Merchants and Their Cultural Horizons in Late Medieval Northern Italy

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For Anne.

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Abbreviations

AC	Genoa, Archivio di Stato di Genoa, Antico Comune.
ASFi	Florence, Archivio di Stato.
ASGe	Genoa, Archivio di Stato di Genoa.
ASI	*Archivio Storico Italiano.*
ASPi	Pisa, Archivio di Stato di Pisa.
ASVe	Venice, Archivio di Stato di Venezia.
BL	London, British Library.
Boccaccio, *Decameron*	Boccaccio, *Decameron*, ed. V. Branca (2 vols, Turin, 2014).
Certaldo, *Costumi*	Paolo da Certaldo, *Libro di buoni costumi, in Mercanti Scrittori, Ricordi nella Firenze tra Medioevo e Rinascimento, Paolo da Certaldo, Giovanni Morelli, Bonaccorso Pitti e Domenico Lenzi, Donato Velluti, Goro Dati, Francesco Datini, Lapo Niccolini, Bernardo Machiavelli,* ed. V. Branca *(Milan, 1986), 3-99.*
Cotrugli, *Mercatura*	Benedetto Cotrugli, *Libro de l'arte de la mercatura*, ed. V. Ribaudo (Venice, 2016).
Dante, *Convivio,*	Dante, *Convivio,* eds. G. Fioravanti, C. Giunta, in Dante, *Opere,* ed. M. Santagata (3 vols, Milan, 2014-2015), ii.
Dante, *DVE*	Dante, *De vulgari eloquentia,* ed. M. Tavoni, in Dante, *Opere,* ed. M. Santagata (3 vols, Milan, 2014-2015), i.
Dante, *Inferno*	Dante, *Inferno*, tr. R. M. Durling (3 vols, Oxford, 1996), i.

Dante, *Purgatorio*	Dante, *Purgatorio*, tr. R. M. Durling (3 vols, Oxford, 1996), ii.
Dante, *Paradiso*	Dante, *Paradiso*, tr. R. M. Durling (3 vols, Oxford, 1996), iii.
Dante, *Vita nuova*	Dante, 'Vita nuova', ed. G. Gorni, in Dante, *Opere,* ed. M. Santagata (3 vols, Milan, 2014-2015), i.
DDP	Dartmouth Dante Project, https://dante.dartmouth.edu (09/05/23).
FD	Prato, Archivio di Stato di Prato, Fondo Datini.
MAP	Florence, Archivio di Stato, Mediceo avanti il Principato.
OD	Pisa, Archivio di Sato di Pisa, Opere del Duomo.
OSC	Pisa, Archivio di Stato di Pisa, Ospedale Santa Chiara.
SNS-S	Pisa, Archivio della Scuola Normale Superiore di Pisa, Salviati.
Uzzano, *Pratica*	Giovanni da Uzzano, 'La pratica della mercatura', in, *Della decima e di varie altre gravezze imposte dal comune di Firenze*, ed. G. F. Pagnini della Ventura (4 vols, Lisbon and Lucca, 1765), iv, pp. 1-284.

All primary sources have been consulted in the original unless specified otherwise.

All translations are my own.

Abstract

The primary aim of this inquiry will be to explore the cultural horizons of merchants in late medieval northern Italy (c.1348 to c.1460). This exploration will dismantle the mythical figure of the merchant in late medieval northern Italy as herald of capitalist modernity. The secondary aim of this thesis is to propose a new methodology of cultural history that explores 'cultural horizons'. These were the constantly shifting frames through which knowledge was categorised. I will investigate how a specific medium, *quaderni*, gave structure to those categories, and I will reunite material which has been artificially divided by the boundaries between disciplines. Merchants in late medieval Italy reasoned through the ethical and tensions that their profession generated, read tales, heard sermons and responded to art in particular ways through their cultural horizons. Yet, to explore these cultural horizons is not in any sense to posit a fixed or coherent mercantile world view. Both aims will offer new avenues of research, into merchants at different times and places, as well as in cultural history more widely.

The first chapter of this thesis, 'Keeping Books', will focus on the impact of *quaderni* on merchant culture. These paper books, sold as blank bound codices, were a versatile new medium that created a space not just for accounting but for many kinds of writing. The second chapter, 'The Perfect Merchant', will examine merchant education and the ideal models that merchants aspired to. The third chapter, 'Measure', will study the role of measure and measuring in merchant commerce, ethics, and eschatology. The fourth chapter, 'Time', will focus on the ways in which merchants perceived and ordered time. The fifth chapter, 'Charting Horizons', will explore the ways in which merchants navigated and contemplated trade routes and spiritual landscapes. The final chapter,

'*Fama*', will examine how merchants were perceived, how they established and lost their reputations, the circulation of information, and how they were remembered. For merchants, *fama* was distinctive; their businesses and their afterlives depended on it.

O you who turn the wheel and look to windward,

Consider Phlebas, who was once handsome and tall as you.

T. S. Eliot, *The Wasteland, IV. Death by Water*, ll. 320-321.

Introduction

Merchants in late medieval northern Italy are seen as the forerunners of the modern world, conjuring the spirit of capitalism from the balance of their ledgers.[1] They transformed money into capital,[2] developed wholesale markets and invented bills of exchange, setting the path of future development.[3] In these narratives the transformation that merchants drove had so great a momentum that many historians of European economic development have seen as their main challenge the task of explaining late medieval northern Italian economies' failure to reach the stage of modern industrial capitalism.[4] For Karl Marx 'Lombards' had pioneered the transformation of value into money, the substitution of money with credit, and the accumulation of capital.[5] Their development of 'merchant's capital' and 'usurer's capital', capital formed through commerce and finance rather than through landed property, set the stage for modern industry and modern capitalist exchange.[6] Max Weber found the origins of capitalist rationality in medieval merchant partnerships and their accounting.[7] For Werner Sombart, their capitalist spirit of calculation was more

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[1] R. Fredona and S. A. Reinert, 'Italy and the Origins of Capitalism', *Business History Review,* 94 (2020), 1; L. Pezzolo, 'The *via italiana* to Capitalism', in L. Neal and J. G. Williamson, *The Cambridge History of Capitalism* (2 vols, Cambridge, 2014), i, pp. 267, 272.
[2] A. Spicciani, *La mercatura e la formazione del prezzo nella riflessione teologica medioevale* (Rome, 1977), 94.
[3] J. Banaji, *A Brief History of Commercial Capitalism* (Chicago, 2020), 6, 14, 18, 21.
[4] As noted by: C. Wickham, 'How Did the Feudal Economy Work? The Economic Logic of Medieval Societies', *Past and Present*, 251 (2021), 29; For example: R. J. Emigh, 'Economic Interests and Sectoral Relations: The Undevelopment of Capitalism in Fifteenth-Century Tuscany', *The American Journal of Sociology*, 108/5 (2003), 1106.
[5] Marx, *Grundrisse: Foundations of the Critique of Political Economy (Rough Draft)* [1939], tr. M. Nicolaus (London, 1993), 108.
[6] Marx, *Capital: A Critique of Political Economy* [1867], tr. B. Fowkes (3 vols, London, 1990), i, p. 914
[7] Weber, *Economy and Society* [1925], trs. G. Roth and C. Wittich, (2 vols, Berkeley, 1978), i, 95, 164.

important than their mere accumulation of capital.[8] The transformation attributed to merchants was not only economic but also cultural.[9] The expansion of markets reached into the forum of an individual's conscience. Commercial reasoning became equally suited to moral and eschatological reckoning. Today we still use the terminology of bookkeeping, contracts, and debt to express ethical tensions.[10] It is the mythology of the rise of capitalism, the return to the claimed origins of a culture in which profit and loss can make us forget ourselves, that makes considering these merchants so fascinating.

Medieval merchants have been mythologised not only as the forerunners of capitalism but also as the herald of imperialism. In Marx's framework, capitalists were chased around the world in their burning desire to consume, and to expand their markets.[11] For Weber, medieval merchant partnerships were also well suited to colonising ventures, as was the case for the Genoese *maona* companies, which operated monopolies for Genoa on Chios and in Cyprus.[12] Historians have applied these ideas to their material. Michel Balard described Genoese merchants as the agents of a colonial economy that was supported by sale of the commodities and slaves in its outposts overseas.[13] Edmund Smith has given English merchants in the years 1550 to 1650 a central role in a founding

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[8] J. Milos, 'Seeking the "Spirit of Capitalism": The German Historical School and the Controversies about the Origins of Capitalism', *International Critical Thought,* 12/1 (2022), 86; W. Sombart, *Der moderne Kapitalismus. Erster Band. Die Genesis des Kapitalismus* (Leipzig, 1902), 207-208.
[9] R. H. Tawney, *Religion and the Rise of Capitalism* [1926] (Oxford, 2017), 22; Y. Renouard, *Les hommes d'affaires italiens du Moyen Âge*' (Paris, 1968), 13.
[10] D. Graeber, *Debt the First 5,000 Years* (New York, 2011), 13.
[11] Marx, *Manifesto of the Communist Party* [1848], in *Karl Marx and Frederick Engels: Selected Works*, eds. trs. Lawrence and Wishart (London, 1991), 38.
[12] Weber, *Economy and Society*, i, p. 380.
[13] M. Balard, *Gênes et la mer* (Genoa, 2017), 504; M. Balard, 'La culture du marchand occidental en Méditerranée orientale', in J. Aurell (ed), *El Mediterráneo medieval y renacentista, espacio de mercados y de culturas* (Navarre, 2002), 44.

narrative of global Britain.[14] He argues that, as a community, their common trust, shared values and commercial training allowed them to face the dangers of new worlds and to become colonisers.[15] Marx, in a bitter borrowing from Virgil's description of the first origins of Rome in the *Aeneid*, warned of the human cost, in slavery and other forms, that the genesis of industrial capitalism from the medieval merchant's capital entailed: '*Tantae molis erat*'.[16] His warning remains a fitting response to history written as mercantile epic.

We can consider merchants in late medieval northern Italy alongside Eliot's invented Phoenician sailor Phlebas as our fictionalised forbearers. With their bookkeeping, their training, their propensity to quantify, their attitudes to time, their investment in long-distance trade and the trust that this exchange required, they have been seen as ideally placed to play the role of early capitalists. Their accounts, financial instruments, contracts, correspondence, manuals, and their nautical charts seem to conform to this script. Yet studying merchants through this lens has obscured the distinctiveness of their culture.[17] Of course, merchants in late medieval northern Italy did not know that they would be cast as the heralds of a capitalist future.[18] The reification of these categories has artificially separated this material from the other elements of merchant culture. Merchants wrote prayers in their *quaderni* and accounted for the duration of a soul's stay in Purgatory; their manuals were financial, ethical, and spiritual works.

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[14] E. Smith, *Merchants: The Community that Shaped England's Trade and Empire, 1550-1650* (Yale, 2021), 4.
[15] Smith, *Merchants*, 3, 6, 209.
[16] Marx, *Capital,* i, pp. 914, 925; Virgil, *Aeneid*, eds. trs. R. H. Fairclough and G. P. Goold (Harvard, 1999), I, l. 33, pp. 264-265; 'So vast was the effort'.
[17] C. M. Baron and A. F. Sutton, 'Preface', in C. M. Barron and A. F. Sutton (eds), *The Medieval Merchant: Proceedings of the 2012 Harlaxton Symposium* (Donington, 2014), xvi.
[18] M. C. Howell, *Commerce before Capitalism in Europe, 1300-1600* (Cambridge, 2010), 13.

When merchants navigated their trade routes, they invoked divine protection, reciting prayers that listed coastal shrines and consulting scaled charts that were framed by saints. *Fama* was the crux of their traffic and eschatology. The engagement of merchants with culture, too, has been seen in narrow terms, as if they saw their reading or patronage of art merely as investments to be weighed against the opportunity cost of spending more time keeping their accounts.[19] There are of course exceptions. Samuel Cohn's study of testamentary bequests in the aftermath of recurrent epidemics is a striking example of a scholar of social and economic history taking culture seriously.[20] The study of their cultural horizons will reunite the broad range of this material and give a more rounded view of merchant culture in late medieval northern Italy than that offered by considering economic or cultural histories separately from one another.

Once we view being a merchant in northern Italy in the years c.1348 to c.1460 not so much as occupying a particular identity but rather as inhabiting a field of material, ethical and spiritual concerns, this distinctiveness comes into sharp focus. A merchant's investments entailed material, ethical and spiritual risks. These risks could be calculated, reckoned, and mitigated, but not eliminated. The tensions between competing concerns generated affinities in how they were approached. The ways in which merchants thought about their investments affected how they imagined their fates, worldly and eternal. Merchants navigated this field of tensions through the frame of their cultural horizons, including not only the learning that they attained and valued,

[19] R. S. Lopez, 'Hard Times and Investment in Culture', in *The Renaissance: a Symposium* (New York, 1953), 31.
[20] S. K. Cohn, *The Cult of Remembrance and the Black Death: Six Renaissance Cities in Central Italy* (Baltimore, 1992).

but also the distinctive ways in which they thought, and how they categorised and assimilated this knowledge.

The paper leaves of *quaderni*, the sets of books that merchants kept to record and account for their trade, were the medium on which they shaped and reshaped their horizons. As such they will be fundamental sources for exploring merchant culture. In this inquiry, *quaderni* will be used to refer to books of paper quires, sold as blank ready-bound codices, of similar dimensions and with similar bindings. They were a record not only of exchange but also of prayers, proverbs, poems, tales, medicinal recipes, and family memory. The intimate calculations on these pages reckoned with risk, financial and eschatological. While historians have divided these books into subcategories depending on their predominant use, here the term *quaderni* is proposed as a new category that will cover the whole range of books which shared the same physical properties and layouts. The term *quaderni* has been chosen because *quaderni* and *libro* were the names that were most frequently given to these books in the late medieval sources. It is an attempt to dismantle a modern category of codex and to reinstate a late medieval one. The materiality of these books became a binding influence on the cultural horizons of late medieval merchants. The definition of *quaderni* will be treated in greater depth in the first chapter of this thesis *Keeping Books: Merchants and Their Quaderni.*

Giovanni Boccaccio asked his readers to imagine the world as merchants saw it, paying ceaseless attention to news from the markets of England, Flanders and the Mediterranean prompting questions, memoranda, counsel, and volumes of letters written to colleagues:

> Riguardate con l'occhio della mente quelle de' mercatanti, co' quali noi continuamente siamo: ogni piccolo movimento ora in Inghilterra, ora in Fiandra, ora in Ispagna, ora in Cipri, ora in una parte e ora in un'altra, sollicitando, ricordando, avvisando, li fa scrivere non lettere, ma vilumi a' lor compagni; e, inanzi tratto, sempre con sospetto l'aportate ricevono; ogni vento gli tien sospesi a' loro navili [...][21]

He saw merchants as wracked with doubt, holding their breath with every change of the wind as thought of the ships that carried their ventures across the seas. The wheels of flame that circled Charon's ember eyes in Dante's *Inferno* sparked Boccaccio's exploration of how merchants perceived the world.[22] For Boccaccio, merchant doubt was as much the product of thinking on the fates of souls at the threshold of damnation as it was the product of material risk and fortune. Doubt was an ever-present context in the cultural horizons of merchants. While the ideas that interested merchants in late medieval northern Italy varied over time, from city to city, and depending on the wealth of the merchant in question, the frame of their cultural horizons, the shifting ways in which they saw and categorised the world, lent a coherence to their identity as a group that was recognised by their contemporaries.

To study merchants is to navigate mythologised depictions of the merchant, medieval and modern, heroic and tragic. Robert Fredona and Sophus Reinert have warned against conflating famous merchants with ideal types of economic agent: for example, against

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[21] Boccaccio, *Commentary on Inferno,* DDP; J. Larner, *Culture and Society in Italy 1290-1420* (London, 1971), 159: 'Looking with the mind's eye of merchants, who are always among us. Every little movement that occurs now in England, now in Flanders, now in Spain, now in Cyprus, now in one place, now in another, makes them write not letters, but rather volumes to their colleagues; urging, remembering, advising; and, before even reading these passages, they are always suspicious of the reports that they receive. Every breath of wind keeps them in suspense on their ships'.
[22] Dante, *Inferno,* III, ll. 97-99, 59.

seeing the banker and founder of the Medici dynasty, Cosimo de Medici (1389-1464), as a 'Faustian entrepreneur'.[23] Nonetheless, Fredona and Reinert have defended the enduring value of the history of capitalism as a field of inquiry that lies at the meeting point between economic history, business history, and cultural history.[24] Christian Bec defined late medieval Italian merchants as having been men of many activities unified by a single goal: profit.[25] Not only material but also spiritual profit was implicit in this definition. More than profit-seeking, it was the distinctive ways in which merchants thought that defined their identity as a group. If merchants must initially be identified by their books, their *quaderni*, in this inquiry, this holding identification will gradually be replaced by a definition of merchants that is grounded in their cultural horizons. This investigation of cultural horizons will historicise and refine our definitions of the medieval merchant.

Across late medieval European societies, the merchant, 'with his bargaynes and with his chevyssaunce', was a familiar figure.[26] To their contemporaries in late medieval northern Italy, merchants were readily defined by the material, spiritual and ethical risks that they ran. Sermons, manuals of the art of trade, mathematical treatises, and literature that engaged with this field of tensions were addressed to merchants: 'a voi, omini banchieri e a voi, mercadanti'.[27] Merchants drew on these sources and their experience to develop the 'ordered reasoning' that they needed to navigate these tensions.[28] Italian

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[23] Fredona and Reinert, 'Origins', 15.
[24] Fredona and Reinert, 'Origins', 36.
[25] C. Bec, *Les marchands écrivains, affaires et humanisme à Florence, 1375-1434* (Paris, 1967), 20.
[26] Chaucer, *General Prologue*, ll. 279-282, in *The Riverside Chaucer* [1978], ed. L. Benson et al. (Oxford, 2008), 23-36; R. Goddard, 'The merchant' in S. H. Rigby and A. J. Minnis, *Historians on Chaucer: The General Prologue to the Canterbury Tales* (Oxford, 2014), 187.
[27] Giovanni Sercambi, *Il Novelliere*, ed. L. Rossi (3 Vols., Rome, 1974), i, p. 153: 'To you, bankers and to you, merchants'.
[28] Cotrugli, *Mercatura,* 51.

preachers praised the loyal and industrious merchant.[29] The good merchant was even compared to the Virgin Mary, who also profited from every single venture.[30] The usurer, imagined as a Lombard or a native of Cahors in France, often on the grounds of his profession as moneylender alone,[31] was this honest merchant's unscrupulous counterpart.[32] Sermons warned that usurers should not be confused with simple merchants.[33] Although, in reality, 'Jewish economic activity and thought' were integrated in the growing sophistication of European commerce,[34] in Christian communities, antisemitic images of Jewish money lenders were invoked to highlight the boundary between ethical and unethical commerce.[35] Medieval merchants knew these models, and positioned themselves carefully in practising their art.

Of course, ideals of the merchant in late medieval northern Italy were themselves another kind of myth. They were contested and were often in tension with merchant practice. Conflict over merchant ideals in late medieval northern Italy was marked by divisions between the various ranks of merchants and the competing commercial identities of rival cities. Change over time in medieval merchant ideals and conflict over these ideas merit more thorough investigation than can be provided here through the quantitative analysis of sources such as last wills and testaments that can be traced to a precise time and place.[36]

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[29] San Bernardino da Siena, *Le prediche volgari,* ed. C. Cannarozzi (2 vols, Pistoia, 1934), i, p. 105.
[30] Giordano da Pisa, *Avventuale Fiorentino 1304,* ed. S. Serventi (Turin 2006), 591.
[31] J. M. Murray, *Bruges, Cradle of Capitalism, 1280-1390* (Cambridge, 2005), 138.
[32] A. Sapori, *Le marchand Italien au moyen âge* (Paris, 1952), xv.
[33] Giordano da Pisa, *Avventuale,* 171.
[34] J. J. Mell, *The Myth of the Medieval Jewish Moneylender* (2 vols, New York, 2017-2018), ii, p. 166.
[35] F. Trivellato, *The Promise and Peril of Credit, What a Forgotten Legend About Jews and Finance Tells Us About the Making of European Commercial Society* (Princeton, 2019), 18, 59.
[36] An approach pursued in: S. K. Cohn, *Death and Property in Siena, 1205-1800: Strategies for the Afterlife* (Baltimore, 1988).

For historians, defining merchants has proved a more challenging task. At the end of the fourteenth century the Milanese merchant Giovanni Dugnano was recommended to Francesco di Marco Datini, the famous *Merchant of Prato,* in a letter as a 'bon merchadante da questa terra'.[37] His business partner Marco Serranieri described himself as a 'civis et Mercator Mediolani' in his will.[38] Yet use of the label merchant was rare. Dugnano founded a company with Marco Serranieri in 1395 that imported Spanish wool and exported finished Milanese fustian cloth.[39] Yet some merchants only operated in local markets.[40] Dugnano and Serranieri recorded their company accounts in a *quaderno,* a book of paper quires, originally bound in limp vellum.[41] Yet *quaderni* were also kept by the civic officials and administrators. Merchants often took on these roles and Marco Serranieri himself was employed by the Milan's cathedral works in 1389.[42] Even artisans who earned their profits not primarily by commerce, but by the labour that they put into making things, kept *quaderni*.[43] Tommaso Zerbi singled out the Dugnano and Serranieri *quaderno* as an early example of 'double-entry' accounting.[44] Yet many quaderni were kept in less formal styles.

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[37] FD, Fondaco di Genova, Carteggio ricevuto dal fondaco proveniente da Milano, 780.7 Lettere di Giovanni da Pessano a Francesco di Marco Datini, 22/1/1398: http://datini.archiviodistato.prato.it/la-ricerca/scheda/ASPO00085679/giovanni-pessano-datini-francesco-marco-e-andrea-bonanno-ser-berizo-e-comp-19 (09/05/23); consulted online: 'a good merchant from this land'; I. Origo, *The Merchant of Prato* (London, 1957).
[38] Zerbi, *Mastro,* xiv: 'citizen and merchant of Milan'.
[39] P. Mainoni, 'Un mercante Milanese del primo Quattrocento: Marco Serranieri', *Nouva Rivista Storica*, 59/3-4 (Milan, 1975), 335.
[40] R. K. Marshall, *The Local Merchants of Prato, Small Entrepreneurs in the Late Medieval Economy* (Baltimore, 1999).
[41] Milan, Archivio della Veranda Fabrica del Duomo, Reg. 39; T. Zerbi, *Il mastro a partita doppia di una azienda mercantile del trecento* (Como, 1936), xv.
[42] Zerbi, *Mastro,* xiv.
[43] SNS-S, IV, 281; Giunta di Nardo Rucellai, *Il Libro discepoli e pigione del tintore Giunta di Nardo Rucellai, Firenze, 1341-1346,* ed. M. Harsch (Pisa, 2018).
[44] Milan, AVF, Reg. 39; T. Zerbi, *Mastro,* xv.

The merchants studied in this inquiry were initially identified not by their wealth, nor by their involvement in wholesale or longer-distance trade, nor by membership of the institutions that regulated merchants and adjudicated their disputes, for example the Florentine *Mercanzia*,[45] nor by a fixed set of financial professions, nor by the degree of sophistication of their accounts, but rather by their *quaderni*, the books that they kept. Merchants were distinguished from artisans, casual investors, and other keepers of *quaderni* in that their fortunes depended on their investments.[46] A merchant's expertise was versatile. As John Larner argued, the growing reach of markets in late medieval Italy meant that a mercantile spirit was diffused across society.[47] Cities vaunted the honesty, skill, and daring of their merchants. It would be misleading to create sharp boundaries between merchant culture and civic culture. Notaries kept physically comparable *quaderni* to merchants. However, notaries used different layouts and scripts.[48] They were also expected to have a more extensive knowledge of Latin than merchants.[49] Although we can distinguish merchants and their books from notaries, they were still part of the same commercial networks. Not only the materiality of a merchant's books but also the form in which they were kept is important in their identification.

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[45] A. Astorri, *La mercanzia a Firenze nella prima metà del trecento, il potere dei grandi mercanti* (Firenze, 1998); C. Quertier, 'Stigmatisation des migrants à l'épreuve des faits, le règlement de la faillite Aiutamicristo da Pisa devant la *Mercanzia* Florentine, 1390', in C. Quertier, R. Chilà, and N. Pluchot (eds), *Arriver en ville, les migrants en milieu urbain au Moyen Âge* (Paris, 2013), 243-259; S. Tognetti and E. Maccioni, *Tribunali di mercanti e giustizia mercantile nel tardo medioevo* (Florence, 2016).
[46] Y. Renouard, *Les hommes d'affaires Italiens du moyen âge* [1949] (Paris, 1968), 11.
[47] J. Larner, *Culture and Society in Italy, 1290-1420* (London, 1971), 30.
[48] I. Ceccherini, 'Le scritture dei notai e dei mercanti a Firenze tra Duecento e Trecento: unità, varietà, stile', *Medioevo e Rinascimento*, 24 (2010), 29-68.
[49] P. Cammarosano, 'I notai nella cultura medievale Italiana', *Italian Review of Legal History*, 7 (2021), 726.

This inquiry will draw on examples from Tuscany, Lombardy, Liguria and the Veneto, a broadly defined northern Italy. Northern Italy has been chosen partly because of its prominence in mythologies of early capitalism. Historians of accounting have often championed the cause of a single northern Italian city, whether Florence,[50] Genoa,[51] Milan,[52] or Venice,[53] as having been the cradle of double-entry bookkeeping, an important proto-capitalist innovation. In this system every transaction was recorded as a debit in one set of accounts and a credit in another so that the books would balance. The cultural history of merchants has also focused on tracing the roots of early capitalist rationality in different Italian cities. Frederic Lane sought to study how the profit-oriented calculations of the fifteenth-century Venetian merchant Andrea Barbarigo were tempered by commercial practice and civic values.[54] Yves Renouard, studying fourteenth-century Florentine merchants, found that they had a distinctive 'mentalité rationaliste'.[55] They believed they could use their reasoning to explain the world, and even to direct it. Renouard maintained that they embodied a capitalist ethic, even if they were unaware of it.[56] In Robert Lopez's profile of Genoese merchants, their identifiable spirit of enterprise was the common denominator of their cultural interests, material and spiritual.[57]

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[50] F. Melis, *Storia della ragioneria, contributo alla conoscenza e interpretazione delle fonti più significative della storia economica* (Bologna, 1950), 480.
[51] H. Sieveking, *Studio sulle finanze genovesi nel medioevo, e in particolare sulla Casa di S. Giorgio,* tr. O. Soardi (Genoa, 1906), 143.
[52] T. Zerbi, *Il mastro a partita doppia di una azienda mercantile del trecento* (Como, 1936), xv.
[53] F. Besta, *La ragioneria seconda edizione riveduta ed ampliata* (Milan, 1916), 349; M. Sagriacomo, S. Coronella, C. Mio, U. Sostero and R. Di Pietra, 'Accounting Culture in Venice through the Lenses of the Centuries: An Introductory View,' in M. Sagraicomo, S. Coronella, C. Mio, U. Sostero and R. Di Pietra, *The Origins of Accounting Culture, The Venetian Connection* (New York, 2018).
[54] F. C. Lane, *Andrea Barbarigo, Merchant of Venice 1418-1449* (Baltimore, 1944), 5.
[55] Y. Renouard, 'Affaires et culture à Florence au XIVe et au XVe siècle', in *Il Quattrocento, Libera cattedra di storia della civiltà fiorentina* (Florence, 1954), 165; Renouard, *hommes d'affaires.*
[56] Renouard, 'Affaires', 167.
[57] R. S. Lopez, 'Le marchand génois: un profil collectif', *Annales*, 13/3 (1958), 513.

To view merchant culture through the lens of their city is to offer a partial view. Such an approach understates the extent to which their books, correspondence, goods, and even reputations were thought of as having been in motion. Even merchants who did not travel imagined the geography of their trade routes and knew the value of the timely arrival of news from distant markets. A merchant's business spanned multiple cities: as the Orlandini company records reveal, a single transaction could involve Bruges, Barcelona, Genoa, Venice, and Prato.[58] The ways in which merchants assimilated new knowledge retained a substantial coherence across different northern Italian towns. The *quaderni* kept by merchants in Pisa will be important sources for this inquiry. Merchants of Pisa have received relatively less attention than merchants in other cities, although there are of course exceptions.[59]

By limiting this inquiry to merchants in northern Italy it will be possible to study merchant culture in greater depth. Southern Italy, Sardinia,[60] and Sicily,[61] have often had a marginal role in narratives of the rise of capitalism, as underdeveloped territories whose resources were exploited by the economies of northern Italy. In his study of Sicily, Stephan Epstein showed how these paradigms have ignored regional specialisation and the dynamism of the island's economy.[62] Studying Naples, Angela Orlandi has demonstrated how the challenges posed by the loss of source material for

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[58] I. Origo, *The Merchant of Prato* (London, 1957), 147.
[59] B. Figliuolo and A. Giuliani, *Merci e mercanti pisani a Firenze e fiorentini a Pisa nei registri doganali trecenteschi* (Rome, 2020); A. Poloni, 'Pisa negli ultimi decenni del trecento, i mercanti-banchieri e i ritagliatori', *Mélanges de l'école française de Rome* (2017); S. Duval, A. Poloni, and C. Quertier, 'Pise dans la seconde moitié du XIVe siècle: sortir d'une vision décliniste', *Mélanges de l'école française de Rome* 129/1 (2017) ; S. Duval, 'La société pisane vue à travers les testaments, adaptations, mutations et permanences face aux crises du XIVe siècle,' *Mélanges de l'école française de Rome* 129/1 (2017).
[60] M. Tangheroni, *Commercio e Navigazione nel Medioevo* (Bari, 1996), 340.
[61] M. Aymard, *La transizione dal feudalesimo al capitalism,* (Turin 1978), 1177.
[62] S. R. Epstein *An Island For Itself, Economic Development and Social Change in Late Medieval Sicily* (Cambridge, 1992), 16.

medieval trade can be circumvented.[63] Expanding the study of the cultural horizons of medieval merchants, across Italy, is an exciting prospect for a future study that sadly lies beyond the practical scope of this thesis.

This inquiry begins c.1348, when recurrent epidemics made markets in late medieval northern Italy more volatile, and covers the period until c.1460, when *quaderni* were a flourishing medium. Unlike codices that were bound and gathered together from completed quires, *quaderni* were sold as blank, ready-bound books. It was this quality, above all, that made them a new medium in late medieval Italy. *Quaderni* provided a space that was suited both to the review and distillation of financial accounts and of religious texts.[64] They were a portable medium through which these ideas circulated, with each codex having the potential to function as a 'kind of library'.[65] This inquiry will end c.1460 when the spread of printing in Italy marked a change in mediums through which knowledge was transmitted.[66] The kinds of knowledge that merchants acquired changed over this period. The learning that led to the identification of the merchant and writer Benedetto Cotrugli (1416-1469) as a 'humanist' [67] was not identical to that of the fourteenth-century Pisan merchant Miliadusso Balduccione.[68] Nonetheless, in both these cases, their cultural horizons, the ways in which they assimilated this knowledge, were still shaped by their experience and education as

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[63] A. Orlandi, *Ora diremo di Napoli, i traffici dell'area campana nei manuali di commercio* (Florence, 2012), 11.
[64] S. Corbellini, *Cultures of Religious Reading in the Late Middle Ages: Instructing the Soul, Feeding the Spirit and Awakening the Passion* (Turnhout, 2013), 53.
[65] Corbellini, *Cultures*, 50.
[66] C. Dondi, 'The 15cBOOKTRADE Project and the Study of Incunabula as Historical Sources', in C. Dondi, ed., *Printing Revolution and Society 1450-1500, Fifty Years that Changed Europe* (Venice, 2020), 24.
[67] L. Boschetto, 'Tra Firenze e Napoli nuove testimonianze sul mercante-umanista Benedetto Cotrugli e sul suo libro dell'arte di mercatura', *ASI,* 163/4 (2005), 687.
[68] Miliadusso's *quaderno* survives: OD, 1312.

merchants. This inquiry will emphasise continuities with the years that preceded and followed its time-frame.

