave inferiore a 200 *milliaria* non si danno precetti particolari’. On his analysis of Venetian statutes see *Ibid.*, 606-614.

several paragraphs of the sixth book of the Venetian statutes, compiled in the year 1343'.⁷⁴⁰ C. Valsecchi equally observed 'the laws of Zeno fell out of use, and for this reason they were forgotten [...] and for this reason they remained unpublished until the half of the past century'.⁷⁴¹ Lane explained the inclusion of the Tiepolo Laws in the first printed edition of the statutes in 1477 in these terms 'Tiepolo's Code was less elaborate and may for that reason have been preferred in the fifteenth century when changes in the techniques of rigging, loading, and warfare made both of these old codes obsolete in part'.⁷⁴² Pier Silverio Leicht agreed on the fact that the Zeno and Tiepolo codices had limited circulation, were largely obsolete by the fourteenth century and at any rate they were superseded by ad-hoc laws.⁷⁴³ Giorgio Zordan has offered to us a rather accurate impression of Venetian legislation on shipping:

Faced with a reality of norms based on contingency - episodic and sectoral, chaotic and dispersive, cumbersome and contradictory - one would be surprised that the gargantuan heap of laws did not bring Venetian shipping to a total halt at every turn.⁷⁴⁴

The 'congerie di leggi' evoked by Zordan requires more thorough analysis to understand the role of the statutes in the regulation of seafaring. But before turning our attention to the Zeno

⁷⁴⁰ V. Sandi, *Principj di storia civile*, cit., Vol. 2, Libro IV (Venice, 1755), 864: 'Comunque ciò siasi, è indubitato che poco durò il vigor suo, poichè quanto al diritto proprio de' Veneziani naviganti non altro rimase valido che quanto è disposto con molti capi del libro sesto de' vulgati Statuti Veneziani, compilato nell'anno 1343'.

⁷⁴¹ A. Valsecchi, 'Bibliografia analitica della legislazione della repubblica di Venezia', *Archivio veneto*, 2 (1871), 59: 'Le leggi dello Zeno andarono in disuso, e perfino si dimenticarono [...] E fu certamente per questa ragione ch'esse rimasero inedite fino alla metà dello scorso secolo'. For an overview of the contents of the *codices* containing the Venetian statutes see Id., 'Bibliografia analitica', *Archivio veneto*, 3 (1872), 19-37.

⁷⁴² Lane, 'Maritime Law and Administration', cit. The same judgment is expressed in M. Roberti, *Le magistrature giudiziarie veneziane e i loro capitolari fino al 1330*, vol. 1 (Venice, 1906), 119: 'antique consuetudines che oramai avevano perduto, di fronte agli usi novi, qualunque valore'.

⁷⁴³ P. S. Leicht, 'L'elaborazione del codice della Veneta marina mercantile', in *Studi di storia e diritto in memoria di Guido Bonolis* (Milan, 1942), 79-87.

⁷⁴⁴ G. Zordan, 'Le leggi del mare', in *Storia di Venezia*. Vol. 12. *Il mare*, cit., 628 : 'e di fronte ad una realtà normativa di carattere contingente, episodico e settoriale, così caotica e dispersa, farraginoso e contraddittoria [...] rimarrebbe sorpreso [...] nel constatare - piuttosto - come quella immensa congerie di leggi non portasse ad ogni piè sospinto alla paralisi totale la marineria veneziana'. A similar judgement on Venetian legislation is expressed by G. Cozzi: 'legislazione sotto molti aspetti frammentaria, disorganica e tecnicamente insoddisfacente', in G. Cozzi, 'La politica del diritto nella Repubblica di Venezia', in Id. (ed.), *Stato, Società e Giustizia nella Repubblica veneta (sec. XV-XVIII)*, vol. 1 (Rome, 1980), 22.

Statutes on shipping it is important to understand how Venice came to have statutes in the thirteenth century,⁷⁴⁵ and the place of shipping regulation in that legal history.⁷⁴⁶ The codification of Venetian statutes involved two fundamental moments, one in 1242 and a second in 1346. In 1242, Doge Jacopo Tiepolo officially issued the Statuta Veneta.⁷⁴⁷ These contained 72 chapters, divided into five books: the first dealing with civil lawsuits, the second with guardianship of minors and the mentally ill, the third with contract law, the fourth with inheritance, and the fifth with all other topics.⁷⁴⁸ During the dogeship of Andrea Dandolo, around 1346, all subsequent additions to the statutes up to that time were collected in a single book, viz. the sixth book of the *statuta*, but this did not result in the completion of an official text, and led instead to the proliferation of equally unofficial translations into the vernacular.⁷⁴⁹ The same doge also promoted a collection of important laws passed by the Maggior Consiglio, known as ‘Summula statutorum’.⁷⁵⁰ As Lorenzo Tomasin has explained, ‘the Venetian state,

⁷⁴⁵ On Venetian statutes see A. Padovani, ‘La politica del diritto’ in *Storia di Venezia*, vol. 2, cit., 303-329 and E. Besta, *Storia del diritto italiano. Volume I. Parte Seconda. Fonti: Legislazione e scienza giuridica dalla caduta dell’impero romano al secolo decimosesto* (Milan, 1925), 594-598 and S. Gasparini, ‘Venezia, diritto, domande. Divagazioni a margine a un bel webinar’, *Historia et ius*, 20 (2021), Paper 3, 1-24.

⁷⁴⁶ G. Cassandro, ‘La formazione del diritto marittimo veneziano’, in A. Pertusi (ed.), *Venezia e il Levante fino al secolo XV. Atti del I convegno di storia della civiltà veneziana* (Venice, 1973/74), volume I, 185-218; Zeno, *Storia del diritto marittimo*, cit., 164-165; F. Lane, ‘Venetian Seamen in the Nautical Revolution’, in *Studies in History*, cit., 403-429. More recently Gluzman, *Venetian Shipping*, cit., 18-19.

⁷⁴⁷ *Gli statuti veneziani di Jacopo Tiepolo del 1242*, cit. . See the useful translation of some of their passages in the S. Gasparini (ed.), Database Pax Tibi Marce - Ariel and Caliban, ‘The Early civil statutes’, http://www.arielcaliban.org/PX_early-statutes.pdf (30/05/25). For a useful summary of the editions of the texts of the statutes see A. Casamassima (ed.), *Catalogo della raccolta di statuti, consuetudini, leggi, decreti, ordini e privilegi dei comuni, delle associazioni e degli enti locali italiani dal medioevo alla fine del secolo XVIII*. Volume 10. Venezia (Rome, 2021), 3-4: Carta di promissione del doge Orio Mastropiero, 9-10 Usus Venetorum, 34-63 Statuti Tiepolo and additions.

⁷⁴⁸ L. Tomasin, *Il volgare e la legge. Storia linguistica del diritto veneziano (secoli XIII-XVIII)* (Padua, 2001), 47. They are particularly brief by comparative standards, see F. Salvestrini, ‘Struttura, normazione e stratificazione testuale negli statuti di alcune città comunali italiane del XIII e XIV secolo’, in D. Lett (ed.), *Les statuts communaux vus de l’intérieur dans les sociétés méditerranéennes de l’Occident (xiii-xve siècle)* (Paris, 2019), 19-35, accessed online <https://books.openedition.org/psorbonne/54588?lang=en> (30/05/25): ‘Il testo complessivo appare relativamente breve. Quasi stupisce che sia potuto restare così a lungo in vigore’.

⁷⁴⁹ On which see G. Verzi, ‘Edizione critica e studio lessicale del più antico volgarizzamento degli Statuta Veneta’ (PhD thesis, Università Ca’ Foscari Venezia, 2019) and L. Tomasin, ‘Il volgare nella cancelleria veneziana fra Tre e Quattrocento’, *Medioevo letterario d’Italia*, 4 (2007), 69-89.

⁷⁵⁰ V. Crescenzi, ‘La summula statutorum di Andrea Dandolo secondo il manoscritto Montecassino, 459’, *Initium. Revista catalana d’història del dret*, 12 (2007), 623-696.

loath to circulate legislative and statutory texts widely, did not prepare a reference text'.⁷⁵¹ Normally, the statutes also included a further text, the 'Promissio de maleficiis', a useful collection of criminal laws dating back to 1181.⁷⁵² The statutes of 1242 in turn replaced and integrated a series of pre-existing norms and codifications: the statutes of the previous doges, the 'Iudicia a probis iudicibus promulgata' (a collection of judgments passed by Venetian judges), and the 'Ratio de lege romana', an explanation of - mainly - principles of Roman law.⁷⁵³ In the statutes proper, references to shipping are mostly found in the sixth book, chapters 68-77, which lists general principles: how sailors should be condemned to jail if they failed to show up as part of the crew; the obligation to record in the ship's logbook all merchandise laden onboard; and the norms for calculating general average.⁷⁵⁴ In the 'Promissio de maleficiis', as modified in 1232, we find one general provision about the restitution of goods

⁷⁵¹ Tomasin, *Il volgare e la legge*, cit., 49: 'Lo Stato Veneziano, verosimilmente restio a promuovere un'ampia circolazione dei testi legislativi e statutari, non curò, a quanto pare, la circolazione dei codici di riferimento'.

⁷⁵² *Gli atti originali della cancelleria veneziana*, vol. 1 (1090-1198), ed. M. Pozza (Venice, 1994), 92-96.

⁷⁵³ On which see L. Margetić, 'Il diritto', in *Storia di Venezia*, vol. 1, cit. 677-692; V. Crescenzi, 'Il diritto civile', cit., 409-474. For the edition see *Le consuetudini giudiziarie veneziane anteriori al 1229*, ed. B. Pitzorno (Venice, 1910); E. Besta and R. Predelli, 'Gli statuti civili di Venezia anteriori al 1242 editi per la prima volta', *Nuovo Archivio Veneto*, N. S. 1 (1901), 5-117, 205-300 and E. Besta, 'Il diritto e le leggi civili di Venezia fino al Dogado di Enrico Dandolo', *Ateneo veneto*, 20/2 (1897), 290-320; *Ibid.*, 22/1 (1898), 135-184 and *Ibid.*, 22/2 (1899), 61-93 and 202-248. For a useful English translation see Gasparini, Ariel and Caliban, 'Early jurisprudence in Venice: Ratio de lege Romana and Iudicia a probis iudicibus promulgata', http://www.arielcaliban.org/PX_ratio.pdf (30/05/25).

⁷⁵⁴ *Novissimum statutorum ac venetarum legum volumen*, cit., from 99, n. 68 to 103, n. 77. The term 'avaria' appears in fact for the first time in a statute in the Statuta of Zeno, see A. Addobbati, 'Principles and Developments of General Average: Statutory and Contractual Loss Allowances from the *Lex Rhodia* to the Early Modern Mediterranean', in Fusaro et al., *General Average*, cit., 147-148, esp. note 9. On Venetian general average see M. Fusaro, 'Venetian «Averages» between East and West. Risk Management and Transaction Costs in the Early Modern Mediterranean', *Quaderni storici*, 171/3 (2022), 649-671. For a rare receipt by the Estadorinari of the payment towards general average See ASPr, Datini, b. 1173, 'Venezia', n. 1243 (29/07/1396): 'Sia manifesto a tuti quelli a chi questa lett(era) p(er)vegnerà chomo s(er) Zanobio de Tadio à pagado/al nostro officio di ex(tr)ordinarij su la chocha fo paron s(er) Daniel da Mollin vene da Majoricha / del mexe de fevrer d(e) 1395 p(er) varia de velle e [sa]rtie e tortice e uno fero che la dita perse/ p(er) fortuna p(er) lo valor de sachi XX de lana fo [ca]rgagi a Barzelona p(er) lb. XVI de gss./a gss. XXI p. VII p(er) lb. de gss. monta [...] p. XVI d'oro, apariadi al vostro /piasser. /Lunardo Emo/Donado Chorner /Bortollamio Morexini/offic(iali) ex(tr)ordinarii. Dat(a) i(n) Veniex(ia) d(i) XXVIII de luio 1396.

(ch. 1);⁷⁵⁵ two sections related to acts of piracy committed by Venetians between Grado and Caverzere, with a detailed list of corporeal punishment, starting with whipping and culminating in the loss of body parts (ch. 9 and 22);⁷⁵⁶ and one general provision forbidding the sale of Venetian ships ‘contrary to the statutes’ (ch. 26), punished so harshly that ‘may the culprit lose whatever he has in the world’.⁷⁵⁷

I will now present the statutes related to shipping. The maritime statutes of Venice were published in 1839 by Jean-Marie Pardessus and in 1903 by Adolfo Sacerdoti and Riccardo Predelli (both editions limited to the Latin text, not its vernacular rendition).⁷⁵⁸ They comprise the ‘*Ordinamenta super saornatione, caricatione et stivatione navium*’ (1227);⁷⁵⁹ the ‘*Capitulare navium*’ (1229);⁷⁶⁰ the ‘*Statuta marittima*’ of the Doge Jacopo Tiepolo (1229-1236): 55 chapters, plus 2 additional ones added in May 1233, 5 more in August 1233, and 1 more in 1236;⁷⁶¹ the ‘*Statuta et ordinamenta super navibus et aliis lignis*’ by Doge Ranieri Zeno (1255, 117 chapters),⁷⁶² the ‘*Statuta tarretarum*’ (1255, 56 chapters),⁷⁶³ and the so-called ‘*Statuta navium*’ (1255, corrections to the earlier maritime statutes).⁷⁶⁴ To better understand their contents, I

⁷⁵⁵ I quote here for the ease of the reader the edition in Gasparini, Ariel and Caliban, cit., ‘The promissio maleficiorum of Orio Mastropiero (1181), http://www.arielcaliban.org/PX_maleficiorum-mastropiero.pdf (30/05/25), which also features an English and Italian translation: ch. 1 ‘statuentes statuimus, ut si deinceps aliqua navis, tam venetorum quam extraneorum in toto districtu Venetiarum naufragium passa fuerit, quicumque ad navem illam iverit et aliquid de bonis, vel habere aut rebus ipius navis occasione auxilii aut violenter abstulerit, reddere infra tertium diem debat homini cuius fuerit’.

⁷⁵⁶ Ibid., ‘de raubaria, sive praeda commissa in districtu Venetiarum’ and ‘de Illis qui cum galea vel ligno amicos Venetiarum offendunt’ (the chapters are not numbered, I will refer to the headings).

⁷⁵⁷ Ibid., ‘de illis qui iurant non vendere navem suam contra statutum’: ‘Item statuimus ut eorum quisque iuramentum habet vendere navem suam contra nostrum statutum et eam vendiderit perdat totum quod habet in mundo et illud totum veniat in nostrum commune’.

⁷⁵⁸ *Gli statuti marittimi veneziani fino al 1255*, cit.; *Collection des lois maritimes antérieures au XVIIIe siècle*, ed. J.-M. Pardessus, Vol. 5 (Paris, 1839), 64-95. For a description of these texts see Casamassima, *Catalogo*, 133-134.

⁷⁵⁹ Casamassima, *Catalogo*, cit., 17-18. Predelli-Sacerdoti, *Statuti marittimi*, cit., 46-49.

⁷⁶⁰ Predelli-Sacerdoti, *Statuti marittimi*, cit., 50-51.

⁷⁶¹ Predelli-Sacerdoti, *Statuti marittimi*, cit., 52-75, described in Casamassima, *Catalogo*, 33-34.

⁷⁶² Predelli-Sacerdoti, *Statuti marittimi*, cit., 77-167, described in Casamassima, *Catalogo*, 72-74.

⁷⁶³ Predelli-Sacerdoti, *Statuti marittimi*, cit., 168-183, described in Casamassima, *Catalogo*, 74.

⁷⁶⁴ Predelli-Sacerdoti, *Statuti marittimi*, cit., 184-189.

present a synoptic table comparing the contents of the three longer texts, namely the Statutes of Jacopo Tiepolo and Ranieri Zeno, and the ‘Statuta tarretarum’.

Table 7:

Synopsis of norms concerning shipping in Venetian statutory legislation

Norms	Tiepolo Statutes (1229)	Zeno Statutes (1255)	Statuta tarretarum (post 1250)
Safety regulations regarding ships, including basic equipment and the number of armed men onboard	1-2; 4-5, 8-16, 23, 30-33	1-2, 7-17; 20-22, 27-30, 55-59, 74, 113-114	3 - 16, 18, 33-36
Overloading and the composition of the cargo and the ballast	3, 18-22, 24, 27-29, 34, 47-51	3-6, 38, 48-52, 60-66, 69-72, 87-89, 93, 103-112	2, 30-32, 48, 54
Measuring ships and merchandise, such as the presence of steelyard balance onboard	(Dealt with in the August 1223 decree)	31, 38, 43-47, 101-102	19, 29, 53
Loaning of ships and agreements	38, 41-42	36, 62, 82, 97, 115	45, 51
Seafaring (e.g. not sailing in winter)	55	82, 91, 99-100	44,
Roles onboard, including the <i>patronus</i> , the scribe, and sailors	17, 39-40,	23-26, 32-35, 37, 39-42, 73, 80-81, 94, 99	17, 20-27, 42-43, 48
Settlement of disputes	43-46, 52,	76, 83-86	46-47, 49, 55-56

Norms	T i e p o l o Statutes (1229)	Zeno Statutes (1255)	S t a t u t a tarretarum (post 1250)
Expenses, damages and shipwrecks	6 - 7, 25 - 26, 35-37, 53	18-19, 53-54, 67 - 68, 75, 76-79, 90, 92, 95-96, 98, 112, 116-117	15, 37-41, 50, 52

These statutes are clearly comprehensive and regulate several aspects of Venetian shipping, such as shipwrecks, the role of the scribe and the sailors, ship measurements, safety regulation, and details of shipbuilding. Venice opted to confine maritime matters to a stand-alone statutory book, rather than embedding these regulations within the general statutes. This had important consequences on the transmission of these texts. In the 1477 vernacular edition of the statutes we find the older Statuti Tiepolo, dated therein 1229, translated into Venetian starting with ‘nvi statuanti: statuimo: che li patroni de le nave debiano/dar quelle bene conze & ben calcate de fora’, a norm imposing on shipowners the need to have ships well caulked and well maintained.⁷⁶⁵ The printer’s choice was, in fact, extravagant and was not repeated in subsequent editions of the statutes. The inclusion of either the Zeno or the Tiepolo nautical code within an edition of the statutes was far from a *fait accompli*: the oldest manuscript of the statutes does not include them,⁷⁶⁶ and they are also omitted from two later fourteenth-century examples.⁷⁶⁷ Sacerdoti and Predelli published their edition based on three codices and the indirect

⁷⁶⁵ I use the digital reproduction of *Statuti & ordeni de l’ynclita città de Venesia cu(m) le soe correction traducti cum ogni diligentia de latino in vulgare a laude del omniponte Idio e dal beato san Marco protectore nostro*, ed. Filippo di Pietro (Venice, 1477), <https://archive.org/details/ita-bnc-in2-00001937-001/mode/2up> (30/05/25), photo-reproduction of Florence, BNCF, Pal. E. 6. I. 42 which is unnumbered. The Tiepolo Statutes can be found on the last folios of the incunabulum. The edition is described in Casamassima, *Catalogo*, cit., 34-37.

⁷⁶⁶ Florence, Biblioteca Riccardiana, MS Ricc. 1237.

⁷⁶⁷ Rome, Biblioteca del Senato, MS 755 (digital reproduction) and London, British Library (henceforth BL), MS Harley 4770.

knowledge of a fourth.⁷⁶⁸ The ‘Statuti Tiepolo’ were published following BMV, Marc. Lat. V, 130 (f. 28-37), a collection of legal and commercial texts.⁷⁶⁹ The ‘Statuti Zeno’, by contrast, were published according to two codices: the so-called ‘Capitulare Nauticum’ of the Querini-Stampalia,⁷⁷⁰ and what is now ASVe, Senato e Collegio. Miscellanea, Statuta veneta, busta 1. Another codex, once owned by Thomas Phillips, is now in Washington (Library of Congress, Law Library, MS V. 46, ‘Statuta et ordinamenta super navibus’).⁷⁷¹ In fact, there is at least one further specimen (BAV, Pal. Lat. 774, ff. 79r-108v), a rubricated vellum codex of medium quality, featuring the Tiepolo civil Statutes of 1242 (1r-78v) alongside the Zeno maritime statutes, which was not considered for the edition.

As for the translations of the statutes into Venetian, they are characterised by great heterogeneity.⁷⁷² Oxford MS Bowyer 3, a luxury copy on vellum with illuminated initials, despite translating all other statutes and additions into the vernacular, leaves the text of the ‘Statuta navium’ in Latin.⁷⁷³ A much less luxurious version (BMC, PDC 272), a vernacular rendering of the statutes written in *mercantesca* on paper, likewise features a maritime code in Latin, but this time Tiepolo’s.⁷⁷⁴ MS BMV It. VII, 369 (=7661), a paper codex of medium quality from the fifteenth century, offers a vernacular translation of the sixth book of the statutes, but then features the ‘Statuta marittima’ by doge Tiepolo in Latin (f. 41v-90r). Interestingly, one of the copies of the statutes still preserved in the Venetian archives - a luxury fourteenth century codex with rubricated initials - features a rare translation of the Tiepolo statutes in Venetian, presented in fact as the sixth book of the statutes, certainly different from

⁷⁶⁸ Predelli-Sacerdoti, *Statuti*, cit. 42-46.

⁷⁶⁹ Venice, BNV, Marc. Lat. V, 130 (=3198), f. 28r-36r.

⁷⁷⁰ Venice, Fondazione Querini Stampalia, MS Classe IV, n. 1, ‘Capitulare Nauticum’, f. 84-206.

⁷⁷¹ Attention to this manuscript has been drawn by F. Lane in Id., ‘Maritime law’, cit., 228-232, but it is often ignored in the discussion of Venetian statutes.

⁷⁷² These codices are commented and described in G. Verzi, *Edizione critica e studio*, cit., 8-40.

⁷⁷³ Oxford, Bodleian Library, MS Bowyer 3, f. 35r-38r.

⁷⁷⁴ Venice, BMC, MS Provenienze Diverse 272, 96v-102v.

the 1477 text.⁷⁷⁵ Another fourteenth-century parchment codex with rubricated initials (BMV, MS It. II, 93 = 4841) features a vernacular translation, but this time of Doge Zeno's statutes, reduced to 43 headings, at folios 53r-59r.⁷⁷⁶ In total, fewer than ten manuscripts feature either version of the maritime statutes enacted by Doge Zeno or Doge Tiepolo, and fewer than five in the vernacular. The reason for their inclusion in the 1477 edition was possibly because Francesco and Andrea Dandolo's latest additions to the statutes ended with laws regarding shipping, so it is likely that the conterminous subject of Venetian maritime statutes was included in the edition. The maritime statutes did not circulate widely, even less so in vernacular codices intended for practical use. They regulated several aspects of shipping but were superseded by the realities of fourteenth-century maritime activity. They did not apply, in any case, to vessels deemed unseaworthy - that is, of less than 100 tons. There is no doubt that Venetian statutes were detailed and clearly outlined general rules on seafaring, but they would have been superseded in actual practice by ad hoc legislation, as we shall now see.

3. Assemblies : *consilia*

When historians reflect on the reach of the Venetian state, they often think of the Senato, as it 'worked out the pattern of voyages and the methods of administration which continued with some interruption and extensions for about two hundred years', to quote Lane.⁷⁷⁷ In this section, I will investigate how the Senato regulated commerce. After surveying the matters that the Senato oversaw, I will show that the regulation of shipping was, in fact, a rather contentious issue, often giving rise to contested votes. I will point out that even within the Senato there was a significant number of senators - normally around 30 - who consistently voted in favour of

⁷⁷⁵ ASVe, Senato e Collegio. Miscellanea; Statuta veneta, busta 3, ff. 53r-60v.

⁷⁷⁶ An abridged version of the 1255 statutes, in Latin, can be found in Predelli-Sacerdoti, *Statuti marittimi*, cit., 184-189, based on ASVe, Giudici dell'Esaminador, Capitolari, busta unica.

⁷⁷⁷ Lane, *Maritime Republic*, cit., 125.

measures that incentivised private shipping, as can be seen in many debates concerning the import or export of surplus merchandise left in ports where the *muda* would normally call. For instance, when in 1352 Andrea Corner and Marco Giustinian proposed authorising privately owned vessels to transport any merchandise and to sail beyond the Adriatic as far as Sicily, the proposal received thirty-six votes, even though it was ultimately defeated.⁷⁷⁸ At the same time, I will underscore how the Maggior Consiglio was more concerned with private shipping and often sought to advance bills favouring privately-owned vessels.