The years c.1348 to c.1460 have been seen as the autumn of the medieval economy. In its classic iteration, the 'Commercial Revolution' describes the advent of rising economic growth, the increasing sophistication of the means of exchange, and the proliferation of trade networks in the cities of the Mediterranean and the Baltic between the tenth century and the start of the fourteenth century.[69] The fourteenth century, by contrast, has been seen as a period of demographic collapse, of crises in the economy and climate, heralding the 'long depression' of the fifteenth century.[70] Recurrent epidemic disease, which had spread swiftly through commercial networks on land and at sea, reduced the range, profitability, and intensity of trade.[71] The response of Italian merchants to these new conditions has been characterised as a retreat from the bold ventures of an earlier age. Norman Gras summed up these changes by describing a shift towards the figure of the 'sedentary merchant' who did not travel, but controlled his investments from his desk, administering them to minimise the risks to which they were exposed.[72] While Gras saw the sedentary merchant as an innovation, others have read this shift away from the travelling merchant, together with changing attitudes towards risk, as a sign that merchant culture was becoming less mercantile. Benjamin Kedar saw these years as a time of demographic and economic crisis.[73] In his view, for

[69] R. S. Lopez, *The Commercial Revolution of the Middle Ages, 950-1350* (Cambridge, 1976), vii.
[70] B. M. S. Campbell, *The Great Transition, Climate, Disease and Society in the Late-Medieval World* (Cambridge, 2016); R.S. Lopez and H. A. Miskimin 'The Economic Depression of the Renaissance', *The Economic History Review*, 14/3 (1962).
[71] Lopez, *Revolution,* 169.
[72] N. S. B. Gras, *Business and Capitalism, an Introduction to Business History* (New York, 1939), 68, 78.
[73] B. Z. Kedar, *Merchants in Crisis, Genoese and Venetian Men of Affairs in the Fourteenth-Century Depression* (London, 1976), 28.

merchants, 'the contraction of the spirit outstripped the contraction of opportunities'.[74] Jaume Aurell, studying merchants in late medieval Barcelona, has argued that their attempts to adapt to new conditions and new learning transformed them into mediocre merchants and mediocre humanists.[75] He described merchant culture in Barcelona between 1370 and 1470 as having lost the coherence of its values, with the imitation of aristocratic culture taking its place.[76]

But rather than being a 'betrayal', the resilient responses of late medieval Italian merchants to volatile conditions are what make this period so intriguing. As Alexander Murray has argued for an earlier period, tracing the effects of an economic shift on ways of thinking, the accelerated turns of fortune's wheel uncovered the value of investment in learning to reason.[77] The reason, or *ragione*, of merchants in late medieval Italy, an idea that will be addressed in depth subsequently, can be seen in this light. The contraction of the volume of commerce and of populations presented the surviving merchants with a period of instability and competition, providing challenges and opportunities. Francesco di Marco Datini, perhaps the most famous of all late medieval Italian merchants, compared himself to a mariner who, although afraid, continued to sail at a time of volatile fortunes.[78] The exogenous shock of recurrent epidemics has been read as an instance of Schumpeterian 'creative destruction' that accelerated the slow processes of market integration, political integration and lowered

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[74] Kedar, *Crisis*, 132.
[75] J. Aurell, 'Merchants' Attitudes to Work in the Barcelona of the Later Middle Ages: Organisation of Working Space, Distribution of Time and Scope of Investments', *Journal of Medieval History*, 27 (2001), 216, 217.
[76] J. Aurell, *Els mercaders Catalans al quatre-cents: Mutació de valors i procés d'aristocratització a Barcelona 1370-1470* (Lleida, 1996), 391, 394.
[77] A. Murray, *Reason and Society in the Middle Ages* [1978] (Oxford, 2002), 18.
[78] I. Origo, *Merchant of Prato*, 39.

transaction costs in late medieval northern Italy.[79] Social boundaries were at once blurred by this volatility and emphasised by those who felt threatened by changing conditions.[80] By approaching merchants through the lens of their cultural horizons, we can make clear the reasons for this instability and the responses of merchants to late medieval anxiety over their rapidly changing fortunes.

To respond to these calamitous, autumnal conditions,[81] late medieval merchants and others categorised, calculated, and imagined the world in sophisticated ways.[82] The late medieval European economy was characterised by improvements in contract enforcement as well as regional market integration and specialisation.[83] Merchant companies and their bookkeeping proliferated, while markets for public debt, insurance and bills of exchange grew in these years.[84] Innovation was supported by the increased geographical mobility of labour and the circulation of knowledge in writing as the world was measured, quantified and codified.[85] These ways of thinking extended seamlessly into spirituality. They facilitated the measurement, calculation, and contemplation of merchants' afterlives. The notion that the horizons of late medieval merchants narrowed, and that the ways in which they thought became less distinctive

[79] S. R. Epstein *Freedom and Growth, The Rise of States and Markets in Europe, 1300-1750* (London, 2000), 55.
[80] G. Petralia, 'Problemi della mobilità sociale dei mercanti, secoli XII-XIV, Italia e Mediterraneo europeo', in C. Sandro (ed), *La mobilità sociale nel medioevo* (Rome, 2010), 270.
[81] J. Huizinga, *The Waning of the Middle Ages, A Study of the Forms of Life, Thought and Art in France and in the Netherlands in the Fourteenth and Fifteenth Centuries* [1924], tr. F. Hopman (London, 1998), 19.
[82] M. Kempshall 'Space, Time, and the World', in I. Lazzarini ed., *The Later Middle Ages* (Oxford, 2021), 139.
[83] S. R. Epstein (with C. Dyer), 'The Economy', in Lazzarini, *Middle Ages*, 55, 75,
[84] Epstein 'Economy', 66, 68; E. S. Hunt and J. M. Murray, *A History of Business in Medieval Europe,* 1200-1550 (Cambridge, 1999), 65.
[85] Epstein 'Economy', 62.

and less effective as the opportunistic outlook of the previous century faded, will be challenged in what follows, presenting new prospects for research.

To illustrate the cultural horizons of merchants in late medieval northern Italy from c.1348 to c.1460, *quaderni* will be a point of departure in exploring a wide range of varying sources, from different places in Italy and times within this period. The study of merchants has frequently been equated with the study of the most famous merchant families and companies. This inquiry will investigate the most well-known examples of *quaderni,* Francesco Pegolotti's, *La pratica della mercatura*, the *Zibaldone da Canal*, Benedetto Cotrugli, *Il libro dell'arte di mercatura*, alongside the most striking examples of *quaderni* kept by lesser-known merchants, especially Pisan merchants, to further our understanding of merchant culture. All these *quaderni* will be placed in the context of the published literature, sermons, religious writings, and letters from late medieval Italy. The works of Dante Alighieri, Giovanni Boccaccio, the sermons of Pisan Dominicans, Domenico Cavalca, Jacopo Passavanti, Giordano da Pisa, and of Bernardino da Siena, Goro Dati's *La Sfera* and selected and published letters written by Francesco di Marco Datini will be important sources. Merchants read and engaged with these literary and religious sources in ways that were distinctive and that were shaped by their education and profession.[86] The tales that merchants wrote, copied and told, the maps and books they consulted, the sermons they heard and the art they engaged with are just as promising sources for the study of their cultural horizons as their accounts, letters, and records of commercial litigation. Of course, the books that merchants read, the sermons they heard and the art they saw were largely

[86] Further unpublished quaderni consulted in the preparation of this thesis offer the prospect of exploring variation in merchant in greater detail in a future study.

those that were respectively circulated, preached, and displayed in their towns.[87] However, they engaged with this material in distinctive ways as merchants. Their cultural horizons can be traced in their responses to literature, art, sermons, and their investments. If these sources have been placed in different categories of inquiry by historians, they were all united as the kinds of material that would have passed across the desks of late medieval merchants. Here, they can profitably be reunited to show the cultural horizons of those who perused them.

Studying the cultural horizons of late medieval merchants can offer a more rounded picture of merchants than has been offered by many studies of merchants as patrons of late medieval art. Learning in general, and art in particular, have been seen as having been in tension with the pursuit of a commercial career. To illustrate his point that investment in culture was 'inversely proportional to the intensity of the business spirit', Lopez cited the relatively small size of Genoa's cathedral.[88] Merchants were aware that paintings were a commodity that could be traded.[89] Yet, in the fourteenth century, contracts became more precise in the stipulations of the content and intended meaning of the works of art they commissioned.[90] Merchants knew that investing in art could affect their social standing and art was a means by which they could efface the social boundaries between mercantile and courtly spheres.[91] They have been seen as wealthy,

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[87] Caroline Barron has noted that merchants in late medieval London read whatever material they could obtain: C. M. Barron, 'What did Medieval London Merchants Read?', in M. Davies (ed), *Medieval Merchants and Money* (London, 2016), 70.
[88] F. Antal, *Florentine Painting and its Social Background: The Bourgeois Republic before Cosimo De' Medici's Advent to Power: XIV and Early XV Centuries* (London, 1947), 31.
[89] R. S. Lopez and I. W. Raymond, *Medieval Trade in the Mediterranean World* [1955], (New York, 2001), 114-115.
[90] D. Bomford, J. Dunkerton, D. Gordon, A. Roy, and, J. Kirby, *Art in the Making, Italian Painting Before 1400* (London, 1989), 7.
[91] J. Le Goff, *Marchands et banquiers du moyen âge* (Paris, 1956), 111.

not 'cultured', patrons.[92] As one of the 'patronising classes', merchants have been seen as a guiding influence on Italian art to the exclusion of poorer groups in society.[93] Yet, as Jill Caskey has shown, writing on 'the art of *mercatantia*' in Amalfi in the 12th and 13th centuries, to reduce the patronage of art by merchants to a top down model of commissioned works is too simplistic.[94] This kind of reduction has obscured how this art embodied the tensions of a society in which merchants whose fortunes had been made in international commerce were increasingly prevalent.[95] The 'broad horizons' that Amalfitan merchants had cultivated in their experience of Mediterranean trade were reflected in the models, techniques and craftsmen of the art they funded.[96] As John Larner has noted, merchants were often involved in collective rather than individual patronage.[97] A merchant's patronage of art could express an affinity between their social, material and spiritual concerns and need be read neither as the expression of a calculation of opportunity cost, nor as a mere attempt to copy courtly culture.

The two sections of this introduction that follow will introduce the concepts of 'cultural horizons' and 'affinities' that will guide this inquiry and set this thesis in the context of the existing literature on merchants.

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[92] Antal, *Painting,* 211.
[93] M. Baxandall, *Painting and Experience in Fifteenth Century Italy* (Oxford, 1988), 39.
[94] J. Caskey, *Art and Patronage in the Medieval Mediterranean, Merchant Culture in the Region of Amalfi* (Cambridge, 2004), 22.
[95] Caskey, *Patronage,* 6.
[96] Caskey, *Patronage,* 14.
[97] Larner, *Culture*, 34.

Medieval Merchants and Their Cultural Horizons

A merchant's cultural horizons were the distinctive (yet shifting) parameters of the ways in which they thought, how they categorised, framed, and assimilated knowledge. The idea of continual change is implicit in cultural horizons. They framed new learning and shifted with each encounter with new knowledge. Cultural horizons were a means by which merchants could orient themselves and navigate the field of material, ethical and eschatological tensions that defined their profession as investors. In late medieval Italy, the idea of the horizon could invoke orientation in time and geography, while expressing the connection between this world and the next. In Dante's *Purgatorio,* the horizon connected the time-space of Mount Purgatory to earthly time, and to Jerusalem on the other side of the globe:

> Già era 'l sole a l'orizzonte giunto
> lo cui meridian cerchio coverchia
> Ierusalèm col suo più alto punto.[98]

An anonymous fifteenth-century Florentine commentary glossed these lines as having described the time of day, and Dante as having pictured Mount Purgatory as perpendicularly beneath Jerusalem.[99] The commentator directed readers to the fourth canto of Purgatory in which Virgil asked Dante the pilgrim to imagine Mount Zion and Mount Purgatory on the same horizon: 'amendue hanno un solo orizzòn'.[100] In the commentary on Dante's *Inferno* that he wrote for Filippo Maria Visconti in 1440, Guiniforte Barzizza (1406-1463) included the notion of perception in his definition of

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[98] Dante, *Purgatorio*, II, ll. 1-3, p. 34; 'Already the sun had reached that horizon whose / meridian circle covers Jerusalem with its / highest point'.
[99] Anonimo Fiorentino, *Commentary on Purgatorio*, DDP.
[100] Dante, *Purgatorio*, IV, l. 70, p. 68; 'the two have a single horizon'; Anonimo Fiorentino, *Commentary on Purgatorio*, DDP.

the horizon as that extremity of heaven, which appears to the human eye in the circuit of the world, that unites the heaven with the Earth.[101] Although their cultural horizons allowed merchants to orient themselves in time and space, they were not the same as the visible horizon. Whereas a horizon could be perceived, a merchant's cultural horizons were imagined. The orientation that merchants carried out through the frame of their cultural horizons was as much an ethical and spiritual task as a practical one.

Cultural horizons were bounded by the medium in which they were shaped and reshaped, in this case, *quaderni.* The materiality and form of this medium, that seems to have emerged as a pragmatic response to the need to keep records of transactions and to calculate investments, had far-reaching effects that extended beyond the original intended purpose of these books. In an image that this inquiry will return to, in *Paradiso* Dante depicted the universe as comprising the scattered quires of a book, gathered together and bound by divine love in the empyrean.[102] The idea that the limits of a book meant the limits of their world would not have been unfamiliar to merchants in late medieval northern Italy.

The debts incurred by this attempt at what David D'Avray has termed 'conceptual engineering', the positing of new concepts by historians to further their research, ought to be acknowledged here.[103] Jacques Le Goff invoked horizons to describe the interaction of different elements of a medieval merchant's *mentalité*: neither the vague history of a collective psyche nor the mechanical search for the cultural effects of socio-

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[101] Guiniforto delli Bargigi, *Commentary on Inferno*, DDP.
[102] Dante, *Paradiso*, XXXIII, 85-87, 664; J. Ahern, 'Binding the Book: Hermeneutics and Manuscript Production in Paradiso 33', *Publications of the Modern Language Association,* 97/5 (1982), 800.
[103] D. L. d'Avray, 'The Concept of Magic', in S. Page and C. Rider eds., *The Routledge Handbook of Medieval Magic* (Oxford, 2019), 52.

economic change, but rather the history of the changing means by which ideas were received, of ways of thinking, a history that remained close to cultural history, the history of values and of beliefs.[104] Writing about late medieval perceptions of time, he famously proposed two horizons of a Christian merchant's existence, 'merchant time' and 'church time'.[105] Le Goff's use of horizons was subtle. He investigated not only the tensions between these ways of thinking about time but also their coexistence; merchants kept both horizons in mind. In literary criticism, Hans Robert Jauss described how readers confront texts within the horizon of their expectations, the cumulative result of individual experience, familiar norms, traditions, and methodological understanding.[106] These horizons mediate the reception of a work.[107] Richard Scholar took up the phrase 'cultural horizons' to describe how Michel de Montaigne strove to think beyond those things which he took for granted.[108] But horizons do not represent limits. They are connected to mentalities. They mediated the reception of ideas. They can be thought of as a frame and not as an impassable barrier.

Cultural horizons provide a way to navigate between claims that merchants had their own distinctive mercantile identity, and claims that they had nothing in common. They can be applied to commercial, literary, and visual sources, to explore how merchants navigated a common set of challenges and tensions.

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[104] J. Le Goff, 'Les mentalités: une histoire ambiguë', in J. Le Goff and P. Nora eds., *Faire de l'histoire, nouveaux problèmes, nouvelles approches, nouveaux objets* (Paris, 1974), 745.
[105] J. Le Goff, 'Au moyen âge: temps de l'église et temps du marchand [1960]', in J. Le Goff, *Un autre moyen âge* (Paris, 1999), 60.
[106] H. R. Jauss, *Aesthetic Experience and Literary Hermeneutics*, tr. M. Shaw (Minnesota, 1982), 14.
[107] H. R. Jauss, *Toward an Aesthetic of Reception*, tr. T. Bahti (Minnesota, 1982), 25.
[108] R. Scholar, *Montaigne and the Art of Free-Thinking* (Oxford, 2010), 11.

Merchant Affinities

> Chomuccio di Barone da Piombino de dare a me / Miliadusso a di ii di gennaio li quali / li diei co(n)tanti i(n) compagnia di mare a mio / rischio di mare e di gente dio li dia salva/mento e guadagno am(en) i(n) termine d'uno / mese e mezzo che viene l. xv S. x. / [...] Ane dato Chomuccio s(oprascrit)to a di xxii di febbraio £. xv S. x / e di guadagno l. 3 S. 0.[109]

> Questi sono li p(er)doni di S(an)to Piero a Grado / [...] Som(m)a anni undici milia settecento cinquanta nove e die LXXVI [...] Som(m)a anni diecimilia settecento meno die xii.[110]

On 3 January 1344, the Pisan merchant Miliadusso Balduccione recorded in his *quaderno* his investment in a company of the sea together with Chomuccio di Barone da Piombino. This investment led Weber to identify Balduccione as an 'early capitalist'.[111] On a later page of his *quaderno,* exploiting the form that facilitated his commercial accounting, Balduccione calculated the years and days that could be granted in remission from a soul's stay in Purgatory by attending at specific times the church of San Piero a Grado outside Pisa. Neither of these entries in Balduccione's *quaderno* can be described as strictly rational or spiritual. For Balduccione, ideas of

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[109] OD, 1312, fo. 32v; 'Chomuccio di Barone da Piombino must give me, Miliadusso Balduccione on 2 January, that which he invests in cash in the Company of the Sea, at my risk of the seas and of men, God save them and grant me profit, amen, at the end of the next month and half, l. xv S. x. [...] On 22 February, the aforementioned Chomuccio gave l. xv S. x and of profit £3 S0'.
[110] OD, 1312, fo. 107v; 'These are the pardons of San Piero a Grado [...] In total eleven thousand seven hundred and fifty-nine years and LXXVI days [...] In total ten thousand seven hundred years less twelve days'.
[111] M. Weber*, The History of Commercial Partnerships in the Middle Ages* [1889], tr. L. Kaelber (Oxford, 2003)*,* 148.

profit and of salvation were inseparable. As his *quaderno* reveals, the separation of economic history and the history of *mentalités* cannot be sustained. Studying the cultural horizons of late medieval merchants will reveal this affinity between the material and spiritual, which can easily be framed, in misleading terms, as a conflict.[112]

The study of affinities can be traced to Weber, who understood them as the reciprocal influence of forms of religious belief, and of professional ethics, on economic culture.[113] Weber's definition drew inspiration from Goethe's 1809 novel *Elective Affinities,*[114] in which relationships between characters were described, in the language of early nineteenth-century chemistry, as reactions between elements that formed new compounds.[115] Weber's notion of affinities that were characterised by reactivity rather than conflict will be an important point of reference for this inquiry. The study of affinities requires that we work backwards from familiar classifications to understand new forms. Before we can understand the unfamiliar, we must first categorise it in terms of the familiar. In Goethe's novel, one of the characters sets out this argument, which resonates with Weber's use of affinities:

> [...] only once we have fully understood the things we are familiar with, can we proceed together towards the things with which we are not familiar [...] the

[112] Giacomo Todeschini has argued that the tendency to view the material and the spiritual as having been in conflict is a prevailing challenge of merchant historiography: 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.
[113] Max Weber, *The Protestant Ethic and the Spirit of Capitalism, The Revised 1920 Edition* [1920], tr. S. Kalberg (Oxford, 2011), 109.
[114] P. Ghosh, *Max Weber and the Protestant Ethic, Twin Histories* (Oxford, 2014), 390.
[115] R. H. Howe, 'Max Weber's Elective Affinities: Sociology Within the Bounds of Pure Reason', *American Journal of Sociology,* 84/2 (1978), 367.

> complicated cases are in fact the most interesting. Only through them do we realise the degree of affinity [...][116]

This thesis will adopt this approach. Each chapter will start with a category that is a familiar element of late medieval merchant culture. Merchants kept accounts in their books, they trained for their trade, they measured their goods, they had a keen awareness of the value of time, they knew the trade routes and they depended on their reputations as reliable counterparties. Having started with the familiar, it will then be possible to reconsider these elements to establish their place in a late medieval merchant's cultural environment. When merchants kept their books, they accounted for their souls. Merchants applied their learning and reasoning to their ethics, to their analysis of social status and in imagining the afterlife. Measure meant the justice of exchanges and the virtue of the mean. Practical measuring facilitated the contemplation of eschatology. The value of quantifiable time was held to be of a different order from the value of eternity. Trade routes were marked by markets and shrines and protected by the invocation of saints. Merchants knew that their *fama,* or reputation, secured the stability of their profit, whether worldly or spiritual.

The calculation of the afterlife and the ethical vocabulary invoked by late medieval merchants are two approaches to the study of merchant spirituality that prioritise affinity over conflict. Thomas Lentes and Robert Schaffern, viewing this problem from the perspective of piety, have charted the emergence of an arithmetic of salvation in response to the growing reach of late medieval markets.[117] Counting repeated prayers

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[116] Goethe, *Elective Affinities* [1809], in Goethe, *Selected Works* (New York, 1999), 155.
[117] A. B. Angenendt, T. Braucks, R. Busch, T. Lentes, and H. Lutterbach, 'Gezählte Frömmigkeit', *Frühmittelalterliche Studien*, 29/1 (1995), 43; R. W. Schaffern, 'The Medieval Theology of

and indulgences could also have a mnemonic effect that facilitated the contemplation of sin.[118] In this quantified piety, reckoning in an account book and weighing by scales were the instruments through which a soul's fate could be imagined.[119]

Counting, it has been suggested, generated harmony between the material and spiritual in merchant culture. Approaching this problem from the perspective of individual merchants, in his survey of wills from fourteenth-century Avignon, Jacques Chiffoleau coined the phrase 'la comptabilité de l'au-delà' to describe merchants who used quantification and calculation to imagine and measure eschatology.[120] He saw the repeated masses to be said for the health of their souls, which were funded by the bequests of merchants in their wills, as part of a logic of accumulation.[121] Chiffoleau presented this logic as an extension of the spirit of capitalism, with its inculcation of the duty to accumulate, into the sphere of religious investments. In Chiffoleau's account, the trauma of recurrent epidemics in towns such as Avignon after 1348 created the conditions in which the 'modern rationality' practised by merchants, with its emphasis on quantification, could be adopted more widely across society.[122] The idea of spiritual accounting has been taken up by the most recent scholarship on merchant spirituality. Notably, Emily Kelly and Cynthia Turner Camp have seen the appeals of

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Indulgences', in R. N. Swanson, *Promissory Notes on the Treasury of Merits, Indulgences in Late Medieval Europe* (Leiden, 2006), 21.

[118] Angenedent, Braucks, Busch, Lentes and Lutterbach, 'Gezählte Frömmigkeit', 48.

[119] Angenedent, Braucks, Busch, Lentes and Lutterbach, 'Gezählte Frömmigkeit', 7.

[120] J. Chiffoleau, 'Avant-propos', in J. Chiffoleau*, La comptabilité de l'au-delà, Les hommes, la mort et la religion dans la région d'Avignon à la fin du Moyen Âge* [Rome, 1980] 2nd edn (Paris, 2011), xxxiiii.

[121] Chiffoleau, *Comptabilité,* 337.

[122] Chiffoleau, *Comptabilité,* 450.

merchants for the intercession of the saints as a 'way of balancing their spiritual ledgers'.[123]

However, the equation of accounting with counting rests on a precariously narrow understanding of how merchants kept their books. *Quaderni* were important as a distinctive medium and as a frame in which merchants could write and reason. The prayers and eschatological calculations that merchants noted in these *quaderni* were more complex than merely counting the number of masses, just as investing was not merely a matter of counting florins. For Chiffoleau, 'la comptabilité de l'au-delà' was still a part of 'désacralisation' or disenchantment, because the attempt to rationalise the afterlife by means of measurable periods that corresponded to penance and prayer challenged the divine hegemony over time.[124] Yet different horizons of time overlapped in merchant *quaderni*, where they would record payments that were due on saints' feasts. The eternal time of salvation or damnation resisted quantification. Investigating merchant *quaderni* as material books in which merchants simultaneously accounted for their investments, worldly and spiritual, is another way in which depictions of late medieval merchant culture can profitably be historicised.

The assumption that calculation merely implied counting will also be questioned here. Weber saw the propensity to calculate as a quintessential element of capitalist thought.[125] He defined calculation as the quantification of the projected advantages of a certain course of action, grounded by regular comparison to the results of completed

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[123] C. T. Camp and E. Kelley (eds), *Saints as Intercessors between the Wealthy and the Divine: Art and Hagiography among the Medieval Merchant Classes* (New York, 2019), 55.
[124] Chiffoleau, *Comptabilité*, 354.
[125] Ghosh, *Twin Histories,* 164.

actions.[126] Insofar as this calculation was made in terms of money, oriented towards profit and considering the principle of marginal utility, he thought this was the most perfect example of a capitalist rationality.[127] The usefulness of calculation was neither bounded within markets nor limited to monetary calculation. In this thesis, calculation will be defined as the calculation practised by merchants keeping their books: an ordered process, according to which they reviewed a categorised record of the past to facilitate the projection of material and eschatological futures.

It is important to remember that this kind of calculation exploited not only the mathematics of arithmetic but also of geometry and proportion. The mathematics of proportion enabled merchants to convert the values of different currencies, to compare areas of landholdings, and to gauge the measurements of goods, while treating their investments as having been in motion rather than static. Michele Bacci has examined spiritual investing through the testamentary bequests of late Italian medieval merchants.[128] He argued that these investments were encouraged by mendicant sermons which emphasised that charity that was proportionate to the risks of their profession was a means of balancing their sin.[129] Where the sin of usury was concerned, this same idea of justice as balance meant that restitution was needed to rectify the sin; repentance alone was insufficient. [130] Purgatorial time was measured by its proportional relationship to earthly time, the mathematics of proportion enabling merchants to

[126] Weber, *Economy and Society*, i, p. 86.
[127] Weber, *Economy and Society*, i, p. 87.
[128] M. Bacci, *Investimenti per l'aldilà* (Bari, 2003), v, 42.
[129] M. Bacci, 'Les frères, les legs et l'art: l'augmentation du culte divin', tr. V. Rouchon, in N. Bériou and J. Chiffoleau (eds), *Économie et religion, L'expérience des ordres mendiants XIIIe-XVe siècle* (Lyon, 2009), 567.
[130] L. Armstrong, *The Idea of a Moral Economy, Gerard of Siena on Usury, Restitution and Prescription* (Toronto, 2016), 18.

imagine the lengths of journeys of their souls across the topography of Purgatory.[131] By studying the full range of learning that was thought to have been needed to make the perfect merchant, the importance of ideas of proportion and motion in merchant eschatology will be revealed.

Detecting the use of the language of the market to describe the afterlife and the language of piety to describe investments has been a valuable means of studying the affinities that distinguished merchant culture. Bec pioneered this approach, tracing the particular ways in which merchants invoked seemingly familiar terminology in their writings, for example: fortune, reason, and prudence.[132] Cecilia Iannella has traced the language of spiritual accounting in fourteenth-century Pisan sermons.[133] For Giacomo Todeschini, medieval economic thought was, properly speaking, a medieval economic ethic, which he equated to a medieval economic vocabulary.[134] He argued that mendicant preachers in late medieval Italy integrated the logic of the market into the system of Christian values.[135] Merchant vocabulary plays an important part in this thesis, yet by studying their cultural horizons, it will be possible to explore not only how they used language, but also how they framed knowledge and their reception of terminology.

The meanings of a constellation of ideas that burned bright in the cultural horizons of merchants in late medieval Italy merit detailed exploration: ideas of *ragione*, *fortuna*, *misura* and *fama*. *Ragione,* or reason, meant accounting, and it could mean a set of

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[131] J. Le Goff, 'La naissance du Purgatoire [1981]', in J. Le Goff, *Un autre moyen âge* (Paris, 1999), 308.
[132] C. Bec, 'Au début du XVe siècle: mentalité et vocabulaire des marchands florentins', *Annales. Histoire, Sciences Sociales,* 22/6 (1967), 1207, 1221, 1222.
[133] C. Iannella, *Etica urbana,* 137.
[134] G. Todeschini, *Il prezzo della salvezza, lessici medievali del pensiero economico,* (Rome, 1994), 15.
[135] Todeschini, *Lessici,* 216.

accounts or an account book.[136] It also described an ordered, mercantile way of thinking, influenced by the medium of *quaderni* that could equally be applied beyond the confines of the marketplace. When two merchants in late medieval Pisa recorded the *ragione chomuna* of their bank in their *quaderno,* they invoked all these meanings of *ragione*. Merchants conceived of worldly risk as the realm of *fortuna* or fortune. Their destinies on Earth and their material wealth were vulnerable to fortune. The most direct illustration of this meaning is that, in insurance contracts, *fortuna* was at times synonymous with a tempest or storm at sea.[137] This vulnerability could be mitigated through *ragione*, but not resolved. Yet they imagined the fates of their souls, along with their spiritual goods and investments, as being beyond the reach of Fortune. *Misura*, or measure, encompassed the measuring and gauging of goods in the marketplace. More than this, in merchant ethics and spirituality, it also meant an older sense of the virtue of the just mean and of proportionate conduct. Measuring was at once a practical and a spiritual activity. It is in this sense that Paolo da Certaldo (1315-c.1370) defined courtesy as nothing other than measure in his merchant manual, telling his readers that if they ordered their affairs with measure, they would reach a good end and could not fail.[138] *Fama* signified a merchant's reputation, the circulation of news, and a kind of memory. Although the role of trust in merchant culture has received far more attention than that of *fama*, the latter was a far more prominent idea in late medieval Italy.

Merchant culture has been studied not only through the terms that merchants invoked, but also through the vernacular tales that circulated among them, the literature they encountered, heard, and copied. These tales responded to and shaped contemporary

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[136] Bec, *Vocabulaire,* 1214.
[137] Bec, *Vocabulaire,* 1207.
[138] Paolo da Certaldo, *Costumi*, 13.

attitudes and perceptions. For Lopez, the sheer volume of commercial writing and the specialised literacy that late medieval merchants needed justified the investigation of merchants through these sources.[139] Vittore Branca heard in the *Decameron* a 'merchant symphony' underscored by the anxieties of a burgeoning commercial society.[140] These tales were not passive. They invited 'reciprocal acts of imaginative thought', as Terence Cave has argued in a different context.[141] In late medieval Italy, too, literature's instrumentality was a known quality. According to Giovanni Boccaccio, literature should 'awake the idle, stimulate the dull, restrain the rash, subdue the criminal and distinguish excellent men'.[142] Merchants framed the world in their literary horizons. Literature was written in commercial contexts. It offered models of how merchants should behave. More than this, merchants could think with literature to explore the field of material, ethical and eschatological tensions that were the distinguishing feature of their profession as investors.

Dante's *Inferno, Purgatorio* and *Paradiso* are especially rich sources for the investigation of the affinity between the worldly and the spiritual in merchant culture. Dante's works would have been a shared point of reference among merchants in late medieval Italy. A fourteenth-century copy of the *Commedia,* written in *mercantesca* script in a *vacchetta*, a tall, slim variant of a merchant's *quaderno*, preceded by a vernacular translation of Graziolo Bambaglioli's commentary on *Inferno*, and illustrated by its copyist, bears witness to the close engagement of merchants with

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[139] R. S. Lopez, 'The Culture of the Medieval Merchant', *Medieval and Renaissance Studies,* 8 (1979), 54.
[140] V. Branca*, Boccaccio Medievale* (Florence, 1970), 83.
[141] T. Cave, *Thinking with Literature, Towards a Cognitive Criticism* (Oxford, 2016), 14.
[142] Boccaccio, *The Genealogy of the Gentile Gods*, XIV:7, in eds. trs. A. J. Minnis and A. B. Scott, *Medieval Literary Theory and Criticism c.1100-c.1375* (Oxford, 1998), 420.

Dante.[143] Cursi and Miglio identified fifteen copies of Dante's *Commedia* from the fourteenth and fifteenth centuries written in *mercantesca* script.[144] A *quaderno* kept by the merchant Giovanni da Uzzano (1420-1445) contains not only financial records but also a list of loans made from his library to his friends and colleagues. Two glossed '*quaderni*' of Dante feature in his library list.[145] Dante was a contributor to the ethical debates that the volatility of late medieval markets provoked. Moreover, by thinking with Dante's verses in mind, merchants could imagine their own afterlives. Dante's reach extended beyond late medieval markets to the origins of the idea of capitalism itself. Marx was an avid reader of Dante, and the *Inferno* lent its topography to the structure of *Capital*.[146] The extent of his influence offers a strong reason to invoke Dante as a guide to the cultural horizons of late medieval merchants.

Now that I have defined the approach of studying cultural horizons, and examined the place of the affinity between the spiritual and the material in the study of medieval merchants, I will outline each chapter of this thesis in greater detail.

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[143] M. Cursi and L. Miglio, 'Carte che ridono poco. La *Commedia* in mercantesca', in R. Arqués and M. Ciccuto eds., Dante visualizzato: carte ridenti (5 vols, Florence, 2017), i, pp. 68-69; S. Picarelli, 'Nel cantiere di un mercante copista per passione: il Pluteo 90 Inf. 42 della Biblioteca Medicea Laurenziana di Firenze', in C. Perna (ed), Immaginare la *Commedia* (Rome, 2022), 25, 28; Florence, Biblioteca Medicea Laurenziana, Pluteo 90 inferiore 42, http://mss.bmlonline.it/s.aspx?Id=AWOMTP-yI1A4r7GxMWY2&c=Dantis%20Infernus%20cum%20gloss.%20anon#/book (09/05/2023); consulted online; Illustrations to the manuscript viewed online; https://www.dante.unina.it/ms/250037 (09/05/2023).
[144] Cursi and Miglio, 'Carte', 61.
[145] SNS-S, I, 2, fo. 182r.
[146] W. C. Roberts, *Marx's Inferno: The Political Theory of Capital* (Princeton, 2017), 12, 27.

Chapter Outlines

The medium of *quaderni* is the subject of the first chapter, *Keeping Books: Merchants and their Quaderni*. As we have seen, the purchase of already bound books of blank paper leaves was a relatively new phenomenon.[147] These *quaderni* were the most important tool of the merchant's art and emblematic of his identity. Reading *quaderni* as account books, as evidence of mercantile propensity for a particular kind of writing and calculation, has led to late medieval Italian merchants being cited as early capitalists.[148] Yet the effects of the materiality, form, and layouts of these *quaderni* reached beyond pragmatic bookkeeping to range across merchant culture. This new medium created the space in which merchants categorised and imagined the world around them in distinctive ways.

Having defined *quaderni* as a set of source materials and a new medium, the second chapter, *The Perfect Merchant*, will investigate merchant education, the transmission and formation of the cultural horizons of merchants in late medieval Italy. Reading, teaching, and experience were the making of a merchant. Manuals of the practice and art of trade, mathematical treatises, vernacular *novelle*, penitential manuals, sermons and the visual iconography of the ideal merchant all offered models of behaviour to aspiring merchants. Mastering knowledge of the mechanics, geography, and ethics of exchange by itself was insufficient. Aspiring merchants had to learn a particular way

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[147] J. Steinberg, *Accounting for Dante: Urban Readers and Writers in Late Medieval Italy* (Notre Dame, Indiana, 2007), 144.
[148] Max Weber, *The History of Commercial Partnerships in the Middle Age* [1889], tr. L. Kaelber (Oxford, 2003), 148.
S. A. Reinert and R. Fredona, 'Merchants and the Origins of Capitalism', *Harvard Business School Working Paper*, 18/021 (2017), 26.

of thinking and of approaching problems, merchant *ragione*. This was seen as a merchant's surest defence against the turns of Fortune's wheel. Late medieval ideals of the merchant complicate familiar definitions put forward by historians. In late medieval Italy, the perfect merchant was imagined as a man of universal learning who reasoned with *ragione*, reckoning profit and loss, sinfulness and virtue in every venture. The measure of his success was not only riches but how they were acquired and how they would contribute to his city.