As for the functions of the Senato, as Hocquet put it:

Venetian merchants knew they could count on the help of the authorities, particularly the Senate [...] giving them complete freedom to choose non-monopoly goods and their prices, and acting as a board of directors at the service of the merchants.⁷⁷⁹

Already Enrico Besta observed that the Senato had ample jurisdiction - or, as he put it - 'absolute authority on maritime and commercial issues', in key areas: the outfitting of ships (viz. galleys), the establishment of the calendar and routes of state galleys, the control of imported and exported merchandise, and the protection of Venetian commercial interests abroad.⁷⁸⁰ E. Orlando has pointed out that senators could legislate 'not only on matters political and economic, but also on foreign policy, diplomacy, peace treaties and war, the safeguard of the

⁷⁷⁸ *Venezia-Senato. Deliberazioni miste. Registro XXVI (1350-1354)*, ed. F. Girardi (Venice, 2008), 410, n. 795 (14/06/1352).

⁷⁷⁹ Hocquet, *The merchant*, cit., 25.

⁷⁸⁰ Besta, *Senato*, cit., 120: 'Le famose parti del 28 gennaio 1294 e del 25 ottobre 1302 che davangli autorità assoluta in materia di navigazione e di commercio'. The two deliberations are in ASVe, Maggior Consiglio, Deliberazioni, 'Luna, Zaneta, Pilosus', Reg. Pilosus, 183v, olim 39v (27/01/1294): 'Capta fuit pars quod illud quod fiet per dominum ducem et consiliarious in Consilio Rogatorum et XL de modo navigandi, tam de mutare navilium et modum solitum quam de expendere quam de revocare consilia quam de omnibus aliis pertinentibus ad hec et circa hoc sit firmum sicut si factum foret per maius consilium', glossed on the left of the register as 'quod modum navigandi formetur et firmetur in Consilio Rogatorum' and in ASVe, Deliberazioni, Maggior Consiglio, Magnus et Capricornus, f. 38r (25/10/1302): 'quod illud quod fiet per dominum ducem et consiliarious in consilio Rogatorum et XL super facto mercacionum tam de expendere quam de revocare consilium quam de omnibus aliis que spectant ad mercaciones sit ita firmum sicut esset factum per maius consilium'.

state, rights of retaliation, the protection of foreign merchants abroad, and on excise duties'.⁷⁸¹ It is important to contextualise the powers of the Senato, particularly in relation to those of the Maggior Consiglio.⁷⁸² Accordingly, we must examine how it regulated trade to understand its reach.

Overall, the Senato had the right⁷⁸³ to prescribe the import/export of specific commodities, to ban trade in certain regions or of certain items,⁷⁸⁴ and to authorise privately-owned vessels to carry merchandise that was theoretically reserved for transport by the state galleys⁷⁸⁵ - particularly *havere subtile* and spices, which were officially the preserve of the *muda*. The Senato could also set safety regulations for the storage of goods onboard,⁷⁸⁶ and, in times of

⁷⁸¹ E. Orlando, 'Il consiglio dei Rogati', in *Venezia-Senato. Deliberazioni miste*, vol. 1, cit., XLIV: 'non solo sulle politiche economico-finanziarie del comune, ma anche sulla politica estera, sulla diplomazia, sulle iniziative di pace e di guerra, sulle strutture di difesa, sulle rappresaglie, sulla tutela dei mercanti veneziani all'estero, sulle questioni daziarie.'

⁷⁸² For the sixteenth century see R. Finlay, *Politics in Renaissance Venice* (London, 1980), 44-81.

⁷⁸³ For an overview of the decision of the Senato on shipping see Rojas Molina, *Decoding Debate*, cit., 50-57 and Gluzman, *Venetian Shipping*, 9-14. For state subsidies to shipping see U. Tucci, 'Venetian Ship-owners in the XVIth Century', *Journal of European Economic History*, 16/2 (1987), 277-296 and G. Luzzatto, 'Per la storia delle costruzioni navali', cit. On the use of the deliberations of the Senato as a source for maritime history see F. Lane, 'La marine marchande et le trafic maritime de Venise à travers les siècles', in A. Paul et al. (eds.), *Le sources de l'histoire maritime en Europe du Moyen Âge au XVIIIe siècle* (Paris, 1962), 7-32.

⁷⁸⁴ *Venezia-Senato. Deliberazioni miste*, vol. 1, cit., Rubricae of the second book (1303-1307), 215: 'Navigia disarmata possint portare ad terras imperatoris quaslibet mercationes, exceptis drapparia, telis et cetera'. For a complete ban see Also ASVe, Senato, Deliberazioni, Misti, Reg. 37, 39v (16/12/1381): 'quod aliquod nostrum navigium non vadat partes ponentis [...] cum suis navigiis vel cum navigiis forinsecorum. For the 'ordo' given to sal see Hocquet, *Le sel et la fortune de Venise*, II, 189-225 and Id., *Venise et le monopole*, I, 345-467

⁷⁸⁵ *Venezia-Senato. Deliberazioni miste*, vol. 1, cit. Rubricae of the tenth book (1326-1328), 223: 'Quod si que (sic) mercationes superhabundaverint in Constantinopoli et Nigroponte a galeis ipsis possint conduci Venecias cum disarmato navigio'.

⁷⁸⁶ *Venezia-Senato. Deliberazioni Miste, Registre XV (1332-1333)*, ed. F-X Leduc (Venice, 2017), 98, n. 226 (20/07/1332): 'Quod eligantur tres sapientes per dominum, consiliarios et capita, qui examinent, provideant et consulant super facto stivarum navigiorum disarmatorum et mercationum que ponuntur de super cohopta, de quibus imminet grave periculum et damnum and *Venezia-Senato. Deliberazioni Miste, Reg. XVIII*, cit., 242, n. 579 (28/09/1338): 'Item quod aliquod navigium de portata milliariorum CC et inde supra quod non sit scriptum ad consules quod exhibit Culfum non possit recedere de Veneciis cum paucioribus hominibus XX'; *Venezia-Senato. Deliberazioni Miste. Reg. XXV*, cit., 121, n. 201 (18/06/1349): 'quod pro quolibet navigio disarmato subposito officio consulum mercatorum detrahatur unus marinarius pro unaquaque decena marinariorum, exituro de cetero de Venetiis, loco cuius marinarii surrogentur et accipiantur tres famuli, qui sint XIII annorum vel inde supra, et consules mercatorum sic observent et faciant observare'. On overloading see J. E. Dotson, 'A Problem of Cotton', cit.; Id., 'Stowage Factors in Medieval Shipping', cit. and F. Ch. Lane, 'Cotton Cargoes', cit.,

significant danger, establish a general shipping calendar.⁷⁸⁷ Additionally, it could restrict the sale or construction of ships to Venetians or Venetian subjects,⁷⁸⁸ or incentivise shipbuilding through fiscal incentives.⁷⁸⁹ As the Senato itself stated in 1355, shipping ‘is so dear to our hearts and so important for our state that nothing could be of greater concern, for we could say that our very condition is predicated upon the security of the said armed and unarmed vessels’.⁷⁹⁰ Indeed, shipping was important enough to generate significant friction within the Senato itself. As Rojas Molina pointed out ‘to outsiders, the patrician elite was an air-tight ruling class [...] Inside this elite, however, elements of division and fragmentation were common.’⁷⁹¹ Luzzatto perceptively reflected on the influence of the ‘piccolo gruppo di grossi mercanti monopolistici’ in the context of the syndicates formed by Venetian noblemen - and the action, or inaction, of the Senato against them.⁷⁹²

To gauge the presence of a specular group - namely, merchants who favoured private shipping - I will use as a proxy a selection of deliberations on commercial from registers XV-XVIII of the Senato-Misti, covering a period of relative peace (1332-1338). It should be noted that the vast majority of deliberations were approved unanimously or with very little disagreement, and that, as it was common practice in Venice, no record of the debate survives.

⁷⁸⁷ *Venezia-Senato. Deliberazioni Miste, Reg. XV*, cit. 202, n. 452 (08/12/1332): ‘quod aliquod navigium disarmatum iturum intra bucham Avedi non possit recedere de Veneciis ante kallendas marci proxime venturi, salvo quod navigia que vellent ire extra Culfum ad caricandum de vino et aliis possint recedere de Veneciis quando voluerint’.

⁷⁸⁸ *Venezia - Senato. Deliberazioni miste. Registro XXIX (1359-1361)*, ed. L. Levantino (Venice, 2012), 86, n. 155 (01/08/1359): quod a modo aliquis forensis non possit vel debeat aliquo modo vel ingenio facere vel fieri facere aliquod navigium de novo Venetiis nec movere vel levare aliquod navigium quod conducat vel emat Venetiis de mensuris cum quibus conduxerit vel emerit illud Venetiis’.

⁷⁸⁹ *Venezia - Senato, Deliberazioni miste, Registro XXXI (1363-1366)*, ed. L. Levantino (Venice, 2016), 196, n. 387 (12/12/1363): vadit pars quod quicumque Venetus vel qui pro Veneto tractaretur, possendo navigare, fecerit vel fieri fecerit in Veneciis amodo usque duos annos navigia nova disarmata portate milliarium VC vel inde supra aut emerit vel acquisierit de dictis navigiis privilegitur in tantum a nostro comune, ut habeat causam de ipsis navigiis fieri faciendi et acquirendi.’

⁷⁹⁰ *Venezia-Senato, Deliberazioni miste, vol. 14. Reg. XXVII (1354-1357)*, ed. F. Girardi (Venice, 2021), 159, n. 366 (02/10/1355).

⁷⁹¹ Rojas Molina, *Decoding Debate*, cit., 37-38.

⁷⁹² G. Luzzatto, ‘Sindacati e cartelli nel commercio veneziano dei secoli XIII e XIV’, in *Studi di storia*, cit., 195-200, quote from 200.

Nonetheless, I present here all the commercial deliberations that encountered opposition from at least ten senators. As we shall see, the prohibition on private vessels leaving Venice was hotly contested and required a second vote, as did the mercantilist policies of the *Officium de Navigantibus*. The debate over the export of *havere subtile* was similarly fraught, necessitating multiple rounds of voting. Fiscal measures also provoked significant discussion, even when they concerned bulk goods such as timber. Moreover, Venice's delicate relations with foreign powers - particularly commercial hubs like Mallorca - were the subject of close scrutiny.

Table 8⁷⁹³

Selection of contested vote in the Senato on commercial matters

(Source: *Venezia-Senato, Deliberazioni Miste*, volumes XV-XVII)

Law	In favour	Against	Abstained	Date	Reference
Prohibition of export on unarmed vessels bound to Crete, Armenia and Cyprus	39	9	18	22/01/1332	XV, 174, 75
New tax of on money lending and purchases of ships	51	44	4	03/1333	XV, 608, 266
Renewal of the <i>Officium de navigantibus</i>	83	29	9	20/04/1333	XVI, 60, 25
Authorisation to both Venetians and foreigners to export from Venice 'havere subtile'	[75]	13	12	24/02/1334	XVI, 510, 225

⁷⁹³ In the last column the reader may find the number of the register, the number of the edited deliberation, and the page. Only votes with a full records of those in favour, against and abstaining are considered. The number of senators fluctuated around 100, as *ex officio* members would not attend every vote.

Law	In favour	Against	Abstained	Date	Reference
Proposal to let any foreigner import wool and hides into Venice, as long as he agrees to export from the city the value of the items he imported, investing in 'havere subtile'	12	47	11	24/02/1334	XVI, 511, 226
Fine on the import of timber from Cadore by Veronese merchants	66	4	12	03/06/1335	XVII, 146, 57
Renewal of the Officium de navigantibus	47 (47)	38 (41)	12 (8)	22/06/1335	XVII, 151, 59
Renewal of the Officium de navigantibus, with minor changes	63	29	10	27/06/1335	XVII, 155, 60
Setting of a set amount of salt to be imported annually in the treaty with Cervia	41	20	8	05/02/1336	XVII, 456, 178
Extraordinary arming of ten privately-owned galleys	55	22	11	02/1336	XVII, 494, 195
Interdiction of trade with Mallorca	57	15	9	16/03/1336	XVII, 552, 215
Delivery of salt to Mantua	37	29	4	06/05/1336	XVII, 618, 241
Decision not to send galleys to Flanders	50	12	9	13/02/1337	XVII, 743, 288
Interdiction to privately-owned vessels to leave Venice	28 (27)	30 (32)	8 (9)	11/12/1337	XVII, 964, 366

Law	In favour	Against	Abstained	Date	Reference
Order to the captain of the galleys to load all wares on the galleys, including those left after previous voyages in the Byzantine empire and Cyprus	58	16	6	10/03/1338	XVII, 1017, 386

The shipment of galleys and vessels remained a quintessential element of contention in the Senato, as the latter attempted to find a balance between state-led enterprises and the voyaging of privately-owned vessels. The Senato clearly regarded the ‘smuggling’ of light commodities (including its transport on unarmed vessel) as a threat, ‘breaking our land and our usual convoys of galleys, to the utmost damage of the land and of our merchants and citizens who respect the law’.⁷⁹⁴ However, the existence of an ‘opposition party’ comprising dozens of members of this body in favour of privately-owned vessels - as well as twenty senators (between abstained and against) opposed to sending galleys to Flanders in 1337 - suggests that the Senato was indeed a primary arena for the open expression of political dissent.⁷⁹⁵ We observe the same mechanisms in the second half of the century. In 1377, for instance, a motion was presented, but not carried, enabling the transport of merchandise to Syria by privately-owned vessels. Even though it ultimately failed, it is significant that twenty-three senators voted in favour of a measure which evidently advantaged the owners of such vessels.⁷⁹⁶ Similarly, a motion from the same year authorising the right of reprisal against the inhabitants of Ancona was only narrowly carried with 45 votes, evidently motivated by a fear

⁷⁹⁴ ASVe, Senato, Deliberazioni, Misti, Reg. 38, f. 145r (10/07/1384): ‘rumpendo terram nostram et mudas nostras solitas cum maximo damno terre et mercatorum et civium nostrorum qui observant ordines terre’.

⁷⁹⁵ On the limits and possibilities of debate in the Senato see F. De Vivo, *Information and Communication in Venice: Rethinking Early Modern Politics* (Oxford, 2007), 25-33.

⁷⁹⁶ ASVe, Senato, Deliberazioni, Misti, Reg. 36, f. 11v (29/05/1377).

that the lucrative Adriatic trade could be at risk.⁷⁹⁷ The next year there was a significant debate on a similar matter, namely whether to lodge an official protest with the Malatesta of Rimini as their subjects kept trading with the Croatians, enemies of the Republic, despite being allies of Venice; the motion only secured twenty-six votes in favour⁷⁹⁸. A motion to introduce a new two per cent excise on wares shipped outside of Venice drew significant opposition in 1381, as forty senators voted against it.⁷⁹⁹

Almost every register of the Senato saw substantial opposition even on less substantial motions concerning trade: a motion to change how the excise on oil was levied was resoundingly defeated in 1340, gathering only sixteen supporters.⁸⁰⁰ The single most contested motion in the twenty-seventh register of the deliberations of the Senato was a measure of 1356 to authorise the export of products from Pula into the territories of Venice.⁸⁰¹ Without further multiplying the examples and in the absence of an overall study on the theme, we can tentatively conclude that the Senato was not a monolith and that multiple interests influenced its actions, especially those of the shipowners and merchants who invested in privately-owned vessels and Adriatic trade. It should be remarked nonetheless that the Senato did not control every aspect of shipping, and that shipping ‘intra-culfum’ - that is within the Upper Adriatic - remained largely remote from its concerns.

F. Lane remarked that, in terms of legislation over seafaring activities, ‘Most important at first was the Maggior Consiglio. [...] It made many new regulations of maritime police’.⁸⁰² As Gluzman has explained ‘the latter retained its jurisdiction concerning several fields in maritime law that had social implications, for example, the obligation to carry a certain quota of noble-

⁷⁹⁷ Ibid., f. 22v (12/07/1377).

⁷⁹⁸ Ibid., f. 66v (19/08/1378).

⁷⁹⁹ Ibid., f. 132v (30/08/138)1.

⁸⁰⁰ ASVe, Senato, Deliberazioni, Misti, Reg. 19, f. 35r (03/10/1340).

⁸⁰¹ *Venezia-Senato, Deliberazioni Miste, Registro XXVII*, cit., 342-343, no. 716 (21/03/1356).

⁸⁰² Lane, ‘Maritime administration’, cit., 236.

men on board ships and galleys, as well as, the material conditions of crews on ships. [...] and the limitation on navigation along the western coast of the Adriatic Sea'.⁸⁰³ In fact, the *Maggior Consiglio* appears to have retained its own jurisdiction over sundry commercial matters well into the fourteenth century. It was the *Maggior Consiglio* that proposed in 1391 that two vessels be fitted to protect the coast of the Marche, given that 'according to what we hear, smuggling happens daily along the coast of the Marche'.⁸⁰⁴ It could prescribe the import or export of commodities that benefitted the state, such as wheat or salt, and could ban foreigners from partaking in that trade.⁸⁰⁵ Members equally took measures in 1392 to limit 'the extortions and frauds committed by the owners of ships and other vessels of ours to the damage of pilgrims that they ought to transport to visit the sepulchre of the Lord',⁸⁰⁶ who were laden on 'decrepit and crumbling ships'. More importantly the *Maggior Consiglio* was very vocal, much more than the *Senato*, in its support for privately-owned vessels. In 1394, for instance, they explained that 'amongst other things which our Republic is used to oversee, depending on the circumstances, is the granting of support and aid to unarmed vessels, favouring them with many immunities and concessions'.⁸⁰⁷ The *Maggior Consiglio* also intervened several times to ensure the timely departure of ships, regulating for instance, sanctions for sailors who failed to

⁸⁰³ Gluzman, *Shipping*, cit., 19, note 5.

⁸⁰⁴ ASVe, *Maggior Consiglio*, Leona, f. 50v (26/04/1391): Quis per ea que sentiuntur multa contrabanna quotidie (sic) committuntur in riparia Marchie, cum maximo damno nostri communis et diminutione nostrorum introitum, quod accidit solum quia custodia que fuit in illa riparia non est sufficiens ad obviandum contrabannis predictis et propterea necessario expedit providere de sufficienti remedio ut obvietur tanto danno quod fiet sine magnis expensis nostri communis ultra illas que fiunt ad presens, vadit pars secundum opinionem et consilium officialium de Catavere, quod provideatur in hunc modum, videlicet quod sicut ad presens armantur unum lignum et barche due ad custodiam dicte riperie, sic de cetero armari debeant duo ligna solummodo, unum de banchis viginti et alterum banchorum quindecim'.

⁸⁰⁵ ASVe, Luna, Zaneta, *Pilosus*, Lib. *Pilosus*, 164r (olim 20r, 06/05/1292): 'quod non possit per aliquem de districtu Venetiarum emi sal pro communi aliquo vel singulari persona forinseca nec possit facere societatem cum aliquo communi vel singulari persona forinseca'.

⁸⁰⁶ ASVe, *Maggior Consiglio*, Leona, f. 60r-61r (04/06/1392): Cum per patronus navium et aliorum navigiorum nostrorum fiant multe extorsiones cum deceptionibus et fraudibus personis peregrinis quas conducere debent cum suis navigiis ad visitandum sepulcrum dominicum et ad alias partes ultramarinas, monstrando dictis peregrinis navigia veterima et marcida, que faciunt aptari de novo'.

⁸⁰⁷ *Ibid.*, 76v (18/07/1394), the full deliberation can be found at note 418.

appear for being drafted onto their ships,⁸⁰⁸ and we have already seen previously the tax reforms passed by that Council in the 1340s. All these examples support the idea that the *Maggior Consiglio*, *pave* Cracco, was not a ‘parking lot’ but rather an important forum of debate on excise rates, shipping, and seafaring. Moreover, we can see how the language employed by that Council suggests a keener interest in privately-owned vessels than the deliberations of the *Senato*.

4. *Officia*

It is difficult to quantify precisely the number of *officia* in Venice and their function. A deliberation of the *Senato* from 1381 suggests that their number was already considerable by that date.⁸⁰⁹ An examination of the same deliberation allows us to distinguish several categories of *officia*. Two clearly defined groups are the *Procuratori* and the judicial system in its entirety. In addition, we can identify a series of magistracies concerned with either the Mint or the Arsenal. The remainder, however, is difficult to classify under any single, precise category. Andrea Da Mosto proposed to divide the *officia* into ‘*organi finanziari*’ (*Provveditori alle biave*, *Ufficiali al dazio del vin*, *Dogana da mar*, *Dogana da terra*, *Estraordinario*, *Ufficiali al frumento*, *Provveditori sopra officii*, *Ufficiali alle rason vecchie* and *Ufficiali alle rason nuove*, *Salinieri*,

⁸⁰⁸ ASVe, *Maggior Consiglio*, *Deliberazioni*, *Novella*, 14r (17/04/1350): ‘Cum status et bonum terre nostre specialiter consistat in navigando, et sicut manifestum est navigia maximum deffectum substineant occasione marinariorum qui se ad tempus debitum et ordinatum non se recolligant ad naves’.

⁸⁰⁹ A reform of the salary of officials de intus in 1381 lists the following (ASVe, *Senato*, *Deliberazioni*, *Misti*, Reg. 37, 1v-6r and 8r, 16/09/1381): ‘*Consilarii*, *illi de consilio de XL*, *iudices proprii*, *iudices petitionum*, *iudices procuratorum*, *iudices forinsecorum*, *iudices mobilium*, *iudices examinatorum*, *iudices per omnes curias*, *advocati curiarum palatii*, *advocatores communis*, *auditores sententiarum*, *provisores bladi*, *provisores communis*, *consules mercatorum*, *officiales rationum veterum*, *camerarii*, *officiales datii vini*, *officiales extraordinariorum*, *iusticiarii veteres*, *iusticiarii novi*, *quinque de pace*, *supraconsules*, *officiales imprestitorum*, *officiales de supra Rivoalto*, *vicedomini ternarie*, *vicedomini maris*, *vicedomini lombardorum*, *officiales frumenti*, *Officiales catavere*, *officiales argenti*, *extimatores auri*, *massarii monete*, *pexatores*, *pexatores auri*, *officiales super folio auri*, *officiales fonti theotonicorum*, *officiales missetarie*, *officiales becharie*, *capita sexteriorum*, *officiales de nocte*, *solutores armamenti*, *officiales canapi*, *officiales publicorum*, *officiales super pannis*, *officiales levantis*, *capitanei postarum*, *officiales geti rami*, *patroni arsenatus*, *omnes procuratores*, *officium cadutarum*’.

Sindici, Ternaria, Zecca)⁸¹⁰ and ‘organi amministrativi’ (Provveditori all’arsenale, Ufficiali alle beccherie, Provveditori di Comun, Visdomini al fondaco dei Tedeschi, Giustizia vecchia and Giustizia Nuova), Ufficiali alla messetteria, Cancellier grande, Cassiere della bolla ducale, Segretario alle voci),⁸¹¹ but ultimately their jurisdictions overlapped. In the following section, I will analyse the judicial system, reserving these pages for a discussion of the types of *officia* tasked with the repression of smuggling, the exaction of customs duties, and the regulation of seafaring. I will argue that the Venetian policy of multiplying magistracies with overlapping jurisdictions hindered their effectiveness and proved cumbersome for merchants, who were at times unaware of the precise regulations. Before presenting the evidence, I will briefly outline the functions of each group of magistrates.

The repression of smuggling was entrusted to a series of magistracies, namely the Consoli dei mercanti, Contrabanni, Capitanei postarum, Cattaveri and Levanti, Provveditori di Comun, and Venetian officials stationed overseas.⁸¹² As Fusaro has noted, the Consoli dei mercanti ‘had general jurisdiction over merchants and commercial controversies’.⁸¹³ First mentioned in 1228, they initially served as the principal magistracy overseeing trade and shipping. They maintained a register of all seaworthy vessels in Venice, inspected ships to determine their carrying capacity and to prevent overloading, enforced the shipping calendar, and originally held judicial authority in disputes between merchants.⁸¹⁴ Their statutes illustrate their functions.⁸¹⁵ They

⁸¹⁰ *L’archivio di Stato di Venezia. Indice generale, storico, descrittivo ed analitico*, A. Da Mosto (ed.), Vol. 1. *Archivi della amministrazione centrale della Repubblica veneta e archivi notarili* (Rome, 1937), 107-152.

⁸¹¹ *Ibid.*, 155-221

⁸¹² Lane, ‘Maritime Law’, cit., 244 and Gluzman, *Venetian Shipping*, cit. 22-45. Smuggling has been analysed in a neglected article: P. Molmenti, ‘Il contrabbando sotto la Repubblica veneta’, *Atti dell’Istituto di Scienze Lettere ed Arti*, 76/2 (1917), 977-1021.

⁸¹³ Fusaro, ‘Politics of Justice’, cit., 145.

⁸¹⁴ Their jurisdiction is analysed in G. Rösch, ‘Le strutture commerciali’, in *Storia di Venezia*, cit., vol. 2, 451-454 and Lane, ‘Maritime Law’, cit., 237-243. See also Tiepolo, *Guida generale*, cit., 979.

⁸¹⁵ *Capitolare dei Consoli dei Mercanti (seconda metà del sec. XIV)*, ed. M. Michelon (Rome, 2010), Chapter are given as numbers, e.g. ch. 2 = 2. The original fourteenth-century *capitolare* was lost in the sixteenth century. The modern edition is based on another fourteenth century copy owned by the Giusti family. The ‘modern’ *capitolare*, which also recopied the previous *capitolare antiquissimum* as its incipit, is in AsVe, Consoli dei mercanti, *busta* 1. A sixteenth-century copy is in Venice, BMC, MS Classe III, 331.

recorded details of merchants, ships, and merchandise entering and leaving Venice (3 and 49); preserved records of agreements between merchants (6-7); enforced the sailing order of convoys (30); enacted prohibitions on trade with foreigners (51); prevented falsification of merchandise (54); stamped goods with officials seals (especially soap, 58); estimated ship tonnage and measurements⁸¹⁶ (65, 71-72 and 85); prevented overloading (66, 70 and 72-73); ensured the correct number of weapons was aboard (69); appointed the scribe assigned to each ship (67); documented damaged goods (74, together with the *Estraordinari*, 27) and kept a detailed list of sales of ships (75).

The three *Provveditori di Comun*, also established in the mid-thirteenth century, held broad jurisdiction over maritime affairs.⁸¹⁷ Their responsibilities included verifying the arrival and departure of ships (1v), repressing smuggling (2r, 6v-7r, 11v-12r), overseeing the naturalisation of foreigners (8r, 18v-19v, 21v-22r, 23r-24r, 25r-27v, 31v, 33r, 35v-36r, 37r/v, 45v), capturing fugitives (8v), inspecting cargo registers (24r/v), promoting the arrival of skilled craftsmen and sailors (30v), and inspecting customs records from the *Ternaria* (43v).

The *Capitanei Postarum*, five noblemen based on the Rialto and supported by guards, were responsible for collecting tolls and customs duties at customs houses throughout the *dogado*, through customs tolls on the main rivers of lagoon (Sile, Brenta, and Piave), using patrol boats.⁸¹⁸ They inspected and sealed commodities entering or leaving Venice and worked

⁸¹⁶ The estimates had to be sent to the Levanti as well (Article 76 of the *Capitolare dei Consoli dei Mercanti*).

⁸¹⁷ For their functions see Tiepolo, *Guida generale*, cit., 989. ASVe, *Provveditori de Comun, Atti, busta 1* (Capitolare). The codex has no headings, I will thus refer to folios. On their jurisdictions see Ferro, *Diritto comune*, cit., 2nd ed., vol. 1, 557: 'l'oggetto principale della istituzione di questo magistrato fu la mercanzia; poiché dall'antica formula del loro giuramento risulta ch'essi avevano il diritto di regolare ed ordinare tutto ciò che riguarda le mercature, i mercanti, e i navigli che entrano in Venezia, e che escono.

⁸¹⁸ ASVe, *Consiglio dei Dieci, Deliberazioni, Miste, Reg. 3, f. 43r* (17/11/1328), badly stained: 'Si videtur vobis quod pallate debeant aperiri [...] Pallate Sileris, S. Iuliani, Vissignonis et de Plavi aperiantur, quod committatur capitaneis postarum quod ponat (sic) a sex usque X homines in una barcha pro qualibet istarum pallatarum, ponendo unum ex ipsis pro barcha. Now edited in *Consiglio dei dieci: registri 3-4. 1325-1335*, ed. F. Zago (Venice, 1968), 97.

alongside local officials.⁸¹⁹ Their extensive powers included stamping certain products jointly with the *Estraordinari*.⁸²⁰

As Benjamin G. Kohl has explained, the *Officiales de contrabannis* were tasked with supervising outlying customs posts - around eight in Istria - each manned by four to ten guards with patrol boats. Their principal function, however, was judicial: they held court thrice weekly in the ducal palace to interrogate and punish those accused of smuggling.⁸²¹ As their *capitolare* indicated,⁸²² the officials swore 'I will investigate all contraband be committed against the Lord Doge and the Comune of Venice (2, 'cercabo de omnibus contrabannis que fient contra dominum ducem et Comune Veneciarum). They held court every Monday, Wednesday, and Friday 'pro hiis contrabannis inquirendis et puniendis' (8), receiving from the Doge all documents related to contraband (10) and maintaining a register containing all witness statements and the names of those condemned to banishment ('quaternus bannitorum et testificationum', 15). Trials were to be concluded within a maximum of three months (63). The *officiales* were also responsible for administering pledges given by merchants intending to export wine, salt, or oil from Venice. Such merchants were required to obtain an export licence specifying the intended destination of the goods, along with a receipt from the local Venetian rector attesting that the goods had, in fact, been delivered there.⁸²³ Failure to comply

⁸¹⁹ B. Kohl, 'The Changing Function of the Collegio in the Governance of Trecento Venice', in M. Knapton et al. (eds.), *Venice and the Veneto during the Renaissance: the Legacy of Benjamin Kohl* (Florence, 2014), edited on the basis of the 2009 unpublished original), 41. I have recently discovered that the *Capitulare of the Capitanei postarum* is in Seville, Institución colombina, Call number 07-5-16 (<https://opac.icolombina.es/opac/abnetcl.exe/OhNXawpVndf0FIhyKwu1LKjRmFI/NT1>). I have not consulted the manuscript. The same library apparently holds an important collection of Venetian statutes, including the *Capitolare of the Vismomini dei Lombardi*, the *statuta seu consilia super becarios*, *Capitulare dominorum iudicum*, *capitulare capitum sexteriorum*, *Capitula commissionis nobilis domini Iohannis Barbadico*, *Statuta navium*, *statuta servanda a rectore trapezuntino*, and one unspecified 'capitolare' from 1383.

⁸²⁰ ASVe, Senato, Deliberazioni, Misti, Reg. 40, f. 89v (30/08/1387): 'debeant predicte grane, species et res, quando applicuerint Venetiis, poni sub bulla extraordinariorum et capitaneorum postarum'.

⁸²¹ Kohl, 'Collegio', cit., 41.

⁸²² The text has been published on the basis of the *olim* ASVe, *Miscellanea codici*, 133 in Roberti, *Le magistrature giudiziarie*, cit., vol. 3, 205-239.

⁸²³ On these *bullete* see G. Zordan, *I Vismomini di Venezia nel sec. XIII : ricerche su un'antica magistratura finanziaria* (Padua, 1971), 347-484.

constituted smuggling and thus fell within the officials' jurisdiction (23).⁸²⁴ They were likewise responsible for enforcing the prohibition on the sale of ships to foreigners (24). The Contrabanni had the authority to absolve shipowners whose vessels had been used for smuggling, provided the owners were unaware of the illicit activity (26). The office was temporarily merged with the Cattaveri in 1282 (27) and later with the Levanti in 1285 (76). Initially, they had six patrollers (or *famuli*) at their disposal, later reduced to three (30). In collaboration with the Signori di Notte (37), they were also responsible for addressing smuggling activities within the city. Additionally, they enforced the ban on direct trade between the eastern and western shores of the Adriatic, which included the seizure of ships (40-41). The Contrabanni also pursued the suppression of salt smuggling (43-46, 68, 77), along with the illicit trade in a wide range of other goods: wheat (48), wine (51), fruit (52, 74), iron and coal (54), timber (58-59), weapons (doc. 66), and flaxseed (doc. 78). They retained the authority to inspect merchandise that had not been officially sealed (doc. 70).

Three further magistracies complete this picture: the Levanti, the Estraordinari, and the Cattaveri. As their name suggests, the Domini super mercationibus levantis (commonly known as the Levanti) were originally created to supervise trade in products from the Levant. However, they soon acquired extensive jurisdiction over smuggling on all unarmed vessels. They were required to inspect ships departing Venice to ensure that they had sufficient crew and military personnel onboard, and to examine the records kept by the ship's scribe.⁸²⁵ The Levanti, together with the Cattaveri, enforced regulations on overloading, although the inspection of privately-owned galleys was initially the responsibility of the *Officiales super denariis de Rascia*.⁸²⁶ According to their *capitolare*,⁸²⁷ their wide-ranging responsibilities included:

⁸²⁴ These pledges date to the thirteenth century, see R. Cessi 'Liber Communis qui vulgo nuncupatur Plegiorum', in Id. (ed.), *Deliberazioni del Maggior Consiglio di Venezia* (Venice, 1931), vol. 1, 1-231.

⁸²⁵ Gluzman, *Venetian Shipping*, cit., 24-26.

⁸²⁶ See Lane, 'Maritime Administration', 243-249.

⁸²⁷ The number refers to the books and headings of the unpublished *capitolare* in ASVe, *Ufficiali sopra le mercanzie del levante*, *busta* 1.

preventing the import and sale of products from the Levant in any port other than Venice (II, 1; II, 32-33); ensuring that items were exported with the appropriate certificates and seals (II, 2: ‘cum licentia et sigillo’); prohibiting unlawful associations between foreigners and Venetian merchants (II, 3, 7), including for the transport of *grassa* (II, 6); and preventing the movement of specific goods or ships to forbidden territories (II, 8-9, 14, 26, 34, 54-63, 68; III, 24; VI, 6). They were also tasked with incentivising imports from certain regions or of particular wares (II, 11–12), and with preventing foreigners from acting as factors for Venetian merchants (II, 13). Their role further encompassed the repression of smuggling (II, 15, 29, 73) and restrictions on trade conducted by foreigners (II, 16), unless they were crew members (II, 29). The Levanti inspected and assessed ships arriving in or departing from Venice (II, 18; III, 2, 17-18, 21), enforced the prohibition on transporting lightweight goods on round ships and boats (II, 21-24, 31, 64, 71, 73-74; VI, 15), and regulated the sailing season (March to September) (II, 25-28, 69). They ensured ships carried the required numbers of armed men, sailors, and weapons (II, 46-47, 65-67; III, 1, 5-13, 19-20, 22-23), confiscated falsified goods (II, 48-52), monitored against overloading (III, 3-4, 14-16), and enforced rules relating to armed galleys, including regulations on choosing the *patronus*, the types of merchandise allowed, and the required equipment (Book V, *passim*).

The Domini extraordinariorum or Estraordinari were established in 1302, primarily to collect freight charges from state galleys.⁸²⁸ According to their *capitolari*,⁸²⁹ they were responsible for overseeing the payment of freight dues (C1, 1-3, 21, 31–33, 76, 80, 93-94, 107-108; C2, 1, 4-13, 17-18, 20-43), issuing official export receipts (*bulleta*, C1, 19; C2, 3), supervising the loading and unloading of ships (C1, 106; C2, 2, 14, 19), and ensuring the enforcement of commercial contracts (C1, 58).

⁸²⁸ Lane, ‘Maritime Law’, cit., 249-250 and Tiepolo, *Guida generale*, cit., 937.

⁸²⁹ There are two copies of the Capitolare of the Estraordinari, both from the fourteenth century with later additions. The first version will be referred here as C1 (ASVe, Cinque savi alla mercanzia, Prima serie, *busta* 22bis), the second as C2 (ASVe, Cinque savi alla mercanzia, Prima serie, *busta* 22ter).

The Ufficiali al Cattaver were responsible for the repression of smuggling, the handling of treasures recovered at sea and shipwrecks, the confiscation of goods during military actions, the welfare of pilgrims onboard, and the sale of ships.⁸³⁰ Their *capitolare*⁸³¹ charged them with the repressing smuggling, including the transport of merchandise to ports other than Venice (1)⁸³² and ‘de omnibus contrabannis que fient contra dominum ducem et comunem Venetiarum’ (28, 73, 79, 81, 96, 106, 112). They were rewarded with a portion of the seized goods (15, 80), in cooperation with other officials, particularly the Capitaneus riparie (82-86; 88, 99-103, 113-115, 119, 158). Their power included seizing vessels (19), falsified goods (129-132), and illicit merchandise (32), as well as collecting excise duties on ships leaving the port of Venice (37, 57, 60, 64, 66). They also seized goods from shipwrecks (39). A particular focus was placed on the illegal trade in salt (40-49), including verifying that shipowners held the proper export licences and seals (43-44, 51, 67, 89). Additional duties included monitoring the sale of ships and merchandise to foreigners (50, 90), the transport of prohibited goods (53, 55-56, 61, 63, 65, 71, 75-76, 107, 109, 117-118, 120, 144, 160), the loading and unloading of ships (54, 110), the shipment of lightweight goods on round ships (74, 136-139), and the transport of cotton and bulk items (141-143, 148, 157).

This complex entanglement of jurisdictions⁸³³ was exacerbated by the fact that the repression of smuggling also fell under the authority of naval officials (such as the Capitaneus

⁸³⁰ Gluzman, *Venetian Shipping*, cit., 29-30 and Tiepolo, *Guida generale*, cit., 937-938 and P. Bosmin, ‘Le origini del magistrato del Cattaver’, In A. Luzio (ed.), *Gli Archivi di Stato italiani. Miscellanea di studi storici* (Florence, 1933), vol. 1, 231-35. See also Braunstein, *Les Allemands à Venise*, cit., 31-74, note 118: ‘Le réseau du contrôle est serré : custodes capitum postarum, famuli dominorum de Catavere, qui exercent le contrôle à l’entrée de Venise ou sur un bateau en partance, ou dans une maison place St. Marc, et naturellement aux confins, S. Giacomo de Palude’.

⁸³¹ ASVe, Ufficiali al Cattaver, b. 1 (Capitolare), numbers refer to headings in the *capitolare*. Another copy of the codex is in now in Washington, Library of Congress, Law Library, MS V. 42. The illuminations in the latter have been analysed in H. K. Szépe, *Venice Illuminated. Power and Painting in Renaissance Manuscripts* (New Haven, 2018), 58-59.

⁸³² At least since the thirteenth century, see ASVe, Maggior Consiglio, Luna, Zaneta, Pilosus, ‘Pilosus’, f. 195r (May 1295): Cum ligna portentur de partibus Ystrie ad Ripariam de subtus, non sine magno preiudicio nostro [...], glossed on the right margin ‘ad cattavere’.

⁸³³ See Sandi, *Principi di storia civile*, cit., Parte 1/2 (Venice, 1755), Libro IV, Art. 12, 771-779.

Culphi or Capitanei ripartie),⁸³⁴ and Venetian governors abroad,⁸³⁵ often resulting in jurisdictional conflicts, especially over the determination of the portion of seized goods attributed to each.⁸³⁶ Venetian officials abroad issued export licences, inspected vessels for suspected overloading,⁸³⁷ and checked agreements between ship-owners and pilgrims.⁸³⁸ In 1331, the nobleman Nicoletto Mocenigo was pardoned for a fine related to the import of rock alum. The Levanti admitted they were unaware whether the Camerarius (treasurer) of Crete had actually received the order, approved in Venice, banning alum exports.⁸³⁹ The enforcement of fines related to contraband was the responsibility of the Capisestiere and the Signori di Notte⁸⁴⁰, the Lords of the Nightwatch ‘who had special responsibility for the marketplace at Rialto’.⁸⁴¹ However, the regulation of fair market pricing fell under the jurisdiction of the Giustizia Vecchia.⁸⁴² Smuggling was also considered a crime against the honour of Venice and

⁸³⁴ See Rizzi, *Andar per mare*, cit., ‘Capitaneo del Golfo’, 52, art. 52, specifically on copper.

⁸³⁵ See on this G. Christ, ‘The Venetian Coast Guards: Staple Policy’, *Seaborne Law Enforcement, and State Formation in the 14th Century*, in *Merchants, Pirates, and Smugglers. Criminalization, Economics, and the Transformation* (Frankfurt, 2019), 269-296.

⁸³⁶ ASVe, Senato, Deliberazioni, Misti, Reg. 37, f. 6r (13/09/1381), to contrast smuggling election of a Capitaneus riparie Istrie and Capitaneus riparie Marchie, but the fines had to be divided ‘contrabanna vero dividantur de cetero in hunc modu, quod tres quarti contrabannorum sint capitaneorum et hominum lignorum galeatarum et brigentinorum [...] de resto vero medietas sit officii de catavere [...] et alia medietas sit nostri communis.

⁸³⁷ ASVe, Senato, Deliberazioni, Misti, Reg. 36, f. 133r (30/08/1381): ‘Nostri rectores in quorum regiminibus invenientur de dictis nostris navigiis habeant libertatem circandi et videndi si ipsa navigia sint caricata ultra dicta signa’.

⁸³⁸ ASVe, Maggior Consiglio, Deliberazioni, Registri, Leona, f. 61r (04/06/1392).

⁸³⁹ ASVe, Cassiere della bolla ducale, Grazie, Reg. 4, f. 2v (13/08/1331): ‘Cum nobilis vir Nicoletus Mocenigo hoc anno esset in Candida et camerariis Crete presentasse miliaria VIJ luminis a rocie, secundum usum, pro accipiendo ab ipsis litteram pro conducendo Venetias et sic habita littera Venecias dictum alumen conduxit, credens libere possit conducere, unde cum officiales Levantis dictam ipsum alumen perditum esse vigoris cuiusdam novi consilii, quod ipse, novit Deus, penitus ignorabat et camerarii etiam, ut apparet per ipsorum litteras’.

⁸⁴⁰ *Capitolare dei Signori di Notte esistente nel civico museo di Venezia*, ed. F. Nani Mocenigo (Venice, 1877), 54, heading 62 (05/05/1293): ‘capta fuit pars in maiori Consilio quod addatur in capitulari dominorum de nocte sicut tenentur in de contrabannis que fierent de vino, ita teneantur de omnibus aliis que portarentur vel conducerentur contra banna et ordinaamenta domini Ducis et Veneciarum’. On the jurisdiction of the magistracy on thefts see S. Piasentini, *Alla luce della luna. I furti a Venezia, 1270-1403* (Venice, 1992).

⁸⁴¹ Lane, *Maritime Republic*, cit., 99.

⁸⁴² G. Monticolo, ‘L’Ufficio della giustizia vecchia a Venezia dalle origini sino al 1330’, in *Miscellanea pubblicata dalla R. Deputazione di Storia Patria*. Serie Quarta, vol. 12 (Venice, 1892), Essay II, 5-172 and Shaw, *The Justice*, cit.

could be investigated by the Avogadori.⁸⁴³ No contract was deemed valid without the involvement of a registered middleman, known in Venetian as a *messeta*.⁸⁴⁴ Duties were levied by one of three customs officials. The Ternaria was responsible for *grassa* (fat goods),⁸⁴⁵ whilst goods arriving by sea were under the authority of the Tavola del mare, and those imported by land were handled by the Tavola dei Lombardi⁸⁴⁶ - although overlapping jurisdictions were common.⁸⁴⁷ For example, in June 1327, the Contrabanni and Capitanei Postarum brought a legal case against the Podestà of Loreto concerning the division of a fine for smuggling⁸⁴⁸ The Republic also retained the right to impose fixed prices (*ordo*) for the import of certain commodities, such as wheat (*frumento*) or salt.⁸⁴⁹

Foreign merchants frequently complained about the time-consuming resolution of disputes, noting that even the export of wine required three separate licences,⁸⁵⁰ and that long waiting

⁸⁴³ Gluzman, *Venetian Shipping*, cit. 21-22.

⁸⁴⁴ ASVe, Ufficiali alla Messetteria, b. 1 (Capitolare), f. 2v (1315): ‘quod quilibet messeta debeat scribere vel scribi facere in suis quaternis pacta et conventiones et terminos quos mercatores faciunt ad invicem’. On their jurisdiction see E. N. Rothman, *Brokering Empire: Trans-Imperial Subjects between Venice and Istanbul* (Ithaca, 2012), 35-42.

⁸⁴⁵ There are two specimina of the *capitolare* of the Ternaria. A fifteenth-century specimen in vernacular (T2, currently in ASVe, Ternaria Vecchia, *busta* 1) and a fourteenth century version in Latin (Venice, BMV, Lat. V, 6 = 2380). On the jurisdiction of the ternaria see G. Zordan, *I Visdomini*, cit., 99-116; 209-226; 280-292; 502-526. The part of the capitolare of the ternaria related to olive oil has been transcribed and commented in B. Cecchetti, ‘La vita dei veneziani nel 1300. Il vitto’, *Archivio veneto*, 30 (1885), section 25, 309-319.

⁸⁴⁶ This division was somehow more nuanced but it gradually emerged from the fourteenth century onwards. For the powers of the Tavola del mare and dei Lombardi see Zordan, *Visdomini*, cit., 79-98; 227-279; 485-501.

⁸⁴⁷ ASVe, Cassiere della bolla ducale, Grazie, Reg. 7, 28v (26/06/1336): ‘Cum Michael de Clario, cives et fidelis noster exposuerit coram nobis quod de quadam quantitate lane quam emerat a quodam de Messana ipse ivit ad accipiendum licenciam a vicedominis maris de ponderando dictam lanam et dedit pignus, ut est solitum, credens quod ad ipsam tabulam solveretur et vicedomini ternare aliud facere nequennes (sic) condemnauerunt eum.

⁸⁴⁸ ASVe, Collegio, Notatorio, Registro Rosa, f. 16r (09/06/1327).

⁸⁴⁹ Gluzman, *Venetian Shipping*, cit., 39-43. F. Faugeron (ed.), *Capitolare degli ufficiali al formento (metà del sec. XIV)* (Rome, 2012), 41, art. 7 (De far condur formento a volontate de misser lo doxe’, 57, art. 65 ‘de dar le garde a li signori de li contrabandi, 69 art. 106 ‘de quelli che porta farina, pan over alguna blada contra bando’.

⁸⁵⁰ ASVe, Maggior Consiglio, Deliberazioni, Novella, 75v (21/09/1358): Cum mercatores qui volunt extrahere vinum de Veneciis multum fatigentur eo quod oportet eos ire pro accipiendo bulletas ipsius vini ad tria officia, videlicet ad offitium datii vini, ubi accipiunt bulletas et postea ad cameram, ubi solvunt datium et accipiunt unam bullam et deinde ad curiam maiorem, ubi etiam accipiunt sigillum dimini ducis.

times - due to limited office hours - often delayed the dispatch of merchandise.⁸⁵¹ The overwhelming volume of legislation also presented serious challenges, not just for merchants. In 1303, a codex was commissioned to compile ‘omnia statuta et consilia spectantia ad navigia, navigationem et mercaturam’, though this document is no longer extant.⁸⁵² The Venetian policy of creating redundant offices undoubtedly served to limit the power of each individual magistracy but simultaneously fostered duplication. This problem was exacerbated by the lack of a unifying legal framework - *pace* the statutes . and by an overwhelming flood of legislation: 644 bills were debated in the Senato in 1332–1333, and 1,018 in the period 1333–1335.⁸⁵³ The example of smuggling repression is illustrative of both the administrative overreach and the systemic inefficiencies created by a bureaucratic structure based on repetitive jurisdiction.

5. The tribunals

The Venetian judicial system was equally complex and, to a significant extent, operated on the same logic of overlapping jurisdictions. As noted in Chapter 2, there were six *curie palatii*, the principal state tribunals. Jurisdiction over waterways fell to the Iudices publicorum, while commercial affairs more generally were the domain of the Consoli. Smuggling, however, was tried in the court of the Contrabanni, which convened three times a week. Additional tribunals existed, including the little-known Giudici del Men. They heard disputes between Venetians when the claim was valued less than ten *lire*. However, they lacked authority over maritime

⁸⁵¹ ASVe, Maggior Consiglio, Deliberazioni, Leona, 28 aprile 1397, f. 96r Cum bonum et iustum sit providere et modum tenere quod omnes mercatores tam Veneti quam foresense habeant omnibus horis diei expeditionem in extrahendo de Veneciis mercationes, sicut quod notum est propter breve tempus quo sedent officiales ad officia sua

⁸⁵² ASVe, Provveditori di Comun, Atti, *busta* 1 (Capitolare), f. 5r-v. The original deliberation is in ASVe, Maggior Consiglio, Deliberazioni, Magnus et Capricornus, f. 41r (19/01/1303). It has been published in Predelli-Sacerdoti, *Statuti Marittimi*, cit., 190-191.