Merchants were meant to abide by measure in all their affairs. The third chapter, *Measure*, will examine the meanings that measure held for merchants in late medieval Italy. Merchants needed to have a practical familiarity with measuring in order to value the goods that they bought and sold. They were taught the techniques of direct measuring with tools, and indirect measuring through gauging and the mathematics of proportion. To approach a problem with merchant *ragione* was often to quantify or to imagine by measuring. Accurate measurement was a symbol of marketplace justice. This grounding in measuring changed the way in which merchants understood measure beyond the confines of the marketplace. As an idea, measure, in ethics, commercial law, literature and sermons, meant the virtue of the mean, of proportionate conduct. The sudden gains made by successful merchants, together with the instability of their fortunes, provoked anxiety at what seemed to be intensifying social volatility. Measure was proposed as a new definition of courtesy in some merchant writings in answer to this anxiety. Even in Purgatory, measure, proportion, and justice were inseparable ideas. As an activity, measuring provided a lens through which merchants could review their investments, contemplate justice, and emulate virtue. Quantification changed the way in which merchants imagined the landscape of the afterlife.

The fourth chapter, *Time*, will explore their perceptions of time, an integral part of their cultural horizons. Merchants knew that in their material and spiritual investments, value was determined by measure and timing. The precision with which merchants reckoned time has been seen as having been at its most accurate in their contracts and business dealings.[149] Yet payments were ordered by the liturgical calendar and merchants calculated far longer ranges of the time in accounting for a soul's stay in Purgatory than in accounting for their investments. Astrology played an important part in determining when the time was right. Merchants recorded the births of their children with greater precision still, because of the degree of accuracy needed to draw up horoscopes. In all these cases, merchants seem to have set the value of the immeasurable time of eternity above that of any measure of quantifiable time.

The fifth chapter, *Charting Horizons,* will show how a merchant's cultural horizons entailed imagining not only time but also geography in a particular way. Travel, real and imagined, was seen as essential to assembling the cultural horizons that would enable a merchant to perfect their art. In Dante's *Inferno,* Ulysses' last voyage was driven by his desire to 'divenir del mondo esperto, / e delli vizi umani e del valore'.[150] Merchants were equally driven by their desire to become experts in the different markets of the world and in understanding value. Yet geography (and this was equally true for Dante's Ulysses) was also inextricable from divinely ordered cosmography. Navigation entailed a considerable affinity between the practical and spiritual.

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[149] S. A. Epstein 'Business Cycles and the Sense of Time in Medieval Genoa', *The Business History Review,* 62/2 (1988), 259.
[150] Dante, *Inferno*, XXVI, ll. 98-99, p. 270: 'To gain experience of the world, and of human vice and worth'.

Merchants measured distances on maps that were drawn to scale and framed by protective saints.[151] They kept financial accounts of voyages that recorded the saying of topographical prayers, allowing a merchant mariner to orient themselves and invoke the protection of coastal shrines.[152] When merchants surveyed the world on paper, they charted the horizons of trade, of the classical past, of vices and virtue and of salvation.

Fama, the sixth and final chapter of this thesis, will follow the path set out by each of the previous chapters to explore the particular way in which merchants understood *fama*: how they were perceived. The cultural horizons of merchants converged in the aim of securing a particular kind of '*buona fama'*. It was of grave importance to merchants, whose profits and salvation depended on their *fama*. By keeping their books, thinking with *ragione*, abiding by measure, valuing time, and charting their horizons, merchants in late medieval Italy sought to perfect their art and establish enduring identities as virtuous members of their communities. Merchants who secured a *buona fama* were prepared for the closing of their books, for the audit of their investments and of their souls.

Taken together, these chapters, with each building on the one that preceded it, will explore how merchants approached the spiritual and ethical tensions that emerged from their profession by employing a distinctive way of reasoning, showing how they received and engaged with ideas through the shifting frames of their cultural horizons.

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[151] Laura De Marchi, Mari dipinti e immagini sacre nella cartografia, per una storia di carte atlanti e planisferi miniate a Venezia nel XIV e XV secolo (Ph.D. thesis, Università Ca'Foscari Venice, 2017).
[152] V. Ruzzin '*La Bonna Parolla*. Il portolano sacro genovese,' in *Atti della Società Ligure di Storia Patria*, 53/2 (2013), 21-59.

1. Keeping Books: Merchants and Their *Quaderni*

If a merchant's books were the medium in which their cultural horizons were formed and transmitted, then it is only fitting that their *quaderni* should be the starting point of this investigation, occupying the paper leaves that follow.

> Scrivere bene la ragione e non errare. Amen.[1]

Francesco Pegolotti (c.1290-c.1349), a factor of the Florentine Bardi company, counselled readers of his manual for merchants, above all else, to keep their books with precision. Accounting allowed merchants to record their investments, to calculate risks and to divide profits between partners. *Quaderni*, ready-bound, blank books formed of paper quires of regular dimensions, in which merchants kept these accounts, were a flourishing medium. They were also intimate books in which personal and family ties were recorded. They could be used for the calculation of eschatological as well as commercial risks. The profits projected on their pages were never separable from consideration of divine reward or sanction. At times, they provided a space in which vernacular literature and written prayers were copied.[2] The fourteenth-century Venetian *Zibaldone da Canal,* for example, with its mathematical problems, sketches of ships, written prayers, medicinal recipes, and vernacular tale of the birth of Tristan,

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[1] Francesco Pegolotti, *La pratica della mercatura*, A. Evans ed., (Harvard, 1936), 20: 'Keep your accounts faithfully and do not make mistakes. Amen'.

[2] J. Steinberg, *Accounting for Dante, Urban Readers and Writers in Late Medieval Italy* (Indiana, 2007); C. Bec, *Les marchands écrivains, affaires et humanisme à Florence, 1375-1434* (Paris, 1967); V. Branca ed., *Mercanti, scrittori, ricordi nella Firenze tra Medioevo e Rinascimento, Paolo da Certaldo, Giovanni Morelli, Bonaccorso Pitti e Domenico Lenzi, Donato Velluti, Goro Dati, Francesco Datini, Lapo Niccolini, Bernardo Machiavelli* (Milan, 1986).

is just such a *quaderno*.[3] Yet, as this example demonstrates, *quaderni* were more than just a new accounting medium, and they were ideally suited to a diverse range of uses.[4] That they were sold as blank ready-bound books, rather than being gathered from completed quires and bound together when they were finished codices, is significant. As a new medium, *quaderni* facilitated new ways of thinking. A merchant's *quaderni* were the medium in which their cultural horizons took shape and found expression.

Quaderni have been studied most often as account books. The root of the idea that the pages of *quaderni* were the cradle of capitalism can be traced back to Weber. For Weber, the rationality that accounting demonstrated, itself a precocious sign of early capitalism, was held in tension with late medieval spirituality.[5] More recently, Richard Goldthwaite has stressed the growing reach of these registers from the end of the thirteenth century as a medium kept by a wider range of people with a greater regularity than ever before.[6] Only after we have addressed readings of *quaderni* as the archetypes of modern account books can the reckonings that merchants made with their *quaderni* be historicised. Late medieval merchants did not imagine accounting to be a straightforwardly secular activity.

While the history of late medieval accounting is not a new field of enquiry, the effects that keeping a *quaderno* of accounts each day had on the cultural horizons of Italian merchants is less well explored. An important exception is offered by the work of Armando Sapori. Sapori rejected Werner Sombart's imposition of a false uniformity

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[3] *Zibaldone*.
[4] F. Allegrezza, 'La diffusione di un nuovo prodotto di bottega: ipotesi sulla confezione dei libri di famiglia a Firenze nel quattrocento', *Scrittura e civiltà*, XV (1991), 260.
[5] P. Ghosh, *Max Weber and the Protestant Ethic: Twin Histories* (Oxford, 2014), 249.
[6] R. A. Goldthwaite, *The Economy of Renaissance Florence* (Baltimore, 2009), 93.

and his tendentious comparison of late medieval account books to modern accounting methods.[7] Similarly, Sapori proposed that invocations of divine protection in late medieval accounts may have been more than just expressions of hope that business ventures would end well, and could have been an effective means of discouraging fraud.[8]

Spiritual accounting, 'la comptabilité de l'au-delà', was detected by Chiffoleau in bequests for accumulated series of masses in wills from fourteenth-century Avignon.[9] Chiffoleau saw this spiritual accounting as the consequence of the trauma of recurrent epidemic disease.[10] According to Chiffoleau, the accountability of the afterlife was, paradoxically, a part of 'désacralisation', or disenchantment with the world, because attempts to measure the afterlife in penances and prayers challenged the divine hegemony over time.[11] By defining the accountability of the afterlife as an expression of the arithmetic of accumulation, Chiffoleau's model entails the separation of secular and spiritual accounting, and simplifies the nature of accounting as an activity. It seems that the medium of *quaderni,* their materiality, forms and layouts may have had a greater effect on accounting in merchant spirituality than recurrent epidemics. Chiffoleau's model will be called into question through the study of *quaderni* and the ways in which merchants kept their books.

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[7] A. Sapori, *Le marchand italien au moyen âge* (Paris, 1952), xlv.
[8] Sapori, *Marchand,* lxv.
[9] J. Chiffoleau, 'Avant-propos', in J. Chiffoleau, *La comptabilité de l'au-delà, Les hommes, la mort et la religion dans la région d'Avignon à la fin du Moyen Âge* [Rome, 1980] 2nd edn (Paris, 2011), xxxiiii.
[10] Chiffoleau, *Comptabilité,* 450.
[11] Chiffoleau, *Comptabilité*, 354.

The utility of *quaderni* in commerce was established by their twin role as the books in which accounts were kept and a record of legal proof. [12] The Perugian jurist Baldo degli Ubaldi (1327-1400) considered the status of *Quaderni* in his discussion of the value of credit and debit accounts as proof in litigation between merchants.[13] He argued that a merchant's authentic *quaderni*, whether they were devoted solely to business accounts, a 'codex rationum', or less formally kept codices, a 'simplex memoriale', held the status of public writing in commercial disputes.[14] As such, *quaderni* were sufficient proof in and of themselves to pursue a debt. The quality of *quaderni* as a record of public writing stemmed from the initial consent between the counterparties concerned, contained in the start of a set of accounts.[15] Recording a transaction in a *quaderno* was the same as a confession before a witness, regardless of whether or not the counterparties were present.[16] Yet Degli Ubaldi cautioned that the status of *quaderni* as records of public writing was bound up with a merchant's profession. To be a merchant was almost to fulfil a public role, and this set a merchant's *quaderni* apart from other sets of books. Usurers were not considered to be merchants. Entries in a usurer's *quaderni* would lose the status of public writing, just as the condemned usurer had lost this status as a merchant.[17] Yet the entries that merchants confessed in their *quaderni* were not only made in the expectation of their value as legal proof; they also functioned as a record of eschatological proof in the expectation of divine audit.

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[12] M. Fortunati, *Scrittura e prova, i libri di commercio nel diritto medievale e moderno* (Rome, 1996), 31.
[13] Baldo degli Ubaldi, *Super quarto et quinto codicis* (Lyon, 1539), p. 31r.
[14] Baldo degli Ubaldi, *Codicis*, p. 31r.
[15] Baldo degli Ubaldi, *Codicis*, p. 31r.
[16] Baldo degli Ubaldi, *Codicis*, p. 31r.
[17] Baldo degli Ubaldi, *Codicis*, p. 31r.

After examining the impact of *quaderni* as a new medium and considering the effects of the form in which accounts were kept, this chapter will expand its scope to investigate the function of *quaderni* within and beyond the confines of the marketplace. The approach taken by Alexander Murray in tracing the effects of an 'economic shift on men's minds' offers a model for exploring the impact of *quaderni*.[18] In *Reason and Society,* Murray dismantled perceptions of the Middle Ages as an 'age of faith', to uncover the ways of reasoning that were prevalent at the time. He rejected the simplistic characterisation of the Middle Ages as an age of faith that stood in contrast to a later age of reason. In so doing, he also explored the cultural effects of medieval economic change. For late medieval merchants, reasoning, accounting, and investing were just as important in imagining eschatology as in managing their businesses.

A surviving series of *quaderni* written in Pisa between 1348 and 1450, alongside the examples of two merchants, Miliadusso Balduccione and Parazone Grasso, who were contemporaries in this late fourteenth-century marketplace, will be used to study how merchants kept their books and the medium of *quaderni* in detail.

[18] A. Murray, *Reason and Society in the Middle Ages* [1978] (Oxford, 2002), 18.

Merchants in Pisa: Miliadusso Balduccione and Parazone Grasso

The merchants Miliadusso Balduccione and Parazone Grasso were contemporaries in the markets of fourteenth-century Pisa. The *quaderni* kept by Balduccione and Grasso are preserved among books of Pisa's cathedral works. The *Opera del Duomo* in Pisa was responsible for embellishing and maintaining the city's most important sites of worship: the cathedral, the baptistery and the Camposanto. It was funded by bequests, a portfolio of property that it owned and leased, rights to measure and tax the grain that arrived in the city, as well as other privileges.[1] Balduccione donated to the cathedral works. [2] Grasso would eventually hold the post of *operaio del Duomo,* with responsibility for its organisation, from 1385 until his death in 1390.[3] The books preserved in the archive of Pisa's cathedral works provide a rich vein of material that can be quarried in search of the affinity between the material and the spiritual in the cultural horizons of late medieval merchants.

As we have seen, Balduccione was singled out by Weber as an early 'capitalist' for his propensity to calculate and for his investments in commercial partnerships.[4] A single *quaderno* of his *ricordi*, detailing his business accounts and property holdings, but also containing medicinal recipes and written prayers,[5] is preserved in the Archivio di Stato di Pisa.[6] Five *quaderni* kept by Grasso to account for his private investments and for

[1] M. Battistoni, *L'Opera del duomo di Pisa: il patrimonio e la sua gestione nei secoli XII-XVI* (Pisa, 2013), 203-207.
[2] OD 1312 fo. 21v.
[3] Battistoni, *L'Opera,* 76.
[4] M. Weber*, The History of Commercial Partnerships in the Middle Age [1889],* tr. L. Kaelber (Oxford, 2003)*,* 148.
[5] A. E. Vitolo, *Ricette e formule medicamentose nei ricordi di Miliadusso di Balduccione* (Pisa, 1950).
[6] OD 1312; In 1850 Francesco Bonaini published a partial transcription of Miliadusso's *quaderno* that would later reach the attention of Max Weber: F. Bonaini, 'Ricordi di cose familiari di Meliadus Baldiccione de'Casalberti Pisano', *Appendice all'ASI*, viii (Florence, 1850).

his administration of Pisa's cathedral works are also held in this archive.[7] Grasso operated a bank in Pisa in partnership with Donato del Maestro Piero.[8] He became head of the Pisa's cathedral works after the latter's death.

Both Balduccione and Grasso were described as sophisticated merchants by the Italian economic historian Federigo Melis. Melis used Balduccione and Grasso as examples in his wider project charting the development of new kinds of document that supported the growing sophistication of commerce. Melis identified an instrument of credit written by Balduccione for Ghallo di Stefano in 1369 as one of the earliest known examples of a bill of exchange or 'cheque'.[9] A later generation of economic historians, Edwin Hunt and James Murray, classified the bill of exchange as the 'most important financial innovation' of the Middle Ages, facilitating complex transactions and avoiding the costs of transporting specie.[10] Melis saw Grasso as having been at the forefront of the development of the modern bank.[11]

The extent to which the accounting and investing practised by Balduccione and Grasso extended to merchant spirituality is less well explored. Balduccione's use of accounting techniques to calculate the time in remission from Purgatory that a soul might receive for stationary penances to the church of San Piero a Grado near Pisa did not attract comment from Weber or Melis. The spiritual elements of Grasso's *quaderni* and his application of mercantile methods to his later administration of the cathedral works

[7] OD, 1319; OD, 1320; OD, 1321; OD, 1322; OD, 1323.
[8] F. Melis, *La banca Pisana e le origini della banca moderna* (Florence, 1987), 67.
[9] Melis, *Banca,* 113.
[10] E. S. Hunt and J. M. Murray, *A History of Business in Medieval Europe,* 1200-1550 (Cambridge, 1999), 65.
[11] Melis, *Banca,* 67; OD, 1323.

have been similarly underexplored. During his tenure as *operaio*, Grasso oversaw an increase in revenues and expenditure by selling the *opera*'s property and arranging new loans.[12] Among other projects, he oversaw payments to the Florentine painter 'maestro Antone di Franchesco' for the completion of the San Ranieri fresco cycle in the Camposanto.[13] His experience and reputation as a merchant seems to have been an excellent preparation for managing the funds of the cathedral works.[14]

Balduccione was not one of Pisa's wealthier who invested on a greater scale than the city's 'petty merchants'.[15] He seems to have been representative of a wider group of middling merchants in Pisa. He invested in partnerships with his brother Nieri, with Chomuccio di Barone da Piombino with whom he started a *societas maris*, and with Colo Gatto. His family ties feature prominently in his *quaderno*. Entries make reference to his father, Lotto Balduccione, his sister, Ceccha, his brother and business partner Nieri, his nephew, Bartolomeo, his nieces, Nella, Bartolomea and Madalena, his first wife, Bacciamea dei Sismondi, his second wife, Niera, daughter of Gatto, his sons Lotto and Colo, and his daughters, Margarita, Tedda and Giovanna.[16] Lotto, Margarita and Colo all died in early childhood.[17] Balduccione owned female domestic slaves, Verdina, Marta and Lucia, all from the Crimean Khanate.[18] Balduccione's political alignment within mercantile factions of Pisa is underlined by his business dealings with the wealthy Alliata and Gambacorta families, and the marriage of his daughter Tedda

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[12] Battistoni, *L'Opera*, 99.
[13] J. Tripps, 'Andrea Bonaiuti', in R. Offner et al., *A Critical and Historical corpus of Florentine painting*, *Andrea Bonaiuti*, 4:VII (Florence, 1996), 214; OD 440 fo. 18r.
[14] Battistoni, *L'Opera*, 73.
[15] D. Herlihy, *Pisa in the Early Renaissance, A Study of Urban Growth* (Yale, 1958), 182.
[16] A. Castellani, 'Note su Miliadusso', in A. Castellani, 'Saggi di linguistica e filologia Italiana e Romanza, 1946-1976 (3 vols, Rome), ii, pp. 323, 324; OD, 1312, fos.1v, 154v, 3r, 11v, 21r, 97v.
[17] Castellani, 'Miliadusso', 324.
[18] OD, 1312, fos. 97v, 159r, 162r, 164r, 166r, 276v.

to Jacopo Fagiuolo on Palm Sunday, 22 April 1359, for which he raised a dowry of 900 florins and bought fine coloured silks, vermillion and green, together with silver buttons for Tedda's dress.[19]

Balduccione pursued an administrative career in Pisa alongside his mercantile activity.[20] Pisa's government drew on mercantile expertise. David Herlihy has estimated that in 1324 there were 285 Pisan Government officials.[21] In 1349 Balduccione was Pisa's captain in the town of Collina di Sotto for six months.[22] He was a customs officer in Castiglione della Peschaia in 1350.[23] In 1351 he was a customs officer at Fivizzano representing Pisa, Sarzana, the condottiere Spinetta Malaspina and the bishop of Luni.[24] In 1355 he purchased grain for Pisa in Pietrasanta and Massa.[25] In 1370 he was Pisa's Podestà of Marti near Pontedera. He was warden of Pisa's prison on 3 April 1370 and he had to petition the Anziani of his innocence after unrest that night left 22 prisoners freed and houses burned.[26]

Grasso was one of the more important merchants in late medieval Pisa. He invested on a greater scale than Balduccione. He was involved in lending in Pisa and Mediterranean trade in textiles and commodities. In addition to his partnership with Del Maestro Piero, he made joint investments with his fellow Pisan merchant Bindo Alliata in the grain trade.[27] He was a partner, together with Tomaso Grasso and Bartolomeo del Tignoso, a

[19] OD, 1312, fos. 59r-60r.
[20] Castellani, 'Miliadusso', 326-327.
[21] Herlihy, *Pisa,* p. 5.
[22] OD, 1312, fo. 44r.
[23] OD, 1312, fo. 30r.
[24] OD, 1312, fo. 34v.
[25] OD, 1312, fo. 37r.
[26] OD, 1312, fo. 181r.
[27] OD, 1323, fo. 49r.

member of another Pisan merchant family, in a company in Rome.[28] He held shares in a textile company in Pisa, a 'bottegha del taglio,' with Paolo da Tanpo, Cholo Dorsarello and Franchesco di Piero di Noccho Fermamo.[29] His land and property holdings offered a further source of income in rents, perhaps acting as a relatively secure form of investment. Family was important to Grasso's business, especially his brother, Ranieri Grasso, who was the *doganiere* in charge of Pisa's iron mines in Elba and *podesta* of the island's mining towns Rio and Grassera ('Grassula') until his death on 18 July 1380.[30]

A range of surviving late medieval account books, preserved in the ASPi and the Salviati archives of the Scuola Normale Superiore di Pisa, will allow Balduccione and Grasso to be studied in a wider context. These include surviving *quaderni* kept by a number of other merchants in Pisa, which cover a range of periods, notably those of: Biagio delle Brache (1326-1364),[31] Iacopo Dati (1333-1380),[32] Antonio Datafiglioli (1365-1385),[33] Bartolomeo di Tingo (1384-1388),[34] Francesco Pacino and Matteo di Talameo (1388-1396),[35] Ranieri di Jacopo Astaio (1388-1422),[36] Pietro Lancia (1408),[37] Bartolommeo di Giovanni da Forcoli e Iacopo di Colo Porcellini (1438-1443),[38] Da Uzzano (1440),[39] and Iacopo Salviati (1396-1448).[40] Finally, there is the

[28] OD, 1323, fo. 74v.
[29] OD, 1323, fo. 171r.
[30] OD, 1322, fo. 1r; Melis, *banca*, 103.
[31] OD, 1286; OD, 1287; OD 1288; OD, 1289; T. Antoni ed., *Il libro dei bilanci di una azienda mercantile del trecento, il libro della Ragione di Biagio e Guido delle Brache, dal 1326 al 1356* (Pisa, 1967).
[32] OSC, 2010.
[33] OD, 1281.
[34] OD, 1285.
[35] OSC, 1938.
[36] OD, 1331.
[37] ASPi, Alliata, 773.
[38] OSC, 2005; OSC, 2006; OSC, 2007; OSC, 2008; OSC, 2009.
[39] SNS-S, I, 2.
[40] SNS-S, II, 1.

quaderno preserved in the archives of the Scuola Normale Superiore di Pisa and kept in English by John Balmayn (1450-1451) for William Cantelow, a business partner of Salviati, which reveals how the medium of *quaderni* was exported along trade routes.[41]

While *quaderni* were a medium used by merchants in cities throughout late medieval Italy, the city in which Balduccione and Grasso kept their books deserves close attention. Late medieval Pisa has been seen as a city in decline, in the context of loss of commercial standing to Genoa and Florence and the silting of the river Arno.[42] Pisa's population reached its considerable medieval peak of 38,000 around 1293: the demographic shocks of recurrent epidemics after 1348, malaria, and protracted conflicts set a trend of decline.[43] Investments, particularly in sea companies and in the wool trade, became more volatile, redirecting merchant capital to Pisa's *contado*.[44] Cinzio Violante saw this change in investing practice as a retreat from the pre-capitalistic spirit of the preceding century in reaction to economic crisis.[45]

Pisa's enduring commercial strengths are often overlooked. At the end of the fourteenth century, Gregorio Dati, a Florentine textile merchant, described Porto Pisano, Pisa's markets and canals,[46] the rivers of the Arno, Serchio and Ozzeri as the 'bocca di

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[41] SNS-S, I, 339; G. Holmes, 'Anglo-Florentine Trade in 1451', *The English Historical Review,* 108/427 (1993), 371-386; Transcribed by Megan Tiddeman: M. Tiddeman, 'Money Talks: Anglo-Norman, Italian and English Language Contact in Medieval Merchant Documents, c1200-c1450', PhD Thesis (Aberystwyth University, 2016), 428-496.
[42] G. Rossi-Sabatini, *L'Espansione di Pisa nel mediterraneo fino alla Meloria* (Florence, 1935), 111; M. E. Parker, 'Sinking Pisa: The decline of a Commercial Empire in the Thirteenth Century' (Univ. Saint Louis Ph.D. thesis, 2019), 257.
[43] D. Herlihy, *Pisa in the Early Renaissance, A Study of Urban Growth* (Yale, 1958), 26.
[44] M. Tangheroni, *Politica, commercio, agricoltura a Pisa nel Trecento* (Pisa, 1972), 79.
[45] C. Violante, *Economia società istituzioni a Pisa nel Medioevo* (Bari, 1980), 207.
[46] Herlihy, *Pisa*, 91.

Toscana'.[47] Porto Pisano silted up slowly and was only surpassed by nearby Livorno in the late fifteenth century.[48] Moreover, the economic effects of recurrent epidemics were uneven. Despite labour shortages, falling prices in real terms for most foodstuffs, textiles and rents, the post-1348 economy was sometimes profitable for surviving merchants who took advantage of the disruption that epidemics wrought. High mortality accelerated the redistribution of land and capital through testaments and charitable legacies.[49] Although late medieval Pisa experienced demographic decline, Fortune's wheel turned more quickly, creating opportunities for some. The challenges of late medieval Pisa inspired innovative and creative responses from its merchants, and other citizens.[50] Fabio Redi's archaeological survey depicts a flourishing city, where coloured-glass workshops pioneered optics,[51] where new *case-torri* crowded the skyline, and merchants financed the completion of the Ospedale Nuovo, the Camposanto and the Chiesa della Spina.[52]

In S. Caterina, as well as in Pisa's other churches and its markets, Dominican preachers offered subtle responses to volatile economic conditions. Giordano da Pisa (1260-1311) contrasted the sinfulness of the dishonest merchant with the piety of the honest one.[53] Bartolomeo da San Concordio (1262-1347) stressed that mercantile activity was shielded from avarice, provided that no profit was made from the unjust exploitation of

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[47] *Two Memoirs of Renaissance Florence, The Diaries of Bounaccorso Pitti and Gregorio Dati,* ed. G. Brucker, tr. J. Martines (Illinois, 1991), 117.
[48] G. Guarnieri, *Da Porto Pisano a Livorno città, attraverso le tappe della storia e della evoluzione geografica* (Pisa, 1967), p. 53.
[49] S. Duval, 'L'argent des pauvres, l'institution de l'*executor testamentorum et procurator pauperum* à Pise entre 1350 et 1424', *Mélanges de l'École française de Rome - Moyen Âge*, 125/1 (2013), 3.
[50] K. R. Mathews and S. O. Busch, 'Introduction: The Legacy of Medieval Pisa', in K. R. Mathews, S. O. Busch and S. Bruni, *A Companion to Medieval Pisa* (Boston, 2022), 6.
[51] F. Redi, *L'arte vetraria a Pisa, dallo scavo di una vetreria rinascimentale* (Pisa, 1994), 18.
[52] F. Redi, *Pisa com'era: archeologia, urbanistica e strutture materiali* (Naples, 1991), 395.
[53] C. Iannella, *Giordano da Pisa, Etica urbana e forme della società* (Pisa, 1999), 134.

the buyers' or sellers' circumstances and that the motivations of merchants were aligned with communal good through supplying goods that were needed at the correct place and time.[54] Ranieri da Rivalto (1260-c.1310) insisted that it was the manner in which merchants acted, rather than commerce itself, which could be sinful: equity, charity and piety were capable of redeeming avarice.[55] The preacher Domenico Cavalca (c.1270-1342), having been asked by many Pisan citizens to prepare a vernacular confession manual, wrote a work that categorised types of sin by their causes.[56] In a further work, he offered the mercantile warning that to waste time was sinful, provoking the wrath of God, because he who wasted time wasted that which God had given him, so that 'con esso guadagnasse'. [57] By the second half of the fourteenth century, a range of sophisticated responses had been developed in Pisa to the new temptations to sin that commerce could offer.

Late medieval Pisa is an ideal place to study the confluence of commerce and spirituality in merchant *quaderni*. The volatile conditions that prevailed in the city in these years were just the conditions that merchants sought to account for in their books. Although recent studies of Pisa have emphasised the enduring vitality of the city,[58] Pisan *quaderni* are still sources that stand in the shadow of the richness of the surviving Florentine material.[59] The towers, wharves, and workshops of Pisa's Lungarno will be

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[54] O. Langholm, *The Merchant in the Confessional. Trade and Price in the Pre-Reformation Penitential Handbooks* (Boston, 2003), 124, 125.
[55] Langholm, *Confessional,* 127.
[56] Domenico Cavalca, *Lo Specchio de' peccati*, ed. M. Zanchetta (Florence, 2015), 179, 180.
[57] J. Le Goff, 'Le temps du travail dans la "crise" du XIV^{e} siècle: Du temps médiéval au temps modern [1963]', in J. Le Goff, *Un autre moyen âge* (Paris, 1999), 77; Domenico Cavalca, *Disciplina degli spirituali* (Milan, 1838), 133: 'he should make a profit with it'.
[58] K. R. Mathews and S. O. Busch, 'Introduction: The Legacy of Medieval Pisa', in K. R. Mathews, S. O. Busch and S. Bruni, *A Companion to Medieval Pisa* (Boston, 2022), 7.
[59] T. W. Blomquist and M. F. Mazzaoui, *The "Other Tuscany": Essays in the History of Lucca, Pisa, and Siena during the Thirteenth, Fourteenth and Fifteenth Centuries,* (Michigan, 1994), 1; F. Bettarini,

the point of departure in exploring *quaderni* as the medium through which merchants formed and reformed their cultural horizons.

R. A. Goldthwaite, and M. Spallanzani, *The Census, A Census of Private Account Books in Florence, 1211-1499*, https://phaidra.cab.unipd.it/o:453620 (09/05/2023).

Quaderni as a New Medium: l'universo si squaderna

> Nel suo profondo vidi che s'interna
> legato con amore in un volume
> ciò che per l'universo si squaderna:[60]

For Dante, the limits of a book meant the limits of the world. In *Paradiso,* he invoked the quires of a universal codex, gathered and bound together, to represent the cosmos and its order. Dante's image of the universe as a book was resonant with this new medium that began to flourish in late medieval Italy, the *quaderno* or blank bound book of paper leaves.[61] The cultural horizons of late medieval merchants were shaped and transmitted through *quaderni*. A return to the primary sources and to studying *quaderni* as codices is critical to understanding the influence of this medium on the ways in which merchants thought.

Changing commercial modes and advances in papermaking made *quaderni* a widely available medium in late medieval Italy. Pisa with its port was a centre for the export of paper from the heartland of Italian papermaking in Fabriano.[62] Paper was affordable. On 2 April 1362, Balduccione recorded a payment of one *soldo* and three *denari* to Bacciameo Cartaio for five folded paper sheets that would be bound into a blank *vacchetta* in which he would write the terms of his agreement with another merchant,

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[60] Dante, *Paradiso*, XXXIII, ll. 85-87, p. 664; 'In its depths I saw contained / bound with love in one volume / what through the universe is unsewn quires'; J. Ahern, 'Binding the Book: Hermeneutics and Manuscript Production in Paradiso 33', *Publications of the Modern Language Association,* 97/5 (1982), 800.
[61] Steinberg, *Accounting*, 15.
[62] E. Graziosi, 'Il registro contabile di Lodovico Ambrogio, mercante di carta: un edizione', MA Thesis (Ca' Foscari, Venice, 2014), 21.

Andrea Musso.[63] Many merchants in Pisa were also investors in the paper trade and were conscious of the growing importance of this versatile writing material.[64] On 19 October 1397, Francesco Pacino and Matteo di Talomeo made a payment of 136 florins to a certain 'Bernardo Vessieri chartalario (paper-maker)'.[65] In the years around 1400, the Datini company in Pisa, Masigno del Tignoso, the Delle Brache family, Paliano de Falcho's company, and the company of Ricciardo Alberti, Leon Battista Alberti's uncle then in exile from Florence, all had business in Pisa with the Fabriano paper merchant Lodvico di Ambrogio.[66] Paper gave *quaderni* some of their most important characteristics. The use of paper, rather than parchment, reduced the cost of *quaderni*. Its lighter weight made *quaderni* a portable medium for merchant writing.

Quaderni had a range of overlapping uses. They were the medium for a wide culture of mercantile writing. They were used as *libri del dare e dell'avere* for accounting. They were kept to record family memory as *libri di famiglia*, a kind of writing that proliferated across Italian towns in the thirteenth and fourteenth centuries.[67] The distinction made by Angelo Cicchetti and Raul Mordenti between account books and 'libri di famiglia' is one which I will elide by pointing to their material similarity and to the wide range of material found in account books that cannot be described as strictly economic.[68] That they were often kept in the vernacular rather than being written in

[63] OD, 1312, fo. 68v.
[64] O. Da Rold, *Paper in Medieval England, From Pulp to Fictions* (Cambridge, 2020), 211.
[65] OSC, 1938, fo. 89r.
[66] Graziosi, 'Ambrogio', 29, 46, 99, 113, 115, 117-118, 148, 150.
[67] G. Bennati, *Un libro di memorie e possessioni, un Libro del dare e dell'avere, per la biografia di un uomo di affari Pisano del Trecento: Cecco di Betto Agliata* (Pisa, 2002), 11; G. M. Anselmi, F. Pezzarossa, L. Avellini, *La "memoria" dei mercatores, tendenze ideologiche, ricordanze artigianato in versi nella Firenze del Quattrocento* (Bologna, 1980).
[68] A. Cicchetti and R. Mordenti, *I libri di famiglia in Italia*, *filologia e storiografia letteraria* (Rome, 1985), x; R. Mordenti, *I libri di famiglia in Italia*, geografia e storia (Rome, 2001), 35.