⁸⁵³ See *Venezia-Senato, Deliberazioni miste, Reg. XV and Reg. XVI*, cit.

matters.⁸⁵⁴ Romano summarised their main functions as follows: ‘These courts handled a variety of matters such as disputes over dowries (the Giudici del Proprio), minor debts and collegranze (the Giudici del Mobile), cases between Venetians and foreigners (the Giudici del Forestier), and property transfers (the Giudici dell’Esaminador).’⁸⁵⁵ The practical intricacy of the system is well illustrated by a single example: in the case of intestate death, the competent court was the Proprio. However, if the heirs sought to accept the inheritance only after examining the inventory of the deceased’s assets and liabilities, jurisdiction passed to the Petizion, but only if the value of the estate exceeded 50 ducats; otherwise, the case would be referred to the Mobile. This latter court also had jurisdiction over wills, provided that all heirs were alive. If the estate included foreign assets, the Giudici del Procurator were also involved, and the Esaminador would hear witness statements.⁸⁵⁶ Unfortunately, most of the medieval records of Venetian tribunals have not survived, making it difficult to study the Venetian judicial system in practice.⁸⁵⁷ Appellate courts were also plagued by overlapping jurisdictions. In theory, the Auditori heard appeals in civil cases, while the Avogadori dealt with criminal ones. In practice, as G. Cozzi observed, ‘the two magistracies, despite their different historical and political origins, had duties which were or could become over-lapping and they tended, therefore, to compete with one another.’⁸⁵⁸ The result, as the Senato acknowledged in 1375, was that ‘due to frauds, quibbles, and many other dishonest wiles, numerous and endless lawsuits, judicial disputes, and litigations of all sorts are brought forth’.⁸⁵⁹

⁸⁵⁴ Roberti, *Capitolari*, cit., III, 155, art. 9: ‘racionem vero et iusticiam fatiam omnibus et singulis petentibus eam coram me de quantitate librarum decem, aut a decem libris infra, de causis seu querimoniis que sint sine cartis, vertentibus inter venetos et venetos et habitores Veneciarum et inter habitatores Veneciarum et habitatores Veneciarum, exceptis rationibus ad navium rationum pertinentibus’.

⁸⁵⁵ Romano, *Venice. Remarkable History*, cit., 156.

⁸⁵⁶ Passarella, ‘La procedura civile veneziana’, cit., 291-292.

⁸⁵⁷ See Tiepolo, *Guida generale*, 987-993.

⁸⁵⁸ G. Cozzi, ‘Authority and the Law in Renaissance Venice’, in J. R. Hale (ed.), *Renaissance Venice* (London, 1973), 303.

⁸⁵⁹ ASVe, Senato, Deliberazioni, Miste, Reg. 35, f. 64r (09/11/1375): ‘Item quia sepissime occurrit propter fraudes cavilationes et alia multa inhonesta quod moventur multe et infinite differentie lites seu cause et diversorum generum questiones’.

The complexity of the Venetian legal system is epitomised by the jurisdiction and authority of the Corte di Petizion.⁸⁶⁰ As stated in its *capitolare*, the court had jurisdiction over ‘all and every petition and complaint of Venetians and foreigners laid against a Venetian or a foreigner’.⁸⁶¹ It soon acquired authority over debtors,⁸⁶² and cases in which Venetians had been robbed abroad by foreigners.⁸⁶³ However, the law explicitly forbade it from investigating thefts, homicides, assaults, and robberies within the *dogado*, except when committed by a foreigner against a Venetian.⁸⁶⁴ This court has been the focus of scholarly attention, particularly due to a crucial passage in its *capitolare* concerning the way it ought to settle claims, that is ‘audire et examinare ac eas diffinire et determinare quam cicius poterunt bona fide et secundum quod eorum discretione iustum videbitur atque decens [...] quorum sentencias, laudum et arbitrium debeamus executioni mandare’.⁸⁶⁵ The scope and boundaries of the *discretio* and *arbitrium* of these judges have been a subject of debate for over a century, underscoring the role of the Corte di Petizion as the main tribunal for equitable justice.⁸⁶⁶ Although maritime disputes and ‘lawsuits of Venetians against foreigners and of foreigners against foreigners’ fell within the remit of the Corte del Forestier,⁸⁶⁷ such cases were often addressed by the Petizion on the basis

⁸⁶⁰ On which see Roberti, *Le magistrature*, cit., I, 209-213 and Cassandro, ‘La curia di Petizion, cit., Parte II, 1-104.

⁸⁶¹ Roberti, *Le magistrature*, III, 108, Art. 12: ‘curam autem et studium habebō omnes et singulas petitiones et querimonias venetorum et forinsecorum que deposite fuerint contra venetum vel forinsecum coram nobis’.

⁸⁶² Ibid., 114, art. 50: ‘procedunt in illos qui fugiunt de Veneciis cum havere aliorum’.

⁸⁶³ Ibid., 116, art. 52: ‘querimonia veneti quod bonis suis sit spoliatus vel derobatus’.

⁸⁶⁴ Ibid., 118, art. 57: ‘querimonias homicidii, latrocinii, forcii et raubarie, que fient in districtu ducatus Veneciarum, salvo tamen que dicta sunt supra de spoliatione et de raubaria facta in districtu ducatus Veneciarum alicui veneto per forinsecum’.

⁸⁶⁵ Ibid., 116, art. 51.

⁸⁶⁶ See for a recent appraisal C. Passarella, ‘Venezia e il diritto comune: dall’orgoglio nazionalistico alla ricerca delle concordanze’, *Archivio giuridico*, 1 (2021), 155-200; See Padovani, ‘La politica del diritto’, cit.; Pansolli, *La gerarchia delle fonti*, cit.; Nehlsen-Von Stryk, ‘Ius commune’, “consuetudo” e “arbitrium iudicis”, cit., 107-139; P. S. Leicht, ‘Lo Stato veneziano e il diritto comune’, in *Miscellanea in onore di Roberto Cessi*, vol. 1 (Rome, 1958), 203-211.

⁸⁶⁷ Roberti, *Le magistrature*, cit., II, 105, art. 4: ‘curam et studium habebō omnes et singular causas et placita que pertinent ad rationem navium et ad commune Veneciarum’ and Ibid., 105, art. 5: ‘omnes et singulas causas vertentes inter venetum et forinsecum vel forinsecum et forinsecum’.

of its equitable jurisdiction.⁸⁶⁸ Cassandro interpreted *arbitrium* as ‘the recourse to criteria which are not merely formalistic, allowing the court to gather proofs not contemplated by statute, use assumptions discretionally, and thereby surpass even the authority of written documents’ - in other words, to go beyond form, in search of substantive justice.⁸⁶⁹ Pier Paolo Vergerio (1370-1445) summarised the authority of this court succinctly in his ‘De Republica Veneta’: ‘the Iudices petitionum have jurisdiction over claims of any value, and they have ample discretion, and they are allowed to do much, according to their office’.⁸⁷⁰ Already in 1284, the office was considered so burdensome that the authorities struggled to find willing candidates: ‘for their task is burdensome and their office is concerned with many issues, and for this reason many refuse to accept it’.⁸⁷¹ The heterogeneity of its jurisdiction and the overlap with the Corte del Forestier is evident from the second register of the Sentenze a Giustizia, a rare surviving specimen of over 100 folios, dating from 1366-67. This register shows that the Petizion dealt not only with commercial disputes, but also with claims regarding credit, dowries, and wills. Only twenty-five lawsuits in the register concerned maritime trade, such as the shipment of goods or bullion,⁸⁷² merchant partnerships⁸⁷³ or individual voyages on private vessels.⁸⁷⁴ Two

⁸⁶⁸ Fusaro, ‘Politics of justice’, cit., 144: ‘In 1286 the situation changed again, and the *Maggior Consiglio* decreed that «lawsuits between Venetians and foreigners which were [delegated] to the *Petizion* will be now delegated to the *Forestier*’.

⁸⁶⁹ Cassandro, ‘Concetto, caratteri’, cit., 43: L’ *arbitrium*, che non significa arbitrio, ma ricorso a criteri non formalistici, che consentono di raccogliere prove che non sono previste dalla lex, di ricorrere discrezionalmente alle presumpciones e di superare mediante queste anche la forza delle prove scritte, di irrogare pene, di andare, insomma, oltre la forma, alla sostanza del rapporto in ragione del quale sorge la lite’.

⁸⁷⁰ Pier Paolo Vergerio, *De republica veneta fragmenta*, ed. E. A. Cicogna, (Venice, 1830), 23, ‘Iudices petitionum’: iudices vero petitionum in omnem summam ius dicunt et arbitrium habent amplum: multaque ex officio facere eis licet.

⁸⁷¹ Venice, BMC, MS Provenienze Diverse 272, f. 109r: ‘Imp(er)zò che lo so officio è gra(n)de e de molti fatti occu/pado, p(er)zò che molte cosse sè da fare e p(er)zò molti renu(n)cia quello officio habia’.

⁸⁷² ASVe, Giudici di Petizion, Sentenze a Giustizia, Reg. 2: wares sent to Cyprus (f. 8v) and Greece (fols. 70 v and 107v), merchandise sent to Alexandria (fols. 40r, 44r, 56v, 63v).

⁸⁷³ Ibid., generic society (29r operating in Alexandria, 37v, 86v, 89r, 91v, 100v), to buy horses (23v), to trade currant (51r), wine (36r) and silk (72v).

⁸⁷⁴ Ibid., wheat traded in Rimini (5r), merchandise laden on a ship in Alexandria (25r), cotton in Famagusta (59v), wine (87r), six pieces of cloth bound to Crete (92r). A generic dispute on freightage (17r).

cases of arbitration enforcement appear, and in both instances, the court merely upheld the arbitration.⁸⁷⁵

The court also coexisted with a tradition of private arbitration. One illustrative case dates from 1298, showing how arbitration was used alongside settlements in court. That year, Maria Baseggio, née Badoer, testified before the court. She recounted a dispute, most likely commercial, between her brothers Vitale and Marco Badoer. Her husband Nicolò was also present.⁸⁷⁶ The argument escalated to the point that none could hear themselves speak. At that point, a merchant named Tommaso Zulian intervened, saying ‘Sirs, you will never come to an agreement. Trust Niccolò and me, we will settle this better than the courts of the Doge’s palace, and if you do go to court, you will be disgraced’ (mo’ laséve en ser Nicholò / et in mi che nui ve enderemo meio de çudissi de palaço e se vui andé en palaco/ vui se’ vitopradi). Maria’s brother replied: ‘Both of us are more than willing to entrust the matter to you and we want you to resolve the matter at your own will and make peace between us’ (entranbi nui si ne ge volemo ben lasar en vui/ e volemo che vui ne façe ço che ve plasse dele questione e che vui ne debia acord/dare insembre’). The vocabulary is notable. Tommaso’s appeal to trust - ‘laséve’, literally abandon yourself - is echoed in the brothers’ affirmation ‘nui ne volemo ben lasar en vui’. The courts, the ‘çudissi de palaço’ are depicted as something to be feared and avoided; the risk was being ‘vitopradi’, a term evoking public shaming and disgrace. According to Maria, the arbitrators instructed the brothers to compare their *quaderni* (account books), marking agreed items differently from disputed ones, thereby enabling the arbitrators to focus on the contested matters.

On 4 May 1299, Vidal Badoer brought witnesses before the court. Nicolò Baseggio testified that although he had been appointed arbitrator, the parties failed to accept the ruling. The

⁸⁷⁵ Ibid., f. 42v and 47r.

⁸⁷⁶ ASVe, Giudici di Petizion, Frammenti antichi, b. 1, Sentenze 1298-1299, loose paper sheet, incongruously now placed between folio 15 and 16. It has been transcribed in full in A. Stussi (ed.), *Testi veneziani del Duecento e dei primi del Trecento* (Pisa, 1965), 23-24, n. 16.

judges queried why two decisions had been issued. Nicolò explained that the first verdict had not been notarised (*‘primam sententiam dederint sine notario et testibus*), whereas the second had been properly formalised (*cum notario et testibus*), given that Vidal Badoer complained to the arbitrators that ‘they were not judges’ (*‘quia ipsi non erant iudices*).⁸⁷⁷ Tommaso Zulian added that Vidal refused to accept the initial decision, prompting the arbitrators to issue a second one, this time notarised: *‘credentes quod ipse dominus Vitalis Badovario ipsi sententie deberet obedire et quia noluit obedire ipsi dederint aliam sententiam et cum notario et testibus’*. Marco Badoer at that point decided to petition the Corte di Petizion to summon Vidal Badoer and enforce the arbitration (*‘sic fecit precipi coram dominis iudicibus petitionum’*), reminding the judges that they were required to execute the verdict: *‘quod ipsi domini iudices deberent adimplere ipsam sententiam’*. The judges, however, cut the hearing short, replying that they were ‘wise men and knew well what they ought to do’. (*et ipsi iudices licentiaverunt eos, respondens quod sic facerent precipi et domini iudices dixerunt eis quod ipsi erant sapientes homines et sciebant bene quod facere debebant’*).⁸⁷⁸

The judges gathered that at some point between the two judgements, there had been an attempt by the arbitrators to leave the brothers to settle the matter by themselves. The two brothers then asked Nicola Baseggio to produce all evidence on their disagreements, and they eventually produced a paper ‘written in the hand of the said Nicola Baseggio, in which are written all the sums that each of them owes to someone else’,⁸⁷⁹ which was then showed to Tommaso Zulian too. That paper has been preserved in the records of the court, and it has

⁸⁷⁷ ASVe, Giudici di Petizion, Frammenti antichi, b. 1, Sentenze 1298-1299, f. 18v, Witness statements of Nicolò Baseggio.

⁸⁷⁸ Ibid., f. 18v-19r, Witness statement of Tommaso Zulian.

⁸⁷⁹ Ibid., f. 19r (09/05/1299) : *rogaverunt eis ut deberent conciare se simul et et preces ipsorum testium, ipsi fratres remanserunt simule et ipsi testes inde recesserint et post nonam quasi in vesperis ipsi frates vocaverunt in Rivoalto ipsum Nicolaum Basilio et conduxit [sic] ipsum ad domum ipsius Nicolai et dixit eidem Nicolao quod sibi apportaret omnes cartas in quibus scripte erant questiones eorum [...] dederunt sibi quidam folium carte scriptum manu dictionum domini Vitalis in qua scriptum est sume (sic) secundum quod quilibet eorum dari tenebatur cuilibet et post hec ipsa Nicolaus Basilio ipsum scriptum demonstravit eidem domino Thome Iuliani.*

been published.⁸⁸⁰ Vidal Badoer did not agree on a series of expenses of the brother: money taken ‘ad usura’, 105 ducats given to Giacomo Contarini, 40 *soldi di grossi* paid to an unnamed Tuscan, 40 *soldi di grossi* paid to the crews ‘of two boats that brought hides from Poreč’, 840 *lire* borrowed from Nicola Baseggio to pay a Tuscan who had bought ‘copper and iron’ to be laden in the ship, 8 *lire di grossi* for an accounting mistake on a business trip to Padua. Marco Badoer complained instead about a loan of 108 *lire* that Vidal obtained from Marco Malipiero, 104 *lire* that he borrowed from Contuzzo de Luca, and 780 *lire* taken from ‘ser Gaido’ to pay the debt with Nicola Baseggio.

The two parties must have shown that same paper to the court, because on July 20, Vidal Badoer introduced another witness, Benclaro from Florence, who confirmed that the brothers owed him 40 *soldi di grossi* as the remaining payment ‘pro residuo pannorum quos eisdem vendiderat’ (as the remaining sum from a sale of cloth), as shown in the account books (‘sicut contenit suus quaternus’) and he lamented delays in his payment of a certain quantity of olive oil sold to them in Puglia (‘quam dederat fratri ipsius testis in Apullea’).⁸⁸¹ On 8 August, Marco Badoer countered that the cloth came from Koroni, and he called as a witness Filippo Barbarigo, who would have received a letter from his brother in Koroni containing details of a purchase of two pieces of gold-woven fabrics (‘panni ad aurum’) and various silk fabrics (‘panni de seta’), sold by Angelo Badoer, son of Vitale.⁸⁸² In the end, the judges ruled in Marco’s favour, condemning Vitale to pay 68 *lire ad grossos* for the cloth bought by his son.⁸⁸³ Vitale then produced a further witness, Pietro Pasqualigo, who swore that the brothers had yet another lawsuit pending at the Corte del Procurator (‘existente quadam die ad curiam

⁸⁸⁰ Stussi, *Testi veneziani*, cit., 25-26, n. 19. Original in ASVe, Giudici di Petizion, Frammenti antichi, b. 1, Sentenze 1298-1299, loose paper between folio 31 and 32.

⁸⁸¹ Ibid., 30v, ‘testis introductus per dominum Vitalem Baduario’ (20/07/1298).

⁸⁸² Ibid., 30v, ‘testes introducti per dominum Marco Baduario’ (08/08/1299): ‘recepit a Corone a Nicolao fratre suo unam litteram continentem inter cetera quod ipse daret Angelo Badovario libras LXVIIJ ad grossos pro panis (sic) II ad aurum, II panni de seta et V meçanelli quos emerat ab ipse Angelo’.

⁸⁸³ Ibid., 29v (06/08/1299): ‘dixerunt quod Vitalis Baduario de confinio sancti Paterniani dare et solvere debeat Marco Badoario fratre suo de eodem confinio libras [the ink faded] LXVIIJ ad grossos’.

procuratorum, ibi erat dominis Vitale Baduario et Marcus [sic] Baduario fratres [sic]) to settle some matters they had together ('de quadam questione quam ad simul habebant'). When Pasqualigo tried to square their ledgers he discovered that 'that there was a large discrepancy ('quod defficeret [sic] ad sumam [sic] magnam').⁸⁸⁴ Vitale, apparently unwilling to comply, was fined on 8 September for failing to respect the judgment..⁸⁸⁵

This case study is particularly useful to illustrate the enforcement of arbitration in Venice. The trial lasted just three months, from 4 May to 6 August, and demonstrates the complex nature of contract enforcement. The two brothers first sought to solve the dispute informally, they then had recourse to arbitration (oral and then notarised), and finally litigated in court. They submitted a wide array of proofs, such as account books, commercial letters, and oral testimonies. Yet the Petizion, rather than merely enforcing the arbitration, decided to reexamine the facts, hear witnesses, and eventually only acknowledged part of the disputed claims. As G. Cassandro noted, the Corte di Petizion did not merely act on form; it went beyond the letter of arbitration to assess the substance of the case⁸⁸⁶ The fact that the two main documents - the arbitration agreement and the list of contested payments - did not determine the final outcome is highly significant. In other cases, the court itself encouraged arbitration.⁸⁸⁷ In theory, the court's remit was limited to enforcing arbitration decisions, not reinterpreting them.⁸⁸⁸ Nonetheless, the Republic actively promoted arbitration. A 1433 resolution of the Maggior Consiglio declared: 'differences between our citizens settled through arbitration are the honour of our land and the utility of our citizens; but it happens that arbitration agreements are

⁸⁸⁴ Ibid., 33r, 03/09/1299, 'testes introduction per dominum Vitalem Baduario', the ink has faded.

⁸⁸⁵ Ibid., 32v, 08/09/1299.

⁸⁸⁶ Cassandro, 'La curia di Petizion', cit. 10-11.

⁸⁸⁷ Mozzatto-Marrella, *Arbitrato*, 159-161, n. 47 (19/07/1392).

⁸⁸⁸ Ibid., XVII-XXIV; 24, 44, 58, 93-95.

appealed to judges and Auditori after they had been ratified'.⁸⁸⁹

Disputes among family members were expected to be resolved first within the household, and only then - if unresolved - before the Giudici del Proprio, who would appoint arbitrators.⁸⁹⁰ Merchants favoured arbitration for its expediency;⁸⁹¹ as a 1388 document explained: it avoided the 'disputes, expenses, and labour of finding justice through the palace's courts'.⁸⁹² It was better to avoid 'palazar', wandering through the palace in search of justice.⁸⁹³ As early as 1255, the maritime statutes enacted by Doge Zeno prescribed that 'three suitable men shall be elected in the place of judges to settle all differences and discords that might arise between those onboard a ship'.⁸⁹⁴ As T. Terpstra observed regarding ancient Greece, 'private order and public institutions were not working in opposition as competitors in a "market for enforcement"'. On the contrary, they worked together'.⁸⁹⁵ This balance is exemplified by the Petizion's reply to Badoer's request to merely enforce the arbitration: 'we are wise men and we know what to do'. The judges clearly reckoned that justice did not simply mean to apply the existing legislation; rather, to interpret it. Arbitration and litigation coexisted, often with the

⁸⁸⁹ ASVe, Maggior Consiglio, Ursa, f. 102r (20/10/1433), partially stained : 'cumzosa che le differentie fra i nostri cittadini che se termena per via de arbitri sia honor/ de la terra et utilità de i nostri e pur l'occore che i(n) le sententie fate p(er) arbitri se truova e çudesi/ e aldidori che incarceration over i(n)tromette quando son fate le ratification'. It is transcribed, but from the Compilazione leggi, with some differences, in Mozzatto, *Arbitrato*, cit., 112, n. 5. On arbitration in Venice see F. Marrella, 'L'arbitrage à Venise (XIIe-XVI siècles)', *Revue de l'arbitrage*, 2 (2002), 263-300. More generally A. Cordes and P. Höhn, 'Extra-Legal and Legal Conflict Management among Long-Distance Traders (1250–1650)', in M. Gofrey et al. (eds.), *The Oxford Handbook of European Legal History* (Oxford, 2018), 509-527.

⁸⁹⁰ ASVe, Maggior Consiglio, Ursa, f. 102r (13/11/1433), also partially stained: 'vadit pars che pare co(n) frar, sorelle, mare, fiuoli et fie non possa insenbre nel nostro/palazo over ad altro officio litigar, ma de le suo differentie insembre se comprometa et/ se de questo i non se podesse acordar, habia ricorso al çudegado de proprio una over le do/parte, i qual çudexi se aforçi de darli arbitri d'accordo [...]'.
⁸⁹¹ E. Demo, "Per evitar molte spese et longhezze". Esempi di arbitrato mercantile nella Repubblica di Venezia del XVI secolo', *Acta Histriae*, 22/2 (2014), 403-412.

⁸⁹² ASVe, Cancelleria Inferiore, Notai, busta 223, Angioletto da Venezia, Paper protocol, f. 137r (19/12/1388): 'Volentes litigia, expensas et labores palatii penitus evitare'.

⁸⁹³ L. Mola, *La comunità dei lucchesi a Venezia : immigrazione e industria della seta nel tardo Medioevo* (Venice, 1994), 126-127.

⁸⁹⁴ Predelli-Sacerdoti, *Statuti marittimi*, cit., 66, art. 45: 'decernimus quod pro observandis nostris statutis in Veneciis, debeant eligi tres ydonei homines pro iudicibus ad diffiniendum omnes differentias ac discordias que orte erunt inter euntes in navibus'.

⁸⁹⁵ T. Terpstra, *Trade in the Ancient Mediterranean. Private Order and Public Institutions* (Princeton-Oxford, 2019), 17.

former functioning as a means of avoiding the latter. However, litigation remained an option for those with the resources or influence to influence the outcome.