Latin, in many cases also using Arabic numbers rather than Roman numerals, was a significant change from many earlier forms of writing.

In this inquiry, the term *quaderni* will be used to describe books that have not been given a uniform name. While *libro* and *quaderno* seem to have been the most frequently used terms for blank paper codices in late medieval Italy, more specific names could also be used in recognition of the purpose assigned to a particular *quaderno*, notably: *giornale*, for daily cashflow accounting; *memoriale* and *ricordi,* for longer series of accounts; and *vacchetta*, a smaller size of codex. Yet, in practice, the material contained in different sub-types of *quaderni* was as varied as the terminology employed at the time. The word *quaderno* can be traced to the Latin root 'quaterni', which describes the making of a single quire from four sheets of paper folded into eight leaves, which would be gathered together to be bound into a book.[69] The size of *quaderni* was in part determined by the familiar sizes in which paper was sold.[70] Most *quaderni* seem to have comprised 200 leaves gathered together in 25 quires, and their bindings tend to measure close to 300mm in height by 240mm in width and 40mm across the spine as a result. Grasso's *quaderno* that he kept to record the estate of his brother Ranieri Grasso in 1376 is a representative example of this kind of codex (Figure 1.1). A smaller kind of *quaderno*, sometimes referred to as *vacchetta*, could be made by folding the same standard sizes of paper in a different way to produce codices which, together with their bindings, tended to measure 300mm in height by 110mm in width, with their depth across the spine varying according to the number of quires gathered together.

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[69] C. S. Singleton, *Paradiso Commentary* [1975] (Princeton, 1991), 577.
[70] The standard sizes of paper survive carved on the 'pietra di Bologna', a later copy of the 1389 original stone of Bologna stone of measures that was funded by Bologna's *speziale* guild; C. M. Briquet, *Les filigranes, dictionnaire historique des marques du papier, dès leur apparition vers 1282 jusqu'en 1600* (4 vols, Geneva, 1907), i, p. 4.

Bartolomeo di Tigno's *vacchetta* (1387-1389) is a typical example of this type of book (Figure 1.2).

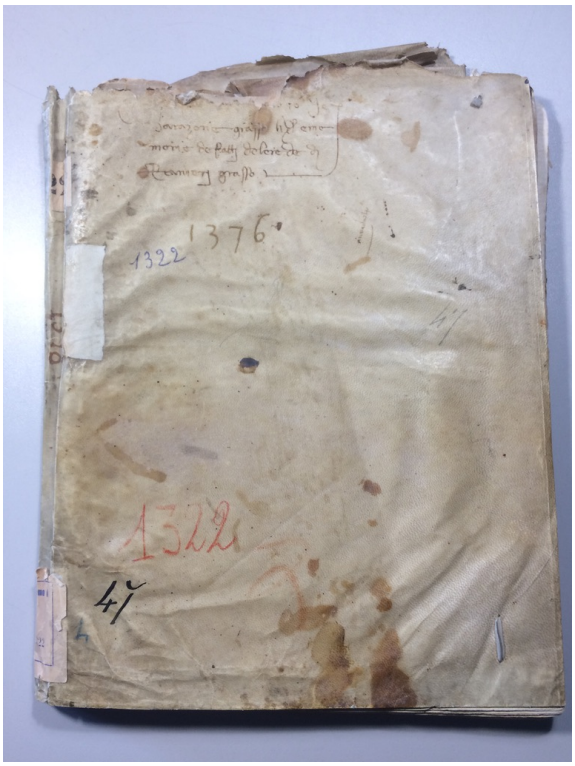

Figure 1.1 **Parazone Grasso's *quaderno*.**

Figure 1.2 **Bartolomeo di Tigno's *vacchetta.***

Quaderni often shared a style of limp vellum binding that can be seen in surviving examples that have not been rebound. This style of binding meant that their covers could be labelled in ink by their authors. Francesco Pacino and Matteo di Talameo labelled their *quaderno* in this way (Figure 1.3). It was a robust and lightweight form of binding ideally suited to codices that travelled and were used regularly. The addition of straps or wrap-around covers to enclose the edges of the leaves could offer further protection for volumes in continual use. In the case of *quaderni* bound in different styles, the colour of the leather could act as a means of identifying them, for example, Iacopo di Alamanno Salviati's red book (Figure 1. 4).

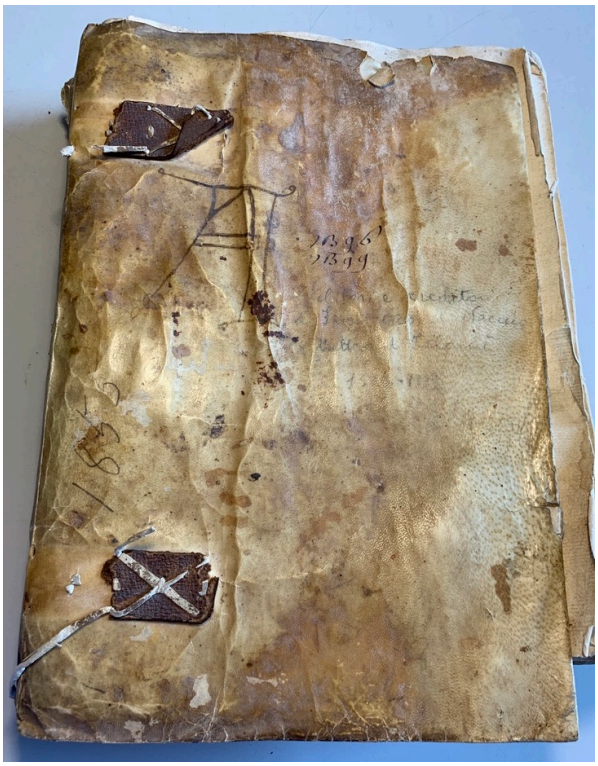

Figure 1.3 **Francesco Pacino and Matteo di Talameo, *quaderno* "A".**

Figure 1.4 **The 'Libro Rosso' of Iacopo di Alamanno Salviati.**

Merchants often carried their *quaderni* with them. In late medieval Pisa, the small knives needed to keep writing tools sharp were exempt from bans on carrying weapons, implying that it was not unusual for merchants to move around with their quills.[71] Balduccione's use of the phrase 'sono iscritti in su lo suo libro di mia mano' implies that these *quaderni* were brought by merchants to their meetings.[72] Da Certaldo recommended that merchants always carry a small book with them in their 'borsa' together with their coins, so that entries could be made whenever they opened it.[73]

The portability of *quaderni* that travelled with the merchants who kept them was at once a practical and spiritual quality of these books. Merchants wrote entries in their *quaderni* that conferred material and spiritual protection on their bearers.[74]

> A voi figliuolo di dio a chui io pregho beatissima vergine Maria, salutata dali angeli piena d'ogni grasia, compagnia di dio, madre di Jesu Xpo, regina deli anguili, imperatrice del cielo, donna del cielo, donna del mondo, stella del mare, gloria e gaudio de perfetti christiani, amore delle femmine, lestisia deli omini, speransa di Jesu Xpo, camera delo ispirito sancto, fiore dele vergine, consiglio dele vedove, speransa deli peccatori, fontana di misericordia, via di salvasione, ischala del cielo, porta di paradiso, a voi Madonna, racomando l'anime cristiane e lo corpo e lo ispirto mio. Amen. Amen. Amen.[75]

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[71] O. Cavallar, 'Regulating Arms in Late Medieval and Renaissance Italian City-States', in J. Kirshner and L. Mayali (eds), *Privileges and Rights of Citizenship, Law and the Juridical Construction of Civil Society* (Berkely, 2002), 94.
[72] OD, 1312, fos. 45v, 47v, 50v, 55v: 'they are written in his book in my hand'.
[73] Certaldo, *Costumi*, 29.
[74] Commonplace books are an important source for late medieval textual amulets: D. C. Skemer, *Binding Words, Textual Amulets in the Middle Ages* (Pennsylvania, 2006), 82.
[75] OD, 1312, fo. 189v: 'To you son of God, to whom I pray, most holy Virgin Mary, heralded by angels, full of every grace, companion [literally company] of God, mother of Jesus Christ, queen of the angels, empress of heaven, Lady of heaven, Lady of the world, star of the sea, glory and joy of all

Balduccione wrote in his *quaderno* this prayer or litany of the Virgin Mary, which was meant to provide protection when worn on a journey: 'qualunqua persona andasse in viaggio porti questa orasione adosso serae siguro in suo viaggio'.[76] The security conferred by this written prayer was both material and spiritual, evoking the close affinity between the two. The precise phrasing of the prayer, invoking Mary as the star of the sea and the path to salvation, entrusting the reader's body and soul to her care, seems to have reinforced this twin protection that it afforded its bearer. The same prayer, when recited by a reader in their own name at moments of mortal danger, was said to ensure they would avoid a 'mala morte' without 'penetensia'.[77] If read aloud three times, while a blessed candle burned, it was believed it would protect a woman in labour from dying in childbirth. If read aloud nine times, by the light of a holy candle, it was meant to free anyone possessed by evil spirits from their influence. In all these cases, the quality of *quaderni* as books that were always at hand seems to have made them a useful medium for both recording business on the move and for protective prayers.

Balduccione's *quaderno* is not an isolated example of this use of *quaderni*. A prayer to be said when embarking on a voyage was written in the *Zibaldone da Canal*, a fourteenth-century Venetian *quaderno*:

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perfect Christians, love of women, ecstasy of man, hope of Jesus Christ, home of the holy spirit, flower of virgins, counsel of widows, hope of sinners, fountain of mercy, road of salvation, ladder of heaven, gate of paradise, to you Madonna, I commend my Christian soul and my body and my spirit. Amen. Amen. Amen'.

[76] OD, 1312, fo. 189v: 'whomsoever goes on a journey wearing this prayer with them will travel in safety'.

[77] OD, 1312, fo. 189v: 'a bad death', 'penitence'.

> Quando tu vos montar in nave rechomandate a santo Uriellem et Tobiellem. + Christo vençe + Christo regna + Christo i(n)pera + Christo / vençe + Christo regna + Christo in çelli + Christo in terra.[78]

Uriellem, or Uriel, may have been a reference to the Archangel Raphael rather than to the apocryphal archangel Uriel in this instance.[79] The invocation of Raphael and Tobias would have been especially fitting for a merchant. Tobias had been sent by his blind father to collect a debt in a distant city, carrying the contract of the loan with him as written proof.[80] The archangel Raphael was his companion and protector on this business trip, although Tobias did not recognise him. Raphael inspired Tobias to take a fish from the river Tigris. The fish's heart won Tobias his marriage and dowry during their journey. The fish's gall restored sight to his father on their return. While Tobias was away, his mother looked for his return from a nearby hill each day and his father feared for his safety: Raphael's watchfulness guaranteed that Tobias's journey was safe and profitable. In Venice, Tobias and Raphael were associated with protecting voyages on the lagoon. The southeast corner of the Doge's palace, facing out on to the lagoon, was decorated in the late fourteenth century with a sculpture of Raphael holding a scroll and Tobias holding a fish. Raphael's scroll was inscribed with a prayer calling for his intervention to calm a storm at sea.[81] While all *quaderni* were portable, the spiritual

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[78] *Zibaldone*, 89: 'When you are going to embark on a ship, commend yourselves to Saint Uriel and Saint Tobias + Christ triumphs + Christ reigns + Christ rules + Christ wins + Christ rules + Christ in heaven + Christ on Earth'.
[79] E. C. Wolynes, 'Migrant Mentalities: Reconstructing the Community, Identity and World of Venetian Merchants in the Late medieval mediterranean', PhD Thesis (Notre Dame, Indiana, 2020), 257, 258.
[80] Jacopo da Voragine, *Golden Legend,* in Internet History Sourcebooks Project, https://sourcebooks.fordham.edu/basis/goldenlegend/GoldenLegend-Volume2.asp - Tobit (11/07/2022).
[81] T. Rizzo, *I capitelli del Palazzo Ducale di Venezia* (Venice, 1995), 13: '*effice quaeso fretum, Raphael reverende, quietum*', 'I pray, reverend Raphael, that you calm the gulf'.

protection that they invoked was tailored to the circumstances and traffic of the merchants who kept them.

The protective function of *quaderni* as physical objects could be a product of either written entries or images, recorded on their leaves. The most worn page of the fifteenth-century *quaderno* kept by the Venetian mariner Michael of Rhodes displayed a drawing of St Christopher carrying the child Christ across the river (Figure 1.5). It seems to have fulfilled a similar 'amuletic' function to a written or recited prayer, as an image that could be looked at on each day of a journey.[82] This page shared the same medieval pagination and dedication to Christ found throughout the *quaderno*. It seems that it was entered on to a blank page that could equally have held an account of the expenses of a journey.

[82] A. M. Stahl, 'Michael of Rhodes and the Birth of the Mariner's Manual', *Journal of Early Modern History* 14 (2010), 160; O. Long, 'The World of Michael of Rhodes Venetian Mariner', in O. Long, D. Mc Gee, A. M. Stahl *and F. Rossi (eds), The Book of Michael of Rhodes: A Fifteenth Century Maritime Manuscript (3 vols, Harvard, 2009)*, iii, p. 30.

Figure 1.5 **St Christopher carrying the infant Christ.**

The protective power of merchants' written prayers was also applied to more ephemeral scraps of writing. Quaderni contained instructions on how to make textual amulets that could be worn for protection.[83] Readers of the *Zibaldone da Canal* were advised to write the letters 'E.x.c.t.g.d.q.r.q.p.s.a' on a *carta virginea* and to carry it with them, so that, with God's help, their enemies could not harm them.[84] These letters represented angelic names that were thought to be inexpressible.[85] *Carta virginea* was uterine parchment, which was held to be pure and especially suited for recording amulets.[86] To write a prayer to the Father, the Son and the Holy Spirit on *carta virginea* and to wear it suspended on a thread about the neck on a cord of the same material was recommended as a defence against fever.[87] *Quaderni* informed not only ephemeral commercial calculations and correspondence but also ephemeral textual amulets.

The *quaderni* kept by merchants were not thought of as individual volumes but rather as a system of books that were used in reference to each other. Benedetto Cotrugli's manual of merchant practice describes the importance to merchants of ordering their sets of books. He advised merchants to label their *quaderni* alphabetically.[88] Cotrugli continued to offer a model of how merchants might be able to keep multiple *quaderni* to their advantage. In total, he describes six books that merchants ought to keep, in order to avoid Babel-like confusion: the *quaderno*, the *giornale*, the *memoriali*, a small book of *ricordanze*, a book in which to copy relevant external accounts, and, finally, a

[83] Textual amulets are described in: D. C. Skemer, *Binding Words, Textual Amulets in the Middle Ages* (Pennsylvania, 2006), 125.
[84] *Zibaldone*, 89.
[85] Skemer, *Amulets*, 206; R. Turner, *Ars Notoria, the Notory Art of Solomon* (London, 1657), 117.
[86] Skemer, *Amulets*, 129.
[87] *Zibaldone*, 89.
[88] Benedetto Cotrugli, *Della mercatura et del mercante perfetto* (Venice, 1573), 37.

book in which to keep copies of letters and any ciphers used to encode them.[89] In his system, the small book of *ricordanze* feeds into the *giornale* and the *memoriale*, whose entries are in turn copied into the main *quaderno*. By duplicating, checking and referencing across all these *quaderni*, accounting errors could be avoided. Moreover, Cotrugli recommended that merchants carry out a yearly review of all their books.[90]

Although the exact system of *quaderni* used seems to have varied according to the needs of their individual authors, the importance of *quaderni* as a system remained constant. In one of his *quaderni,* Balduccione referenced the other *quaderni* that he kept, and cross-referenced 26 *quaderni* kept by other merchants and notaries.[91] *Quaderni* were often distinguished alphabetically, for example Cholo Gatto's 'Libro del C' and 'Libro del H',[92] and by their bindings: 'Bartolomeo Giatanello [...] del libro suo grande delle coverte nere'.[93] At the end of Francesco di Betto Alliata's *quaderno,* there is a notice that his cousin, Andrea Alliata, carried out a *pulissa*, or review of the kind later recommended by Cotrugli, of a set of *quaderni* labelled A, B, D, F, R, O, P and Q, finding an accounting error amounting to a little more than 15 lire across these books for the year 1368.[94] Keeping *quaderni* as a set or system of books improved their accuracy and made them all the more useful to merchants.

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[89] Cotrugli, *Mercante Perfetto,* 38; The modern edition, in contrast to the first printed edition of 1573, only stipulates that the merchant must keep at least three books, a 'recordançe, giornale et libro grande': Cotrugli, *Mercatura*, 83.
[90] Cotrugli, *Mercante Perfetto,* 38.
[91] OD, 1312, fos. 36r-36v, 45v, 47v, 50v, 55v, 59r, 76v, 93r, 110v, 124v, 125v, 129v, 132r-132v, 135r, 137r, 140r, 142r, 144v, 145v, 147r, 148v, 149v, 151v, 154r, 165v, 169v, 171v, 181r, 193r, 197r.
[92] OD, 1312, fos. 36r, 132r.
[93] OD, 1312, fo. 165v: 'Bartolomeo Giatanello [...] his large book with the black cover'.
[94] G. Bennati, *Un libro di memorie e possessioni, Un libro del dare e dell'avere, Per la biografia di u uomo di affari pisano del Trecento: Cecco di Betto Agliata* (Pisa, 2002), 180; ASPi, Alliata, 231, fo. 86v.

Quaderni were also used to store ephemeral items of merchant writing. Letters, instruments of exchange, accounts on loose sheets and rough mathematical workings can all be found between the leaves of late medieval *quaderni*. The *quaderno* kept by Grasso and Del Maestro Piero contains many loose items, including currency conversions (Figure 1.6), and receipts (Figure 1.7). By placing loose items next to the account entries to which they referred, an additional check could be made for accounting errors. They could also provide corroborating evidence for the precision of sets of accounts. Ephemeral material stored in *quaderni* could equally include fragments of personal and intimate writing. A loose leaf, which was folded and placed in the back of Francesco di Pacino and Matteo di Talomeo's *quaderno*, is covered in scattered rough mathematical calculations; lists wool imported from England; and contains the fragmentary line, 'Io non so per che amor mi stringe chosi',[95] perhaps a conscious echo of Dante's Vita Nova: 'la donna, per cui Amore ti stringe così [...]'.[96] Quaderni were not only a commercial medium but also an intensely personal one.

[95] OSC, 1938: 'I do not know why love makes me suffer so'.
[96] Dante, *Vita Nova,* XIII, 5, 858: 'the lady, through whom Love makes you suffer so'.

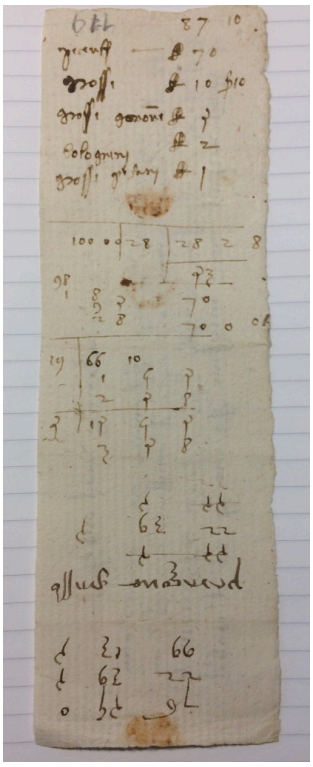

Figure 1.6 **Parazone Grasso's note with currency conversion calculations.**

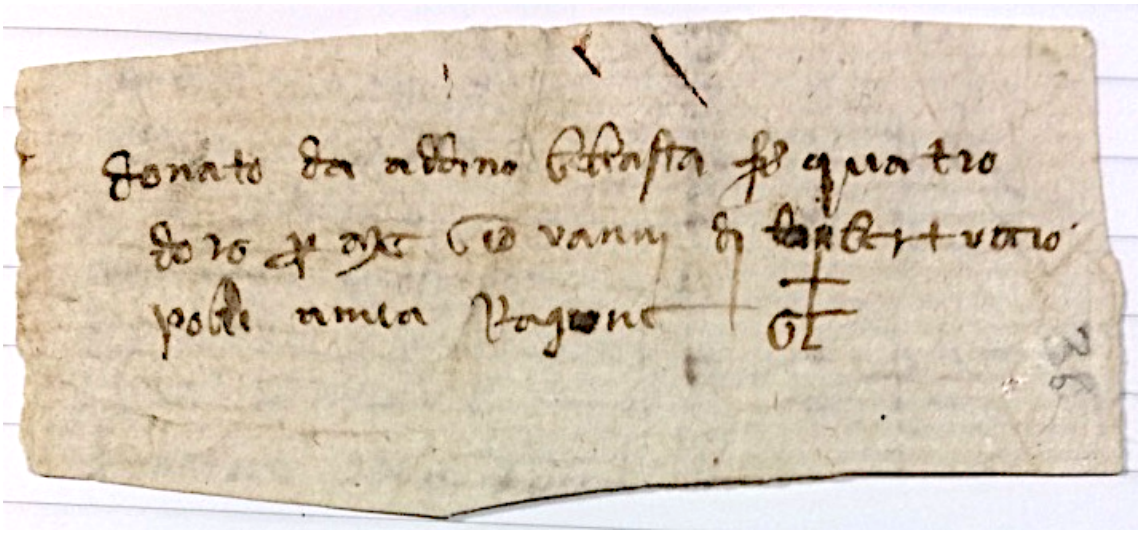

Figure 1.7 **Giovanni di Lanbertuccio, receipt.**

The new availability and affordability of paper meant that merchants in late medieval Italy could write more frequently and in new ways. To purchase a blank bound book would have been a new way of thinking about writing. The materiality of quaderni and their bindings is important. It reveals that they were portable, readily identifiable and were large enough, frequently comprising 200 leaves, to contain many years of regular entries. The *vacchette* show that their form could also be tailored to the task at hand, with smaller quaderni being used to feed information into larger registers. The quality of the bindings of *quaderni* seems to have been consistent for greater and lesser merchants operating at different scales of activity. Although physically similar paper codices were not just used by merchants but also by notaries and administrators,[97] the linking of a series of quaderni, the cross-referencing of entries and the form in which accounts were kept made them a medium ideally suited to commerce.

[97] D. Waley, *Siena and the Sienese in the Thirteenth Century* (Cambridge, 1991), 155.

Accounting: the Forms in Which *Quaderni* Were Kept

The regular discipline of keeping *quaderni* according to expected forms and layouts facilitated the recording of information, but it also influenced how merchants assimilated new knowledge. The layout of the *quaderni* can be studied through the order of books, the structure of individual pages and the use of margins in relation to the body of the text. Merchants began their *quaderni* with written prayers and invocations and closed their accounts with calculations of the balance due. Separate sections of *quaderni*, *dare* and *avere* dealt with debts and credits. On individual pages, entries tied a person and amount to particular times and places.

> Invocando sempre, come di sopra in sul primo foglio del *Quaderno*, il nome di Dio [...][98]

The first page of a *quaderno* was used to describe the book's purpose, name its authors and to invoke divine sanction. As Cotrugli reminded his readers, this was a set form in which it was expected that merchants should start their accounts. However, the phrasing of these invocations was tailored to a particular merchant and their preferred intercessors. The first page of the *quaderno* kept by Grasso and Del Maestro Piero merits detailed investigation.

> Al nome di Dio e della sua madre vergine madonna Sancta Maria e del beato messr Sancto Giovanni evangelista, di tutti li sancti e sancte di vita eterna e di

[98] Cotrugli, *Mercante Perfetto*, 37: 'Always invoking the name of God on the first leaf of the *quaderno*'.

guadagnio e salvamento dell'anima e del corpo con pio avere e con meno pechato. In questo libro scriveremo noi Donato del Maestro Piero e Parazone Grasso lo quale libro e carte dugento nel quale scriveremo chi dovra dare in fine a foglio cento e da inde illa scriveremo chi dovra avere incominciato a scrivere a di primo di giungo anno 1375 sto e chiamasi

lo libro del . A .

Al nome di Dio amen.[99]

It begins within an invocation of God and of the Virgin Mary. This is followed by a more personal invocation of St John the Evangelist, before all the saints are called on to provide profit and salvation. St John the Evangelist is also invoked by Grasso at the start of two *quaderni* that he kept for the cathedral works and that he wrote both for the 'acresamento della chieza di Madonna Santa Maria',[100] and for the 'salute dell'anima mia'.[101] Grasso was a member of the Pisan confraternity of the 'disciplinati' of St John the Evangelist, making his invocation a mark of collective devotion.[102] The appeal to 'pious gain' and 'less sin' seems to mirror the *dare* and *avere*, credit and debit, division of the *quaderno* as a whole. The authors, date, size, and name of the book are all included before the invocation ends. The form of this invocation makes it at once a written prayer and an organising entry in the *quaderno*. This first page was revised by Grasso on 17 May 1377, after his business partner Del Maestro Piero's death, to

[99] OD, 1323, fo. 1r: 'In the name of God and of his mother the blessed Madonna the Virgin Mary and of the blessed St John the Evangelist, and of all the saints of eternal life may they give profit and salvation of the soul and the body with pious gain and with a less sin. We, Donato del Maestro Piero and Parazone Grasso will write in this book which has two hundred folios and we will write about those who owe us until folio one hundred and about those whom we owe from then on. We began to write on the first day of June 1374 and this book is called . A . In the name of God Amen'.
[100] OD, 441, fo. 1r.
[101] OD, 440, fo. 1r.
[102] Battistoni, *Opera*, 75.

highlight folios 102 and 143 on which the 'ragione del banco' was closed and Del Maestro Piero's share given to his heirs, and to stress that Grasso owed nothing more to Del Maestro Piero's account.[103] This later revision and the earlier invocation juxtaposed ideas of the authors' mortality and aspiration to eternal life on the same page of the *quaderno*.

The first page of the Del Maestro Piero and Grasso *quaderno* is consistent with those of the other surviving Pisan *quaderni*. Iacopo di Dati invoked 'Messr Domenedio', the Virgin Mary and all the saints.[104] Bartolomeo di Tingo succinctly invoked God and the Virgin Mary and the whole court of paradise for the sake of 'gaudagnio' in his smaller *vacchetta*.[105] Francesco di Pacino and Matteo di Talomeo called on Christ and the Virgin Mary to lend them profit.[106] Pietro Lancia wrote in the Name of God for the surety of his body and soul.[107] Ranieri Astaio simply invoked 'onnipotente iDio'.[108] The *quaderno* of Jacopo Alamanno Salviati offers a more complex invocation, in which he singled out the saints John the Baptist, Paul, James, Philip, Nicholas, Francis and Antony after naming God and the Virgin Mary and before calling on 'tutta la celestiale chorte di paradiso', 'generalmente' so that they might give profit and salvation to his soul.[109] The focus on the Virgin Mary in Pisa may reflect her status as Pisa's protector and it is telling that John the Baptist is often invoked in her place in Florentine *quaderni*.[110] Saint Nicholas may have been chosen as a protector of mariners and

[103] OD, 1323, fo. 1r.
[104] OSC, 2010, fo. 1r.
[105] OD, 1285, fo. 1r: 'profit'.
[106] OSC, 1938, fo. 1r.
[107] ASPi, Alliata, 773, fo. 1r.
[108] OD, 1331, fo. 1r: 'almighty God'.
[109] SNS-S, I, 333 fo. 1r: 'all the court of paradise'.
[110] Allegrezza, 'Diffusione', 258.

merchants whose cult had spread widely across Mediteranean trade and pilgrimage routes.[111] For merchants setting out the structure of entries in their *quaderni,* spiritual concerns were just as significant as commercial practice.

Quaderni were divided into sections devoted to 'dare', payments owed by their authors, and 'avere', payments owed to their authors, and to descriptions of landholdings. This structure meant their authors could quickly calculate their liabilities, incoming payments and property assets on consulting their books. Although 'dare' and 'avere' entries seem at this period to have been kept separately rather than side by side in a double-entry bookkeeping system, there are, of course, exceptions. Notably, Tommaso Zerbi cited the *quaderno* of a Milanese wool company kept by two merchants, Serranieri and Dugnano, in the 1380s as an early example of 'double-entry' accounting.[112]

In merchant *quaderni*, the interaction between the margins and rest of the page permitted certain information to be read quickly, and facilitated calculation. Individual entries followed consistent layouts. The year was placed at the top of a series of entries in the centre, framed with thin ink lines. The day and the month concerned followed above each individual entry, also aligned in the centre. Each new entry was marked with a large capital. Amounts of money were written in Arabic numerals in the right-hand margins, linked to the main body of entries with horizontal lines and were divided into three columns for florins or lire a fiorino, lire or soldi and denari. A set of *dare* or *avere* entries for a particular individual could occupy part of a page before being

[111] M. Bacci, *San Nicola, il grande taumaturgo* (Bari, 2009), 160.
[112] Milan, Archivio della Veneranda Fabbrica del Duomo, Reg. 39; T. Zerbi, *Il mastro a partita doppia di una azienda mercantile del Trecento* (Como, 1936).

summed up and separated from the next set of entries by a horizontal line drawn across the page. A page of Grasso and Del Maestro Piero's *quaderno,* which dealt with loans to Guido d'Acrespina, a wool worker, and Cholo Boticella, a merchant travelling to Genoa, reveals this structure (Figure 1.8). Payments made to 'Maestro Antone di Francescho dipintore da Fiorensa' for a painting in the Camposanto di Pisa by Grasso in his capacity as *operaio del Duomo* in 1385 were recorded in exactly the same form as payments that were made by Grasso and Del Maestro Piero as part of their banking activity (Figure 1.9).

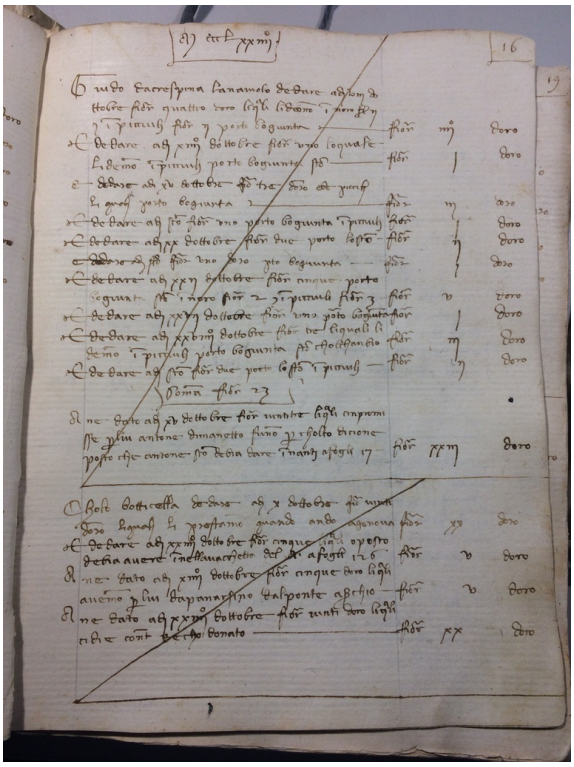

Figure 1.8 **A record of loan repayments.**

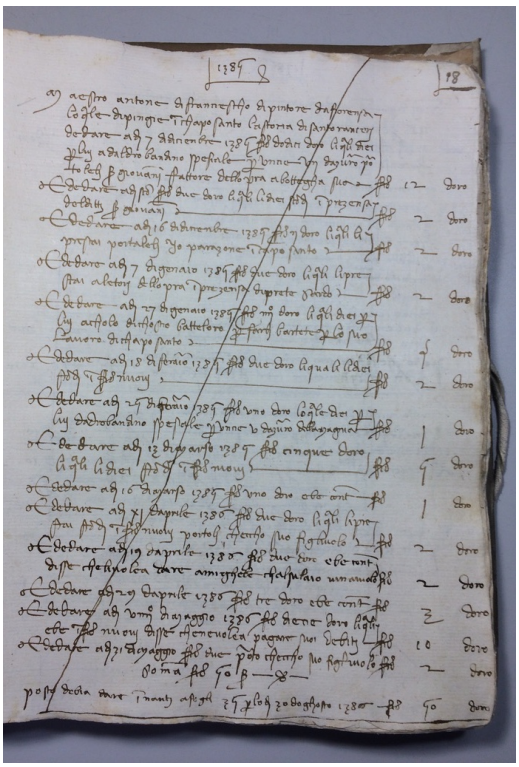

Figure 1.9 **Payments to the painter Antone di Francesco.**

The *quaderno* kept by Balduccione shows how these layouts were adapted for accounts that dealt with landholding and the grain trade with areas in *staiora* and *panora* replacing monetary values, and grain transactions documented in *staia* and *quare*.[113] Familiar forms acted as grids for merchants to order their worlds into financial obligations and revenues.

Entries in *quaderni* were written with the expectation that they would be reviewed. Pages of accounts were routinely struck through, implying that they had been closed by their authors. The margins of pages in Balduccione's *quaderno* were heavily annotated in his own hand. He noted changes to his investments and landholdings and kept references up to date. Balduccione's entries recording Biagio di Coscino's dues,[114] and the list of assets divided with his brother Nieri in 1340 are examples of this practice.[115] The margins of *quaderni* could contain cross-references to other pages of the same *quaderno*: 'chome apare a foglio 17 di questo libro'.[116] They could also cite separate legitimating documents. In April 1362, Balduccione updated an entry from February 1345, explaining that the original contract was now kept in Cholo del Chiaro's trunk.[117] Balduccione's use of the margins sometimes had unsettling effects. On 14 June 1368, he updated the entry recording the marriage of his daughter Giovanna to Tomaso di Lapo, remembering Tomaso's death and burial in the habit of S. Niccolò in the margins.[118] The expectation of future review played an important part in the calculations, material and spiritual, that were made by merchants in their *quaderni*.

[113] OD, 1312, fos. 21r, 65v.
[114] OD, 1312, fo. 33r.
[115] OD, 1312, fos. 16v-17v
[116] OD, 1312, fo. 91v: 'as shown on page 17 of this book'.
[117] OD, 1312, fo. 33r.
[118] OD, 1312, fo. 77v.

Quaderni defy neat categorisation as wholly public or private, commercial, or personal, as the annotations to their pages reveal.

Landholdings were recorded in *quaderni* in regular forms and with familiar layouts. In his *quaderno,* Balduccione followed a rubric that described land with its type – 'terra campia', 'terra pratata'; its general location – 'in delle confine dello commune di Casaggio', 'in luogho detto Mercato di Borgo Nuovo'; and, finally, by the surrounding land on four sides – 'uno capo [...] l'atro capo [...] lato uno [...] l'atro lato'. [119] These layouts permitted merchants to review their assets and to secure these by noting the places where contracts of ownership or rent were stored, as well as the name of the notary who had recorded the transaction.

Material and spiritual gain were fused by the form of *quaderni*. Merchants accounted for their spiritual investments through the same frames and with the same rigour that they applied to other entries in their *quaderni*. At times, merchants explicitly acknowledged the affinity between the material and spiritual that permeated their transactions. A 1310 *quaderno* of the Florentine Bardi company contained accounts of charitable donations kept in the name of 'Messer Domenedio', as if he were one of the partners.[120] Similarly, accounts of the Peruzzi company for the years 1335 to 1341 recorded the money given in charity to the religious, the poor and hospitals.[121] This effect of the form of accounts, which Sapori had noticed in the *quaderni* of the larger

[119] OD, 1312, fo. 21r: 'field', 'pasture', 'in the confines of the commune of Cassagio', 'in the place called the market of Borgho Nuovo', 'at the top', 'at the bottom', 'at the side', 'at the other side'.
[120] A. Sapori, *Studi di storia economica medievale* (Florence, 1940), 10.
[121] Sapori, *Studi*, 19.

Florentine merchant companies, can also be found in the books kept by smaller merchants.

Balduccione accounted for the sale and ownership of slaves in his *quaderno*, recording the date and value of transactions and sometimes describing the relevant contract. Domestic slavery was common practice in merchant households and seems to have become more frequent after the arrival of recurrent epidemics in 1348, with large numbers of Tatar slaves brought to Italy in the 1360s.[122] On 18 February 1378, Balduccione purchased Marta, an eighteen-year-old Christian Tatar slave, through Guicciardo Buzaccarino in Genoa for 37 florins.[123] He kept the contract, which is no longer extant, inside the cover of his *quaderno*.[124] On 3 July 1379, he sold Marta to the Catalan Francesco Mercatieri for 40 florins.[125] On 4 August 1379, he purchased another eighteen-year-old Tatar slave, Lucia, for 42 florins, from Appiso di Falcone.[126] The entries recording Balduccione's purchase and sale of slaves take the same form as those that recorded his property and investments. This form reduced the slaves to a monetary value and an identifying description.

Verdina was one of Balduccione's domestic slaves. He described her as a 'schiava della provincia di Tartaria', whom he had bought as an eighteen-year-old from Tomaso di Lapo, his daughter Giovanna's husband, for 20 gold florins.[127] As soon as she had been

[122] I. Origo, 'The Domestic Enemy: The Eastern Slaves in Tuscany in the Fourteenth and Fifteenth Centuries', *Speculum,* 30/3 (1995), 324; H. Barker, *That Most Precious Merchandise: The Mediterranean Trade in Black Sea Slaves, 1260-1500* (Philadelphia, 2019), 136.
[123] OD, 1312, fo. 159r.
[124] OD, 1312, fo. 159r.
[125] OD, 1312, fo. 159r.
[126] OD, 1312, fo. 162r.
[127] OD, 1312, fo. 176v.

purchased, together with Uliva, a slave owned by Balduccione's father-in-law, Ser Cholo Gatto, she was baptised at vespers on the Saturday of Olives, 1 April 1372, by the priest Jacopo Pecciori.[128] Mona Orsula was Verdina's godmother.[129] In Genoa, too, it was the custom to baptise Tatar slaves before they started to work for Christian households.[130] Balduccione and Cholo swore to the priest, Jacopo Pecciori, that they would never sell Verdina and Uliva. Uliva was freed by Cholo Gatto's daughter, Niera, on 25 December 1377.[131] Slaves were also often manumitted as a form of pious charitable bequest in Pisan wills.[132] After a discussion with the Archbishop of Pisa, Francesco de Moricotti, who made Balduccione swear to sell Verdina at all costs because of her unspecified 'riessa e malvagità', Balduccione sold Verdina to Andreotto di Ser Cholo Galletto for 38 gold florins, a profit of 18 florins, on 27 July 1378.[133] The entries describing Verdina's baptism and sale show how, even in the records that he kept of transactions concerning slaves, Balduccione accounted for material and spiritual concerns. His justification for having broken his promise to the priest seems to have been written in the expectation of a divine audit.

In 1408, at the behest of his father, Nino Lancia, Petro Lancia began to write a list of his family's property in Sicily and Pisa in a separate *quaderno*.[134] They were involved in the grain trade between Sicily and Tuscany, and the textile trade, among other ventures. One of the entries in this *quaderno* recorded the perpetual rent of a workshop

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[128] OD, 1312, fo. 176v.
[129] OD, 1312, fo. 166r.
[130] S. M. Stuard, 'Ancillary Evidence for the Decline of Medieval Slavery', *Past and Present,* 149 (1995), 20, at n. 60.
[131] OD, 1312, fo. 176v.
[132] S. K. Cohn, *The Cult of Remembrance and the Black Death: Six Renaissance Cities in Central Italy* (Baltimore, 1992), 7.
[133] OD, 1312, fo. 166r: 'evil and wickedness'.
[134] Alliata, 773, fo. 1r.

they used for fulling and finishing cloth from the Sicilian Hospitallers. On 10 March 1363, they had agreed a rent of four *tarì*, an accounting unit used in Sicily,[135] with 'messer Lo Peciolo, frate', the treasurer of the order of Saint Stephen of Rhodes.[136] The contract was recorded by the notary Paulo Pollastra in Palermo.[137] On 7 December 1385, the agreement was revisited with the head of the order, Giorgio di Ceva,[138] and a new contract was drawn up by the notary Luca Pollastra.[139] The rent was increased to ten *tarì* because the old agreement struck him as 'troppo buono merchato'.[140] The entry specified that he did this 'per l'anima mia'.[141] The layouts of *quaderni* were ideally suited to calculations that recognised an affinity between spiritual and material.

[135] S. R. Epstein *An Island For Itself, Economic Development and Social Change in Late Medieval Sicily* (Cambridge, 1992), xii.
[136] Alliata, 773, fo. 2v.
[137] Paulo Pollastra is a documented notary from Agrigento who worked in Palermo: G. L. Barberi, *I Capibrevi*, ed. G. Silvestri (3 vols, Palermo, 1879-1888), iii, p. 593.
[138] P. Sardina, 'Vizi private e pubbliche virtù dei Gerosolimitani di Corleone tra XIV e XV secolo', *Rivista dell'Istituto di Storia dell'Europa Mediterranea,* 2/1 (2018), 16.
[139] Luca Pollastra is a documented Palmerian notary: Barberi, *Capibrevi*, iii, p. 89.
[140] Alliata, 773, fo. 2v: 'too profitable'.
[141] Alliata, 773, fo. 2v: 'for my soul'.

Investing: *Quaderni* as Books of Memory

> Avisandovi che lo sapere ben et ordinatamente tenere le scripture insegnia lo sapere contractare, mercatare et guadagniare. Et sensa fallo lo mercante non si dè confidare ne la memoria, la quale fiducia ficce multi errare [...] [142]

Quaderni were used as financial books of memory.[143] The repeated action of keeping and reviewing a *quaderno* provided not only a written record of transactions, but also facilitated the memorisation of critical information. Bartolomeo da San Concordio, a theorist of the art of memory, was a Dominican preacher at Pisa who had studied at Bologna and Paris. On the subject of memory in his *Ammaestramenti degli Antichi,* he counsels that 'those things which a man wishes to retain, let him study to set them in order', that 'from the memory of the one thing he comes to another' and that 'of those things which we wish to remember we should place in certain places, images and similitudes'.[144] The Pisa that Bartolomeo da San Concordio would have known was the Pisa of the merchants and artisans who crowded into mendicant churches.

> Queste sono le posesione che veno in parte a Nieri Baldiccione quando noi partiamo [h]o le iseritte qui perche Nieri non riese mai memoria nulla.[145]

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[142] Cotrugli, *Mercatura,* 82; 'I advise you that once you know how to keep books well, and in order, you will know make deals, how to be a merchant and how to profit without fail, the merchant should not consider things in his memory; reliance on memory leads many into error'.
[143] M. J. Carruthers, *The Book of Memory: A Study of Memory in Medieval Culture* (Cambridge, 2009), 195.
[144] Bartolomeo da San Concordio, *Ammestramenti degli Antichi*, cit. F. A. Yates, *Art of Memory* [1966] (London, 2014), 97.
[145] OD, 1312, fo. 20v: 'These are the possessions, which belong in part to Nieri Baldiccione as we divide our investments. I have written them here because Nieri never manages to remember anything'.

When Balduccione divided assets that he had held in partnership with his brother Nieri in 1340, he explicitly cited the fallibility of unaided memory and the superiority of his own version of events as the reason for recording this in his *quaderno*. The reasoning behind Grasso's use of a dedicated *quaderno* to record the partition of the assets that he had held in common with his brother Ranieri in 1367 is likely to have been similar.[146]

Both Balduccione and Grasso set their financial transactions and holdings in order. Entries related to the same event or place were written in lists that facilitated consultation of the *quaderni,* while also allowing its author to use the '*catena'* or chain method of listing to remember one entry by another.[147] The division of Balduccione's and Nieri's joint holdings in 1340 is marked by just such a chain of entries.[148] A comparable chain can be found in Grasso's *quaderni*; for example, Grasso recorded a chain of entries concerning grain tax payments owed by his brother Ranieri in 1377.[149]

Entries in *quaderni* were frequently cited in the context of a specific time and place exploiting 'locational heuristics'.[150] Balduccione, as was common practice beyond mercantile circles, often cited obligations to receive or make payments in the liturgical time of saints' days: 'in fine a S. Tomeo che viene', 'Di Sancto Salvestro', 'die del corpo di Christo', 'in fine a S. Mighele di settembre che viene'. [151] Property, transactions and notaries were located by reference to precise locations. When Balduccione lent Francesco Cinque three florins on 28 February 1339, he noted him as

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[146] OD, 1319, fo. 1r.
[147] Carruthers, *Memory,* 80.
[148] OD, 1312, fo. 21r.
[149] OD, 1323, fo. 44r
[150] Carruthers, *Memory,* 110.
[151] OD, 1312, fos. 58v-59r, 61r, 117v, 135r, 140v, 143r, 150r, 153r-153v: 'until the next feast of St Thomas', 'the day of St Sylvester', 'Corpus Christi Day' 'until next Michaelmas'.

from the 'capella di S. Mateo' in Pisa, and the contract of the loan was registered with Ceccho, 'notaio di Serr Gaddo dela capella di S. Paulo al'orto'.[152] These entries can be seen as typical of merchant writing in *quaderni.* When we examine *quaderni* as financial 'books of memory', we find that to turn their pages is to travel in landscapes and 'temporalities' constructed by merchants to order and record their business as well as to lend authority to these memories.[153] A 'good memory' trained by the keeping of *quaderni* was essential to mercantile ways of thinking.

Notices of the foundation of companies and commercial partnerships in *quaderni* were recorded with the phrase 'fare memoria'. The partnership of Grasso and Del Maestro Piero was recorded in this way: 'memoria faccio io Parazone',[154] as was that of Francesco Pacino and Matteo di Talomeo in 1397: 'memoria facciamo noi'.[155] When Grasso and Del Maestro Piero listed their shared obligations, 'dobbiamo partire per metà lo guadagnio e la perdita volgia iddio [...] che tanti denari metta l'uno quanto l'altro [...]', they began the entry with 'memoria faremo' and described this 'memoria' as allowing them to 'provedere merchantilemente' the calculation and division of their future profits.[156] Memory in the context of these entries seems to have been understood as the legal weight the *quaderni* would carry in the event of a dispute between partners. This kind of memory was critical to the reputations of merchants. As Cotrugli

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[152] OD, 1312, fo. 11v: 'the Chapel of Saint Matthew in Pisa', 'the Notary of Serr Gaddo of the Chapel of Saint Paul in the Garden'. 'Capella' was a term used for a parish in Pisa. The terminology for districts of a city varied from place to place with, for example, 'contrada' often used as an identifying district elsewhere.
[153] M. S. Champion, *The Fullness of Time: Temporalities of the Fifteenth-Century Low Countries* (Chicago, 2017).
[154] OD, 1323, fo. 1r: 'I Parazone make this memory'.
[155] OSC, 1938, fo. 29r: 'we make this memory'.
[156] OD, 1323, fo. 101r: 'we must share the profit and the loss equally, may God forbid it [...] one will put it as much money as the other', 'we will make a memory', 'memory', 'foresee in a mercantile way'.

cautioned, integrity and truth depended on written evidence that *quaderni* could provide in litigation: 'la qual integrità non si può bene cognoscere s'ella non è bene provata'.[157]

Merchants used the record provided by their *quaderni* to calculate their investments, projecting their material and eschatological futures. These calculations were made from the perspective of an individual, or that of a family or of a partnership. Grasso and Del Maestro Piero used their *quaderno* to calculate the 'ragione chomuna' of their bank.[158] Having reviewed and cited earlier entries, 'come pare in arietro a fogli 101', they summed up their profits to arrive at the modest total of 214 florins, 25 soldi and eight denari.[159] The components of this calculation were repeated below the summary entry and the whole page was struck through to mark the completion of the calculation. This calculation allowed Grasso and Del Maestro Piero to participate in a shared way of thinking.

Quaderni were stores of medical advice.[160] Balduccione wrote in his *quaderno* a protective recipe against the threat of recurrent epidemics: 'de mali che veniono in questa mortalità', which a certain Lorenso Dugo had taught him.[161] He also recorded a remedy for 'male deli occhi', requiring juniper and tamarisk leaves, that he had learned from 'Monna Giovanna'.[162] On another page, in the spare space below the description of a set of landholdings, Balduccione wrote a certain Maestro Fano Barbieri's remedy

[157] Cotrugli, *Mercatura,* 137: 'that integrity which one cannot know unless it is well proven'.
[158] OD, 1323, fo. 141v: 'common reason'.
[159] OD, 1323, fo. 141v: 'as appears earlier on fo. 101'.
[160] A. E. Vitolo, *Ricette e formule medicamentose nei ricordi di Miliadusso di Balduccione* (Pisa, 1950), 4.
[161] OD, 1312, fo. 366r: 'of the evils which arrive in this mortality'.
[162] OD, 1312, fo. 171r: 'affliction of the eyes'.

for toothache, requiring carnations, 'noce d'india', long pepper and nutmeg.[163] The Venetian *Zibaldone da Canal* contained similar material, for example listing the virtues of rosemary, which its author claimed as a remedy for all afflictions.[164]

Writing and remembering prayers in *quaderni* were complementary means of protecting the bodies and souls of the merchants who kept them. Balduccione wrote a prayer against poisoning in his *quaderno*, calling on the intercession of Saint Patrick to be said with three *Paternosters* and three *Ave Marias*.[165] On the same page, he wrote a further prayer, to be said each year before sunrise on the morning of St John the Baptist's feast, while facing east and wearing a gold ring, as a protection against dying without penitence.[166] In the case of written prayers, the function of *quaderni* as books of memory went beyond that of a written record. The action of writing these prayers, and regularly repeating them at significant times, was at once a mnemonic technique and a means of invoking the protection of divine and saintly intercession.

Quaderni provided a space for a different kind of memory in the expectation of eschatological review. They were used as a record of deeds that would influence the fate of the souls of their authors, their families, or their fellow citizens in the afterlife. In this sense, they seem to have been written, not in the expectation of an audit as part of commercial litigation, but rather in the expectation of a divine audit that would settle the fate of a merchant's soul. Grasso's involvement with the decoration of Pisa's Camposanto in his capacity as *operaio* is a revealing instance of *quaderni* being used

[163] OD, 1312, fo. 182v: 'Indian nuts'.
[164] *Zibaldone,* 95.
[165] OD, 1312, fo. 183r.
[166] OD, 1312, fo. 183r.

to remember eschatological investments for the city as a whole and for himself as an individual insofar as he did his job well and honourably. The Camposanto was an important landmark in the Pisan civic and commercial consciousness. It was built on soil brought back from the Holy Land in the Pisan ships that had carried crusaders, with the intention that all Pisans should have the chance to be buried in the Holy Land.[167] Its frescoes show familiarity with Dante's *Commedia*. They also emphasise the transience of worldly life, the eternal time of afterlives and the potential for Pisan saints to act as intercessors.[168] Lina Bolzoni has interpreted the Camposanto fresco cycles as having been 'mutually referential' with the sermons of fourteenth-century preachers, Domenico Cavalca among them, provoking a powerful response from their Pisan audiences.[169] The building of the Camposanto was an exercise in the construction of Pisa's civic memories.

Grasso visited the Camposanto in person to oversee payments to 'Antone di Francescho dippintore da Fiorensa' for completion of the San Ranieri fresco cycle.[170] San Ranieri (1117-1160) had been a Pisan grain merchant and member of a merchant company in the Holy Land until he became a pilgrim and preacher.[171] He was known for his intercession to save those in peril on the seas.[172] In one instance, he was invoked by

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[167] F. Ughelli, *L'Italia Sacra* (10 vols, Venice, 1717), ii, p. 346.
[168] D. B. Kathryn, 'Tradition Innovation and Technique in Trecento Mural Painting: The Frescoes and Sinope Attributed to Francesco Traini in the Camposanto in Pisa' (Johns Hopkins Univ. Ph.D. thesis, 1978), 26, 42, 98.
[169] L. Bolzoni, *The Web of Images: Vernacular Preaching from its Origins to St Bernardino of Siena* (Aldershot, 2004), 5.
[170] OD, 440, fo. 18r; C. Ianella, 'Il ciclo pittorico di San Ranieri in camposanto nel contest storico Pisano', in P. castelli and M. L. Ceccarelli Lemut, *Intercessor Rainerius ad patrem: il santo di una città marinara del XII secolo* (Pisa, 2011), 168.
[171] M. L. Ceccarelli Lemut and G. Garzella, '"Mirabilia Domini in pelago". Cristianizzazione, culti e reliquie a Pisa', in *Dio Uomini Mare*, 171.
Vita San Ranieri, in *Acta Sanctorum Iunii III* (Antwerp, 1701), 423-465.
[172] C. Morris, 'San Ranieri of Pisa: The Power and Limitations of Sanctity in Twelfth-Century Italy', in *Journal of Ecclesiastical History,* 45/4 (1994), 596.

merchants returning to Pisa from Sicily and he quieted the storm that was threatening their ship.[173] This fourteenth-century cycle of frescoes has been seen as an attempt to mobilise memories of Pisa's twelfth-century commercial expansion.[174] Accounting in his *quaderno* for the painting of frescoes of San Ranieri in the Camposanto was a form of memory that united business practice and merchant eschatology.

In his will, copied into one of his *quaderni*, Grasso stipulated his desire to be buried 'in camposancto in sepulcro' should he die in post, or in the Dominican church of S. Caterina, with which his family had long-standing ties.[175] In fourteenth-century Pisa, the burial of merchants in classical sarcophagi in the Camposanto was already an established practice, especially among the *operai del Duomo*.[176] He asked that scenes from the life of Saint John the Evangelist, the saint whom he chose to invoke at the start of his *quaderni*, be painted in his memory.[177] He named the cathedral, the friars of S. Caterina and the confraternity of the *disciplinati* of St John the Evangelist as beneficiaries.[178] His *quaderno*, as a record of his involvement with its decoration and the cathedral works in general, would have played a part in his being remembered, together with his testamentary bequests to hospitals in Pisa and for masses to be said and candles lit for his soul.[179] Whether he would have wished the financial memories of the *quaderno* he had kept with Del Maestro Piero to have been subjected to the same

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[173] *Vita San Ranieri*, ch. 102.
[174] Ianella, 'Ciclo', 177.
[175] OD, 39, fo. 204r; Battistoni, *L'Opera*, 75.
[176] K. R. Mathews, 'Recycling for Eternity: The Reuse of Ancient Sarcophagi by Pisan Merchants, 1200-1400', in A. Leader, *Memorializing the Middle Classes in Medieval and Renaissance Europe* (Berlin 2018), 32.
[177] OD, 39, fo. 205v.
[178] Battistoni, *Opera*, 75.
[179] OD, 39, fo. 204v.

eschatological scrutiny in search of evidence of usury, or lending at excessive rates of interest, seems less certain.

Quaderni were written as a future record for their keepers and often in the expectation that they would be handed down to close family members. They were a legally valid record of a merchant's trade. They were also intimate and personal books. They were the medium in which a merchant's cultural horizons were shaped and reshaped. Grasso's separation of potentially usurious loans, which were recorded in a different *quaderno* from his accounting for the cathedral works, and his wish to be buried in the Camposanto, underline the partiality of *quaderni*. Perhaps Grasso hoped that his soul would be subject only to a partial divine audit.

Placing Books: Geography and Recategorising *Quaderni*

Quaderni were portable and yet they have been carefully fixed by historians on the landscape of late medieval economic development. They have been seen as a quintessentially Tuscan form of writing. Systems of accounting, perfected in their pages by the second half of the fourteenth century, have been offered as an explanation for Tuscany's economic prosperity.[180] The style of accounting adopted by the larger Tuscan commercial partnerships, especially the Datini company, and individual merchants is often taken to be an ideal type, against which less formally kept books, or books with more varied content, have been judged. Melis's model of these *quaderni* separated *quaderni di ricordanze*, books of memories, i.e. works of a genealogical or political character, from analytical books.[181] He then classified the analytical books in which records of transactions were either compiled chronologically, or systematically reviewed, into further groups. Melis's model is still the authoritative point of reference.[182]

The focus on *quaderni* kept by large Tuscan commercial partnerships and comparison to these books as an ideal type, has, at times, obscured the geographical range of these books, as well as the rich variety of their form and content. *Quaderni* were kept not only in Florence, Prato and Pisa, but also in Venice, Milan, Genoa and elsewhere.[183] Variations in the ways in which they were kept in different cities have often been condemned as failures to match the sophistication of Tuscan *quaderni*, or praised as

[180] F. Melis, *Documenti per la storia economica dei secoli XIII-XVI* (Florence, 1972), 49.
[181] Melis, *Documenti,* 67.
[182] Melis, *Documenti*, 61.
[183] For example: *Zibaldone*; Zerbi, *Mastro*; H. Sieveking, *Studio sulle finanze genovesi nel medioevo: e in particolare sulla Casa di S. Giorgio,* tr. O. Soardi (Genoa, 1906).

evidence for a particular town having pre-empted Tuscan advances in accounting. It is in this light that the *quaderno* kept by the Milanese merchants Marco Serranieri and Giovanni Dugnano between 1395 and 1398, and the *libro real novo quaderno* for the years 1406-1434 of the Soranzo commercial partnership in Venice, have been heralded as their cities' earliest examples of double-entry bookkeeping, according to which credits in one account are balanced by debits in a corresponding account.[184] The use of roman numerals in the Soranzo *quaderno* has meant that it has been seen as less sophisticated than Tuscan examples. The civic focus of accounts kept in Genoese *quaderni*, with private enterprise seemingly relying on notarial records, has meant that Genoese bookkeeping has been seen as less fully developed than Tuscan accounting. However some Genoese *quaderni* were devoted to private enterprise. The *Galearum marinariorum rationes,* were accounts kept by notaries onboard Genoese ships that recorded their cabotage in detail.[185]

Of course, variations in how merchants kept their books in different cities does not mean that merchants in Genoa or Venice were any less sophisticated than merchants in Tuscany. While a full analysis of variations in how *quaderni* were kept in different places lies beyond the scope of this inquiry, here *quaderni* will not be judged against an ideal type based on the accounting practice of Tuscany's larger merchant companies. Moreover, it is important to remember that merchants moved between these places, and so did their *quaderni*. The exchange of books and ideas between merchants was decentralised.

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[184] Zerbi, *Mastro*; M. Ryabova, 'The Account Books of the Soranzo Fraterna, Venice 1406–1434, and their Place in the History of Bookkeeping', *The Accounting Historians* Journal, 45/1 (2018), 15.
[185] V. Polonio, *L'amministrazione della res publica genovese fra tre e quattrocento: l'archivio antico comune* (Genoa, 1977), 272-273.

The medium of *quaderni* travelled along with merchants and goods beyond Italy. The *quaderno* kept by Balmayn for Cantelow, who styled himself as a merchant of London and Florence, is just such a book.[186] Its nine paper quires were bound as a blank volume in limp vellum with a wrap-around edge to protect its pages. Its entries were kept across four languages, primarily Middle English, but also Anglo Norman, Latin and Italian. Megan Tiddeman has shown that there was considerable mixing between these languages, especially for merchant terminology with, for example, the Italian phrase for the risk of storms, *fortuna di mare* rendered as *fortune de meer*.[187] It is an example of how the medium of *quaderni* could proliferate along trade routes. Balmayn, this *quaderno's* keeper, was sent to accompany a shipment of wool from Southampton to Porto Pisano between 3 April and 24 June 1451.[188] The *quaderno* rendered an account for his journey there and back. From Southampton, the wool was 'schippyd in a caryk of Jene' owned by Antonio Doria.[189]

The shipment was arranged by Cantelow, who was already an experienced merchant in 1451. He was a mercer, he had collected taxes for the crown, and he was involved in the wool staple at Calais.[190] Subsequently, in 1456, he was made a member of a commission charged with investigating the truth of alchemy.[191] Transporting wool to

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[186] Front cover: SNS-S I, 339.
[187] Tiddeman, 'Money Talks', 111.
[188] Tiddeman, 'Money Talks', 111.
[189] Tiddeman, 'Money Talks', 111: 'Shipped in a carrack of Genoa'
[190] H. Bradley, *The Views of the Hosts of Alien Merchants, 1440-1444* (Suffolk, 2012), 174-175; G. Holmes, 'Cantelowe, Sir William (d. 1464), merchant', *Oxford Dictionary of National Biography* (2004) *https://www.oxforddnb.com/view/10.1093/ref:odnb/9780198614128.001.0001/odnb-9780198614128-e-52243*. (11/07/2022); S. L. Thrupp, *The Merchant Class of Medieval London* (Michigan, 1948), 328.
[191] W. J. Turner, 'London Businessmen and Alchemists: Raising Money for the Hundred Years War', in L. J. A. Villalon and D. J. Kagay, *The Hundred Years War (part III): Further Considerations* (Leiden, 2013), 347.

Italy was especially profitable in this instance. In return for having advanced £800 to the crown to fund the construction of Eton College, Cantelow had been granted the right to ship 300 sacks of wool from Southampton through the straits of Gibraltar without paying the normal customs dues.[192] Cantelow's brother, John Cantelow, also had extensive dealings with foreign and Italian merchants, shipping goods on Venetian galleys, as well as surveying the goods of alien merchants for the mayor of London.[193]

For this shipment, William Cantelow worked in partnership with the Florentine merchant Salviati and the London branch of the Salviati company, which had been founded in 1445.[194] The Salviati provided the finance for the venture.[195] On his arrival in Pisa, Balmayn was met by Salviati, whose expenses riding from Florence to Pisa are recorded in the *quaderno*.[196] Alamanno's Salviati, Iacopo's father, was instrumental in arranging the sale of the wool in Florence for a profit of more than 22,539 florins.[197]

The form in which Balmayn set out his accounts was exactly that used by Italian merchants to keep their *quaderni*. The first folio of the *quaderno* has a written invocation to Jesus and Mary, the year in question at its head together with the pagination.[198] Empty folios between sets of entries suggest the book was created as a blank *quaderno* with space left in anticipation of future entries. Pokes and sacks of wool were set out in columns and summed up at the end of sets of entries: 'Summa totalis in

[192] G. Holmes, 'Anglo-Florentine Trade in 1451', *The English Historical Review,* 108/427 (1993), 377.
[193] Bradley, *Hosts*, xxxvi, li.
[194] P. Hurtubise, *Une famille-témoin: les Salviati* (Vatican, 1985), 44.
[195] Tiddeman, 'Money Talks', 441.
[196] SNS-S I, 339, fo. 41; Tiddeman, 'Money Talks', 442, 443.
[197] Holmes, 'Anglo-Florentine', 375.
[198] SNS-S I, 339, fo. 1r.

pokes: CCC^{mo} lxvj^{o}'.[199] Balmayn accounted for the costs of the journey in detail, recording that they did not pay customs at Genoa, that they unloaded the ship in 'Lyvorne', that they paid for the wool to be taken from 'Lyvorne' to Pisa by cart, where the customs dues were paid, where damaged pokes were repaired and where they spent four florins staying in a house.[200] Entries in the *quaderno* were struck through as they were reviewed and completed (Figure 1.10).

[199] SNS-S I, 339, fo. 64r; Tiddeman, 'Money Talks', 437.
[200] Tiddeman, 'Money Talks', 444.

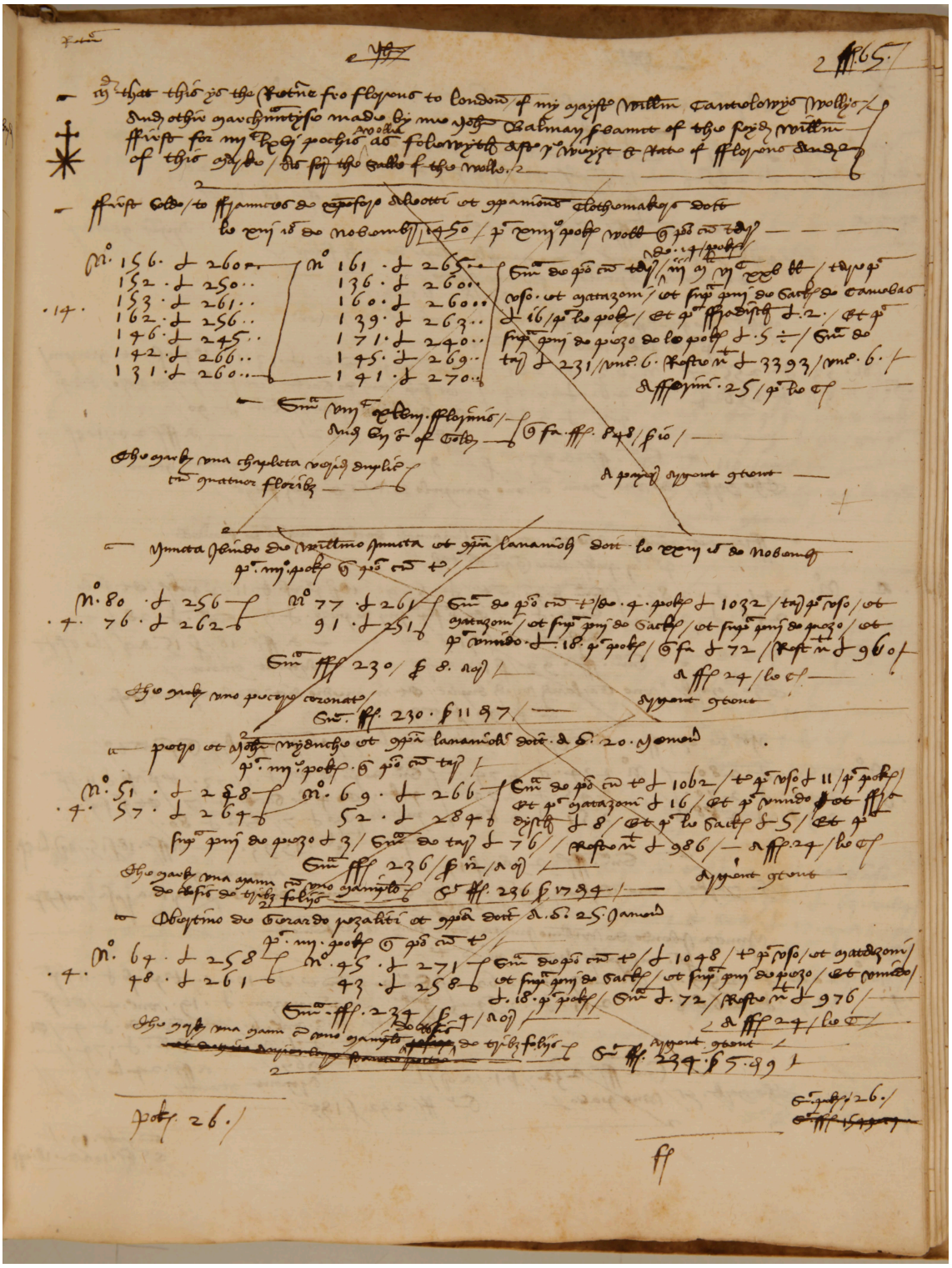

Figure. 1.10 **The form of John Balmayn's accounts.**

The Balmayn *quaderno* was used to store more ephemeral documents, just as its Italian counterparts were. The draft of a letter by Balmayn, written in Florence on 27 August 1451, was preserved loose among its pages.[201] The letter reported on the sale of the wool so far and noted that neither the Strozzi nor the Medici had yet sold any great quantity of wool so that 'there come no quantite but yours [...] to Porte Pysane'. It also advised its reader to expect a letter from Jacob, Iacopo Salviati.[202]

The *quaderno* kept by Balmayn and preserved in the Salviati archive shows how the medium of *quaderni* and the form in which they were kept could be transmitted along trade routes into new markets. To view the medium of *quaderni* as a static phenomenon is to obscure the extent to which the movement of merchants and their books could influence the practice of writing in other markets across late medieval trade routes. The portable nature of *quaderni* lends weight to the argument that the cultural horizons of late medieval merchants were shared beyond the confines of a single city or market.