The same logic of the political use of the law underpinned post-judicial pardons, used both to reduce prison populations and to lessen penalties for the well-connected: between 1324 and 1406, the Republic granted some 18,000 such pardons.⁸⁹⁶ In 1332, the Provveditori de Comun complained in vain that Marco Zanassi, who had imported iron from Aquileia to Grado, and thence to Puglia ‘knew full well that he did so against the orders and maliciously against the law of the land and it would be good if norms were respected’.⁸⁹⁷ As Alfredo Viggiano has pointed out, by the fifteenth century: ‘the chambers of appellate courts, of the Capi of the Consiglio dei Dieci, of the Consiglieri ducali, were so inundated with lawsuits and so overburdened by excessive work to prompt some of the most sensible patricians to propose procedural reforms’.⁸⁹⁸ Ultimately, the administration of justice in Venice remained firmly under the control of unprofessional patrician judges. Franco Sacchetti, a fourteenth-century Tuscan writer who disliked lawyers deeply, commented enthusiastically ‘that maritime land, whose government is in such high esteem, never had a professional judge, and never a Venetian was a doctor of law’.⁸⁹⁹ It was a justice shaped more by social relationships than by the letter of the law. This meant that the law could easily adapted to the circumstance, but also resulted in

⁸⁹⁶ G. Ruggiero, ‘Law and Punishment in Early Renaissance Venice’, *The Journal of Criminal Law & Criminology*, 69/2 (1978), 243-256; G. Ortalli, ‘Il procedimento per gratiam e gli ambienti ecclesiastici nella Venezia del primo Trecento. Tra amministrazione, politica e carità’, in B. Bertoli (ed.), *Chiesa, società e stato a Venezia. Miscellanea di studi in onore di Silvio Tramontin* (Venice, 1994), 75-100 and C. G. Mor, ‘Il procedimento per gratiam nel diritto amministrativo veneziano del sec. XIII’, in E. Favaro (ed.), *Cassiere della bolla ducale. Grazie. Novus liber (1299-1305)* (Venice, 1962), VII-XLVIII.

⁸⁹⁷ ASVe, Cassiere della bolla ducale, Grazie, Reg. 5, f. 14v (23/09/1332): ‘Provisores responderant quod clarissime fecit contra ordinem et maliciose contra intentionem terre et propterea dicunt quod bonum est quod ordines observentur’.

⁸⁹⁸ A. Viggiano, ‘Il Dominio da terra: politica e istituzioni’, in *Storia di Venezia*, vol. 4, cit., 529-575: ‘le aule dei tribunali d'appello, dei capi del consiglio dei dieci, e dei consiglieri ducali, risuonassero di tante querele e fossero oberate da una mole di lavoro così ingente da sbrigare, da dover richiamare alcuni patrizi avvertiti a mettere mano a riforme procedurali’. Accessed online [https://www.treccani.it/enciclopedia/il-dominio-da-terra-politica-e-istituzioni_\(Storia-di-Venezia\)/](https://www.treccani.it/enciclopedia/il-dominio-da-terra-politica-e-istituzioni_(Storia-di-Venezia)/) (30/05/25).

⁸⁹⁹ Franco Sacchetti, *Trecentonovelle*, Novella 127, ‘quella terra marina, che tanto è stata nel suo buon reggimento, giammai non ebbe alcuno giudice; giammai viniziano non ne fu alcuno’, in Franco Sacchetti, *Opere*, ed. A. Borlenghi (Milan, 1957), 396.

plethora of overlapping jurisdictions and deliberations, often unclear to both judges and litigants.

Conclusion

The analysis of organisations buttressing Venetian trade has allowed me to unpack the meaning of words like ‘state’, ‘institutions’, and ‘organisations. When historians use the word ‘public’ in the context of medieval Venice, they should be aware of the plethora of organisations that fell under that label and of the reach of state supervision. The absence of key aspects of maritime law suggests that the Statutes were never seen as the only guide for controlling trade, and that the most efficient way to do so was through specific deliberations gradually subsumed within the *capitolari* of the magistratures dealing with commerce, especially in the case of the many laws regarding commerce. Second, the statutes did not apply to vessels deemed ‘unseaworthy’, that is under 100 tons, a category including several smaller crafts and boats carrying out cabotage in the Adriatic, nor to state-owned vessels, carefully regulated by separate annually-approved norms detailing their routes and value. Third, the crucial issue of taxation was left almost completely out of the statutes, as it was dealt with by the Senato and the Maggior Consiglio.

As we have seen, the statutes do not convey the image of state-controlled trade, but rather that of state-regulated commerce, giving ample leverage to traders to craft their boats, settle their disputes, and carry out commercial voyages however they saw fit. This is a feature that Venice shares with several contemporary medieval polities. A meaningful comparison may be made with another medieval polity sometimes accused of state dirigisme and whose history is profoundly interlaced with that of Venice. Historians of medieval Byzantium agree that ‘the economy of Byzantium is now seen as “restrained” by the state; in other words, it was an economy that functioned on the basis of the freedom of transactions but in which the state

intervened to prevent the excessive accumulation of wealth, the suppression of the weakest, and the exploitation of the citizens/consumer⁹⁰⁰. In other words, the state provided merchants with an overarching legal framework, but then left several key elements to the operation of private enterprise.

If we look at the deliberations of the Venetian Senato and the Maggior Consiglio, we may infer a second feature, namely a reluctance to adopt overarching norms, relying instead on a plethora of ad-hoc laws, sometimes contrasting with earlier ones. A crucial example is the regulation of excises, which oscillated between ‘general reforms’ of the entire matter, and single laws regulating textiles, greasy materials, and so forth. The Senato and the Maggior Consiglio regulated both shipping and commerce *tout court*. Much was in their power to control, but we should also note their limitations. Laws enacted by these two councils determined the type of merchandise allowed on ships, clearly differentiating between light-weight and heavy-weight commodities, contributions towards the repairs of the Venetian harbour, the jurisdiction of magistratures dealing with trade and smuggling, the forms and limits of partnerships (especially between Venetians and foreigners), and excise rates. The Senato was the ultimate arbiter of foreign policy and of the jurisdictions of tribunals and magistratures. As for commerce, the Senato could forbid or incentivise trade with a given territory, as well as authorise foreign polities to import or export products free of charge. But in regard to shipping, it is important to distinguish publicly-owned vessels from privately-owned ones, and to acknowledge the importance of the Maggior Consiglio in formulating commercial policies favourable to them. Whilst galleys were tightly regulated with a detailed norm approved each year, stipulating even the minutiae of their journeys, the latter were only loosely regulated. The Senato and the Maggior Consiglio could thus offer incentives to build new vessels when hit with penury or try to lure sailors to settle in Venice by way of inducements. They dealt with privately-owned

⁹⁰⁰ N. Oikonomides, ‘The Role of the Byzantine State in the Economy’, in *The Economic History of Byzantium*, ed. A. Laiou (Washington, 2002), 973. Cf. G. Maniatis, ‘The Economic Institutions of the Byzantine State’, *Byzantion*, 86 (2016), 205-59.

vessels to establish minimum safety requirements, to determine the excises they had to pay, or to regulate shipping in the Adriatic.

We can thus conclude that Venice regulated but did not control trade, especially in the case of privately-owned vessels. Statutes were not changed, but they were largely superseded by ad-hoc laws meant to provide the general framework for trade. Organisational competition between multiple administrations allowed considerable freedom of action in practice for merchants, who could exploit the overlapping jurisdictions. The Senato worked to ensure a difficult balance between privately-owned vessels and galleys, but it was not the only forum for political agency, as the *Maggior Consiglio* provided lesser nobles with means to influence the agenda of the Senato. Control over illicit trade was even more difficult abroad, where Venetian consuls were often torn between the interests of the local merchants, their own social ties, and the theoretical proscriptions against smuggling enacted by Venice. The solution was a system of checks and balances buttressed by the plethora of magistratures controlling both trade and each other. The idea of an adaptive jurisprudence based on ad-hoc deliberations rather than overarching norms was not limited to deliberative bodies, but was also at the centre of the judicial system of Venice, where, as we have seen, private-order institutions like arbitration coexisted alongside court litigation, creating multiple avenues to settle claims and allowing at the same time patrician judges to exercise their *arbitrium*. The Venetian state was not an all-powerful director of trade; it regulated, it did not organise trade, and it was embedded within kinship ties and social networks.

Conclusion

In this thesis, I have examined five distinct yet interconnected themes: ships, commodities, trade circuits, merchants, and institution/organisations. Our conception of the modern economy influences deeply the way we look at the past. In an era marked by tariffs, we are often confronted with questions over the extent of state control over trade, in terms of both regulation and incentives. Likewise, we live in an era where the vast majority of trade is still seaborne, and we can appreciate the effects of its disruption, given our economic model based on instant shopping - and shipping. These concerns are particularly relevant - arguably even more so - in the context of late-medieval Venice in the years 1290-1420, a formative period that paved the way for what is considered the golden age of Venice in the fifteenth century. Venice has long been identified with 'its sea' - the Adriatic; so much so that Venetian euphemistically called it the 'Gulf of the Venetians', a term also adopted by foreigners. Instruments of Venetian dominance over this sea are associated with the trade policies of the Senato, such as the prohibition of direct trade between the two shores of the Adriatic - thereby cementing Venice's role as an intermediation hub - and the organisation of convoys of galleys chartered annually by the comune. This thesis, however, explores a different aspect of Venetian maritime history: the role and significance of privately-owned vessels in the city's commercial networks. It does so by looking at a vast array of different sources, both normative and commercial, private and public, underscoring the interlocking of multiple scales of trade, the role of non-patricians in the economy, and the significance of kinship structure vis-à-vis abstract concepts like 'the state'.

Regarding ships, I have shown that the Venetian economy rested on a tripartite system formed by longships such as galleys used for war and international commerce, round ships like cogs used for regional and partially inter-regional trade, and a plethora of smaller flat-bottomed crafts that buttressed local trade, both within the Adriatic, between its two shores, and between

Venice and the many rivers flowing into the lagoon. I have reflected in particular on the number and types of ships in late medieval Venice - numbering more than fourteen types of vessels already in the 1330s - explaining their technical characteristics. I have shown why ships were represented in a variety of contexts, such as mosaics, hagiographic cycles, material culture, and arithmetical treatises. The ubiquity of round and flat-bottomed ships in these texts suggests that they were perceived as part of Venetian auto-representation as much as the state-sponsored galley. Although attempts to quantify Venetian shipping will inevitably remain flawed due to the loss of fiscal sources, the likely existence of thousands of such vessels in Venice - and their frequent depiction in vedute of the city drawn by foreigners - represents a significant aspect that has not been sufficiently emphasised. Lastly, the illustration of the prices of selected vessels has allowed me to present the different scales of investment that shipping entailed, and to clarify patterns of ownership in the city, including among boatmen, artisans, and non-patricians.

Concerning commodities, this work has shown the variety of products for sale (more than 300) on the Rialto and throughout the city. By examining price lists compiled by Tuscan merchants operating in Venice, it has been possible to reflect on the mutual relationship between commodities in bulk and precious items. The two went in pair, and we should avoid a clear-cut distinction between these products. Venice did not specialise in a single commodity, and in fact even foodstuff (like capers) tended to come from multiple places of origin. I have coupled the analysis of price lists with that of excise reforms to understand how these products were measured and to lay bare the practicalities of trade in the city, in all its variety of crates and jars, and with its many units of measurement. I have also underscored what was their value and excise, bearing witness to the multiple trade circuits that underpinned their import.

Regarding the scales of commerce, we can only understand Venice if we look at its overlapping trade circuits and at the multiple roles that the city acquired as a centre of production, local exchange, and redistribution. The tripartition of Venetian shipping into

longships, flat-bottomed crafts, and round pot-bellied ships enabled trade on multiple scales. Local *burchi* transported the stone from Istria that was so widely used as a building material; local exchange with the Po Plain ensured the grain supply for the city; and international trade allowed Venice to redistribute wares from London, Damascus, and Tunis on the same marketplace. At the same time, Venice did produce local wares, such as cheese and ceramics. I have also underscored the deep ties between Venice and its terrestrial hinterland. According to the Florentine merchant Giovanni Rucellai, the main advantage of Venice was not its particularly well-suited location as a port, but rather the ease of transport of wares between Venice and the countryside. Rucellai indirectly refuted the saying of Raffaino Caresini, the chancellor of the Republic of Venice in the fourteenth century, that it was proper of Venice to ‘venerate the sea, to turn its back’ on the land. This was a disingenuous statement given that around the same time that Caresini was writing, the Republic had finally taken control over Treviso, the endpoint of several trade routes crossing the Alps, whose export in cattle, alone, towards Venice was notable. Land and sea do not exist in opposition. Port cities and emporia thrive precisely because of their liminality. Venice sat on an ecological border between land and sea, on a political border, and right next to the main trade routes that crossed Europe in an east-west direction. What really favoured Venetian trade was the unique location of the city, looking north towards the Alps, east towards the Balkans, west towards the rich Po Plain, and south towards Tuscany and southern Italy.

In respect to Venetian merchants, I have reflected on three themes. I have clarified how the term *mercato* emerged gradually as an abstract word, and the use of cognate terms already in the thirteenth century. The term ‘merchant’ was not in fact used widely, appearing mostly as a moniker applied to foreign operators, or as a transient label, such as ‘now a merchant in ...’. In my analysis of Venetian traders, I have investigated two dimensions of the social history of Venice, namely the moral values required of the merchants and the ways in which trust was built and maintained in the city. I have focused in particular on two key virtues expected of the

Venetian merchant, namely *pratica* - in the double sense of the experiential gauging of the quality of materials but also the acquisition of notions of history, seafaring, and maths - and morality. I have shown especially how merchants could square their ledgers ‘in the name of God and good profit’. I have then proceeded to analyse the various ways in which capital - economic and social - could be entrusted to associates, through debts like loans and sea loans, through equity tools like *colleganze* or through partnerships, be they those between two brothers (*fraterne*) or ad-hoc companies founded for a single commercial journey. Venetian commerce relied so heavily on family that the physical proximity between brothers in a *palazzo* led to a specific institution, namely the fraternal partnership, the backbone of Venetian trade. The collective administration of assets guaranteed that brothers formed a business unit and that they learnt the rudiments of a business. In Venice, brothers were automatically business partners unless they decided to take legal steps to rescind that partnership. In this context, the building of trust was crucial, and the language of amicability (‘my beloved brother’) was often employed to consolidate business relations. This was particularly true when Venetians entrusted cash or wares to their agents abroad, who had to act following the instructions entrusted to them (*recordationes*). However, the flow of information was asymmetrical and the principals often faced the problem of unreliable agents, a problem that could only be solved through ex-ante trust in the intermediary and difficult ex-post checks on his behaviour.

In relation to the role of organisations in regulating and organising trade, I have reflected on the reach of statutory legislation, deliberations of the Senato and the Maggior Consiglio, enforcement by officials, and court litigation. I have underscored how the statutes were of limited use in regulating trade in the fourteenth century, and how Venetians relied instead on ad-hoc legislation, enacted by Venice’s principal deliberative assemblies. I have shown that laws churned out by Venetian councils led to frequent jurisdictional conflicts between their enforcers. I have also shown how the Maggior Consiglio often sponsored laws favourable to unarmed vessels. As for enforcement, I have used the case of smuggling to exemplify the

overlapping jurisdictions of ten magistracies over the same issue, underscoring how this often led to confusion and redundancy. At the same time, I have cautioned against an oversimplification of the term ‘contract enforcement’ by explaining the multiple powers of Venetian tribunals and by presenting a case study litigated in the Corte di Petizion, showing how court settlements coexisted alongside arbitration.

Venice presents a particularly compelling case study for the analysis of the interactions between trade, traders, and institutions in the late-medieval Mediterranean. It shows how the state could regulate trade, and the ways in which merchants could craft their own agency vis-à-vis the state policies enacted by the Senato. It illustrates the variety of shipping and the extreme variety of products for sale in a Mediterranean marketplace. It shows more importantly that terms like trade, traders, and institutions need to be problematised. Trade refers to a series of overlapping circles, ranging from fluvial trade on the Brenta to the exchange of items in Damascus. As for traders, it is important to acknowledge the currency of the terms in medieval Venice, where it was used to refer to boatmen, artisans and traders, both foreigners and Venetians. As for institutions, the term needs to be contextualised by adopting an approach that considers both the social world of Venetian merchants (institutions proper) and the enforcer of constraints, such as the Senato and the Maggior Consiglio, what I have called organisations, adopting D. North’s terminology. In this research, I have looked at the city of Venice from a perspective that focuses on the merchants themselves and the documents they produced, looking at sources like pardons for smuggling, *commisarie*, and notarial records to illuminate the practicalities of Venetian trade beyond the prescriptions of the deliberations of the Senato. I have also argued that Venice was a city whose history can be compared with those of other Mediterranean polities. Long-distance, regional, and local trade were not mutually exclusive, nor were the agency of the merchants and state policies, or mundane goods and precious commodities.

Appendices:

Appendix A:

Products mentioned in the Datini *tariffe* related to Venice, with the addition of the products mentioned in Pegolotti for Venice (Peg.) and in the anonymous Venetian Tariffa from the end of the fourteenth century (Tar.).⁹⁰¹

Foodstuff and liquids: 48 (17 Pegolotti)

Carne (meat, Peg.), carne insalata (salted meat, Peg.), castagne (Chestnut, Peg.), chaperi d'Alessandra (capers from Alexandria), chaperi di Manfredonia (capers from Manfredonia), chaperi di Pugle (capers from Puglia), charubbe (carobs), choloquintide (colocynth), datteri d'Alessandra (Dates from Alexandria), formaggio (cheese, Peg.), fruti (fruits), fichi secchi (dried figs, Peg.), grano e orzo e tutti altri biadi e tutti legumi (wheat and barley and all other cereals and legumes, Peg.), grascia (fat food, Peg.), mandorle di Marche (Almonds from the Marche), mandorle di Pugle (almonds from Puglia), mandorle di Valenza (almonds from Valencia), mele di Romagna (apples from Romagna), mele lonbarde (apples from Lombardy), miel (honey, Peg.), nocelle (hazelnuts, Peg.), noci sane (entire nuts), noci rotte (broken nuts), olio (olive oil, Peg.) polveri di zucharo bianche (Powdered white sugar), pesce insalato (salted fish, Peg.), polveri di zucharo bianche di Rodi (Powdered white sugar from Rhodes), polveri di zucharo bianche di Tripoli (Powdered white sugar from Tripolis), polveri di zucharo bianche di Zipro (Powdered white sugar from Cyprus), riso di Maiolicha (Rice from Mallorca), riso di Turchia (Rice from Turkey), senape (Mustard, Peg.), sugna (grease, Peg.), vino (wine, Peg.), vino di Creti (Wine from Crete, Peg.), Vino di Rimbola (Ribolla wine, Peg.), vino di Romania (Greek wine, Peg.), vivole seche (raisins), zucharo Banbilonio (Egyptian sugar), zucharo Chandi (Sugar

⁹⁰¹ For the translation of the commercial terms see M. Gual Camarena, *Vocabulario de comercio medieval*, online edition (<https://www.um.es/lexico-comercio-medieval/>), L. Tomasin e L. D'onghia, *Vocabolario storico-etimologico del Veneziano* (<http://vev.ovi.cnr.it/vocabolario>), TLIO (<http://tlio.ovi.cnr.it/TLIO/>), Pegolotti edition by Evans, cit., and F. Melis, *Documenti per la storia economica dei secoli XIII-XVI* (Florence, 1972).

candy), zucchero Domaschin (Sugar from Damascus), zucchero muciatto (type of oriental sugar), zucchero rotto di Babilonia (Egyptian sugar production waste), zucchero rotto di Domaschin (Syrian sugar production waste), zucchero rotto di muciatto (Oriental sugar production waste)

manufactured products, 11

charte (paper), charte marchiane (paper from the Marche), charte piane (flat paper), charte reali (paper-royal), charte viterbesi (paper from Viterbo), cere d'Alemagna (wax from Germany), cere di Raghusi (wax from Dubrovnik), cere di Romania (Greek wax), sapone bianco (white soap), sapone nero (black soap), sevo (Tallow, Peg.)

metals: 19

arianto solimato (corrosive sublimate), Arianto vivo (mercury), arsenico (arsenic), bande de rame (copper foil, Tar.), biache pisane (white lead from Pisa), bronzo (bronze, Peg.), fil de ferro (Iron thread), Fil de rame (copper thread), pionbo (lead), pionbo in pezze (lead pieces), piombo in piastre (lead plates), rame di bolla (marked copper), rame chavado (hollow copper, Tar.), stagnio di bolla (marked tin), stagno in verghe (tin bars), tuzia (tutty), verderame (verdigris), vetruolo romano (Roman vitriol), vetruolo tedesco (German vitriol)

minerals: 18

amatiti (hematite), azzurro della Mangnia (azurite), borace pietra (borax, stone), borace pietra e pasta (borax, stone and moulded), cinabro (cinnabar), litargio (litharge), mamia (mummy, i.e. asphalt), mimo pisano (minium from Pisa), minio (minium), orpimento grosso (coarse orpiment), orpimento minuto (fine orpiment), risalghalo (realgar), salgema (rock salt), salnitro

(saltpetre), smeriglio (emery), vermiglione (vermillion, Peg.), zolfo (sulphur, powder), zolfo vivo (sulphur, stone)

precious stones and precious metals: 19

ambra in paternostri (amber for rosaries), ambre (ambers), Argento (silver), argento filato (silver thread), argento in verghe (silver bars, Peg.), azuri oltremarini (lapis lazuli of different kinds), choralli berberi (corals from Barbary), choralli bianchi (white corals), choralli rosi (red corals), denti d'avorio (ivory), Grosi de zecha (grossi struck by Venetians Tar.), lapislazari (lapis lazuli), oro filato (gold thread), oro in verge (gold bars, Peg.), oro in piatti (gold plates, Peg.), Perle forate (pierced pearls, Peg.), perle da pestare (pearls to be smashed), turcisci de Tiro (turquoise from Tyre), turcisci endiane (turquoise from India),

raw materials: 12

Alume (alum), gattina (cenere gravellata, Peg.), alume chativo (bad alum), alume di feccia (soda ashes), allume di Piuma (alum from Barbary), alume di rocha (rock alum), alume di sorte (different types of alum), alume minute (fine alum), Bosso (boxwood, Peg.) legname (timber, Peg.), Setole di chavallo (horse bristles), Stoppa (tow, Peg.)

resins, dyes, and colours: 57

channe fistole (*cassia fistula*), charpobalsimo (carpobalsam), chassia di Puglia (cassia fistula from Puglia), chassia lingata fine (fine bounded *cassia fistula*), chartamo (safflower), delio (bdellium), draghanti (tragacanth), euforbio (latex produced by the Euphorbia), ghalla (gall nuts), Ghalle di Puglia (gall nuts from Puglia), ghalle di Romania (Greek gall nuts), gome (gums,

Tar.), ghome 'rabiche (Gum Arabic), grana (kermes, Tar.), grane barbaresche (kermes from Barbary), grane di Choranto (kermes from Corinth), grane di Cimarre (kermes from Albania), grane di Creti (kermes from Crete), grane di Proenza (kermes from Provence), grane di Schiavonie (kermes from Croatia), grane di Settine (kermes from Settine), grane di Spangnie (kermes from Spain), guado (woad, Peg.), indacho (indigo), indacho baghadé (indigo from Baghdad), indacho de gholfo (indigo from the Gulf), indacho sacchafé (other type of indigo), lache acerbe (green lac, coccus lacca), lache mature (ripe lac), laudamo (resin of cistus creticus) manne granate (manna in grains, exudate from various plants), masticho (mastic), mirra (myrrh), opononacho (opapanax, gum resin), pecie greche (rosin), peghola spagnuola (tar from Spain), peghole bianche (tar), ragia (turpentine), robie non machinate (unground madder), robie macinate (minced madder), sangue di dragho (resin from *Dracoena Ombet*), sarcocollo (resin from *astragalus sarcocolla*, Peg.), schorze Bugie (tannic bark from Bougie), schotano (sumac), serrapino (sagapenum), silobalsimo (silobalsam), storace chalamite (*styrax solidus*), storace liquido (storax balsam), trementine (turpentine), trementine di Carnia (trementine from Carnia), trementine di Chadore (trementine from Cadore), vernice (sandarac, Peg.), vernice in grane (granular sandarac), verzino almeri (Brazil-wood from Almeria), verzino cholonbin (brazil-wood from Kollam), zafror d'Alesandra (safflower from Alexandria), zafror di Chatalongna (Safflower from Catalonia)

Plants and animals: 55

agharingho chomune (*Polyporus officinalis*), agharingho fine (fine *Polyporus officinalis*), aloe fine (fine aloes), aloe fine ulivastro (probably citrine aloes), aloe paticho (hepatic aloes), aloe socholtrino (aloes from Socotra), ambra di balena/abracam (ambergris), anici romagnoli (anise from Romagna), blate bisanti (*unguis odoratus*, marine shell), chalamo armatico (*acorus calamus*), chanfora (camphor), chanterelle (Spanish fly, a beetle), chastoro (ricin), cholle di pescie (fish

glue), costo (Dolomiae Costus), ghalbino in grana (granular galbanum), ghalbino in pezzi (smashed galbanum), Incenso (frankincense), incenso alessandrino (frankincense from Alexandria), incenso domaschino (frankincense from Damascus), incenso torisino (frankincense from Tabriz), ittamo (dittany), mirabolani bellirici (fruits of the Terminalia bellirica), mirabolani chebuli (fruit of the Terminalia Chebula, from Kabul), mirabolani cietrini (citron myrobalans), mirabolani conditi (myrobalan preserves), mirabolani Indi (myrobalans from India), moschadi fuori di falli (musk out of the sac of the musk-deer), moschado in falli (musk secreted by deers preserved in the sac), opio Tebacho (Egyptiam opium), oppio (opium), ossi di quor di cerbio (bone from the heart of a stag), pilatro (hypericum), porcellette (translucent marine shells), regholizie (liquorice), reuponticho (rheum rhaponticum), ribarbaro chomune (rhubarb), ribarbaro fine (fine rhubarb), seme da vermi (wormseed), sandali bianchi (white sandal-wood), sandali rossi (red Sanders wood), schamonee di Cipro (scammony from Cyprus), Schamonee di Romania (Greek scammony), sene (senna, legume), spigonardi (lavandula dentata), spodio di canos (recte *di canna*, tabasheer), spodio di liofante (burnt ivory), spugne (sponge), squinanti (squinant), stichadosso (*Lavandula stoechas*), stinchi marini (a lizard, *scincus officinalis*), sugho di regholizie (liquorice extract), tamerindi (tamarind), triache (theriac), turbitti chomuni (normal turbith), turbitti fini/minuti (fine turbith)

spices: 32

chanelle chattive (low-quality cinnamon), chanelle chomunale (normal cinnamon), chanelle fine (fine cinnamon), chardamomi (cardamom), chomino (cumin), chore di chanelle (cinnamon core), chubebe (cubeb), comino di Puglia (cumin from Puglia), corcumma (turmeric, Peg.), fior di chanelle (cassia-pods), folio di gherofani (clove leaves), gengiovo belledi (ginger belledi), gengiovo cholonbino (ginger from Kollam), gengiovo mechino (ginger from Mecca), ghalinghe grosse (galangal maior, from Java), ghalinghe minute (galangal minor, from China), gherofani

(cloves), fusti di gherofani (clove-stalks), mace grosso (coarse mace), mace minuto (fine mace), melegchette (grains of paradise), noci muscate (nutmeg), pepe (pepper), pepe lungo (long pepper), spezierie sottile (Peg., fine spices), zafferano Berlinghieri (saffron from Balaguer), zafferano chontado (saffron from Spain), zafferano di Marche (saffron from the Marche), zafferano Merchadieri (saffron from Catalonia), zafferano Orte (saffron from Catalonia), zafferano toscano (Tuscan saffron), zettoarie (zedoary)

textiles furs and silk: 75

angnelline di Maiolicha (lambs skin from Mallorca), angnelline di San Matteo (lams skin from Spain), bambagi filati (spun cotton), baraccami (barracan, Peg.), beccume (goat-skins, Peg.), berete di lana (wool hats), bucherami (buckram, Peg.), canovacci (canvas, peg.), chanevaze (rags, Tar.), chapelletto (a type of silk), chavaline (dressed horsehides, tar.), chori (skins, Tar.), chotone d'Alfoa (oriental cotton), chotone d'Amano (Hama cotton), chotone di Chandia (cotton from Crete), chotone di Puglia e Basilicata (cotton from Puglia and Basilicata), chotone di Santorini (cotton from Santorini), chotone sciamo (Syrian cotton), chotone tratto (imported cotton), chotone di Turchia (Turkish cotton), chotoni filati di Cipro (spun cotton from Cyprus), chotoni filati di Malta (spun cotton from Molta), chotoni filati di Soria (spun cotton from Syria), ciambellotti (camlets, Peg.), cordovano (cordovan, Peg.), cuoia di bue (Peg.), cuoia di cavallo (oxhides, Peg.), dossi di vaio (vair backs), draparie (drapery, Tar.), drappi a oro (gold-embroidered drapes, Peg.), ermellini (ermine), ischeruoli (squirrels), ischeruoli di Schiavonia (Croatian squirrels), lana fiamminga (Flemish wool, peg.), lana francesca (French wool, Peg.), lana tedesca (German wool, Peg.), lana di Vinciistry (presumably Winchester wool), lane di Chondisgualdo (Cotswolds wool), lane di Lindisea (Lindsey Riding wool), lane di Maiolicha (Mallorca wool), Lane di Marcia (wool from the Marshes, Shropshire), Lane di Provenza (Provence wool), lane di San Matteo (Spanish wool), lane di Valenza (Valencia wool), lin (flax), ,

marimanti (gold brocades, peg.), mataselle (small bundles), nacchi dalla Tana (gold brocade from Tana, Peg.), pance tedesche (vair bellies), Panni lini (linen, Peg.), pellame (hides, peg.), pillicceria (furs, Peg.), sciamiti (samite, peg.), seta Andre (silk from Andros), seta chalavrese (silk from Calabria, seta Chatranzene (silk from Catanzaro), seta choronella (type of silk), sete giudesche (Jewish silk), seta legi (silk from Lahigan), seta manzi (oriental silk), seta mordachascia (silk from Merv Chadijan), seta Patrassina (silk from Patras), seta pizachari (type of silk), seta solvari (type of silk), seta suola (type of silk), seta talani (silk from Talish), sete Durazine (silk, possibly from Durrës), sete di cholori fine (fine coloured silk), sete tinte di grane (fine dyed silk), testoiaccio (coarse weft thread), testoio da richamare (weft thread used to embroider), vai a chanpanelle (type of vairs), vai di Romania (greek vairs), velluti (velvets, Peg.), zendadi (sendal, peg.),

Appendix B

Database of mentions of ships other than galleys in Commemoriali (Book VIII-IX), Avogaria de Comun (Raspe, 3645), CIN 168-169, Not. Marco Rafanelli (1387-1404)

Type of ship	Date	Route	Material	Source
Burchio	7 March 1370	n.n.	180 staia of wheat	CIN 168 (Marco Rafanelli), loose parchments, n. 5
Bona navis	23 December 1398	n.n.		CIN 168 (Marco Rafanelli), loose parchments, n. 89
Navigia	February 1388	Alexandria, Syria and 'aliarum terrarum subiectarum soldano'	Everything but weapons, metals, and timber	Commemoriali, VIII, 131v
Cocca	14 March 1388	Venice - crete	n.n.	CIN 168 (Marco Rafanelli), 1388 protocol, f. 3r
Unus navis Venetorum	15 May 1388	Venice-Puglia	n.n.	CIN 168 (Marco Rafanelli), 1388 protocol, f. 13r
Griparia	8 July 1389	Crete-Ortona-Venice	410 Ortona <i>cumuli</i> of Wheat	Commemoriali, VIII, 142r

Type of ship	Date	Route	Material	Source
chocha	30 July 1388	Sicily	Textiles	CIN 168 (Marco Rafanelli), 1388 protocol, fols. 28v-29v
Navis	26 August 1388	P r e s u m a b l y Venice-Crete	Seven 'scrinialia'	CIN 168 (Marco Rafanelli), 1388 protocol, f. 32v
Panfilo called 'St Francis, St Nicholas, and St Clare'	9 October 1388	n.n.	n.n.	CIN 168 (Marco Rafanelli), 1388 protocol, f. 37v
n.n.	27 November 1388	Venice-Methoni	30 <i>anfore</i> of wine from the Byzantine Empire and Crete	CIN 168 (Marco Rafanelli), 1388 protocol, f. 42v
Navis	8 December 1388	V e n i c e - Alexandria	n.n.	CIN 168 (Marco Rafanelli), 1388 protocol, f. 43v
n.n.	18 Feb 89	Venice-Mallorca	n.n.	CIN 168 (Marco Rafanelli), 1388 protocol, f. 54V
Naves	23 February 1389	n.n.	n.n.	CI 168 (Marco Rafanelli), 1388 protocol, f. 55v

Type of ship	Date	Route	Material	Source
Duo navigia	16 March 1389	n.n.	n.n.	CI 168 (Marco Rafanelli), 1388 protocol, f. 59v
chocha	19 March 1389	Venice-Byzantine empire 'itura in Romaniam'	n.n.	CI 168 (Marco Rafanelli), 1388 protocol, f. 60v
Barcha falchata	19 March 1389	n.n.	n.n,	CI 168 (Marco Rafanelli), 1388 protocol, f. 60v
Barcha falchata	26 March 1389	V e n i c e t o Treviso, Padua, or Mestre	n.n,	CI 168 (Marco Rafanelli), 1388 protocol, f. 61v
Navigium	5 April 1389	Venice-Siciky	2,000 staia of wheat	CI 168 (Marco Rafanelli), 1388 protocol, f. 63v
Navilio	15 April 1389	Venice-Byzantine empire 'partes Romanie'	2,000 staia of wheat	CI 168 (Marco Rafanelli), 1388 protocol, f. 66v
Navigium	12 May 1389	Venice- Sicily	1,500-2,000 staia of wheat	CI 168 (Marco Rafanelli), 1388 protocol, f. 69v (cfr. Also 99v)
N a v e t a 'Madona S. Maria'	3 June 1389	V e n i c e - Dubrovnik - C r o t o n e - Syracuse	Wheat	CI 168 (Marco Rafanelli), 1388 protocol, f. 74r

Type of ship	Date	Route	Material	Source
20 anfore marciliana	21 June 1389	Unknown	Unknown	CI 168 (Marco Rafanelli), 1388 protocol, f. 76v
10-anfore barca	2 July 1389	Unknown	Unknown	CI 168 (Marco Rafanelli), 1388 protocol, f. 78v
Navigia	30 July 1389	Venice-Byzantine Empire	2,500 staia of wheat	CI 168 (Marco Rafanelli), 1388 protocol, f. 85v
12-anfore barca marcialiana	10 September 1389	Venice-Istria	Ribolla wine	CI 168 (Marco Rafanelli), 1388 protocol, f. 94v
8 - anfore marciliana	10/09/1389	3 Venice-Treviso journeys	Wine	CI 168 (Marco Rafanelli), 1388 protocol, f. 94v
Barcha	15 September 1389	Unknown	n.n.	CI 168 (Marco Rafanelli), 1388 protocol, f. 95r
Navis ; Navis	11 December 1389	Unknown	Salt	CI 168 (Marco Rafanelli), 1388 protocol, f. 101v
Navigia	19 May 1390	M a m l u k territories	Everything but weapons, metals, and timber	Commemoriali, VIII, 150v
Burchi, Barcha	8 November 1391	Venice	Ballast'	Commemoriali, VIII, 155 r/v

Type of ship	Date	Route	Material	Source
Navis	5 March 1392	Catalonia	Unknwon	Commemoriali, VIII, 160r
Navigium	16 May 1392	Crete-Dalmatia (‘in partibus Zanponcelli, p o r t u m Sclavonie’), p o s s i b l y P e l j e š a c / Sabbioncello	Unknown, a ring is mentioned	Commemoriali, VIII, 159v
Navigium and lignum	4 July 1392	Venice-Tunis	Oil	Commemoriali, VIII, 161v
Plata; burchiela	13 March 1393	Venice	-	AC, Raspe 3645, 6r
N a v i g i u m (barcha)	19 March 1393	Venice-Koper- Rab	W h e a t (1 8 7 <i>sestaria</i>)	AC, Raspe 3645, 7r
Barcha	10 September 1393	Venice	People	AC, Raspe 3645, 12v
Caucha	15 October 1393	Venice-Crete	34 <i>pecias</i> of Cretan cheese	AC, Raspe 3645, 14v
Navigia	4 May 1394	Crete-Venice	Kermes (grana)	Commemoriali, VIII, 183v
Navigium	18 October 1394	Venice-Piran	Cheese and wax	AC, Raspe 3645, 31r/v
Unknown	8 June 1395	Crete-Methoni/ Koroni	Crops	AC, Raspe 3645, f. 40r

Type of ship	Date	Route	Material	Source
Navis	23 June 1395	Venice-Syria	Money	AC, Raspe 3645, 40v-41r
Navis minor	19 November 1395	Venice-Syria	Money	AC, Raspe 3645, 46 r/v
Navigium, Vasa maritima	6 January 1396	Kingdom of Naples and Gaeta	Unknown	Commemoriali, IX, 21r
Navigia	6 January 1396	Gaeta	Unknown	Commemoriali, IX, 21v
Caraques	9 March 1396	Flanders	Wine	Commemoriali, IX, 20r
Barcha 'El passamonte'	16 June 1396	Venice - Portogruaro	Gold thread worth 180 ducats and 'multas merces'	AC, Raspe 3645, 53v
Unknown	26 June 1396	Istria-Venice	Unknown	AC, Raspe 3645, 54r
Navis	26 June 1396	Venice-Patras-Methoni	Unknown	CIN 169 (Marco Rafanelli), 1396 protocol, f. 14v
Chocha	7 August 1396	Unknown	Unknown	CIN 169 (Marco Rafanelli), 1396 protocol, f. 24r
Quoddam navigium from Polignano (Puglia)	7 August 1396	Puglia - Venice	Olive oil	AC, Raspe 3645, 57v

Type of ship	Date	Route	Material	Source
B a r c a marciliana	21 August 1396	Unknown	Unknown	CIN 169 (Marco Rafanelli), 1396 protocol, f. 26r
Navigium	21 August 1396	Venice	Unknown	AC, Raspe 3645, 58r
Navigium	23 August 1396	Durrës	Armed people	Commemoriali, IX, 25r
G r e e k navigium	28 September 1396	Crete-Venice	22 millier of cheese and 46.5 milier of malmsey	CIN 169 (Marco Rafanelli), 1396 protocol, f. 31r
Unknown	11 October 1396	Venice	Alum ‘catinum’	AC, Raspe 3645, 60r
Navigia	19 October 1396	Bari	Unknown	Commemoriali, IX, 23r
Navis latina	18 December 1396	Venice-Syria directly, but with authorisation to also call at Beirut, Tripolis (Lebanon), Lizia and Cyprus	Unknown	CIN 169 (Marco Rafanelli), 1396 protocol, 39r
Chocha	18 December 1396	V e n i c e - Thessaloniki and Alexandria	Wax and Lead	CIN 169 (Marco Rafanelli), 1396 protocol, 39r

Type of ship	Date	Route	Material	Source
Chocha seu navis quadra ad uno themore vocata 'S. Clara, S. Lucia et S. Blasius'.	29 December 1396	'Romania' - Venice	Slaves and barrels (butamen) worth 80 ducats	CIN 169 (Marco Rafanelli), 1396 protocol, 41r
Barcha	10 January 1397	Piran-Koper	Unknown	AC, Raspe 3645, 63r
Navetta	12 January 1397	Unknown	Unknown	CIN 169 (Marco Rafanelli), 1396 protocol, 42v
Navigium	16 January 1397	Unknown	Unknown	CIN 169 (Marco Rafanelli), 1396 protocol, 43v
Navis	18 January 1397	Crete-Venice	Several caratelli of wine	AC, Raspe 3645, 63v
Caucha	19 January 1397	Crete-Venice	Several caratelli of wine	AC, Raspe 3645, 63v
Platea	16 February 1397	Venice	Timber	CIN 169 (Marco Rafanelli), 1396 protocol, 49v

Type of ship	Date	Route	Material	Source
Barcha	21 March 1397	Venice-Durrës	Cloth, spices and other merchandise (novem pannos et speciarum et mercarum)	CIN 169 (Marco Rafanelli), 1396 protocol, 56v
B a r c a marciliana	9 April 1397	Unknown	Unknown	CIN 169 (Marco Rafanelli), 1396 protocol, 59v
N a v i s a n d chocha	16 May 1397	Unknown	Salt	CIN 169 (Marco Rafanelli), 1396 protocol, 64v
Navigium (also referred to as griparia); navigium	25 May 1397	C y p r u s (s h i p w r e c k around Nicosia)	1,000 moggia of salt	CIN 169 (Marco Rafanelli), 1396 protocol, 66r
Navigium	26 May 1397	Unknown	Unknown	CIN 169 (Marco Rafanelli), 1396 protocol, 66v-67r
chocha	27 June 1397	Venice-Beirut or Lizia	Unknown	CIN 169 (Marco Rafanelli), 1396 protocol, 70r

Type of ship	Date	Route	Material	Source
Unknown	19 July 1397	Venice-Corfu	Iron and bullion worth 100 ducats	CIN 169 (Marco Rafanelli), 1396 protocol, 75r
Navigium	29 August 1397	Unknown	Unknown	CIN 169 (Marco Rafanelli), 1396 protocol, 80r
Barcha	7 September 1397	Venice (S. Tomà Ferry - S. Maria della Carità)	Transport of people	AC, Raspe 3645, 72r
B a r c a marciliana	7 September 1397	Venice	Transport of people	AC, Raspe 3645, 72r
Platas	1 February 1398	Venice	Sugar powder	AC, Raspe 3645, 74v
Burchium	12 February 1398	Venice or Ferrara to Torre delle Bebbe (Chioggia)	Unknown	AC, Raspe 3645, 74v-75r
Ganzarolos sive barcas	20 June 1398	V e n i c e - Borgoforte	Weapons	AC, Raspe 3645, 80r/v
Navis	3 August 1398	Venice-Malta	Unknown	Commemoriali, IX, 51v
Barcha	21 August 1398	Caorle-Marche	Wooden planks	AC, Raspe 3645, 84v
Unknown	12 January 1399	Rimini-Codigoro	8 caratelli of wine and 1 caratello of vinegar	AC, Raspe 3645, 89v

Type of ship	Date	Route	Material	Source
Navis	24 January 1399	Puglia-partibus Sclavonie	800 Ducats in cash and other merchandise	AC, Raspe 3645, 90r
Navigium	29 April 1399	Venice -Kvarner Gulf-Lecce(but Dubrovnik)	95 pezze of cloth 'et alias multas merces'.	AC, Raspe 3645, 93r
Navis; Navis dicta chocha	17 May 1399	Sicily	Paper, Copper, Timber, Cloth, Iron	Commemoriali, IX, 97v
B a r c a marciliana	19 September 1399	Extra Venecias	Unknown	AC, Raspe 3645, 103v
Navis and plata	14 October 1399	V e n i c e - L o m b a r d y (Milan)	Salt (4 sacks)	AC, Raspe 3645, 104v
N a v i s s e u pamphylus	3 December 1399	Venice-Barbary (unclear, the same document says 'ad partes Lombardie').	Iron	AC, Raspe 3645, 105v
Burchio and quadam barcha	18 December 1399	S. Nicolò al lido- Venice	Wine, meat, almonds.	AC, Raspe 3645, 107r
Two 'naves seu chocae'	7 January 1400	Venice-Byzantine empire-Tana	Unknown	AC, Raspe 3645, 107v
Navis	30 January 1400	Unknown	Unknown	AC, Raspe 3645, 108r
Barca	6 February 1400	Venice	Transport of people	AC, Raspe 3645, 109r

Type of ship	Date	Route	Material	Source
Gripparia	16 March 1402	Crete-Rhodes	2,000 <i>mensurae</i> of Wheat	AC, Raspe 3645, 149v-150v
Navis; Navis, Navis; Naves	27 April 1402	Cyprus and Rhodes	Ashes, cinnamon, pepper, sugar and ginger	Commemoriali, IX, 156r
Burchius	30 May 1402	Venice	Wine (30 anfore and 2 quarte)	AC, Raspe 3645, 153r
Navis	22 September 1402	Seville	Unknown	Commemoriali, IX, 71v
Plata magna', two 'batelli a navi', one 'barcha fulcita remis, furchis, vello, timone', 32 burchi manned by two people each, navigia	22 November 1402	Venice	Iron and timber	Commemoriali IX, 141v-143r
Cocha sive navis	4 December 1402	Cyprus-Beirut-Rhodes	People	Commemoriali IX, 144 r/v
Burchius	3 January 1403	Venice	Hood ? (Unum <i>burchium capuciorum</i>)	AC, Raspe 3645, 164r

Type of ship	Date	Route	Material	Source
Barce and Navigia	28 February 1403	Cesenatico - Venice	Wine	Commemoriali IX, 146 r/v
Barcha	14 March 1403	Puglia or Dalmatia to Venice	Cheese	AC, Raspe 3645, 167r
Unknown [barcha, cf. 170r)	21 March 1403	Dalmatia to Venice	9/10 millier of cheese	AC, Raspe 3645, 168r
Unknown [barcha, cf. 170r).	3 April 1403	Dalmatia to Venice	50 millier of cheese and cured meat	AC, Raspe 3645, 168v
Navis	1 June 1403	Crete-Venice	Unknown	AC, Raspe 3645, 170v
Navis	20 August 1403	Crete-Venice	4.374 lb of cheese	AC, Raspe 3645, 176v
Barche	6 September 1403	Turkey - Constantinople	People	AC, Raspe 3645, 177v
Barcha	26 November 1403	Venice-Latisana	Salt	AC, Raspe 3645, 183r
Barca	6 February 1404	Venice	Wheat	AC, Raspe 3645, 185r

Appendix C. The Dall'Inzegneri Papers

ASVe, Procuratori di San Marco, Commissarie, Miste, *busta* 66,

Marco dell'Inzegneri, Carte, 'Contratti di navi',

1. Charter agreement between Tommaso Malipiero and Marco dall'Inzegneri, 13th July 1366

I(n) lo nome de Dio, am(en). 1366, di XIII de luio, i(n) Venexia/

Mis(er) Tomado Malipiero s' chomo parçenevole de la bona nave clamada sen Iachomo de Galiçia e sent'Antuonio, de la qual va paro(n) s(er) Salamo(n) de Nichuola, s' à noliçado la dita na/ve a s(er) Marcho I(n)çegnur (sic) al viaço de Modon, ch(n) questi pati e cho(n)diçion, che lo dito/ mes(er) Tomado li dié dar la nave ben cho(n)çà e ben pariada cho(n) homeni quator/dexe e tre fenti e(t) diebi dar i(n) lo numero di diti homeni do boteri che die/bia star i(n) tera a cho(n)çar le xuo bote e diebi dar de soldo s. quindese de gss./al mexe e diebi pagar de mexe do e meço e se li chostaxe plù quello plù/ diè pagar lo dito noliçador; e lo dito noliçador s' diè chargar e meter/ i(n) la dita nave tuto quello che lu plaxerà de soto chuverta e de sopra chuverta, a salvame(n)to de la nave, a l'andar e(t) al tornar, entendando ch'a lo tor/nar no(n) posa meter i(n) chuverta nexuna marchada(n)tia; e lo dito mes(er)/ Tomado si è tegnudo de far che la nave sia apariada e parta de Veniexia / a di hoto d'avosto prosimo p(er) andar a lo dito viaço de Modon e p(er) cho(n)/verso lo dito noliçador si è tegnudo de far che la nave sia spaçada da Modo(n)/e parta da hoto d'otubrio prosimo p(er) vegnir a Veniexia. E se lo dito/ noliçador la spaçase ana(n)ti che lo paro(n) sia tegnudo, partirà / na(n)ti, salvo Dio i(m)pedime(n)to tute choxe. E se 'l dito noliça/dor bexognaxe che la nave andexe a ~~Modon~~ a Choro(n) ~~che lo paro(n)~~ /i(n) quello tenpo che la diè star là, che lo paro(n) sia tegnudo d'a(n)dar de e meter/ i(n) tera e recever i(n) nave quello ch'al dito noliçador plaxerà p(er) dar a /Veniexia, e lo dito noliçador li diè dar p(er) so nolo lb. ç(i)qua(n)tasie de gss. e diè pagar lo dito nolo do mexi dapuò deschargada la nave a Veniexia/, sego(n)do usança e lo dito noliçador li diè dar uno chomo a Modon ch diebia andar char/gar la dita nave a Modon i(n) fina che la serà chargada./

E questo i(n)promete una parte a l'atra d'os(er)var i(n) pena de/ e la pena vegna a la parte che ho(ser)verà e la pena pagada ho no lo/scrito romagna i(n) soa fermeça

E hio Marcho Pelacha(n), meçan de sto noliçado, cho(n) voluntade de le parte/ scrisi de mia ma(n) propia//.

2. Sub-charter between Marco dall'Inzegneri and Antonio Rizzo and Zannino D'Aragona, 13th July 1366

A lo nome de Dio, am(en). 1366, di XIIJ de l'io i(n) Venexia.