[201] SNS-S I, 339.
[202] Tiddeman, 'Money Talks', 446.

Conclusion: Closing the Books

In the centre of the 'Triumph of Death' fresco in Pisa's Camposanto (Figure 1.11), we see Death swooping over a mass of corpses while devils and angels collect their souls. Some of the dead, dressed in fine clothes, to the top left and lower right of this composition, hold closed books with coloured bindings (Figure 1.12). The clothes of one of these figures (Figure 1.13) were painted in a way that is reminiscent of the lecturer in Ambrogio Lorenzetti's *Allegory of the effects of good government on the city* fresco in Siena (Figure 1.14). The books they hold are similar in physical size to the *quaderni* kept by Pisan merchants. Their bindings are relatively plain and of single colours, just as some *quaderni* were identified by the colour of their bindings. They lie below angels and devils fighting each other for possession of the souls of the dead.

Figure 1.11 **The Triumph of Death, Camposanto di Pisa.**

Figure 1.12 **A book, the Triumph of Death, Camposanto di Pisa.**

Figure 1.13 **Books, the Triumph of Death, Camposanto di Pisa.**

Figure 1.14 **Lorenzetti, a lecturer, the effects of good government, Siena.**

This connection between books, the fates of souls and imagining an eschatological audit can also be found in the design of late medieval Tuscan tombs. Ligo Ammanati taught medicine at the University of Pisa until his death in 1359.[203] In 1360, on his tomb in the Camposanto, he was depicted in sculpture lying on the lid of his sarcophagus, holding a book to his chest.[204] Two tombs from the middle of the fifteenth century show similar iconography. Giovanni Chellini, a merchant and lecturer in medicine at Florence, was depicted on his tomb in the church of San Domenico in San Miniato al Tedesco, with his hands folded over a large book, comparable in physical size to a *quaderno*. In the church of San Domenico in Pistoia, the jurist and lecturer Filippo Lazzari was represented in a similar pose to that of Chellini's funerary monument.[205] It is not possible exclusively to identify these figures with merchants. University teaching offered an important context for the iconography of holding these kinds of books. Nonetheless, in late medieval Pisa, figures of the Camposanto fresco and the books they kept still evoked an affinity between keeping *quaderni* and divine reckoning, at the hour of the last judgement.

The proliferation of this kind of bound, blank, paper codex provided a new medium in which merchants could account for their businesses and for their souls. The calculations merchants made in keeping their books were an ordered process according to which

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[203] G. Ferrarini, 'La tradizione e la gloria dell'insegnamento della chirurgia nell'Università di Pisa', *Annali Delle Università Toscane. Sezione Delle Scienze Mediche, Fisiche, Matematiche e Naturali*, 11/45 (1926), 52.
[204] B. Cassidy, *Politics Civic Ideals and Sculpture in Italy c.1240-1400* (London, 2007), 145; R. Novello, 'Puccio di Landuccio', *Dizionario Biografico degli Italiani,* 85 (2016) https://www.treccani.it/enciclopedia/puccio-di-landuccio_%28Dizionario-Biografico%29/ (09/05/2023).
[205] A. M. Schulz, 'The Tomb of Giovanni Chellini at San Miniato al Tedesco', *The Art Bulletin* 51/4 (1969), 320.
G. Gonnelli, *Monumenti sepolcrali della Toscana* (Florence, 1819), 93-94.

they reviewed a categorised record of the past to the facilitate the projection of material and eschatological futures. This new medium changed the ways in which merchants remembered their investments and calculated their prospects, whether material or spiritual. The form of *quaderni*, their layouts, and the calculations merchants made in them allowed them to participate in a shared way of thinking, a common reasoning. The relationship between the cultural horizons of merchants and their *quaderni*, the books they kept, was reciprocal, with each shaping the other in turn. For merchants in late medieval Italy, the question of who would close the books on their souls was an urgent one.

The affinity between the material and the spiritual that characterised the cultural horizons of merchants in late medieval Italy was shaped by the notion that a merchant's books were subject to eschatological audit. The use of the phrase *confessare*, to confess, to record entries in *quaderni,* both by merchants themselves and in legal texts, reveals this connection. Authentic entries in *quaderni* did not need to be witnessed to have validity; this was true of records of both financial transactions and written prayers. Whether they were open or shut, merchants' *quaderni* were imagined as continually subject to divine review.

As a medium, *quaderni* lent expression to the affinity between a merchant's commercial and spiritual investments that was a defining element of their cultural horizons. Where Chiffoleau has seen recurrent epidemics as the most important context to the calculation of the horizon of the afterlife in the late Middle Ages,[206] the proliferation of *quaderni,*

[206] Chiffoleau, *Comptabilité,* 450.

a new medium, in that they were sets of versatile, portable, ready-bound blank paper books, was a more relevant context. The suggestion that 'la comptabilité de l'au-delà' was a part of 'désacralisation' can be challenged.[207] The close study of *quaderni* reveals that merchants would have seen calculation and accounting as tasks that always engaged with both the material and the spiritual.

Having explored the definition of *quaderni,* the medium in which merchants were able to calculate their fortunes, whether material or spiritual, I will investigate merchant education in late medieval Italy through the ideal figure of the perfect merchant.

[207] Chiffoleau, *Comptabilité*, 354.

2. The Perfect Merchant

Merchants in late medieval Italy faced a particular set of practical, ethical, and spiritual challenges, which they approached through the frame of their cultural horizons. The *ragione* that aspiring merchants learned from a young age gave them a distinctive means of approaching these challenges. The exercises that sharpened *ragione* were also a form of entertainment. Investments in education promised returns, not only in future material profits, but also in social standing and in the cultivation a merchant's reputation or *fama*. Late medieval ideals of the perfect merchant were models that merchants aspired to in perfecting their art. These ideals showed them how they should negotiate the tensions between their material, ethical and spiritual concerns. The perfect merchant that Benedetto Cotrugli described in his manual of the art of trade was not an archetype of modern, rational economic man. He was to be judged, not only by his profits, but also by how they were acquired. Cotrugli's manual devoted considerable attention to a merchant's ethics and piety. A merchant's contribution to the common good of his city was an integral part of the perfection of the art of commerce. Merchants read books and engaged with new ideas through their cultural horizons, which were themselves transformed at every encounter with new information. Their reading was not solely practical. The constellations of books they read were broader and more varied than has at times been assumed.

While this chapter will focus on the aspiration to examples of perceived best practice rather than the mechanisms by which merchant ethics were enforced, it is important to remember that merchants were judged as members of their cities, guilds and confraternities. Membership of these communities conferred social capital on their

members and active participation was meant to guide members to virtuous behaviour.[1] A merchant whose ventures fell short of the standards required of them faced pressure from their peers, sanctions and even exclusion. Communities of merchants from one Italian city who lived in another were also organised into groups that regulated their own trade and that could adjudicate legal disputes. For example, before the Florentine conquest of Pisa in 1406, Florentine merchants in the city were either regulated by the Pisan institutions of the *ordo maris*, the *arte della lana,*[2] the *ordine dei mercanti,*[3] the *curia forensicorum* created to handle disputes involving foreigners, or by their own community, headed by an elected consul and under the auspices of the Florentine *Mercanzia*.[4] An investigation of these mechanisms which encouraged and pressured merchants to perfect their art lies beyond the scope of this thesis and is an enticing line of inquiry.

This chapter will begin with an investigation of how merchants learned to read, write, and calculate. Their *ragione*, the ways of thinking that their distinctive education inculcated, transformed how merchants received and framed new knowledge. Building on the foundation of the *ragione* that merchants learned, it will turn to address the late medieval ideals of the merchant. Finally, this chapter will explore the constellation of books that would have passed across a merchant's desk to study, and the ways in which a merchant's cultural horizons were continually reshaped by their reading.

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[1] G. Rosser, *The Art of Solidarity in the Middle Ages, Guilds in England 1250-1550* [2015] (Oxford, 2017), 87.
[2] P. Castagneto, *L'arte della lana a Pisa nel duecento e nei primi decenni del trecento, commercio, industria e istituzioni* (Pisa, 1996).
[3] L. Ticciati, *L'Ordine dei mercanti a Pisa nei secoli XII-XIII* (Pisa, 1992), 57
[4] ASFi, Mercanzia, 14150, fo. 6r; C. Quertier, 'Entre nation, diplomatie économique et corsairs, les conflits marchands au sein de la communauté Florentine de Pise dans la seconde moitié du XIVe siècle', in E. Maccioni and S. Tognetti (eds), *Tribunali di mercanti e giustizia mercantile nel tardo medioevo* (Florence, 2016), 53-54.

Merchant Education

Merchants in late medieval Italy were taught to think in distinctive ways. They learned to *ragionare,* to calculate or reason, a phrase that encompassed particular kinds of arithmetic, geometry and writing. Franco Borlandi, studying Genoa, made this distinction between learning information, and learning to reason and learning to memorise, arguing that the latter two were the most important parts of a merchant's education.[5] For Henri Pirenne, the relationship between education and the revival of commerce in western Europe was symbiotic.[6] By the thirteenth century, trade was increasingly complex and learning how to calculate became more important. Investment in schools increased and the first lay schools devoted to preparing merchants emerged alongside church schools.[7] Pirenne argued that specialised merchant education developed in response to an increasing demand. Dedicated schools and apprenticeships were important stages in the training of many merchants. Cotrugli warned his readers, at the same time, that reading alone was an insufficient foundation for the commercial success that could raise them to a higher social status. Practical experience was needed: 'chi nonn è [stato] a tabacho, nonn è bon padron di nave'.[8]

Ragione had become a prominent skill in late medieval Italy. Alexander Murray traced the growth of an 'arithmetical mentality' that spread throughout society, especially in

[5] F. Borlandi, 'La formazione culturale del mercante genovese nel Medioevo', in *Atti della Società Ligure di Storia Patria*, 3/2 (1963), 226.
[6] H. Pirenne, *Medieval cities: their origins and the revival of trade* [1925], tr. F. D. Halsey (Princeton, 2014), 150.
[7] H. Pirenne, 'L'instruction des marchands au moyen âge', *Annales d'histoire économique et sociale*, 1 (1929), 15, 28.
[8] Cotrugli, *Mercatura*, 71: 'he who has never sailed on a ship, is not a good ship's master'.

cities, over the course of the thirteenth century.[9] As transactions, and the calculations they entailed, became a more regular feature of everyday life, familiarity with mathematical reasoning increased.[10] The 'lifting power' of arithmetic in late medieval Italy as an effective instrument of social mobility was a powerful driver of demand for acquiring mathematical knowledge.[11] The cultural effects of this change can be traced in late medieval Italy's literature. Dante began the *Inferno* with a riddle in arithmetic, 'Nel mezzo del cammin di nostra vita', and in *Paradiso* he turned to geometry to describe his failure to render that of which he could not speak: 'Qual è 'l geomètra che tutto s'affige / per misurar lo cerchio [...]'.[12] The methods of calculation that merchants needed to learn resonated beyond the confines of the marketplace.

Writing was more important still than arithmetic and geometry in merchant education. According to Cotrugli, a merchant's pen was the instrument that was most necessary to his art.[13] He depended on it to record investments, to calculate returns, to create legal proof and to communicate through correspondence with partners, factors and clients. In this sense, the history of merchant education can be set against the growing trust in writing and written records that was part of a 'literate mentality', as Michael Clanchy has argued in another context.[14] He saw a growing demand for literacy as a product of the expansion of government. Merchants were often also appointed to serve terms in civic offices. Facility with reasoning, accounting, and record-keeping in *quaderni* was also an effective preparation for fiscal or administrative posts. Even though the office

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[9] A. Murray, *Reason and Society in the Middle Ages* [1978] (Oxford, 2002), 175, 189.
[10] Murray, *Reason,* 193.
[11] Murray, *Reason,* 207.
[12] Murray, *Reason,* 185; Dante, *Inferno,* I, l. 1, p. 26; Dante, *Paradiso*, XXXIII, ll. 133-134, p. 666: 'In the middle of the journey of our life*'*, 'Like the geometer who sets all his mind to square the circle'.
[13] Cotrugli, *Mercatura,* 82.
[14] M. T. Clanchy, *From Memory to Written Record, England 1066-1307* (Oxford, 2013), 2.

of a merchant was seen as a semi-public role by jurists, the cultural horizons of late medieval merchants were founded on a distinctive way of thinking that was more than just faithful record-keeping.

Conditions in late medieval Italy made investment in learning especially profitable. As an anonymous fourteenth-century merchant manual commented: 'La cartta costa pocho, e spesso ne recha buono profitto*'*.[15] By the middle of the fourteenth century, a greater number of merchants managed their investments by employing factors, writing letters, and keeping *quaderni*, requiring a higher degree of training in merchant *ragione*. Norman Gras saw these changes as leading towards the figure of the 'sedentary merchant' who controlled his investments from his desk without travelling, and carefully administered them to minimise the risks to which they were exposed.[16] Surveying the world on paper made a particular kind of merchant literacy crucial to their success.[17] A merchant could gather more information about distant markets by reading letters and *quaderni* at his desk than by travelling.[18] The impact of recurrent epidemics on the volatility of late medieval markets and the risks of travel may have made surveying the world on paper all the more important.

Studying merchant education as learning how to reason and calculate will bring the distinctiveness of a merchant's cultural horizons into focus. Armando Sapori sought to

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[15] G. Corti, 'Consigli sulla mercatura di un anonimo trecentista', *ASI,* 110/1 (1952), 118; 'Paper costs little, and often it yields great profits'.
[16] N. S. B. Gras, *Business and Capitalism: An Introduction to Business History* (New York, 1939), 68, 78.
[17] Clanchy, *Memory*, 239.
[18] J-C. Hocquet, 'Weights and Measures of Trading in Byzantium in the Later Middle Ages. Comments on Giacomo Badoer's Account Book', in M. A. Denzel, J-C. Hocquet and H.Witthöft (eds), *Kaufmannsbücher und Handelspraktiken vom Spätmittelalter bis zum beginnenden 20. Jahrhundert* (Oslo, 2002), 112.

uncover the specific mathematical, commercial, and geographical knowledge a merchant would have needed to navigate the 'labyrinth' of entries, annotations, and calculations in their *quaderni*.[19] This inquiry will widen Sapori's focus to include the knowledge that merchants needed to navigate not only practical challenges but also the ethical and spiritual challenges that arose in their profession.

[19] A. Sapori, 'La cultura del mercante medievale Italiano', *Rivista di storia economica*, 2, (1937), 168.

Merchant Manuals

Merchants learned the art of trade by reading. As Sapori suggested, *libri d'abaco* and merchant manuals enabled merchants to teach themselves.[20] *Libri d'abaco* have been studied as pragmatic tools for merchants by Warren Van Egmond. They were collections of problems in mathematics and geometry. The fame of Leonardo da Pisa's thirteenth-century Liber Abaco meant that, by the fifteenth century, the term *libro d'abaco* was applied to this kind of tract in a broad sense.[21] The *libri d'abaco* taught invaluable techniques in which the mathematics of proportion underpinned the conversions of measures and currencies, the division of profits, and the geometry of landholdings.

Libri d'abaco were more than just commercial tools. Ugo Tucci thought the way in which their mathematical problems were set provided models of behaviour that informed a merchant mentality.[22] As sources for cultural history, however, they have been relatively underexplored. The problems contained in *libri d'abaco* were often set in the same commercial landscapes as vernacular tales, invoking commercial partnerships, valuable commodities, and trading cities. Richard Goldthwaite has considered whether solving their problems might have entertained as well as instructed their readers.[23] Arielle Saiber, studying proportions and harmonies in the Renaissance, has suggested that the cultures of mathematicians and writers cross-fertilised one

[20] Sapori, 'Cultura', 150.
[21] F. Melis, *Documenti per la storia economica dei secoli XIII-XVI* (Florence, 1972), 126.
[22] U. Tucci, 'La formazione dell'uomo d'affari', in F. Franceschi, R. A. Goldthwaite and R. C. Mueller (eds), Il rinascimento italiano e l'Europa volume quattro, commercio e cultura mercantile (Vicenza, 2007), 483.
[23] R. A. Goldthwaite, 'Schools and Teachers of Commercial Arithmetic in Renaissance Florence', *Journal of European Economic History*', 1 (1972), 433.

another.[24] Learning the mathematics of proportion could change the way in which a merchant understood justice that claimed to be proportionate.

Robert Lopez and Irving Raymond considered *libri d'abaco* to be a specialised kind of merchant manual.[25] Merchant manuals have most often been defined as vernacular treatises containing lists of the conversions of weights and measures in different markets, structured geographically to compare different cities and ports. They were compiled from information in other *quaderni*, the lists of prices that circulated in merchant letters, the tariffs outlined in civic statues as well as from their authors' experience.[26] The correspondence of the Venetian merchant Pignol Zucchello contains a list of prices of this kind.[27] Merchant manuals also borrowed from each other: for example, the sections of Giovanni da Uzzano's manual written in 1440 that dealt with weights, measures and prices drew heavily on either Francesco Balducci Pegolotti's early work or that of a now lost intermediary.[28] These manuals were often written for internal use within larger merchant companies.[29] This intended audience was reflected in their content.[30] Here, these works will be considered as manuals of the practice of trade.

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[24] A. Saiber, *Measured Words, Computation and Writing in Renaissance Italy* (Toronto, 2017), 18.
[25] R. S. Lopez and I. W. Raymond, *Medieval Trade in the Mediterranean World* [1955] (New York, 2001), 341.
[26] G. Dahl, *Trade, Trust and Networks, Commercial Culture in Late Medieval Italy* (Lund, 1998), 227.
[27] R. M. della Rocca ed., *Lettere di mercanti a Pignol Zucchello, 1336-1350*. (Venice, 1957), 123-5.
[28] Uzzano, *Pratica*; Benedetto Cotrugli, *Libro de l'arte de la mercatura*, ed. V. Ribaudo (Venice, 2016).
[29] F. Melis, *Documenti per la storia economica dei secoli XIII-XVI* (Florence, 1972), 120.
[30] J. E. Doston, *Merchant Culture in Fourteenth Century Venice: Zibaldone da Canal* (New York, 1994), 23.

Pegolotti's *pratica*, written between 1335 and 1343 for use inside the Bardi company, has been taken as an ideal type of these texts.[31] Notable edited examples of this kind of manual include the Venetian *Tarifa zoè noticia dy pexi e mexure* (c.1400),[32] and Giorgio Charini's *libro di mercatantie et usanze de' paesi* (1458),[33] written in Dubrovnik, where Charini was an agent of the Pazzi Company.[34] A 1395 *quaderno* kept by Ambrogio de' Rocchi, a Datini company factor, is a half-compiled manual of this type.[35]

> A Piero d'Alamanno Salviati, disse a tavola sua questo dì 8 di maggio 1442 avere uno mio libro che parla di mercatantia, un libro di mercatantia per più parti.[36]

Manuals were also loaned between merchants. In an entry in his *quaderno*, Da Uzzano recorded the loan of his merchant manual to Piero, the son of Alamanno Salviati. By 1442, the Salviati family had already established companies in Pisa and Florence, trading in, among other things, wool and textiles. They would open a further two companies, in London in 1445 and in Bruges in 1456.[37] Merchants copied the manuals that they borrowed into their own *quaderni*. In 1416, Antonio da Pescia, then a factor for Giovanni di Bicci de' Medici in Florence, made a copy of Saminiato de' Ricci's

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[31] Francesco Pegolotti, *La pratica della mercatura*, ed. A. Evans (Harvard, 1936), 3.
[32] *Tarifa zoè noticia dy pexi e mexure di loughi e tere che s'adovra mercadantia per el mondo*, eds. R. Cessi and A. Orlandini (Venice, 1925).
[33] Giorgio di Lorenzo Chiarini, *El libro di mercatantie et Usanze de' Paesi*, ed. F. Borlandi (Turin 1936).
[34] R. A. Goldthwaite, *The Economy of Renaissance Florence* (Baltimore, 2009), 188.
[35] Ambrogio de Rocchi's manual is edited in: B. Dini ed., *Una pratica di mercatura in formazione, 1394-1395* (Florence, 1980), 75-269.
[36] SNS-S I, 2, fo. 186r: 'To Piero d'Alamanno Salviati, he says at his table, this day 8 May 1442, that he has a book of mine which speaks of trade, a book of trade in many parts'.
[37] P. Hurtubise, *Une famille-témoin: les Salviati* (Vatican City, 1985), 44.

1396 work on exchanges in different places, written in Genoa, from Ricci's *grande quaderno*.[38]

Manuals of the practice of trade were not the only kind of merchant manual. Some merchant manuals also set out the ethical and spiritual frameworks that shaped merchant identity. They contained vernacular proverbs, disseminated the wisdom of classical literature, offered ethical advice, and described how merchants should run their households. They established, taught, and defended a distinctive social status, communal role, and recognisable identity for the late medieval merchant. Here, these works will be considered as manuals of the art of trade. Cotrugli's *Libro de l'arte de la mercatura* is an ideal type of a manual of the art of trade. The Tuscan merchant Paolo da Certaldo's *Libro di Buon Costumi,* a book of proverbs and teachings, written in the 1360s but read and copied by merchants into the fifteenth century, can be seen as an earlier example.[39] An anonymous fourteenth-century tract, preserved in Florence, offering mercantile and ethical advice also fits this description.[40] They were written for a wider readership than manuals compiled for use inside a merchant company; for 'figliuolo e fratel mio, e caro mio amico, vicino o compagno'.[41]

While distinguishing between manuals of the art and the practice of trade is a reminder of the range of material that has been defined as a merchant manual, it is important to remember that late medieval merchants themselves were less rigorous in their distinctions. A merchant could write and find elements of both these types of manual,

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[38] A. Borlandi, *Il manuale di mercatura di Saminiato de' Ricci* (Genoa, 1963), 7.
[39] C. Bec, *Les marchands écrivains, affaires et humanisme à Florence 1375-1434* (Paris, 1967), 95; Certaldo, *costumi*.
[40] G. Corti, 'Consigli sulla mercatura di un anonimo trecentista', *ASI,* 110/1 (1952), 114-119.
[41] Certaldo, *Costumi,* 3; 'my son and brother, and my dear friend, neighbour or colleague'.

the mathematical problems of the *libri d'abaco*, lists of the measures of different lands, as well as proverbs, in a single *quaderno*, as the edited fourteenth-century Venetian examples *Zibaldone da Canal* and the *Zibaldone Riccardiano 2161* reveal.[42] All merchant manuals should be read in conversation with other kinds of work that offered merchants models of behaviour, from penitential manuals and sermons to law statues. The versatility of a mercantile education led Kenneth Hyde to question the existence of any notion of a 'distinct merchant culture' in Italian towns.[43] Studying not only manuals of practice, but also manuals of the art of trade, will, however, draw out the distinctiveness of mercantile ways of thinking.

A third variety of merchant manuals were written as guides to the routes along which their goods flowed. Portolans, sets of sailing directions and pilot guides known as *compassi*, were the maritime equivalent of overland travel directions.[44] The *Compasso de Navegare*,[45] written between 1250 and 1265, and *Il Portolano di Grazia Pauli*,[46] written in 1296, are portolans that have both been linked to Pisa.[47] They could be used to plan journeys. They would have been of interest to both sedentary and travelling merchants who considered the geography of their investments. Here, these works will

[42] *Zibaldone*; A. Bocchi, *Lo Zibaldone Riccardiano 2161, una pratica di mercatura veneziana del primo trecento* (Udine, 2021).
[43] J. K. Hyde, 'Some Uses of Literacy in Venice and Florence in the Thirteenth and Fourteenth Centuries', *Transactions of the Royal Historical Society*, 29 (1979), 116.
[44] P. G. Dalché, 'Cartes marines, représentation du littoral et perception de l'espace au Moyen Âge', in J-M. Martin *Castrum 7, Zones Côtières Littorales dans le Monde Méditerranéen au Moyen Âge: Défense, Peuplement, Mise en Valeur* (Rome, 2001), 10.
[45] *Il compasso da navigare*, ed. B. R. Motzo (Cagliari, 1947); *Lo compasso de navegare,* ed. A. Debanne (Brussels, 2011).
[46] T. Asole, *Il portolano di Grazia Pauli, opera Italiana del secolo XIV, trascritta a cura di B.R. Motzo* (Cagliari, 1987).
[47] Giovanni da Uzzano, *Compasso*, in G. F. Pagnini ed. *Della decima e di varie altre gravezze imposte dal comune di Firenze: della moneta della mercatura de' Fiorentini fino al secolo XVI* (4 vols, Lucca, 1761), iv, 199-278.

be considered as manuals of trade routes. They will be explored in detail in the fifth chapter of this thesis, *Charting Horizons*.

Manuals of trade routes also circulated as parts of larger works. Pegolotti's manual provided directions, distances, and advice for travellers. He described the route from Tana on the Black Sea to China, giving distances in days on horseback or on camel-back.[48] He described how merchants should appear on the journey, as well as how to find a good guide and translator.[49] He even explained the system of paper money that merchants were obliged to use in China.[50] Da Uzzano's manual described customs duties and the conversion of weights and measures.[51] It also contained a portolan sailing guide for planning Mediterranean voyages,[52] advice on how to hold a course when prevented from sailing directly from point to point by the prevailing wind,[53] and even instructions on sail-making.[54] A fragment of a Venetian commercial manual, which mixed information on the conversion of weights, measures and currencies with such a sailing guide, demonstrates the similarity of these kinds of manuals.[55] The *quaderno* of the fifteenth-century Venetian mariner Michael of Rhodes contained mathematical problems of the kind found in *libri d'abaco*, a portolan sailing guide and instructions on ship-building.[56] While Alan Stahl saw this *quaderno* as one of a new kind of fifteenth-century Venetian manual written for sailors rather than for passengers or

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[48] Pegolotti, *Pratica,* 21.
[49] Pegolotti, *Pratica,* 22.
[50] Pegolotti, *Pratica,* 23.
[51] Uzzano, *Pratica*.
[52] Uzzano, *Pratica*, 199-276.
[53] Uzzano, *Pratica*, 277-288.
[54] Uzzano, *Pratica*, 279-282.
[55] Venice, Biblioteca Nazionale Marciana, MS CL. XI. 87 (7353).
[56] O. Long, D. McGee, A. M. Stahl, *The Book of Michael of Rhodes: A Fifteenth-Century Maritime Manuscript* (3 vols, Harvard, 2009).

merchants, it seems to have been consistent with the general category of merchant manuals.[57]

Although merchant manuals were works through which the cultural horizons of late medieval merchants were gathered, ordered, and disseminated, they have more frequently been quarried as sources for metrology and economic history than as the material for cultural history. These manuals, however, were closer to the vernacular literature that circulated among merchants than has often been assumed. The places and horizons of trade that they invoked were shared with the settings of vernacular literature. Franco Borlandi's hypothesis, that Rustichello da Pisa's account of Marco Polo's travels was based on a merchant manual that has since been lost, underlines this proximity.[58] As Lopez suggested, they are works that can been seen as lying 'halfway between the extremes of the *Decameron* and the bill of exchange'.[59] The commonplace nature of the aphorisms and ethical or spiritual advice they contained disappointed Lopez.[60] Yet these were more than conventional descriptions: they were active influences on the behaviour and expectations of aspiring merchants.

The tales merchants read were further places in which models of merchant behaviour could be found. These tales responded to and shaped contemporary attitudes and perceptions. Lauro Martines has demonstrated that invention in literary sources

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[57] A. M. Stahl, 'Michael of Rhodes and the Birth of the Mariner's Manual', *Journal of Early Modern History 14* (2010), 152.
[58] F. Braudel, 'A Tribute to Franco Borlandi', *Journal of European Economic History*, 6/3 (1977), 743.
[59] R. S. Lopez, 'Stars and Spices: The Earliest Italian Manual of Commercial Practice', in D. Herlihy, R. S. Lopez and V. Slessarev eds., *Economy, Society and Government in Medieval Italy, Essays in memory of Robert L. Reynolds* (Ohio, 1969), 35.
[60] R. S. Lopez and I. W. Raymond, *Medieval Trade in the Mediterranean World* [1955], (Columbia, 2001), 408.

presents another layer of information that historians can explore.[61] Terence Cave has emphasised that literature is not passive and that it invites a certain way of thinking, 'reciprocal acts of imaginative thought', from its readers.[62] Medieval authors, too, were aware that their writings could have a formative effect. Vernacular literature that invoked the landscapes and techniques of commerce were popular with merchants and circulated through the medium of *quaderni*. The tales of Boccaccio's *Decameron*, written by an author who had trained as a merchant, were underscored by the concerns of a burgeoning commercial society.

Cotrugli described the perfect merchant in his manual of the art of trade. The figure of the ideal merchant was an example that merchants could use to teach themselves. It would have been read alongside the full range of ideas to which a merchant was exposed. These ideas were drawn from laws, sermons, art, literature, other manuals, and conversations. Merchant manuals were neither narrow guides to economic practice nor were they read in isolation. By placing merchant manuals in the context of a merchant's cultural horizons, they become more valuable still as sources for merchant education in late medieval Italy.

[61] L. Martines, *An Italian Renaissance Sextet, Six Tales in Historical Context* (New York, 1994), 10.
[62] T. Cave, *Thinking with Literature, Towards a Cognitive Criticism* (Oxford, 2016), 14.

Learning *ragione*

Ragione was the versatile approach to knowledge that merchants could apply to different kinds of problems. Merchants learnt *ragione* in sequential steps. At the outset they were taught a distinctive kind of literacy and writing. Aspiring merchants then progressed to study commercial arithmetic and geometry. The final stage in acquiring *ragione* was experience of apprenticeships, travel, and commerce. Investment in learning *ragione* was seen as the path to material success in business. More than this, it was an approach that could be applied when merchants imagined their afterlives, weighed the ethics of their transactions, and read vernacular literature. *Ragione*, and the expectations it created, were formative influences upon every merchant in late medieval Italy.

> Et como tu vedi uno mercante li grava la pena, overo ad issa penna sia mal apto, poì dire ch'el non sia mercante.[63]

Penmanship and stamina in writing, according to Cotrugli, marked out the merchant. Aspiring merchants learned how to make entries in their *quaderni* and were trained to handle a high volume of commercial correspondence. Learning to write was the first step towards a mercantile career. While the kind of literacy that merchants learned was distinctive, it lent itself to recording and reading information that was not exclusively commercial.

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[63] Cotrugli, *Mercatura,* 82: 'And when you see a merchant who finds his pen too heavy to lift, or who is not suited to using it, you can say that he is not in fact a merchant'.

Di quella umile Italia fia salute

per cui morì la vergine Cammilla,

Eurialo e Turno e Niso di ferute.[64]

In 1399, Piero, the twelve-year-old son of Francesco di Marco Datini's closest friend and trusted adviser the notary Ser Lapo Mazzei, in order to practise writing, repeatedly wrote out these lines from the first canto of Dante's *Inferno* on a leaf of a paper quire. Ser Lapo had sent him to Datini to prepare him for a commercial career. These verses were an opportunity to practise his script. They were selected from Virgil's prophecy to Dante for the future of Italy. They are the first lines from the *Inferno* that carry Virgil's verse with them, translating his description of Aeneas's first sight of Italy: 'cum procul obscuros colles humilemque videmus Italiam'.[65] They connect late medieval Italy with classical myth. In Virgil's *Aeneid,* Euryalus and Nisus were killed fighting for Aeneas in Italy and Camilla and Turno were killed for fighting against him.[66] Dante held up these mythical figures in his call for man to turn away from greed, towards salvation: elsewhere, Boccaccio singled out Camilla's rejection of luxury, and refusal of the advances of her suitors, as an example he thought young people in his own time should follow in their homes, in church and in public.[67] Reading Dante offered a path to classical literature. Ciriaco d'Ancona (1391-c.1452) was first inspired to the serious

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[64] FD, Busta 1174, Codice 1542, fo. 1v, http://www.istitutodatini.it/schede/archivio/did/prove.htm (09/05/23); Dante*, Inferno,* I, ll. 106-108, p. 30: 'He will be the salvation of that humble Italy for which the virgin Camilla died of her wounds, and Euryalus, Turnus, and Nisus'.
[65] C. S. Singleton, *Inferno Commentary* (Princeton, 1989), 18; Virgil, *Aeneid*, iii, ll. 522-523, in Virgil, *Eclogues, Georgics, Aeneid I-VI*, tr. H. R. Fairclough and G. P. Goold (Harvard, 1999), p. 406: 'when far off we see dim hills and low-lying Italy'.
[66] Virgil, *Aeneid,* IX, ll. 176-449, XI, ll. 759-831, XII, ll. 887-952, in Virgil, *Aeneid: Books 7-12,* tr. by H. R. Fairclough and G. P. Goold (Harvard, 2000), 92-494.
[67] Giovanni Boccaccio, *Famous Women*, ed. tr. V. Brown (Harvard, 2001), 156-158.

study of Latin by reading Dante, which prompted him to read Virgil.[68] Even when Piero di Ser Lapo Mazzei first learned to write, he engaged with vernacular literature and its echoes of classical texts. These texts were not merely pedagogical tools, they also allowed aspiring merchants to cultivate classical learning as a sign of elevated social status.