S(er) Marcho I(n)çegnier, sì chomo noliçador e à noliçado tuta la bona nave clamada/mes(er) Sen Iachomo de Galiçia e sent'Antuonia (sic), si è cho(n)vegnudo e à noliçaado (sic)/a s(er) Antuonio Riço e a s(er) Çane(n) de Ragon su la dita nave che lo dito s(er)/Marcho I(n)çegnier sì li dié far portar su la dita nave chavi vinti / d'anfora da Venexia a Modon e si li dié far a dar su la dita na/ve anfore çinqua(n)ta de vin da Modon a Venexia e li diti / noliçadori si diè gargar li diti chave i(n) nave a tal hora/ che la nave posa partir adì hoto d'avosto proximo p(er) adar (sic)/a lo dito viaço de Modon e p(er) lo simele i(n) Modon si dié aver / chargado le dite anfore 50 ~~a tal hora che li i(n)nave~~ p(er) tuto lo mexe de setenbrio proximo, e li diti noliçadori li dié dar p(er) so nolo duchati quatro e terço de l'anfora de retor/no e dieli XX chiavi no(n) dié pagar nie(n)te e dié pagar/lo dito nolo do mesi dapuò deschargada la nave a Venexia/sego(n)do l'usança/.

E questo i(n) promete Ja parte a l'altra d'oservar i(n) pena/ e la pena vegna a la parte che hos(er)verà e la pena pagada / ho no lo pato Romagna i(n) so fermeça.

E hio Marco Pelacha, meçan de sto noliçado cho(n) volo(n)tade de /le parte scrisi de mia ma(n) propia.

3. Constitution of a company, 20th July 1366

MCCCLXVJ, adì XX de l'uguo

Sia manifesto a çascaduna p(er)sona chomo io, Lunardo Chaxaro, sì ò fato una cho(m)pagnia cho(n) s(er) Marcho I(n)çigniero/p(er) andare al viaço d(e) Modon o dj Choro(n), do(n)d(e)

miegno me pararà, cho(n) questo cho(n)deçion e pati che apreso dirò. In prim/ma ch'el dito s(er) Marcho I(n)çigniro si dè metere p(er) so chavedale duchati trexe(n)to çì(n)qua(n)ta d'oro e io Lunardo/Chaxado ve do metere trexe(n)to çinqua(n)ta cho(n)ta(n)do i(in) questo mio chavadale una chaldiera cho(n) li altre chose/che s'apre(n)te a la dita chaldiera p(er) q(ue)lo che la me chosta e oltra q(ue)sto si do metere la mia p(er)sona e andare/al dito viaço e adoverare tuto çò che serà bexogno i(n)fino ala fine de la dita cho(m)pagnia, cho(n) questa/cho(n)deçion, ch'io posa largame(n)te noleçare, merchadare e fare tuto quello ch'a mi Lunardo parerà/che sia utele e c be(n) dj la dita cho(m)pagnia e de tuto lo guadagno che Dio ne darà el dito s(er) Marcho/si dè avere lo terço e io Lunardo si dò avere li do terçi p(er) lo mio chavedale e p(er) la mia p(er)sona /; e se chaxo ochorese, che Dio guardi, che dano seguise semo i(n)n achordo se dibia partire p(er) mità cho/si chomo nu avemo meso, p(er) mità i(n) dinari e a la fine de la dita cho(m)pagnia el dito s(er) Marcho se dè/raxonare i(n)si la chaldiera, cho(n) lo fornimento, p(er) quello che nui la cho(n)premo a chavedale e tornado / ch'io Lunardo serò a Veniexia cho(n) la vostra i(n)vestida semo cho(n)te(n)ti ch'io posa alogare i(n) chaxa mia/tuto el an ch'io porò e p(er) fito di la mia chaxa debia avere de i dinari del mo(n)te duchati dodexe d'oro./ El dito s(er) Marcho si è tegnudo di ma(n)dare cho(n) mi al dito viaço Bonave(n)tura so frare, se(n)ça alchu(n)no / salario, abiando le spexe di bieni dj la cho(m)pagnia e se algu(n) di p(re)diti cho(n)trafese ale sovra dite chose/chaça a pene di duchati çento d'oro, che siano di cholui che no cho(n)trafarà.

Hio, si chomo la chaldiera dovea romagnire a s(er) Marcho p(er) lo chavedale io son cho(n)te(n)to che la roma/gna a la cho(m)pagnia e far d'esa q(ue)lo che miegno me parerà o di ve(n)derla o di lagarla o a dur/la a Veniexia/.

E p(er) plù fermeça io, Lunardo Chaxaro sovradito, scrisi d(e) mia ma(n)

Io Ma(r)cho de l'Inxegnerj so(n) co(n)nto a quello ch'è sc(r)ito de sov(r)a/e si è sc(ri)te d(e) mia ma(n).

Appendix D:

Weights, measurements, tonnages, and currencies used in Venice in the fourteenth century

Weights :⁹⁰²

Heavyweight (Peso grosso)

1 millier = 1,000 libbre = 477.08 kg

1 centener = 100 libbre = 47.708 kg

1 libbra grossa = 12 once = 2,304 carati = 9,216 grani = 477.08 grams

1 oncia = 192 carati = 768 carati = 39.705 grams

1 carato = 4 grani = 0.2068 grams

1 grano = 0.0517 grams

Lightweight (peso sottile)

1 carica = 400 libbre = 120.51 kg

1 centener di libbre sottili = 100 libbre =

1 libbra sottile = 12 once = 1,455 carati = 5,820 grani = 301.28 grams

1 oncia = 121.1 carati = 485 grani = 25.0745 grams

1 carato = 4 grani = 0.2068 grams

1 grano = 0.0517 grams

⁹⁰² I take these conversions from J.-C. Hocquet, 'Méthodologie de l'histoire des poids et mesures. Le commerce maritime entre Alexandrie et Venise durant le haut Moyen Âge', in *Mercati e mercanti nell'alto medioevo: l'area euroasiatica e l'area mediterranea* (Spoleto, 1993), 847-883. They differ slightly from F. Faugeton, *Nourrir la ville* cit., XXI-XXII as for the weight of the two pounds. I have preferred to adopt J. Hocquet's estimated when the two differed.

Measurements⁹⁰³

1. Liquids

1 burchio = 60 botti = 45.050 litres

1 botte / carro / plaustro = 10 mastelli = 751.17 litres

1 anfora = 4 bigonce = 8 mastelli = 600.936 litres

1 bigoncia = 2 mastelli = 150.234 litres

1 mastello = 7 secchie = 75.117 litres

1 barile = 6 secchie or 24 bozze = 64.3859

1 secchia = 4 bozze = 10.7309 litres

1 bozza or boccale = 4 quartucci = 2.682746 litres

1 quartuccio = 4 gotti = 0.67 litres

1 gotto = 0.1676 litres

Olive oil

1 migliaia = 40 miri = 631.592 litres

1 miro = 15.7898 litres

2. Dry goods

1 moggio = 4 staia = 333.2688 litres

1 staio = 2 mezzeni = 83.3172 litres

1 mezzeno = 2 quarte = 41.6586 litres

⁹⁰³ Faugeron, Nourrir, XXII.

1 quarta = 4 quarteroli = 20.8293 litres

1 quarterolo = 5.2073 litres

Cotton⁹⁰⁴

Sacco = between 400 and 800 libbre sottili, that is between 120 and 240 kg

Sacco piccolo = ca.50 kg

Sacco grande = ca. 1000 libbre sottili or 300 kg.

Salt⁹⁰⁵

1 mozzo or moggio = 12 staia = 24 mozzetti = 999.72 litres

1 staio = 2 mozzetti = 83.31 litres

1 mozzetto = 41.655 litres

3. Tonnages⁹⁰⁶

1 botte = 0.6 metric tons of deadweight tonnage

1 botte = 10 stara = 833 litres of carrying capacity

4. Units of length ⁹⁰⁷

Braccio da lana (1 wool-cloth braccio) = 4 quarte = 68.3 cm

Braccio da seta (1 silk-cloth braccio) = 4 quarte = 63.8 cm

⁹⁰⁴ Nam, *Coton*, cit., 27.

⁹⁰⁵ J.-C. Hocquet, 'Métrologie du sel et histoire comparée en Méditerranée', *Annales. Economies, sociétés, civilisations*, 29/2 (1974), 403, Tableau X.

⁹⁰⁶ Gluzman, *Venetian shipping*, cit., 73-74.

⁹⁰⁷ A. Martini, *Manuale di metrologia ossia misure, pesi e monete in uso attualmente e anticamente presso tutti i popoli* (Turin, 1883), 817, entry 'Venezia'.

5. Currencies

In Venice, several currencies were in use, three being moneys of accounts and one being bullion.

5. 1 Bullion : *ducats, grossi, mezzanini, soldini, denari piccoli, mezzodenari or bianchi, doppi quartaroli and quartaroli.*

In the fourteenth century, the basic coins minted by Venice were the golden ducat (first struck in 1285, with a gold content of 3.55 grams),⁹⁰⁸ the standard silver coin, the *grosso*, and the *piccoli*, or petty coins.⁹⁰⁹ The *grosso* had a silver content of 2.102 grams from 1194 to 1356. It was not struck between 1357 and 1378, and when it was resumed its content had been lowered to 1.89 grams of silver (1379-1394), reaching a silver content of 1.521 grams by 1429, or about 70% of the silver content it had until 1356. In 1331, Doge Francesco Dandolo introduced two further currencies, the *mezzanino* (initially quoted at 16 *piccoli*) and the *soldino* (initially quoted at 12 *piccoli*).⁹¹⁰ The *mezzanino*, coined in 1331-1353 contained 0.969 grams of silver in 1331-1339, reduced to 0.774 in 1346-1353, when it ceased being produced. The *soldino* underwent a similar reduction in the content of fine metal, as between 1331 and 1350 it contained 0.641 grams of silver, plummeting to 0.38 in 1421-1429, that is about 60% of the amount of silver it had initially.⁹¹¹ The system was complemented by the introduction of a last coin named *tornesello* in 1353, quoted at 3 *piccoli*, that is a quarter of a *soldino*.⁹¹² The coin was specifically aimed at

⁹⁰⁸ On the introduction of the ducat see F. Rossi, *Melior ut est florenus: note di storia monetaria veneziana* (Rome, 2012).

⁹⁰⁹ The coinages of Venice are described in details in A. Saccocci et al. (eds.), *Medieval European Coinage. Volume 12. Italy (I). Northern Italy* (Cambridge, 2016), 627-654

⁹¹⁰ A. Stahl, *Zecca. The Mint of Venice in the Middle Ages* (Baltimore, 2000), 177 and 41-68.

⁹¹¹ Silver contents are taken F. C. Lane and R. Mueller, *Money and Banking in Medieval and Renaissance Venice. Volume 1. Coins and Moneys of Account* (Baltimore, 1985), 527, Table A.2.

⁹¹² Stahl, *Zecca*, cit., 61-63.

Venetian overseas dominions and did not circulate in Venice. It contained 0.08 g of silver.⁹¹³ Now, we should remember that the *tornesello* (0.08 g of silver) was quoted at 1/4 of a *soldino* which contained 0.533 g of silver, while four *torneselli* contained in reality 0.32 g of silver, thus making it a coin overvalued by almost 40%. With the *mezzanino* discontinued in 1353 and the *grosso* no longer struck between 1358 and 1377, a high wage could only be paid in either ducats or *soldini*, as it would have been impractical to use *piccoli*.⁹¹⁴ In other words, the gold coin remained remarkably stable virtually until the end of the Republic, while all silver coins were debased. The Republic also produced petty coins with nominal amounts of silver. The staple of petty coins was the *piccolo* (with 0.058 grams of silver in 1280-1343), a coin that was not struck at all between 1370 and 1384 and was resumed in 1385 with precisely half of the already minimal silver content it had (0.027 grams). Its dividers were the half-penny called *mezzodenaro* or *blancus* (struck until 1354), with a silver content of 0.015 grams, the quarter-penny called *quartarolo* (minted until 1328, with 0.003 grams of silver) and the double quarter-penny called *doppio quartarolo* (minted until 1311, with 0.009 grams of silver).⁹¹⁵ As Alan M. Stahl explains, ‘in May 1282, the Great Council changed the official value of the *grosso* from 28 pennies set in 1269 to 32 pennies’.⁹¹⁶ The actual circulation of coins reveal the spread of petty coins in Venice and its dominions. Just to give an illustrative example, the post-mortem inventory of a Jew in Candia drafted in 1408 comprised two letters of credit and 64,000 base coins.⁹¹⁷

On average, through the fourteenth century, in real money:

1 ducat = 24 *grossi* and 1 *grosso* = 32 *piccoli*, hence 1 ducat = 24 *grossi* = 768 *piccoli*. To give an idea, an hoard of 64,000 pennies equalled to (64,000/768 ducats, that is 83.33 ducats or in real coins 83 ducats, 7 *grossi*, and 29 *piccoli*). If we assume that 1 *grosso* = 32 *piccoli* and that a

⁹¹³ A. Stahl, *The Venetian Tornesello. A Medieval Colonial Coinage* (New York, 1985), 5-8.

⁹¹⁴ This was in fact already the case in 1335. See Stahl, *Zecca*, cit., 43.

⁹¹⁵ Mueller and Lane, *Money*, cit., 528, Table A. 3.

⁹¹⁶ Stahl, *Zecca*, cit., 26.

⁹¹⁷ Stahl, *Tornesello*, cit., 2.

mezzanino was valued at 16 *piccoli* or half a *grosso* and a soldino as 12 *piccoli* we obtain 1 *grosso* = 2 *mezzanini* = 2.66 *soldini* = 32 *piccoli*. In petty coins instead 1 piccolo = 2 mezzidenari = 4 quartaroli, hence 1 ducat = 24 *grossi* = 48 *mezzanini* = 63.84 *soldini* = 768 *piccoli* = 1,536 *mezzidenari* = 3,072 *quartoli*.

5. 2 Money of accounts

Venetian merchants did very rarely itemise their expenses in actual money, they opted for money of accounts, that is fictional units that were used to simplify commercial transactions.⁹¹⁸ The use of moneys of accounts in Venice is complicated by the coexistence of several moneys circulating at the same time. F. Lane and R. Mueller have identified no less than eleven moneys of accounts used in medieval Venice.⁹¹⁹ I will present here a schematic explanation of the various moneys of account in circulation.

5. 2. 1 The *Lira di piccoli*

The first was the *lira di piccoli* or *libbra parvorum*, based on the Venetian penny. It was, as J.-C. Hocquet has observed ‘the most widely used, particularly in domestic trade, among shopkeepers and small people’.⁹²⁰ It was used for wages and retail prices⁹²¹ and in 1304 it was assumed that any bequest made in lire in a will was to be understood as lire di piccoli.⁹²²

⁹¹⁸ Mueller and Lane, *Money*, cit., 120-133, 286-313 and 352-353. See also A. Stahl, ‘Venetian Coinage and Money of Account: An Introduction for Researchers’, *News on the Rialto*, 35 (2016), 18-20 and F. Lane, ‘Le vecchie monete di conto veneziane ed il ritorno all’oro’, in *Studies in History*, cit., XI, 49-78. For the conversion of Venetian moneys of account into actual coins and foreign currencies see P. Spufford, *Handbook of Medieval Exchange* (London, 1986), 80-93.

⁹¹⁹ Lane and Mueller, *Money*, cit., 488-489.

⁹²⁰ Hocquet, *The Merchant of Venice*, cit., 267.

⁹²¹ A. Stahl, ‘Coins for Trade and for Wages; The Development of Coinage Systems in Medieval Venice’, in J. Lucassen and A. Pol (eds.), *Wages and Currency: Global and Historical Comparisons from Antiquity to the Twentieth Century* (Bern, 2007), 197.

⁹²² Mueller, *Banks*, cit., 625.

It was based on the following equivalence:

$$1 \text{ lira di piccoli} = 7.5 \text{ grossi} = 20 \text{ soldi di piccoli} = 240 \text{ denari piccoli}^{923}$$

This was a fixed exchange rate based on the value of the piccolo in the thirteenth century, and it was used for customary payments or to quote the price of a *stajo* of wheat.⁹²⁴ In theory 1 ducat = 24 *grossi* and 1 *lira di piccoli* = 7.5 *grossi* thus 1 ducat = 3.2 *lire di piccoli*, even though it fluctuated in practice.⁹²⁵

5. 2. 2 The *lira di grossi*

The *lira di grossi* was instead based on the old conversion rate between the ducat (introduced in 1285) and the *grosso*. In its basic form

$$1 \text{ lira di grossi a oro} = 20 \text{ soldi di grossi} = 10 \text{ ducats} = 240 \text{ grossi} = 7680 \text{ piccoli}$$

This lira was used for accounting purposes by most of the merchants,⁹²⁶ given that it reflected the exchange rate between the ducat and the *grosso* in the first two decades of the fourteenth century. It was also used to quote the prices of cotton, wool, and metals in *mier*.⁹²⁷

Two important caveats should be added. First, up until the mid-fourteenth century, two *lire di grossi* were in use, one called *complida* (that is complete, of 240 *grossi*) and one called *manca* (lit. 'lacking', of 239 ducats). The *lira manca* is mostly found in Tuscan books of accounts kept in Venice and disappeared after the mid-century.⁹²⁸ Second, when the *soldino* was introduced in the 1330s it changed the system fundamentally, especially as actual *grossi* were not struck for twenty years. Thus, a new money of account emerged, also called *lira di grossi* but based on the new

⁹²³ Lane and Mueller, *Money*, cit., 53, 123, and 131.

⁹²⁴ Mueller, *Money*, cit., Table 11, 357.

⁹²⁵ For the fluctuations against the ducat see Mueller, *Banks*, cit., 623-624, Table D. 1 and Table D2.

⁹²⁶ Lane and Mueller, *Money*, cit., 132 and 350.

⁹²⁷ *Ibid.*, 357.

⁹²⁸ Mueller, *Banks*, 617-619.

soldino and known as *lira di grossi a monete*. This *lira di grossi a monete* worked exactly like the normal *lira di grossi complida* but it created a fixed exchange rate between the ducat *a moneta*, the *grosso a moneta* and real *soldino* coins.

1 *lira di grossi a monete* = 10 *ducati a monete* = 20 *soldi di grossi a moneta* = 240 *grossi a moneta* = 640 *soldini* coins = 7,680 *piccoli a monete*.

All other elements of the equivalence are identical to the normal *lira di grossi complida*, but for the introduction of the *soldino*, now ‘fossilised’ at the official exchange rate between the ducats, the *grosso* and the *soldino*. Hence 1 ducat *a moneta* = 2 *soldi di grossi a moneta* = 24 *grossi a moneta* = 64 *soldino* coins; 1 *soldo di grossi a moneta* = 12 *grossi a moneta* = 32 *soldini* coins and 1 *grosso a moneta* = 640/240 *soldini* that is 2.66 *soldini* and 1 *piccolo a moneta* = 1/12 of a *soldino*.⁹²⁹

It is common to call the first *lira complida* ‘a oro’ to distinguish it from the one ‘a moneta’, based on the value of the *soldino*. Thus, the *ducato a monete*, even though identical in value to the *ducato a oro* was based on a fixed rate with the *soldino*, not with the *grosso* as the *ducato a oro*. For all matters and purposes, I have considered every mention of *lire di grossi* as a *lira di grossi a oro complida* of 24 *grossi* and 7,680 *piccoli*. This *lira* became increasingly popular in the fourteenth century, so much so that brokerage fees were calculated by this unit, as happened with freights for merchandise stored on galleys⁹³⁰ and with all other dues, starting from 1390,⁹³¹ being also adopted as the preferred money of account by Venetian fiscal magistracies.

5. 2. 3 The *lira a grossi*

⁹²⁹ Lane and Mueller, *Money*, cit., 333-336 and 352.

⁹³⁰ Lane and Mueller, *Money*, 355-360.

⁹³¹ ASVe, Senato, Misti, Reg. 40, 20/11/1390 : ‘Cum datia que solvuntur ad officium tabule maris exigantur pro maiori parte ad libras grossorum et pauci sint illa que exigantur ad libras grossorum, quod non est ultra sextum totius illius quod exigitur ad dictam tabulam [...] vadit pars iuxta consilium officialium predictorum tabule maris qui collationem habuerint super hoc com provisoribus communis quod consideratis predictis et ut tam commune quam mercatores, cives et forenses possint se melius intelligere quod sicut denarii qui exiguntur ad dictam tabulam maris scribuntur ad libras ad grossos ita de cetero pro bono tam communis quam specialium personarum habentium agere ad dictum officium exigantur et scribantur ad libras de grossis.

The *lira a grossi* is perhaps the most illuminating example of a money of account, because none of its units corresponded to any actual coin minted.⁹³² As Lane and Mueller have observed it may be ‘called a specter, a spook haunting the arithmetical accuracy of Venetian accounts. It was not the equivalent of any coin, past or present’.⁹³³ It lasted from the thirteenth century to the early fifteenth century, when it was gradually replaced by prices in gold.

In its basic form $1 \text{ lira a grossi} = 9.19 \text{ grossi} = 20 \text{ soldi a grossi} = 240 \text{ denari a grossi}$ ⁹³⁴

It is immediately clear that this created a very awkward exchange rate between the *grosso* and the *soldi a grossi* and the *denari a grossi*. In particular, $1 \text{ grosso} = 240/9.19 \text{ denari a grossi}$ thus 26.11 or 26 and $1/9 \text{ denari a grossi}$, as it was then expressed. Despite this very impractical exchange rate, it was the money of account used by many fiscal bureaus: the Camera degli imprestiti, or Loan Office, used it as a reference, and salaries of officials were calculated in this *lira a grossi*.⁹³⁵ Not only was this the case but - as shown by Mueller - in 1396 judges held that if a bequest was expressed in *lire* with no other specification, it was to be understood as *lire a grossi*.⁹³⁶ *Lire a grossi* were also used to quote products for sale in Venice, including the *carica* of pepper, the mark of silver, and the *libbra sottile* of silk.⁹³⁷ After 1405, these prices were given in ducats. One can fully agree that giving prices in gold was ‘meglio e più spaciativo’, ‘better and more expeditious’, as Datini’s agent in Venice reported in 1405,⁹³⁸ and that merchants ‘possunt se melius intelligere’, as the 1396 deliberation justified the adoption of the *lira di grossi* as the basic unit of account.

⁹³² On its use alongside the *lira di piccoli* see L. B. Robbert, ‘Il sistema monetario’, in *Storia di Venezia*, vol. 2, cit., 409-436.

⁹³³ Lane and Mueller, *Money*, 132.

⁹³⁴ *Ibid.*, 124 and 131.

⁹³⁵ Lane and Mueller, *Money*, cit., 129-130.

⁹³⁶ *Ibid.*, Appendix G, 634 : ‘si vulgariter loquitur "lasso cinquanta libre" non aliter loquendo, intelliguntur libre ad grossos’.

⁹³⁷ *Ibid.*, 357.

⁹³⁸ *Ibid.*, 358.

5. 2. 4 Relationship between the three *lire* and the *grosso*⁹³⁹

1 *lira di grossi* = 26.111 *lire a grossi* = 32 *lire di piccoli* = 240 *grossi* (viz. 10 ducats)

1 *lira a grossi* = 0.0383 *lire di grossi* = 1.226 *lire di piccoli* = 9.19 *grossi*

1 *lira di piccoli* = 0.82 *lire a grossi* = 0.031 *lire di grossi* = 7.5 *grossi*

5. 2. 5 Conversion of the ducat into the moneys of account⁹⁴⁰

1 ducat = 1/10 of a *lira di grossi* or 2 *soldi di grossi*, since 1 *lira di grossi* = 240 *grossi* and 1 ducat = 24 *grossi*. In other words, if a sum is expressed in *lire di grossi* to obtain its equivalent in ducats we can simply multiply the *lira* by ten or divided the value in *soldi di grossi* by two.

1 ducat = 768 *piccoli*. In the *lira di piccoli* 20 *soldi di piccoli* = 240 *piccoli*, hence every *soldo di piccoli* equalled 12 *piccoli*, if we divid 768 by 12 we obtain that 1 ducat = 64 *soldi di piccoli*

1 ducat = 52 *soldi a grossi* = 624 *denari a grossi*. If 1 *lira a grossi* = 9.19 *grossi* = 20 *soldi di grossi* = 240 *denari di grossi* and 1 ducat = 24 *grossi*, hence we must divide 24 by 9.19 obtaining 2.6 and multiply that coefficient by 20 to obtain the equivalent in *soldi a grossi* and by 240 to obtain the equivalent in *denari a grossi*.

6) Conventions adopted in this thesis

Every sum expressed in real money has been given as such. All sums in *lire a grossi* and *lire di grossi* have been converted into *grossi* equivalent using the convention 1 ducat = 24 *grossi* = 768 *piccoli*, this was how Venetian merchants itemised their purchases in their books so I have opted for this convention, which also dispenses with calculating the fluctuations of the currency.

⁹³⁹ Lane and Mueller, *Money*, cit., 131 and also F. Lane, 'The Infidelities of the Venetian Lire', in *Studies in History*, cit., Essay XII, 51.

⁹⁴⁰ Lane and Mueller, *Money*, cit., 291.

Venetian merchants normally itemised sums in *lire di grossi a oro complide*. In their account book l. for *lire di grossi* of 10 ducats, s. for *soldi di grossi* (0.5 ducats), d. for *grossi a oro* and p. for *parvi* or *piccoli*. Hence 125 ducats = 10 *lire*, 12 *soldi di grossi* and 6 *grossi a oro* or £ 10, s. 12 d. 6 in the account book. If the merchant needed to pay this sum to the Loan Office he would have converted it into *lire a grossi*. Hence in *lire di grossi* 125 ducats = 3,000 *grossi*, since in *lire a grossi* instead 1 *lira a grossi* = 9.19 *grossi*, he would have divided 3,000 by 9.19, obtaining 326.44 *lire a grossi*. In *lire a grossi*, 0.44 *lire a grossi* = 4.0436 *grossi*. To convert the remaining 0.0436 *grossi* into *soldi a grossi* we must bear in mind that 1 *grosso* = 20/9.19 *soldi a grossi*, that is 2.176 *soldi a grossi*. If we multiply 0.0436 *grossi* by 2.176 we obtain the equivalent of the *grossi* into *soldi a grossi*, namely 0.0948736. If we bear in mind that 1 *soldo a grossi* = 12 *denari a grossi*, we can convert that sum into 1.138 *denari a grossi*. Hence 125 ducats in *lire a grossi* would be 326 *lire*, 4 *grossi*, 0 *soldi a grossi*, and 1 *denaro a grossi*. One can appreciate why the *lira a grossi* was superseded by prices in ducats.

Appendix E

Mentions of privately-owned ships or commodities transported by sea in

ASVe, Cassiere della bolla ducale, Grazie, Reg. 5, f. 1-51v, 1331-1334⁹⁴¹

Granted to	Vessel	Products	Translatio n	Route	Amount of the fine	Value of the cargo	Refere nce
M a r c o Dandolo NV	navis of Martino Zannacola	-	-	Venice - A i g u e s Mortes	100 <i>lire</i>	-	1r
A n d r i o l o Martinazzo	-	Fruментu m	Wheat	Turkey - Alanya	8 <i>lire</i> <i>grossorum</i> (80 ducats)	-	2r
R a f f a i n o, famulus of NV Tomà Soranzo	Navigium disarmatu m	U n u s bariletus de media q u a r t a c u m gerbelatur a pulveris endegi	One barrel of 0.5 <i>quarte</i> (10.4 litres) of sifted indigo powder	Cyprus - Venice	Confiscatio n of the cargo	-	2v
P i e t r o Calandrino, 'Capsellarius'	-	lignam a capsella)	Wood to m a k e coffers	Crete - Venice	40 <i>soldi</i> <i>grossorum</i> 20 ducats)	2 0 ducats	2v
Z o l i d e C e r v e s e from Rimini	Lignum	frumentu m et faba	Wheat and fava beans	Rimini - Venice	Confiscatio n of the ship and the cargo	-	2v

⁹⁴¹ If someone is designated as a nobleman, I have noted NV for nobilis vir after his name.

Granted to	Vessel	Products	Translatio n	Route	Amount of the fine	Value of the cargo	Refere nce
Giovanni Querini, NV	Navis	-	-	Venice - Crete	-	-	2v
Giovanni and Marco Loredan, NV	lignum forinsecor um	quedam quantitas coriorum)	Hides	Constanti nople -Venice	1/4 of the cargo's value	-	3r
Giacobello Urso	-	Caratelli duo ribolii, pecie decem casei et vasi duo olei	2 casks of ribolla wine, 10 pieces of cheese and two vases of olive oil	Adducend o Venecias'	-	-	3v
Bartolomeo da Lalla	Lignum forinsecor um	-		Alexandri a-Venice	50 <i>lire</i>	-	3v
Giovanni, butcher (becarius) at Saint Mark	Barcha	bos et unus castratus	One ox and a ram	Istria - Venice	10 <i>lire</i>	-	3v
Rodolfo Mastro from the Giudecca	Navis	Quatuor balle curaminis	Four bales of leather	Chioggia - Verona	Double of customs' fees	-	4r

Granted to	Vessel	Products	Translatio n	Route	Amount of the fine	Value of the cargo	Refere nce
Marco da Fano	Navis	Lignamen	Timber		25 <i>lire</i>	-	4r
Zolo de Cervese	-	U n u m c a r i c u m frumenti et fabe et emit XIIJ vaxellos ribolii	Wheat and fava beans, 13 casks of wine	Ravenna - Mantova - Rimini	707 <i>lire ad grossos</i> (270 ducats and 17 <i>grossi</i>)	-	4r
Cristofor Pollo da Chioggia	Barcheta	Ordeum	Barley	Marche - Venice	10 <i>soldi di grossi</i> (5 ducats)	-	5r
Paolo Nani	Tarita	-	-	Venice - Puglia	75 <i>lire</i>	-	6r
Petro de Tolon from Mazzorbo	-	X L I I J porci	43 pigs	Latisana - Venice	20 <i>soldi</i> for each pig		6r
Giacomello Biacqua	N a v i s v o c a t a Senatore	U n u s s a c h u s cottoni	One sack of cotton	Famagust a - Venice	-	-	6r
Nicola Grioni	Navis	C e r t a quantitas lignaminis	A certain quantity of timber	-	-	-	8r

Granted to	Vessel	Products	Translatio n	Route	Amount of the fine	Value of the cargo	Refere nce
B o n a n n o 'plater'	Plata	-	-	Venice	-	-	8r
M i c h e l e Biondo	Navis de c a ' Maurocen o	L i b r a s CCC farri	3 0 0 pounds of farro	-	12 <i>denari</i>	-	8r
C e n o l l o D a m i a n i from Rimini	Burchio	Vinum	Wine	Ravenna	1/4 of the c a r g o ' s value	-	9r
Paolo Nani	Tareta et tabachum	Lapides	Stone	Puglia - Venice	8 <i>lire</i> <i>parvorum</i> (2.5 ducats)	-	9r
G i a c o m o Soranzo, NV cf. S. Samuel	Navis	-	-	-	100 lire	-	9v
M a r i n o Tagliapietra	Navis	-	-	-	25 lire	-	9v
F r a n c e s c o del Medego cf. San Vito	Barcha	Fruментu m	Wheat	Abruzzo - Pesaro	140 lire <i>ad</i> <i>grossas</i> (53.6 ducats)	-	9v

Granted to	Vessel	Products	Translatio n	Route	Amount of the fine	Value of the cargo	Referenc e
Federico Bisganga from Messina	-	Lignamen	Timber	Sicily	21 <i>lire</i> , 17 <i>soldi</i> , and 5 <i>denari</i> <i>grossorum</i> (219 ducats circa)	-	9v
Zannino Giuliano, Giovannino Mora and Marco, shearer (cimatori)	Navis de ca' Cocho	Medietas melegetor um	Melegueta pepper	Mallorca - Venice	46 <i>lire di</i> <i>grossi</i> (460 ducats)	-	10r
Nicola from Bologna and Matteolo from Rimini	Barcha dicti Nicholai	Sachia XLVIIJ frumenti	48 sacks of wheat	Poreč - Muggia or Poreč - Humag	-	-	10r

Granted to	Vessel	Products	Translatio n	Route	Amount of the fine of the cargo	Value of the rency	Refer ence
M a r c o G r i m a n i, N V, c f. S. S a m u e l e	-	S e v e n p i e c e s o f v e l v e t		T r a n i - Z a d a r -V e n i c e	The value of the cargo. 5 <i>lire</i> , 19 <i>denari</i> and 1 <i>soldo di grossi</i> (59 ducats circa)		10r
N i c o l ò d i B o n o m o a n d M a t t i o l o d a R i m i n i	B a r c h a	S a c h i X L V I I J f r u m e n t i	48 sacks of wheat	P o r e č a n d U m a g	-		10r
V e z e l l o, f i s h e r m a n (p e s c a t o r) f r o m P o v e g l i a	B a r c h e t a	F r u m e n t u m e t p a n i s	Wheat and bread	V e n i c e - P a d u a	-		10v
M a r c o P e t e n a r i o	G a l e a d i s a r m a t a	L i g n a m e n, v i d e l i c e t r u	T i m b e r (16 trunks and 50 planks)	V e n i c e - C y p r u s	value of the cargo	32 <i>soldi grossoru m</i> (16 ducats)	10v

Granted to	Vessel	Products	Translatio n	Route	Amount of the fine	Value of the cargo	Refere nce
Paolo Nani, NV	N a v i s nauliçata	C e r t a solution pecunie	A certain amount of money	Constanti nople - Cyprus	1,000 <i>lire ad</i> - <i>grossos</i> (382 ducats and 22 <i>grossi</i>)	-	11v
Nicoletto Vitturi, NV	Q u e d a m galea	F r u m e n t u m	Wheat	C r e t e - Turkey - Venice	45 <i>lire di</i> - <i>grossi</i> (450 ducats)	-	11v
G i o v a n n i Viario, NV	Barcham	B l a d u m , victualia, f a b a e t fasioli	O a t , foodstuff, fava beans and beans	Turkey - C r e t e - V e n i c e a n d Turkey - Mononva sia	7 <i>lire di</i> - <i>grossi</i> (70 ducats)	-	12v
Dessi from P a g , inhabitant of Venice	Barcham	F r u m e n t u m	What	Venice - O s o r (C r e s , Croatia)	5 <i>lire di</i> - <i>grossi</i> (50 ducats)	-	13r
S c h i a v o Poltrone	Navis	Bona sua	Merchandi se	C r e t e - Cyprus - ' p a r t e s soldani'	-	-	14v

Granted to	Vessel	Products	Translatio n	Route	Amount of the fine	Value of the cargo	Refere nce
M a r c o Zanassi from Santa Croce	-	milliaria X V e t libre IIIIC ferri	15 <i>millier</i> and 400 libbre of iron (7.34 tons)	Aquileia - Grado - Puglia	9 <i>lire</i> and 12 <i>soldi di</i> <i>grossi</i> (96 ducats)	-	14v
N i c o l ò Soranzo, NV	Navis	-	-	-	75 lire	-	14v
Gianguido Rungi from Rimini	-	15 bestie bovine	15 bovines	Zadar - Magliavac ca (Po delta) - Rimini - Venice	200 <i>lire</i> <i>parvorum</i> (62, 5 ducats)	-	15r
Nicoletto Pasqualigo, scribe	T a r i t a M a r c i Paradiso	-	-	Applicuit Venecias	5%	-	15r
G i o v a n n i Tresso from Mazzorbo	Burclus	A s s e r o s decertim	T i m b e r planks	-	25 lire	-	16r

Granted to	Vessel	Products	Translatio n	Route	Amount of the fine	Value of the cargo	Refere nce
Tomà Canzarello, patronus	Tarita	-	-	-	100 <i>lire</i>	-	16v
Ursinello Morosini, patronus	navis de c a ' Maurocen o	-	-	-	50 <i>lire</i>	-	16v
Bartolomeo da Lalla	G a l e a disarmata	-	-	Manfredo n i a - Venice	-	-	17r
Marco de Bonaiuto	N a v i s Bertucii Benato	Lignamen	timber	Foundere d at the L i d o (fregit in l i t o r e S a n c t i Nicolay'.	Venice - Lido	-	18r
Francesco Foscarini	-	Alumen	Alum	Crete - Venice	Double of t h e customs' duties	-	19r

Granted to	Vessel	Products	Translatio n	Route	Amount	Value	Refere nce
					of the fine	of the cargo	ence
Leonardo Zeno	Navis	Bona sua	Merchandi se	Crete - Cyprus - 'partes soldani'	-	-	19v
Angelo de Concio, mercator	-	.		Bari - Venice	9 onze (1/4 of the value of his cargo)	36 onze (ca. 180 florins)	19v
Simone, Felice, Angelo and Nicola 'de Rode', mercatores regni Apulie	Navigium	Milliarum unum et dimidium de lardelis	1.5 millier (715 kg) of lardons	Puglia - Venice	50% of the value of the cargo	-	19v
Ermolao Condulmer	Navis	Veluti	Velvets	Venice - Puglia and Venice - Crete	25% of the value of the cargo	-	19v

Granted to	Vessel	Products	Translatio n	Route	Amount of the fine	Value of the cargo	Refere nce
Simone, Felice, Angelo and Nicola from Rhodes, merchants from Puglia	-	1.5 <i>millier</i> of lard (715,5 kg)		Puglia - Venice	-	-	19v
Zecchino from Rimini	Lignum	Barilia clavorum	Barrels with keys	-	50% of the value of the <i>lignum</i> (18 <i>soldi</i> <i>grossorum</i> , viz. 9 ducats)	-	20r
Calvi Carnelo from Chioggia	Burchio	Certa quantitas salis	Salt	Chioggia - Aquileia	-		21v
Pietro Romano, plezius	Chocha da cha' Prioli	-	-	Famagust a - Venice	-	-	22r

Granted to	Vessel	Products	Translatio n	Route	Amount	Value	Refere nce
					of the fine	of the cargo	renc e
Meneghello de Santuzzo, f r o m A n c o n a , Bertuccio di G i a c o m o and Cesco Guglielmino f r o m Ancona	Barcha	Vinum	Wine	Chioggia - Ravenna	-	-	22r
Z a n n i n o f r o m P e s c a r o , mercator	-	O c t o boticelle vini	Eight kegs of wine	Venice - Loreto	-	-	23r
Dabicogna from Zadar	Barcha	Scaias pro saorna	-	-	-	-	23r
Alessandro d e g l i Agolanti and Nicoluccio Ridolfi from Rimini	Burchius	-	-	Marche - Venice	-	-	23v

Granted to	Vessel	Products	Translatio n	Route	Amount of the fine	Value of the cargo	Refere nce
Leonardo di Benedetto from Grado	Navigium	C e r t a quantitas ferri	Iron	Trieste - Vrsar - Zadar	50% of the value of the cargo	-	23v
Nicoletto Foscarini, NV	Navis	Lana que venit de Corfu	Wool from Corfu	Corfu - Venice	The value of the wool.	6 lire di <i>grossi</i> (6 0 ducats)	24r
M a r c o , quarryman (lapicida) cf. S. Severo	Maranus	-	-	-	-	1 0 0 <i>soldi</i>	24v
M a r i n o Longo	C h o c h a v o c a t a S a n c t a M a r i a misericord ie	-	-	-	-	25 lire	25r
Ruggiero Urso	N a v i s	Quedam quantitas amigdaliu m	Hazelnuts	-	-	-	26r

Granted to	Vessel	Products	Translatio n	Route	Amount	Value	Refere nce
					of the fine	of the cargo	ence
Tommaso Scenca from Koper	Barcha	V i n a s X X I I I J ribolii	24 kegs of Ribolla wine	Koper - Chioggia	-	-	26v
Nicola Balbi, cf. S. Severo	Barcheta	-	-	T o r r e Nuova	25 <i>lire</i>	-	26v
Nigro Cocco	Navis	-	-	Venice - Naples	75 <i>lire</i>	-	26v
P i e t r o Romano and Tommaso Agostino	Cocha que f u i t Jacobelli de Priolis	-	-	Black Sea - Venice	500 <i>lire</i> (presumabl y <i>ad grossos</i> , 191 ducats a n d 11 <i>grossi</i>)	-	27v
Nicolò Lion, NV	Navis	-	-	Mallorca - Venice	25 <i>lire</i>	-	28r
Rainaldo da Marano	Barcha	Sal	Salt	P o r e č Pula	25 <i>lire</i> and 12 <i>soldi</i>	-	28v
Andreolo de Filippo	N a v i s magna de c a ' Superanci o	C e r t a quantitas mantilloru m	Mantles	Venice - Cyprus	-	-	28v

Granted to	Vessel	Products	Translatio n	Route	Amount	Value	Refere nce
					of the fine	of the cargo	renc e
M a r c o Morosini	G a l e a disarmata	-	-	Venice - Otranto	-	-	29v
N V Balduino D o l f i n , N i c o l a Soranza and M a r c o Mauro	Navis	.	-	.	200 <i>lire</i>	-	29v
Cristoforo Massaro	-	miliaria II Ja et libre CCC et XV amigdalar um in sachis XII	3 <i>millier</i> and 315 <i>libbre</i> in 12 sacks of almonds (1,581 kg)	Venice - Dubrovni k	-	-	29v
F i l i p p o Viaro	Barca	7 boat spars	VII pecias antenelle	Venice - Crete	20 <i>soldi di</i> <i>grossi</i> (10 ducats)	-	29v
Pietro dalle Buffole	-	C e r t a quantitas ferri	Iron	Venice - Tripoli	20 <i>lire di</i> <i>grossi</i> and 12.5 <i>soldi</i> (2 0 6 ducats)		30r

Granted to	Vessel	Products	Translatio n	Route	Amount of the fine	Value of the cargo	Refere nce
Biacchino from Pavia	Plata	Mercimon ia	Merchandi se	Brondolo- P o r t o Fossone	100 <i>soldi</i>	-	30r
N i c o l ó Franco from Murano	Burchus	Sarteni	Sardines	Murano - Venice	-	-	31r
Marco de C a r t a , patronus	N a v i s v o c a t a s a n c t u s Nicolaus	-	-	-	25 <i>lire</i>	-	33r
Francesco qd Alessandro	Navis	Frumentu m e t miliaria IIJ casei	3 <i>millier</i> of c h e e s e (1,431 kg) and wheat	Barletta - Venice	2.5 <i>onze</i> (ca. 1 2 . 5 florins)	-	33v
Belluccio dalle Croci	Navis de ca' Michiel	Capse sue de sale arminiago	Two boxes o f ammonium chloride	Cipro - Venice	4 <i>lire di</i> <i>grossi</i> (40 ducats)	-	34v
Marco Bono, c f. S. Giovanni in Bragora	Navis	-	-	-	-	25 lire	35r

Granted to	Vessel	Products	Translatio n	Route	Amount	Value of the fine of the cargo	Refer ence
Simone Bianco	Navis vocata 'La Moresina'	-	-	Venice - Naples	-	-	36r
Tommaso Agostino	Navis	-	-	-	-	-	36v
Marco dalle Carte	Navis	sachi VI lane , vengetes II de sepo et certe cavaline	6 sacks of wool, 2 <i>vegete</i> of tallow and hides	Tana - Venice	47 <i>lire ad</i> <i>grossos</i> (18 ducats)	-	36v
Blasio de Giustisano from Piran	Barcha	Stara XL frumenti	40 staia of wheat	Piran - Humag	-	-	37r

Granted to	Vessel	Products	Translatio n	Route	Amount of the fine	Value of the cargo	Refere nce
Nigro Cocco	Navis	Wheat		Venice - Sicily - Cagliari - Mallorca	the value of the cargo	Half of the cargo was worth 264 <i>lire</i> <i>grossoru</i> or 2,640 ducats, the ship was worth 1000 <i>lire</i>	37v- 38v
Marino Longo	Navis	-	-	Mallorca - Trapani - Venice	50 <i>lire</i>	-	39v
Giorgio Ursolo	Navis	-	-	-	25 <i>lire</i>	-	40v

Granted to	Vessel	Products	Translatio n	Route	Amount of the fine	Value of the cargo	Refere nce
Pasquale Grioni	Barcha que habet solum I arborem	-	-	-	100 <i>soldi</i>	1 0 0 soldi	41r
Gianneto from Pirano	Barcha	Frumentu m et bladum	Wheat and oat	Aquileia - Grado	-	-	42r
Giovanni Polo	Navis	-	-	Mallorca - Ibiza - Venice	75 <i>lire</i>	-	42r
Tomà Giroldo and Nicola from Trieste	Trees barche	Ribolium	Ribolla wine	Trieste - Lignano - Venice	-	-	42v
Matteo Cavazza qd. Pietro, from Muggia	Navigium	staria XXV J surgi et staria LXVI frumenti et sachi V farine	26 bushels of sorghum, and 66 bushels of grains, and 5 sacks of flour	Grado - Venice	-	-	42v

Granted to	Vessel	Products	Translatio n	Route	Amount of the fine	Value of the cargo	Refere nce
Giovanni Cavazza	Barcha	Libre CCC de lini cum aliis libris IIIJC	700 <i>libbre</i> of flax (334 kg)	-	-	-	43r
Marino Schiavo	Barcha	Grisi	Grey cloth	-	12 <i>soldi</i> <i>grossorum</i> (6 ducats)	-	44r
Margherita, wife of Vercio della Misericordia	quidam suis burchus quam concessera t Martino Furlano	tria staria salis	Three bushels of salt	-	-	-	45v
Firmapace from Muggia	Barcha	Staria XX bladi et certa quantitas cipporum et lapidum	20 bushels of wheat and a certain amount of stone	Venice- Grado	25% of the value of the cargo	-	46r
Michele de Bona from Dubrovnik	Condura	Capelle L V I I ferree	62 iron boxes	Venice - Dubrovni k	-	-	47r
Martino Meno from Chioggia	-	duo caratelli et tria barilia vini terrani	2 <i>caratelli</i> and three barrels of local wines	Portogrua ro - Chioggia	-	-	47v

Granted to	Vessel	Products	Translatio n	Route	Amount of the fine	Value of the cargo	Refere nce
M u z z o l a from Rimini	Lignum	Vinum et s e x segadicias de taiola	Fodder and wine	-	25 <i>lire</i>	-	48v
Marco Moro, NV	navis cuius e r a t patronus s e r Thomas Çancarello	Duo sachi bombicis	Two sacks of cotton	-	20 <i>soldi</i> <i>grossorum</i> (10 ducats)	-	48v
Bernardo from San Barnaba	-	C e r t a quantitas lignorum de nassis	A certain amount of wood	Venice - Mallorca	-	11 <i>libras</i> <i>parvoru</i> <i>m</i> (3.43 ducats)	51r
Petrus from N a p l e s , mercator	Navis	C e r t e merces	C e r t a i n products	-	-	-	52v
Nicola della Fontana	duas platas ad latus navis sua lignamine oneratas	Lignamen	Wood	-	-	100 <i>lire</i>	53r

Granted to	Vessel	Products	Translatio n	Route	Amount of the fine	Value of the cargo	Refere nce
Leonardo, scriba	navis cuius patronus est Rafael Balbi	C e r t a quantitas lignaminis	A certain amount of timber	Venice- crete	25 <i>lire</i>		54v
D o n a t o Dente	Navis	B a r i l i s cutellinoru m	A barrel full of knives	-	Double of customs' fees	-	55v
Angelus de Concio et Iohannes Senator, mercatores nostri qui utuntur in Apulia	Lignum et navis de ca' Leo	c a p s a s C I I I savoni albi	103 boxes of white soap	Puglia - Istria - Cyprus	1% of the value	-	56r
Buonantonio Lorenzo from Chioggia	Barcha	C e r t a quantitas vini de Ancona	A certain amount of wine from Ancona	Venice- Primiero	100 <i>lire</i>	À-	57r
Zanti from Rimini	Lignum	S t a r i a I I I I C frumenti	4 0 0 bushels of what	Conducen do piranum', towards Piran	200 <i>lire</i>	-	57v

Granted to	Vessel	Products	Translatio n	Route	Amount of the fine	Value of the cargo	Refere nce
Vendramio Martellago, boatman (barcarolus)	Barcha	Unum caratellum vini	One <i>caratello</i> of wine	-	50 <i>lire</i> <i>parvorum</i> (15.62 ducats)	-	58r
Pinzino Babilonio, NV	Navis	Botte XX vini Crete	20 kegs of Cretan wine	-	18.5 <i>soldi</i> <i>grossorum</i> (9.25 ducats)	-	59r
Pietro from Zadar	navis	-	-	Venice- Crete	25 <i>lire</i>	-	59r
Antonio Rubeo	Navi	Unum caratellum vini	One <i>caratello</i> of wine	Puglia- Venice	-	-	59r

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