On the reverse of the same leaf, Piero wrote his own name, and that of his father and Datini, as well as the alphabet, drawing out straight lines and copying Datini's merchant mark as well. These were the elements of writing that Piero would have needed to write entries in a *quaderno* or letters to other merchants. A loose paper leaf preserved among the fifteenth-century records of the Zion family, Venetian merchants who traded with Catalonia,[69] can show the kind of writing that merchants practised (Figure 2.1, Figure 2.2). It was used as rough paper for mathematical calculations, for practising script in repeated written names, as well as for honing penmanship in drawing merchant marks, elaborate capitals and even a rapidly sketched portrait.[70]

[68] Francesco Scalamonti, *The Life of Cyriac of Ancona,* in *Cyriac of Ancona, Life and Early Travels,* eds. trs. C. Mitchell, E. W. Bodnar, C. Foss (Harvard, 2015), 42.
[69] B. Doumerc, 'Les Vénitiens en Catalogne pendant la guerre civile (1464-1470)', *Acta Mediaevalia,* 5/6 (1985), 245.
[70] ASVe, Miscellanea Gregolin, 10, fo. 1r-v.

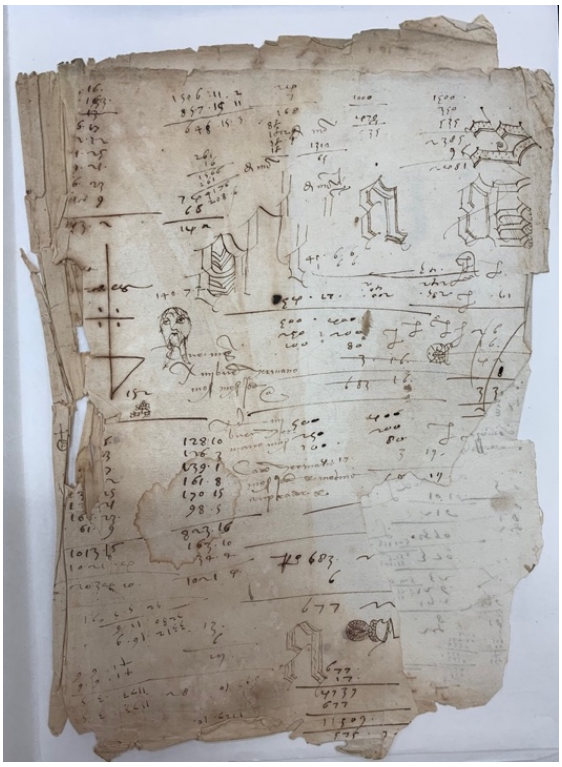

Figure 2.1 **Exercises in writing, penmanship, and mathematics.**

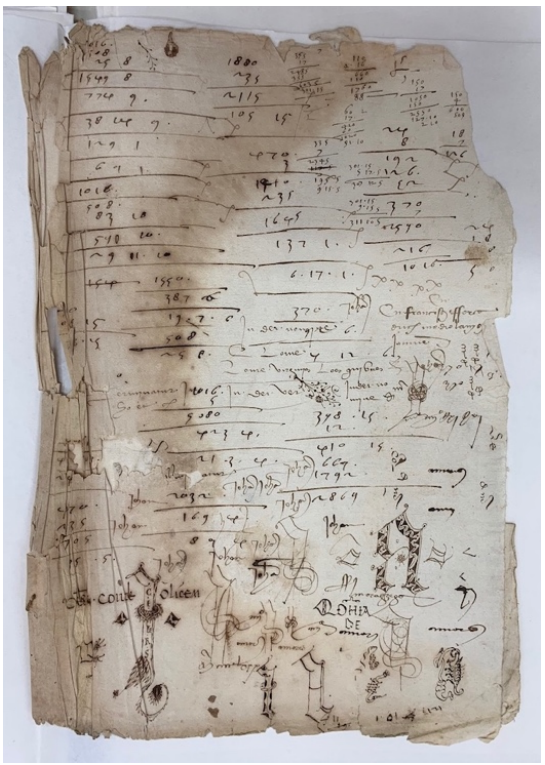

Figure 2.2 **Exercises in writing, penmanship, and mathematics.**

In another example from Umbria, in 1481, written prayers were copied out multiple times on the same paper leaf alongside financial accounts recording the sale of grain and paper: 'Ave Maria gratia plena Dominus tecum,' 'Benedicta tu in mulieribus'.[71] The writer experimented with the size and form of their script as they copied out these prayers. When aspiring merchants learned to write, they were aware of affinity between the material and spiritual value of writing.

Merchant literacy was seen to have been distinctive. In Genoa, contracts employing teachers in schools specified that they ought to teach commercial literacy, *literam mercantilem* or *ad usum mercatorum*.[72] Some contracts specified a Genoese emphasis in the style of mercantile literacy to be taught; 'gramatica secundum mercatores Ianue'.[73] That merchants in Genoa seem to have had greater recourse to notarial contracts than to *quaderni* could explain this stipulation, although questions surrounding the relative survival of sources remain. The Zion papers contain commercial letters, set out in just the same way as Venetian letters of the period, written in Catalan, which hint at the extent to which merchant training could foster outlooks and practices that would have been familiar in cities across late medieval trade routes.[74]

The reach of a mercantile education was wider than is often assumed. As Judith Bryce's study of fifteenth century Florence has shown women in late medieval Italy have often

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[71] P. Cherubini, 'Frammenti di *quaderni* di scuola d'area umbra alla fine del secolo XV', in *Quellen und Forschungen aus italienischen Bibliotheken und Archiven,* 76 (1996), 230: 'Hail Mary full of Grace the Lord is with you'.
[72] Petti Balbi, *L'insegnamento*, 58.
[73] Petti Balbi, *L'insegnamento*, 57: 'grammar following [the style of] the merchants of Genoa'.
[74] Two Letters in Catalan by Daniel Zion, 1468, ASVe, MS Gregolin, 10.

been wrongly placed at the fringes of literate society.[75] At the same time as Piero was an apprentice in the Datini household, Datini gave his daughter Ginevra a florin to pay for lessons in reading at Santa Maria Novella. In 1402, he gave her another florin to pay the salary of a mistress who taught her to read and 'those other subjects which have been asked of her'.[76] When he was away, Datini regularly exchanged letters with his wife, Margherita, who kept him informed about the management of his household and apprentices. She not only dictated letters to him, but also learned to write them in her own hand, without relying on a scribe. The kind of writing she learned was that needed in commercial correspondence. Nonetheless, Margherita still thought that her own literacy was not equivalent to her husband's ability to keep up with the volume of commercial correspondence: 'Se io sapesi iscrivere farei quello che tu dì ch'i' ò già ripreso te perché farei il dì a tutte l'ore'.[77] It was prudent for the wives of merchants to learn to read and write to the extent required by commerce, so that they could take part in the management of companies and households. In Genoa, on 21 July 1379, Filippo Longo, a merchant imprisoned for his debts, granted his wife, Salvagia, formal authority to dispose of his fixed and movable goods, allowing her to take over his affairs.[78] He described Salvagia as 'saggia, industriosa e sagace'.[79] Merchants relied on their wives in the written administration of their business and households.

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[75] J. H. Bryce, 'Les Livres des Florentines: Reconsidering Women's Literacy in Quattrocento Florence', in, S. J., Milner (ed), *At the Margins: Minority Groups in Premodern Italy* (Minneapolis, 2005), 133-161.
[76] Francesco di Marco Datini, tr. E. A. Congdon, in Jansen, Drell and Andrews, *Texts*, 460.
[77] A. Crabb, '"If I could write": Margherita Datini and Letter Writing, 1385–1410', *Renaissance Quarterly*, 60/4 (2007), 1190: 'If I knew how to write, I would do as you say, because, like you, I could write at all hours of the day'.
[78] G. Olgiati (ed), *Mercanti gli uomini d'affari a Genova nel medioevo* (Genoa, 2013), 21; ASGe, Notai Antichi, 444, n. lxxxx: 'wise, industrious and shrewd'.
[79] Olgiati, *Mercanti,* 22; ASGe, Notai Antichi, 444, n. lxxxx.

Merchants were taught literacy by their families and their family friends, in schools and as apprentices. As well as being taught how to write by Datini, Piero di Ser Lapo Mazzei also attended an abacus school, where he learned numeracy, before gaining practical experience of commerce as an apprentice. In the first letter that Piero wrote to Datini, he described himself at the abacus school as one of the 'partitori all'abacho' and expressed his hope that he would be able to spend a few more months perfecting his script so that it would not 'paresse d'uno piçicagnolo'.[80] After this, Piero was apprenticed to the money changer Gucciozzo de' Ricci before becoming a junior factor in Datini's company in Barcelona.[81] The *mercantesca* script that merchants learned in abacus schools and on apprenticeships was identifiable, and it was often the script in which *libri d'abaco* were written.[82]

Piero's path to becoming a merchant was typical. Da Certaldo recommended that boys should learn to read at the age of six or seven.[83] In Florence, in 1339, Giovanni Villani boasted that there were 8,000-10,000 boys and girls who were learning to read, of whom between 1,000 and 1,200 continued to learn mathematics in seven abacus schools.[84] The Florentine Bartolomeo di Niccolò dei Valori (d. 1427), who became at various times a *gonfaloniere*, a prior and an ambassador for the city, remembered that from 1363, 'once the plague had subsided', until 1367, he studied grammar at the school of Master Manoello before learning the abacus with Tomaso di Davizzo dei Corbizzi,

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[80] Piero di Ser Lapo Mazzei 4 February 1398, FD, 1096, 132719, http://datini.archiviodistato.prato.it/2019/10/25/la-scrittura-come-porta-accesso-alla-carriera-mercantile/ (09.05.23); consulted online: 'students of the abacus', 'seem to be that of a grocer'.
[81] J. Hayez, 'Les correspondances Datini: un apport à l'étude des réseaux marchands toscans vers 1400', in E. Malamut, M. Ouerfelli (eds), *Les échanges en Méditerranée médiévale. Marqueurs, réseaux, circulations, contacts* (Aix-en-Provence, 2012), 185.
[82] I. Ceccherini, 'Writing, Function and Social Diffusion of Writing in Thirteenth- and Fourteenth-Century Florence', in P. R. Robinson, *Teaching Writing, Learning to Write* (Woodbridge, 2010), 182.
[83] Certaldo, C*ostumi*, 36.
[84] Giovanni Villani, *Nuova cronica*, ed. G. Porta (Parma, 1991), 1352.

'so as to know how to keep accounts', and then working as an apprentice to the banker Cino Bartolini in 1368.[85] According to Vespasiano da Bisticci, the humanist Giannozzo Manetti (1396-1459) had a similar education, despite his preference for academic rather than commercial pursuits. His father, Bernardo Manetti, sent him to learn to read and write 'quanto s'appartiene a uno che abbia essere mercatante'.[86] The young Manetti then moved on to study the mathematics of the abacus and he was so gifted that, at the age of ten, he was keeping *quaderni* at his father's bank. In later life, he considered that he had 'perduto assai tempo disutilmente al banco', which he could have devoted to further study.[87] In Venice in 1420, Simone di Ser Giovanni Valenti specified in his will that his children should learn the writing and mathematics needed for commerce, and that they should also study the *auctores*, logic and philosophy, provided that, in the end, they became neither doctors nor jurists but merchants.[88] Fathers who invested in the education of their sons according to merchant *ragione* seem to have been concerned that the versatility of merchant literacy could lure their children into unintended professions.

Cotrugli's perfect merchant was a *scrittore* and an *abechista*. Tuscan teachers of commercial mathematics were highly sought after in late medieval Italian cities. Jacopo da Firenze was paid by the city of Lucca to teach commercial mathematics there in 1345 and 1346. [89] When he moved to teach in Pisa in 1347, he was replaced as a teacher

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[85] Bartolomeo di Niccolò dei Valori, tr. M. Michèle Mulchahey in Jansen, Drell and Andrews, *Texts,* 461.
[86] Vespasiano da Bisticci, *Commentario della vita di Messer Giannozzo Manetti* (Turin 1862), 5: 'in so far as it pertained to one who was to be a merchant'.
[87] Bisticci, *Manetti*, 5: 'lost a great deal of time wastefully at the bank'.
[88] Petti Balbi, *Insegnamento*, 72.
[89] P. Barsanti, *Il pubblico insegnamento in Lucca dal secolo XIV alla fine del secolo XVIII* (Lucca, 1905), 55.

in Lucca by his nephew, Coscio.[90] In 1353, Nello Specchielli di Firenze, *maestro d'abaco*, was paid to run an abacus school in Lucca on the condition that he would not leave to seek better employment elsewhere, even if he found that he had only a small number of students Lucca to begin with.[91] In late medieval Venice, Genoa and Savona, teachers from Pisa and Florence taught grammar and mathematics.[92] In 1392, Filippo da Pisa, was a teacher of the abacus in Venice.[93] In 1373, Tommaso fu Miniato responded to a call from the Doge and Anziani inviting teachers to Genoa's abacus school.[94] Giovanni Petti Balbi has identified Tommaso Bonaci di Pisa, Giacomo di Pisa, and Pietro Lapi di Firenze as having taught in late fourteenth-century Genoa.[95] The demand for these teachers and the mobility of their labour lent uniformity to merchant education across Italy.

Merchants learned mathematics alongside or outside schools through *libri d'abaco*, books of exercises and rules that circulated in the vernacular. The name for this kind of work is derived from the thirteenth-century *Liber Abaci*, a celebrated work written by Leonardo Pisano (Fibonacci), the son of a Pisan customs officer in North Africa. The problem of the Tuscan traveller from Fibonacci's text is typical of the problems set by the later *libri d'abaco*:[96]

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[90] *Provvisione concessa a Coscio da Firenze maestro d'abaco 28 July 1347*, ed. P. Barsanti, in Barsanti, *Insegnamento,* 196.
[91] *Provissione concessa a Nello Specchielli di Firenze maestro d'abaco 15 February 1353* ed. P. Barsanti, in Barsanti, *Insegnamento,* 196.
[92] F. Borland, 'La formazione culturale del mercante genovese nel Medioevo', in *Atti della Società Ligure di Storia Patria*, 3/2 (1963), 226; G. Petti Balbi, *L'insegnamento nella Liguria medievale: scuole, maestri, libri* (Genoa, 1979), 132.
[93] E. Bertanza, *Documenti per la storia della cultura in Venezia* (Venice, 1907), 202.
[94] Petti Balbi, *Insegnamento,* 66
[95] Petti Balbi, *Insegnamento,* 67.
[96] Leonardo Fibonacci, *Fibonacci's Liber Abaci, A translation into Modern English of Leonardo Pisano's Book of Calculation,* ed. tr. L. E. Sigler (New York, 2002).

> A certain man doing business in Lucca doubled his money there, and then spent 12 denari. Thereupon, leaving Lucca, he went to Florence; there he also doubled his money, and spent 12 denari. Returning at length to Pisa, he again doubled his money and spent 12 denari. Nothing now remained to him. How much did he have in the beginning?[97]

The arithmetic needed to calculate problems according to *ragione* was phrased in commercial terms and set in familiar landscapes of trade routes. To find the solution (ten and a half denari), a reader would need to use multiplication and might gain an understanding of powers. This exercise, unlike checking the calculation of accounts in a *quaderno*, did not offer an immediate reward beyond the practice of arithmetic and the enjoyment of the problem itself. The cultural horizons of late medieval merchants were conditioned not only by facility with a particular kind of mathematics but also, it seems, by the intrinsic appeal of calculating.

The role of *libri d'abaco* in the making of merchants can be explored through the writings of Paolo dell'Abbaco (1282-1374), and by examining two surviving examples of these books which, although similar in content, were produced in markedly different contexts. In fourteenth-century Florence, Dell'Abbaco wrote works on astrology, geometry, arithmetic and poetry.[98] Boccaccio praised 'Paulus geometra Florentinus' for his skilled astrology in the *Genealogy of the Pagan Gods*.[99] The Martelli family, who

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[97] Leonardo Fibonacci, *Liber Abaco*, tr. M. Michèle Mulchahey, in K. L. Jansen, J. Drell, and F. Andrews, eds, *Medieval Italy: Texts in Translation* (Philadelphia, 2009), 464.
[98] M. Muccillio, 'Paolo Dagomari', *Dizionario Biografico degli Italiani,* 31 (1985), http://www.treccani.it/enciclopedia/paolo-dagomari_%28Dizionario-Biografico%29/ (09/05/2023).
[99] Boccaccio, *Genealogy of the Pagan Gods,* ed. tr. J. Soloman (2 vols, Harvard, 2011-2017), ii, pp. 288-289.

operated in finance, the wool trade and the silk trade in Florence, Seville, Pisa and Venice,[100] owned a copy of his 'libro di ragione adatto a traffico di mercatanzia', in 1436; his *Regoluzze* provided a basic grounding in the arithmetic needed for trade.[101] The *Regoluzze* were a list of rules for arithmetic and how to write calculations. Paolo described how to use Arabic numerals and the number zero.[102] He specified the correct layout for addition.[103] They were geared towards merchant practice, and they offered shortcuts to conversions that merchants would need to make frequently. To convert lire into soldi, a multiplication of twenty, a merchant could double the figure and add an additional nought. To derive yearly revenues in lire from daily revenues in *denari*, all that was needed was to multiply this figure by three and divide it by two, assuming the commercial approximation of a year's length at 360 days and considering that there were 240 *denari* to each lira, or two-thirds of a 360-day year.[104] A simple division by two would convert the value in gold florins of an area of land in *staiora* into the *denari* of a square *braccia*.[105] To memorise Paolo's ordered list of rules was to learn to make commercial calculations quickly.

Two fifteenth-century *libri d'abaco*, Oxford, Bodleian Library, MS Canon. Ital. 188 and MS Canon. Ital. 244, show the different contexts in which *libri d'abaco* circulated. The former, MS Canon. Ital. 188, has the appearance of a student copybook of the kind identified elsewhere by Judith Field.[106] The latter is a carefully composed codex, of

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[100] L. Martines, 'La famiglia Martelli e un documento sulla vigilia del ritorno dall'esilio di Cosimo dei Medici 1434', *ASI*, 117/1 (1959), 32.
[101] Paolo dell'Abbaco, *Le regoluzze*, ed. G. Frizzo (Verona, 1883), 31.
[102] Dell'Abbaco, *Regoluzze*, 42.
[103] Dell'Abbaco, *Regoluzze*, 43.
[104] Dell'Abbaco, *Regoluzze*, 50.
[105] Dell'Abbaco, *Regoluzze*, 54.
[106] J. V. Field, *The Invention of Infinity: Mathematics and Art in the Renaissance* (Oxford, 1997), 15; W. Van Egmond, *Practical Mathematics in the Italian Renaissance: A catalogue of Italian Abacus Manuscripts and Printed Books to 1600* (Florence, 1980).

which the first folio bears the stemma of the Emigliani family of Ferrara.[107] Geometry and the mathematics of proportion are a thread running through all these examples. They were essential in the conversion of measures, weights, and currencies, the division of profits between partners, and calculation of areas of landholdings. Yet geometry and proportion can be seen to have had a wider cultural resonance, and the perspective of an *abechista* could be applied beyond the limits of commercial mathematics.

The material evidence of surviving *libri d'abaco* can help us to understand their significance. MS Canon. Ital. 188 is a small, portable paper codex.[108] Its contents are not consistently organised into titled sections. Problems are separated by horizontal lines drawn across the page, in a similar way to the lines used to mark off different entries in *quaderni.* It is not ruled, and the available writing space is entirely filled. It is illustrated with drawings and diagrams, the text running around and occasionally over these images. The paper it is written on shows a deer watermark which is extant in datable documents preserved at the archives of Ferrara, Modena, Siena, Reggio Emilia, Bologna, Pistoia, Lucca, and Rome between 1406 and 1418.[109] A sketch of a gondola might indicate a Venetian provenance (Figure 2.3). The kinds of problems found in this *quaderno* and the form in which they were set out is typified by fo. 19v., that shows a set of problems concerning travel and a geometrical diagram of different shapes (Figure 2.4).

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[107] A. Maresti, *Teatro geneologico et istorico dell'antiche, & illustri famiglie di Ferrara* (Ferrara, 1678) v, 84.
[108] MS Canon. Ital. 188.
[109] Briquet No. 3296; C. M. Briquet, *Les filigranes, dictionnaire historique des marques du papier, dès leur apparition vers 1282 jusqu'en 1600,* (4 vols, Geneva, 1907), i, p. 219.

Figure 2.3 **Sketch of a gondola.**

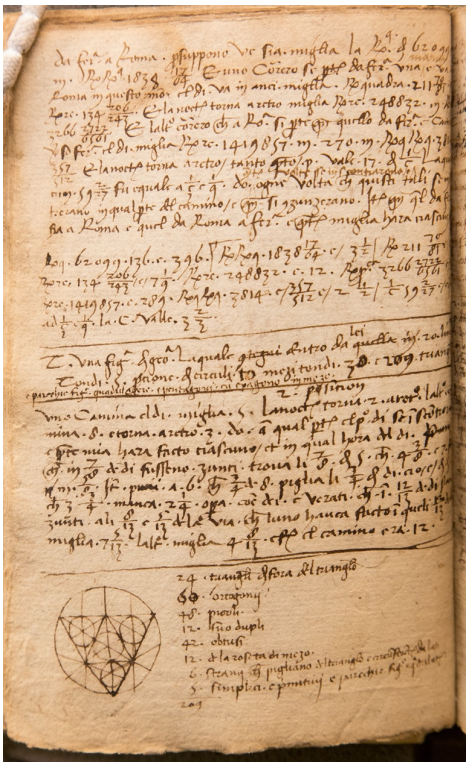

Figure 2.4 **From Florence to Rome.**

MS Canon. Ital. 244, also a paper codex, is written in a careful script, decorated with an elaborate incipit folio, and illustrated with ink drawings. It promised its readers a versatile approach to different types of problem: 'el modo de insegnare di trovare ogni raxone'.[110] The paper in this *libro d'abaco* shows a basilisk watermark of dimensions corresponding to Briquet No. 2667, extant in datable documents preserved at the archives of Ferrara, Modena and Mantua between 1447 and 1450.[111] It seems to have been a planned text. The first seven folios contain an index, and the titles of problems are set out in red ink. It is also decorated with drawings and diagrams, but these illustrations are given their own space within the text. It bears the stemma of the Emigliani family and it was a luxuriously produced manuscript (Figure 2.5).[112]

[110] Oxford, Bodleian, MS Canon. Ital. 244, fo. 1r: 'the way to teach how to find every reason'.
[111] Briquet, *Filigranes,* 192.
[112] Maresti, *Teatro geneologico*, 84.

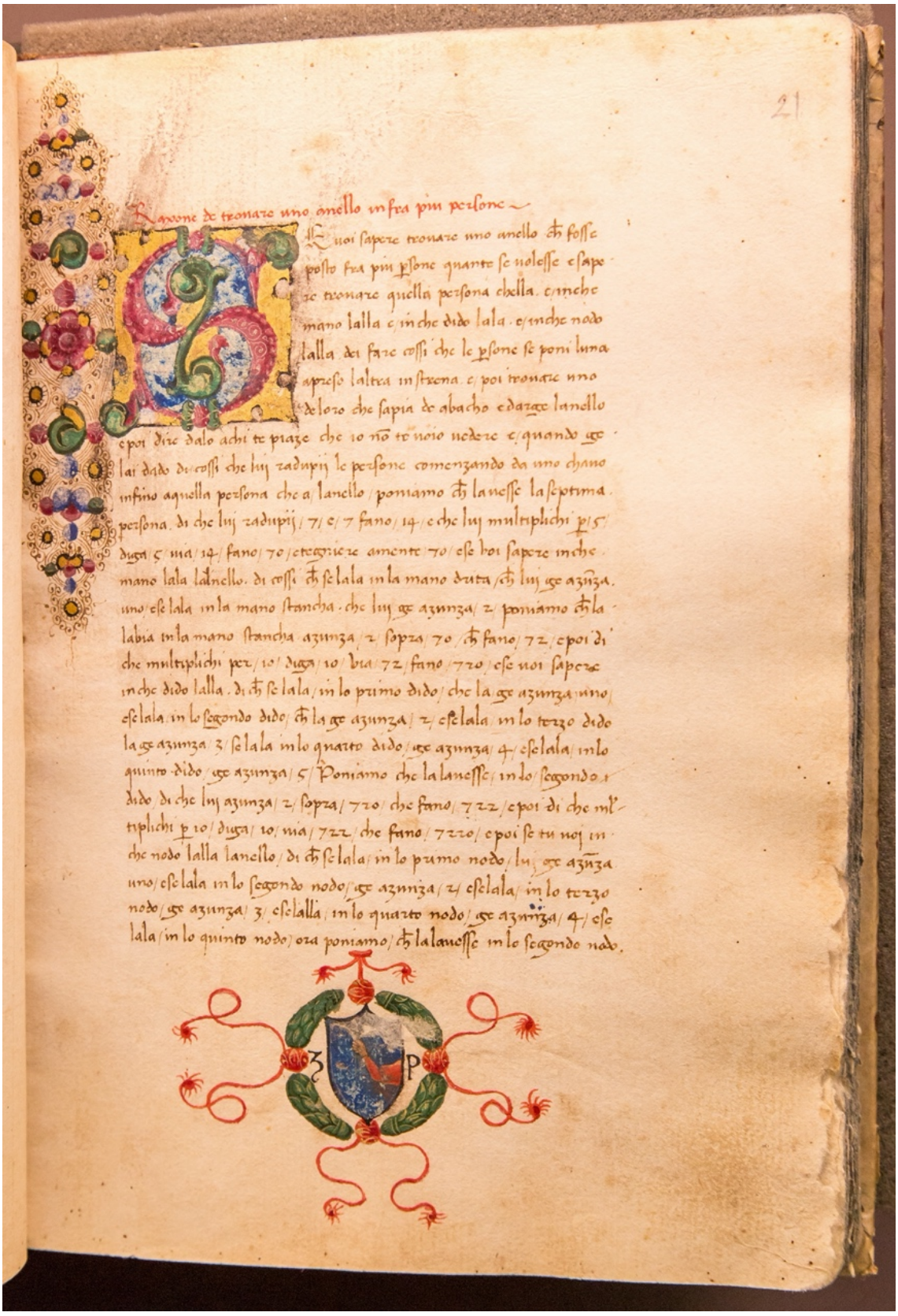

Figure 2.5 **Raxon de trovare un anello.**

Where MS Canon. Ital. 188 seems to be an example of a student copybook, MS Canon. Ital. 244 is a richly decorated codex that may have been created for the display of learning in arithmetic and geometry. Both these *libri d'abaco* contain very similar exercises that fall into two main categories: problems involving the mathematics of proportion and problems involving the geometry of gauging. Exercises involving fractions and multiplication were common, and they were often framed in terms of the division of profits: 'Qui fano compagnia [...] partire il guadagno';[113] 'raxone de compagnie'.[114] This division would be made in proportion to the original investment: 'fano una compagnia e l'uno messe f. 600. e l'altro f. 200'.[115] The same techniques of proportional calculation were applied to currency exchanges: 'e il fiorino d'oro vale l. 3 d. 16 di Pisani';[116] 'andò a uno banco a cambiare uno fiorino d'oro';[117] 'raxone de 2 compagni che andò a Bologna e vuole comprare fiorini'.[118] Alternatively, they could be used for the conversion of units of measure: in length, *braccio* and *panno*,[119] *perteze* and *piedi*;[120] and in weight, *onze*, *punti* and *attimi*.[121] The method of solving these problems was known as 'the rule of three' or 'merchant's key', and has been seen as the quintessential mathematics of the commercial partnership.

The settings of these problems, and the places, values, and units they contained reveal the wider cultural resonance of *libri d'abaco* and calculations of proportion. As well as

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[113] MS Canon. Ital. 188, fo. 4r: 'Here they founded a company [...] the sharing of the profits'.
[114] MS Canon. Ital. 244, fo. 34v: 'Reason of companies'.
[115] MS Canon. Ital. 188, fo. 104r: 'They founded a company and one contributed 600 florins, the other 200 florins'.
[116] MS Canon. Ital. 188, fo. 134r: 'and the gold florin is worth 3 Pisan lire and 16 Pisan denari'.
[117] MS Canon. Ital. 244, fo. 41r: 'they went to a bank to change a gold florin'.
[118] MS Canon. Ital. 244, fo. 62v: 'the reason of two partners who went to Bologna and want to purchase florins'.
[119] MS Canon. Ital. 188, fo. 9v.
[120] MS Canon. Ital. 244, fo. 93v.
[121] MS Canon. Ital. 244, fo. 93v.

dividing profits between partners, this mathematics could be applied to dividing a worldly estate: 'raxone de uno uomo che sta male e fa la testamento'.[122] Justice between partners in companies and in testamentary bequests was ordered by proportion and proportional shares. The mathematics of proportion were intimately connected to ideas of justice, material and spiritual.

Al nome di Dio. Qui si comincia la regola dello asazare delle terre [...][123]

The second kind of problem familiar to *libri d'abaco* includes exercises in geometry and *asazare* or gauging. These problems could involve the calculation of an area by dividing it into regular geometric shapes (Figure 2.6, Figure 2.7). A manual of this kind of geometry from fourteenth-century Pisa is the earliest known vernacular translation of Fibonacci's treatise on this subject.[124] It describes how to measure lands by the division of geometrical forms into proportional parts.[125] This kind of geometry was readily paired with the ways in which landholdings were described in merchant *quaderni* and legal contracts by their area and the features that bounded them: 'uno capo [...] l'altro capo [...] lato uno [...] l'altro lato'. [126] The geometry of gauging had tangible legal effects in late medieval Italy. In 1355 the famous jurist Bartolus of Sassoferrato (1313-1357) composed his *Tiberiadas*, which used this geometry to resolve disputes over shifting alluvial deposits.[127] The same technique could be used to

[122] MS Canon. Ital. 244, fo. 42r; 'reason of a man who is ill and who is setting out his will'.
[123] MS Canon. Ital. 244, fo. 86r: 'In the name of God. Here begins the rule of gauging lands'.
[124] *Gli esordi della geometrica in volgare, un volgarizzamento trecentesco della pratica geometrica di Leonardo Pisano,* ed. A. Evans (Florence, 2008), 7.
[125] *esordi,* 39.
[126] OD, 1312, fo. 21r.
[127] O. Cavallar, 'River of Law: Bartolus's Tiberiadis', in J. A. Marino and T. Kuehn (eds), *A Renaissance of Conflicts, Visions and Revisions of Law and Society in Italy and Spain* (Toronto, 2004), 32.

calculate the volumes of irregular shapes such as sacks or barrels of goods (Figure 2.8, Figure 2.9).[128] At a time when the size of containers was not standardised, the ability to gauge the volume of goods was especially valuable to merchants who were purchasing or shipping commodities. To measure bulk goods directly was impractical and so gauging was used to calculate the sums that merchants owed to customs officials.

[128] Baxandall, *Painting,* 87.

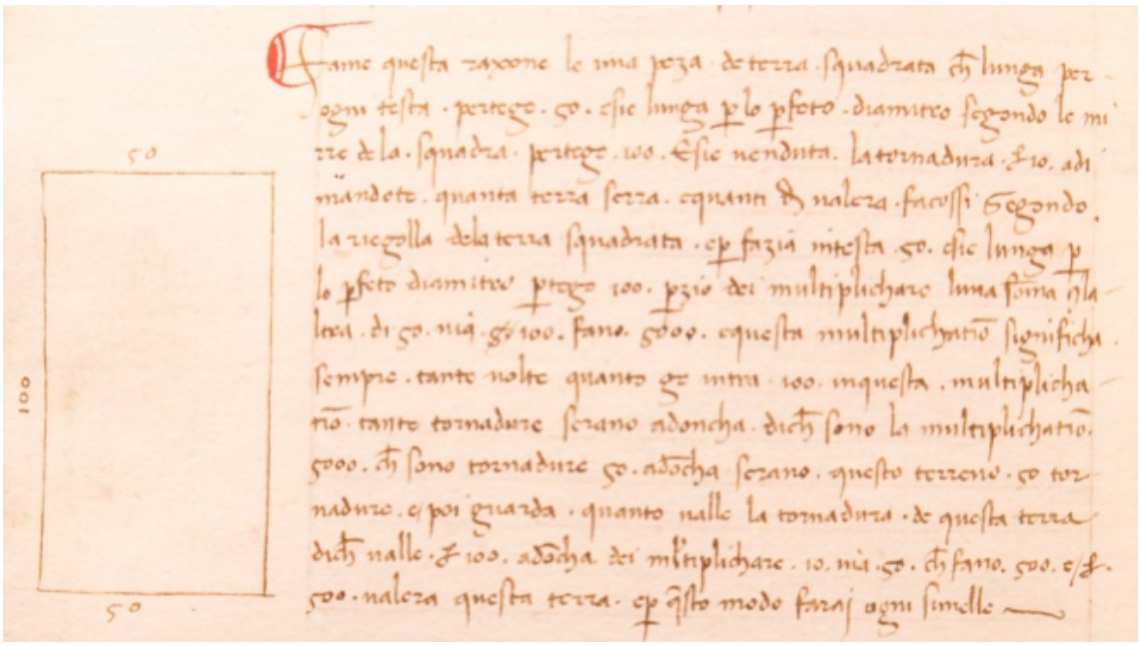

Figure 2.6 **Measuring a rectangular plot of land.**

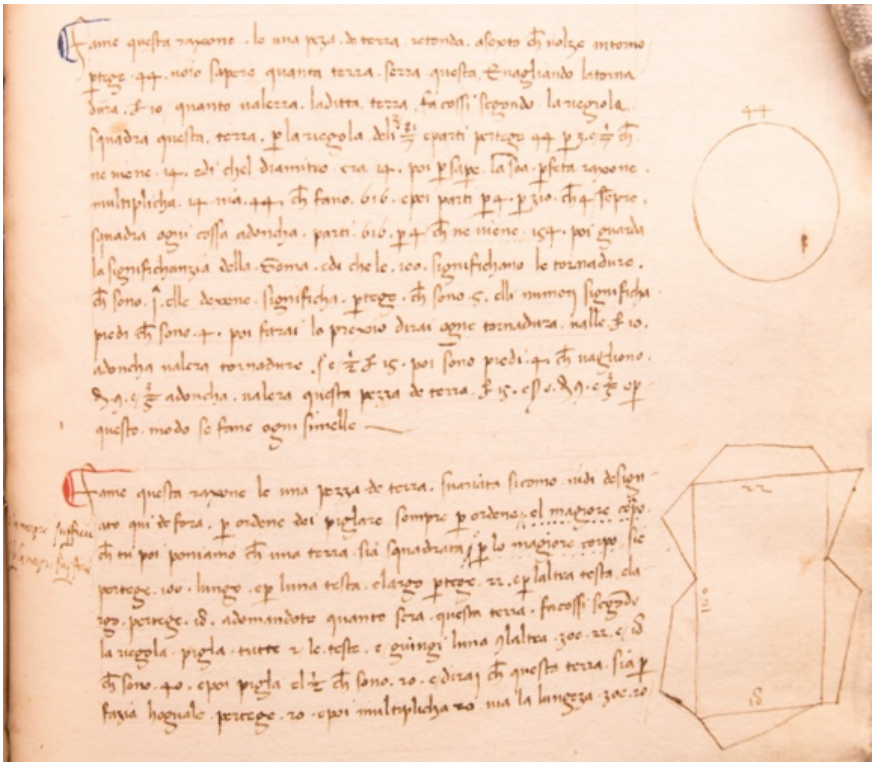

Figure 2.7 **Measuring circular and irregular plots of land.**

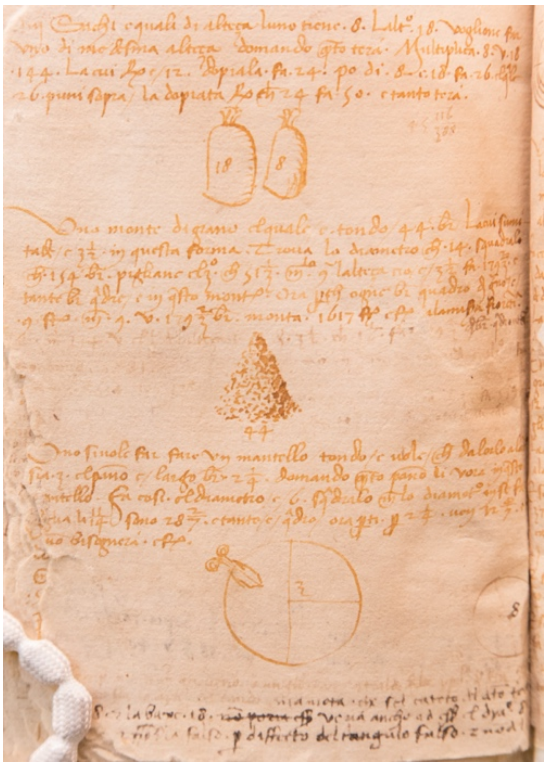

Figure 2.8 **Gauging: sacks, a pile of grain, cloth for a cape.**

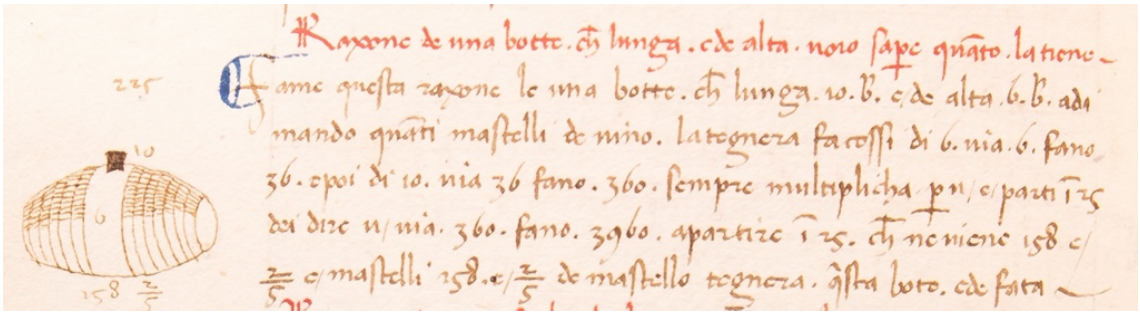

Figure 2.9 **Gauging a barrel.**

Geometry offered an understanding of physical areas or volumes and recording them to scale in a *quaderno*. This was a process that also worked in the other direction. It was possible to work out a scene through *ragione* on paper, constructing a sense of both scale and perspective by using the mathematics of proportion and the geometry of gauging. MS Canon Ital. 188 contains diagrams used to construct linear perspective and a human figure drawn to scale (Figure 2.10, Figure 2.11). Of course, it does not follow that the naturalistic techniques of artists in late medieval Italy can be reduced to the products of an 'early capitalist' rationality,[129] or 'commercial mathematics' alone.[130] Nonetheless, *ragione* presented merchants with a way of surveying the world on paper.

[129] F. Antal, *Florentine Painting and Its Social Background: The Bourgeois Republic before Cosimo De' Medici's Advent to Power: XIV and Early XV Centuries* (London, 1947), 13.
[130] Baxandall, *Painting*, 86.

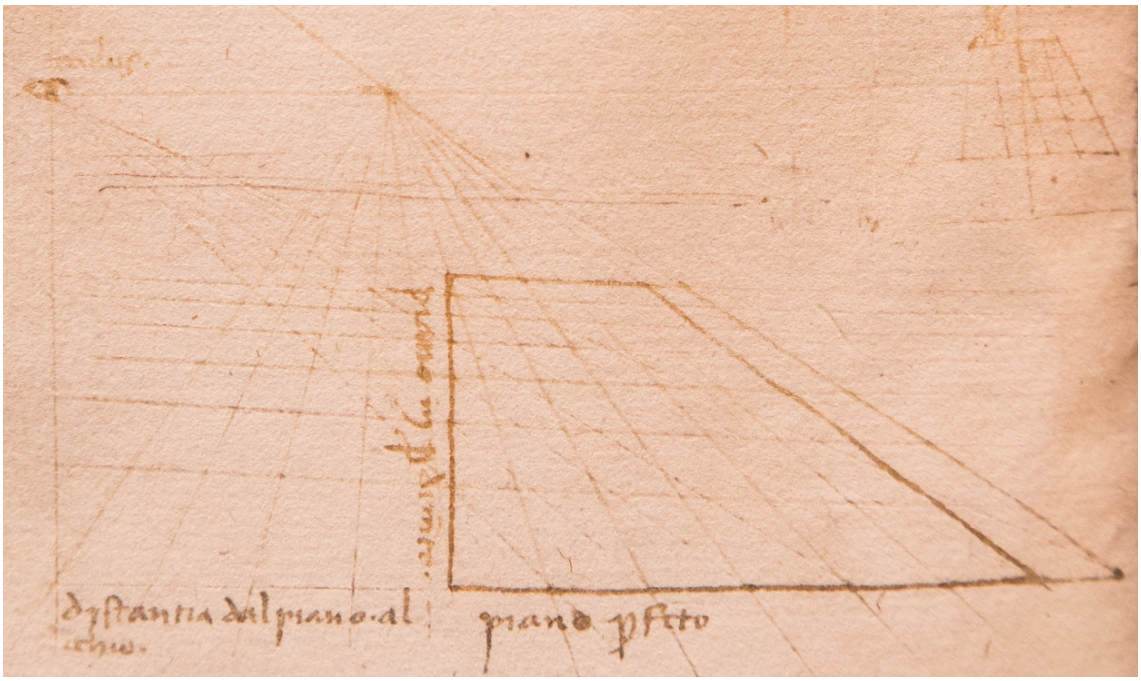

Figure 2.10 **Constructions of perspective.**

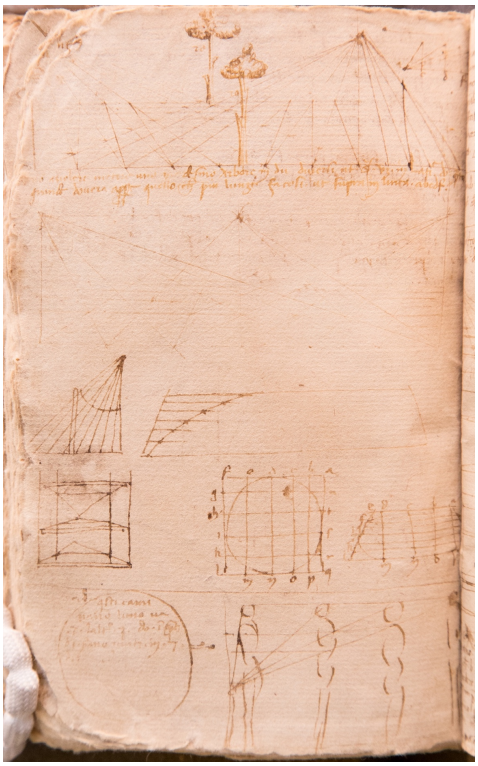

Figure 2.11 **Constructions of perspective and scale.**

Apprenticeships were the next stage in learning *ragione,* after the study of commercial arithmetic and geometry.[131] Apprenticeships and postings for young factors in the larger merchant companies could take place in branches in several cities in Italy, and even across the Mediterranean. Boccaccio's apprenticeship with the Florentine Bardi firm in Naples (1327) and Piero di Ser Lapo Mazzei's work at the Datini branch in Barcelona (1403-1411) are representative examples. The Florentine Giovanni Morelli (1371-1444) made an explicit link between training and travel, and emphasised the importance of first-hand experience in his *ricordi*: 'if you want to become experienced in anything, practise it as a child and be in *fondachi* and in banks with others, go abroad, frequent merchants and merchandise, see with [your own] eyes the places and countries where you have in mind to do business'.[132] Da Certaldo worried that if apprentices were sent abroad, for example to France, at too young an age, they might become a good merchant, but they would pick up the customs of a different city and would no longer have the network, the knowledge or even the desire to be a merchant in Florence.[133]

Wherever they were stationed, apprentices were expected to learn as they worked by keeping accounts, writing letters and monitoring income and expenditure from a firm's cashbox. In 1446 the 14-year-old Lorenzo di Matteo Strozzi wrote to his mother in Florence, praising the practice of copying commercial correspondence and marvelling at having to spend all day at a desk even as an apprentice in Valencia: 'E sovi a dire no mi rincrese a scrivere: sto tutto dì nello scrittoio, e copio il dodici lettere: iscrivo tanto

[131] For a later study of Italian apprenticeship contracts see: A. Caracausi, 'The Price of an Apprentice : Contracts and Trials in the Woollen Industry in Sixteenth Century Italy'*, Mélanges De L'Ecole Française De Rome*, 128/1 (2016).
[132] Giovanni Morelli, *Cronica*, in R. S. Lopez and I. W. Raymond, *Medieval Trade in the Mediterranean World* [1955], (New York, 2001), 422.
[133] Certaldo, *Costumi*, 50.

presto, che ve ne maraviglieresti [...]'.[134] A desk, letters and *quaderni* were shared staging posts for aspiring merchants across Mediterranean trade networks.

On 10 October 1433, in the wake of the family's exile from Florence, seventeen-year-old Francesco de Medici wrote from Venice to his father, Giuliano de Medici, in Rome. He explained that his only desire was to learn the merchant's art and reported that he was making progress: 'Altro disidero no(n) ho che di imparare / questa arte [...] queste no(n) mi paiono si difficile chome / prima stimavo ma s(a)pete no(n) si puo volare sanza alie'.[135] His teachers were members of the Medici company and family. In the same letter, he complained of the 'grandissimo manchamento di chi m'i[n]segni' that Cosimo de Medici's safe arrival in Ferrara and the consequent movement of company and family members had caused.[136] On 1 November 1433, he wrote again, describing how he was being taught through first-hand experience of copying out letters and preparing accounts, *fare le chonti*.[137] Francesco explained that he was motivated to 'imparare l'abacho' because 'sanza quello niente si può fare'.[138] In a further letter, on 19 December 1433, Francesco explained that he was also learning by reading 'quelle librettine', probably *libri d'abaco* and merchant manuals, but he found these texts to be

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[134] *Lettere di una gentildonna Fiorentina del Secolo XV ai figliuoli esuli*, ed. A. Macinghi Strozzi (Florence, 1877), 30; cited in R. A. Goldthwaite, *The Economy of Renaissance Florence* (Baltimore, 2009), 84: 'I tell you that writing is no trouble: I am at my desk all day, and I copy twelve letters: I write so quickly that you would be amazed by it'.
[135] MAP, V 697r, https://www.archiviodistato.firenze.it/map/riproduzione/?id=7264 (09/05/2023): 'I have no other desire than to learn this art [...] things do not seem as difficult as I had thought earlier but as you know one cannot fly without wings'.
[136] MAP, V 697r, https://www.archiviodistato.firenze.it/map/riproduzione/?id=7264 (09/05/2023): 'the great absence of my teachers'.
[137] MAP, V 701r, https://www.archiviodistato.firenze.it/map/riproduzione/?id=7272 (09/05/23).
[138] D. Kent, 'I Medici in esilio: una vittoria di famiglia ed una disfatta personale', *ASI,* 132/1 (1974), 24; MAP, V 701v, https://www.archiviodistato.firenze.it/map/riproduzione/?id=7273 (09/05/23): 'learn commercial mathematics', 'without it one can do nothing'.

challenging: 'perché vi sono su grosso e no(n) v'ò messo tempo chome si chonviene'.[139] While he had learned to write at a younger age, Francesco was struggling to adapt to the time pressure of a merchant *bottegha*. He explained that he was hurrying to write this letter before the messenger departed: 'Io sono uso a scrivere adagio […] chome ora che mi cho(n)viene scrive p(r)esto p(er)che il fante pa(r)te'.[140]

According to the lawyer and diplomat from Ancona, Francesco Scalamonti (1468), Ciriaco d'Ancona was apprenticed to a wealthy merchant at the age of fourteen so that he might restore the family's fortunes.[141] His father had died when he was six, shortly after his investments were ruined by three shipwrecks and two acts of piracy.[142] On his apprenticeship, he was reputedly so sharp witted that he taught himself arithmetic, geometry and merchant skills, working long hours without sleep so that, after only two years, he was able to run business by himself on behalf of his master.[143] The next step in D'Ancona's merchant education was Mediterranean travel as a clerk, possibly a notary on board ship, to Ciucio, possibly Cinzio de Pizzicolli, a relative.[144] These voyages allowed D'Ancona to gain commercial experience, to visit classical ruins and to gather classical texts. When he returned to Ancona, his skill at accounting was such that he managed to balance the spice trader Luca di Tolentino's books after the death of his Florentine accountant Niccolò Cossi, even though they had been badly kept for

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[139] Kent, 'Medici', 25; MAP, V, 706r; https://www.archiviodistato.firenze.it/map/riproduzione/?id=7282 (2/8/2022): 'those small books', 'because they are so voluminous and I have not spent as much time on them as one should'.
[140] Kent, 'Medici', 25; MAP, V, 706v. https://www.archiviodistato.firenze.it/map/riproduzione/?id=7283 (2/8/2022): 'I am used to writing quickly […] just as now I have to write hurriedly becuase the messenger is leaving'.
[141] Scalamonti, *Cyriac,*10.
[142] Scalamonti, *Cyriac*, 6.
[143] Scalamonti, *Cyriac*, 12.
[144] Scalamonti, *Cyriac*, 14, 317.

fourteen years.[145] A merchant apprenticeship could facilitate both humanist learning and the balancing of books.

Apprenticeships took different forms in different cities. Venetian institutions offered formative experiences to young noblemen with little capital of their own. In his youth, Andrea Barbarigo, a merchant whose career was studied in detail by Frederic Lane, benefited from working as a clerk to the court of the *Giudici di Petizion*, which gave him a grounding in contracts, record-keeping and legal disputes. He also served as a one of the 'Bowmen of the Quarterdeck', a position on state galley convoys that was rewarded with cargo space as well as direct payment. [146] This placement of inexperienced merchants proved less popular with the crews of the ships on which they were to serve and they sometimes offered payments to Bowmen of the Quaterdeck on the condition that they would not embark on the voyage.[147] To a greater extent than the apprenticeships that were found in other cities, the Venetian system seemed to offer the chance to gain experience of commercial law and trade without undue exposure to risk.

Merchants learned *ragione,* a versatile approach to information, by being taught how to write, calculate, and measure. These were the formative elements of the cultural horizons of merchants in late medieval Italy. They were taught by their families, in schools and on apprenticeships. While merchant education varied in different cities, the mobility of texts and teachers gave an overarching uniformity to this *ragione*. The reach of merchant education was wider than has often been assumed. As the example of Salvagia Longo in Genoa reveals, the wives of merchants also learned commercial

[145] Scalamonti, *Cyriac*, 34.
[146] F. C. Lane, *Andrea Barbarigo, Merchant of Venice, 1418-1449* (Baltimore, 1944), 17. 19.
[147] R. Gluzman, *Venetian Shipping from the Days of Glory to Decline, 1453-1571* (Leiden, 2021), 97.

writing, and at times they were relied on as partners in the administration of a merchant's business.[148] The value of merchant education was recognised across different levels of society. Investment in learning *ragione* promised returns in wealth and social status. As a copybook, the *libro d'abaco* MS Canon. Ital. 188 bears witness to this promise. Noble families, too, prized merchant education. The luxurious *libro d'abaco* MS Canon. Ital. 244 speaks to the esteem in which mathematics and geometry were held in fifteenth-century Ferrara, where Francesco di Giuliano d'Averardo de Medici was learning the merchant's art.

Having explored merchant education and the *ragione* that aspiring merchants learned, the following section will turn to investigate late medieval ideals of the merchant, especially Cotrugli's perfect merchant.

[148] Serena Galasso has identified 199 account books authored by women in her study of Florence in the Fifteenth and Sixteenth Centuries: S. Galasso, 'Le droit de compter: les livres de gestion et de mémoires des femmes, Florence, XV^{e}-XVI^{e} siècle', PhD thesis, Centre de recherches historiques, École des hautes études en sciences sociales, Paris, 2021.

Benedetto Cotrugli and his Cultural Horizons

Benedetto Cotrugli (c.1410-1469) was ideally placed to sketch the ideal of the merchant as a universal man. He was born in Dubrovnik to a family of merchants and diplomats. Members of the Cotrugli family traded in grain, barley, salt, saltpetre, dyes, and Spanish wool, as well as chartering ships.[149] He had initially studied law at Bologna until fortune intervened and he turned to the art of commerce.[150] These areas of study complemented one another, and their synthesis was reinforced by experience. As a merchant, he traded and travelled in Aigues-Mortes, Barcelona, Florence, Naples, Dubrovnik, and Venice. In 1439, in the Florentine *Mercanzia* commercial court, he pursued a debt of 303 florins owed to the Cotrugli company by the company of Francesco degli Alberti.[151] Cotrugli knew the markets, routes, and norms, legal and mercantile, of late medieval trade. Cotrugli thought his experience made him better placed than preachers or canon lawyers to offer a guide to ethical business practice; 'Io sono mercante et intendo l'arte [...] dico che l'è *quodanmodo* impossibile ad uno religioso intenderlo per informatione et *per consequens* non può iudicare *tamquam cecus de coloribus'*.[152]

Cotrugli observed the courtly virtues that he commended to his perfect merchant at first hand. His father, Iacopo, was simultaneously a merchant and an ambassador for Dubrovnik in Naples, where he was later appointed to run the mint.[153] Cotrugli

[149] M. Luzzati, 'Cotrugli, Benedetto', *Dizionario Biografico degli Italiani,* 30 (1984). https://www.treccani.it/enciclopedia/benedetto-cotrugli_%28Dizionario-Biografico%29/ (25/4/2022)
[150] Cotrugli, *Mercatura,* 38.
[151] L. Boschetto, 'Tra Firenze e Napoli Nuove testimonianze sul mercante-umanista Benedetto Cotrugli e sul suo "Libro dell'arte di mercatura"', *ASI,* 163/4 (2005), 695.
[152] Cotrugli, *Mercatura,* 78-79: 'I am a merchant, by which I intend the art of commerce [...] I say that it is in a certain way impossible for a cleric to understand this art from second hand reports and in consequence he cannot judge the matter, like a blind man with colours'.
[153] Luzzati, 'Cotrugli'.

eventually settled in Naples, where he traded and invested, and was appointed at various times as a judge and diplomat. Following in his father's footsteps, he was made master of the mints in Naples and Aquila by Alfonso I and Ferdinand II. His son, Giacomo, succeeded him as master of the mint in Aquila after his death in 1469.[154] Alfonso I of Naples and his court were examples of 'liberalità' and 'cortesia', which Cotrugli argued that he, and his fellow merchants, could follow by being 'magnifico nel dare e non acerbo nel rivolere'.[155]

Cotrugli was as well-read as his perfect merchant. His commercial career placed him in contact with humanist circles. He was in business with the Florentine merchant Francesco Neroni, sending dyes to Florence and receiving wool from Barcelona to sell in Dubrovnik.[156] Luca Boschetto has argued that exchanges of this kind were also the means by which humanist learning was diffused, calling Cotrugli a 'merchant humanist'.[157] The survival of a list of the books owned by Dietisalvi de Neroni, Francesco's brother, including many works of Latin grammar, rhetoric, literature, and poetry, reveals the kinds of texts that circulated between merchants.[158] When Cotrugli was there, Naples was a centre of humanist learning.[159] Alfonso I was the patron of an important library of classical texts.[160] His court supported a circle of humanist writers,

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[154] T. Zanato, 'Benedetto Cotrugli, Merchant Writer', in Benedetto Cotrugli, *The Book of the Art of Trade*, eds. C. Carraro and G. Favero, tr. J. F. Phillimore (Cham, 2017), 176-177.
[155] Cotrugli, *Mercatura*, 146: 'generosity', 'courtesy', 'munificent in giving and not bitter in expecting repayment'.
[156] Boschetto, 'Mercante-umanista', 699.
[157] Boschetto, 'Mercante-umanista', 704, 689.
[158] L. Chiappelli, 'Inventario dei manoscritti raccolti dal lanaiolo fiorentino Dietisalvi di Nerone (a. 1433)', *La Bibliofilía*, 25:8/9 (1923), 247-252.
[159] Zanato, 'Cotrugli', 177; J. H. Bentley, *Politics and Culture in Renaissance Naples* (Princeton, 1987).
[160] M. Santoro, 'Humanism in Naples', in A. Rabil Jr., *Renaissance Humanism, Volume 1: Foundations, Forms, and Legacy* [1988] (Philadelphia, 2016), 298.

notably: Antonio Beccadelli, Flavio Biondo, Bartolomeo Facio, Gainozzo Manetti and Lorenzo Valla.[161]

The perfect merchant was conjured by Cotrugli as a response to the imperfect state of commerce in the middle of the fifteenth century. Cotrugli despaired at the young who invested all in fortune and failed to invest in the riches of their souls.[162] He completed the *Libro de l'arte de la mercatura* in 1458, in the shadow of an epidemic in Naples, which perhaps sharpened his focus on merchant eschatology.[163] He saw many contemporary merchants as ignorant, willing to trade without abiding by the ethical bounds of measure, or by the law, and with no sense of their duty to humanity.[164] We should note such late medieval criticisms of merchants who focused only on individual gain, who depended solely on Fortune's mercy and who sought risky, rapid advancement. Cotrugli saw education as the way to restore commerce from this fallen state, noting that those merchants who followed in the footsteps of their fathers should not try to imitate, but rather to surpass them, and that young merchants who were not yet set in their ways might still be guided towards a truer form of commerce as the most necessary art to humanity that sustained cities and supported the common good.[165]

We know of other texts written by Cotrugli that would have been relevant to a merchant readership. His *De Navigatione* treats sailing, merchant voyages, geography, and

[161] Santoro, 'Naples', 299; F. delle Donne, *Alfonso il Magnanimo e l'invenzione dell'umanesimo monarchico, ideologia e strategie di legittimazione alla corte aragonese di Napoli* (Rome, 2015), ix.
[162] Cotrugli, *Mercatura*, 38.
[163] Cotrugli, *Mercatura*, 190.
[164] Cotrugli, *Mercatura*, 38.
[165] Cotrugli, *Mercatura,* 123, 39.

astrology.[166] A map drawn in a 1460 manuscript of Justin's *Historiarum Philippicarum* may be a copy of the *mappamundi* described in *De Navigatione*.[167] Cotrugli cited *De Uxore Ducendo*, a treatise of his that is now lost, in the chapter of his *Libro de l'arte de la mercatura* on wives.[168] A treatise *De Natura Florum* has been attributed to Cotrugli on the basis of a single citation,[169] although this particular volume may never have existed.[170]

Before we can study Cotrugli's perfect merchant, we must first dismantle a modern ideal of the medieval merchant as the forerunner of a modern capitalist rationality. The context of how late medieval merchant education has been studied by historians and how merchant manuals have been categorised as sources will need to be addressed. Finally, the extent to which the learning that was expected of the perfect merchant overlapped with humanist education in late medieval Italy merits attention.

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[166] Benedetto Cotrugli, *De navigatione*, ed. P. Falchetta, in P. Falchetta, '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), 15-334.
[167] C. Van Duzer, 'Benedetto Cotrugli's Lost Mappamundi Found Three Times', *Imago mundi*, 65/1, (2013), 3.
[168] Cotrugli, *Mercatura,* 169.
[169] D. Farlato, *Illyrici Sacri Tomus Sextus Ecclesia Ragusina cum Suffraganeis, et Ecclesia Rhiziniensis et Catharensis* (Venice, 1800), 17.
[170] G. Favero, 'A New Edition of Benedetto Cotrugli's the Book of the Art of Trade', in Cotrugli, *Trade*, 15.

Merchant Myths: the Origins of Economic Man

> The economic man of these early economists was an efficient manager of the household [...] he became more and more an efficient businessman [...]. the accent is on efficiency [...] This is not so very different from the modern economic man, though the concept was more concrete and less abstract.[171]

In 1957, the economic historian Raymond de Roover wrote to the economist Jacob Viner to tell him about the chapter of Cotrugli's merchant manual devoted to 'l'homo yconomo'.[172] In De Roover's famous article on the history of the Alberti Company in the first half of the fourteenth century, published the following year, he further explained that, while this term was not used in its modern sense, it still referred to 'an efficient household and business manager'.[173] This tendency to frame both late medieval writings on merchants and the merchants themselves as if they were steps in the development of modern economics and the forerunners of modern capitalists, respectively, endures. More recently, John Dotson saw 'a very modern business culture at work' in merchant manuals.[174] Niall Ferguson read Cotrugli's as a precocious celebration of a Weberian 'protestant work ethic'.[175] Yet to view Cotrugli's ideal of the merchant as an ancestor of a modern economic rationality is to risk overlooking his focus on the ethics of trade, and the faith that a merchant ought to observe. Here, the

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[171] Raymond de Roover to Jacob Viner, 5 June 1957, quoted in: R. Fredona and S. A. Reinert, 'Italy and the Origins of Capitalism', *Business History Review*, 94 (Harvard, 2020), 22, 23.
[172] Cotrugli, *Mercatura*, 162: 'economic man'.
[173] R. de Roover, 'The Story of the Alberti Company of Florence, 1302-1348, as Revealed in its Account Books', *The Business History Review*, 32/1 (1958), 17, at n. 15.
[174] J. E. Dotson, 'Commercial Law in Fourteenth-Century Merchant Manuals', *Medieval Encounters* 9/2-3 (2003), 213.
[175] N. Ferguson, 'Foreword', in Cotrugli, *Trade*, 5.

affinity between the material and the spiritual, a defining element of a late medieval merchant's cultural horizons, will be reasserted.

In modern economics, economic man is often taken to mean a perfectly rational agent who, out of self-interest, makes choices that will maximise his personal utility. The simplifications this model can entail have sometimes been called into question by economists. As early as 1944, Karl Polanyi, influenced by recent writing in anthropology,[176] argued that this model of an economic agent ought to be set in its historical context, because economic rationalities have always been 'submerged' in the context of their social relations.[177] Herbert Simon called for the limitations of knowledge and capacity to be recognised, arguing for the study, not of perfectly rational agents, but rather of 'bounded rationality'.[178] More recently, the behavioural economist Richard Thaler has called economic man a 'fictional creature', created to simplify economic models and to exclude supposedly irrelevant factors, arguing that economists should simply study humans instead.[179] This study of the cultural horizons of merchants in late medieval Italy will explore the context in which their economic rationalities were submerged while recognising that even the ideal merchant was not a perfect economic agent.

The alleged roots of economic man in late medieval Italy are an example of the modern myths of the medieval merchant. Cotrugli's ideal merchant offers a way of historicising and critiquing these myths. His perfect merchant was neither solely motivated by

[176] G. Dale, *Karl Polanyi: The Limits of the Market,* (Cambridge, 2010), 91.
[177] K. Polyani, *The Great Transformation* [1944] (Boston, 2001), 48.
[178] H. A. Simon, *Models of Bounded Rationality* (3 vols, Harvard, 1982-1997), iii, p. 291.
[179] R. H. Thaler, *Misbehaving: How Economics Became Behavioral* (London, 2015), 17.

material profit, nor did he exclusively judge his success in terms of worldly wealth. Merchant reasoning 'con hordene de la ragione' was not limited to their material investments; it entailed market ethics and was also used to imagine the afterlife.[180]

[180] Cotrugli, *Mercatura,* 51: 'with ordered calculation'.

Merchant Humanism

Cotrugli believed that the breadth of a merchant's learning should match the broad range of people of different 'generacione e condicione', social standing, age, and origins, whom they would have to meet in their profession.[181] They needed a grounding in cosmography, geography, and the liberal arts, including grammar, logic, and rhetoric, as well as a mastery of commercial expertise. It is this willingness to invest in a broad scope of learning that has led Cotrugli and his intended audience of merchants to have been cited among the early humanists. Merchants, who kept their *quaderni* every day, who needed a pragmatic knowledge of the notarial Latin of their contracts and who often spoke other languages, were well placed to assimilate new humanist learning, if defined as the revival of the knowledge of antiquity.[182] Merchants who travelled or who corresponded with counterparts across the Mediterranean had the opportunity to gather scattered traces of the classical past. D'Ancona was a merchant, a humanist writer and poet. He has been called 'the father of archaeology' for his detailed accounts of the classical ruins that he encountered in his Mediterranean commercial voyages.[183]

The connections between humanism and merchant education are not unexplored. Robert Lopez suggested that for Italian merchants after 1348, 'books' and 'humanistic culture' were profitable markers of nobility at a time when investments in land, which had been seen as relatively conservative, were made less enticing and more volatile by

[181] Cotrugli, *Mercatura,* 133: 'a most universal person', 'generation and condition'.
[182] R. Black, 'Humanism', in C. Allmand ed., *The New Cambridge Medieval History*, (Cambridge, 1998), vii, 244, 247.
[183] Cyriac of Ancona, *Later Travels,* ed. tr. E. W. Bodnar (Harvard, 2003), ix.

the scarcity of labour.[184] Yves Renouard argued that the *mentalité* of merchants, for whom knowledge was a source of profit, created a fertile ground for learning, and he counted many merchants who had become humanists by the middle of the fifteenth century.[185] The exchange between merchant culture and humanism in Italian cities was reciprocal. Christian Bec found Florentine humanists promoting the mercantile virtues of 'prudence' and 'measure' and building on the learning that merchants needed and valued.[186] Alberto Tenenti, while emphasising the distinctions between merchant and humanist culture in Florence at the turn of the fifteenth century and rejecting Bec's narrative of the development of merchant culture into humanism, nonetheless saw them as having creatively reacted with one another.[187] Eugenio Garin detected an emphasis on the social utility of money and economic activity in the writings of Italian humanists.[188]

Nonetheless, it is important not simply to conflate merchant culture with the humanistic culture of Florence in the first half of the fifteenth century. Robert Black has underlined the differences between teaching in the vernacular, the pragmatic Latin merchants needed to navigate contracts, and the subjects taught under the heading of *humanista*.[189] Leon Battista Alberti (1404-1472), writing in the fifteenth century, emphasised the qualitative difference between a mercantile and humanist education when he dismissed those who said that all that young Florentines needed to learn was how to write their

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[184] R. S. Lopez, 'Hard Times and Investment in Culture', in *The Renaissance: a Symposium* (New York, 1953), 30; J. H. Munro, 'Economic Depression and the Arts in the Fifteenth-Century Low Countries', *Renaissance and Reformation,* 7/4 (1983), 235.
[185] Y. Renouard, 'Affaires et culture à Florence au XIVe et au XVe siècle', in *Il Quattrocento* (Florence, 1954), 165.
[186] C. Bec, *Les marchands écrivains, affaires et humanisme à Florence 1375-1434* (Paris, 1967), 103, 298.
[187] A. Tenenti, 'Les marchands et la culture è Florence 1375-1434', in, *Annales,* 23/6 (1968), 1329.
[188] E. Garin *L'umanesimo italiano, filosofia e vita civile nel Rinascimento* [1952] (Bari, 1994) 54.
[189] Black, *Humanism*, 261.

names and how to calculate what they were owed.[190] Alberti, as a humanist and a member of a Florentine merchant family, was a well-placed observer of merchant education.[191] Cotrugli himself admitted that few merchants in late medieval Italy attained such a range of knowledge: 'pochi sono li veri mercanti'.[192] He lamented that grammar and rhetoric were often neglected by merchants who were, instead, experts at the courtly pursuits of chess, gambling, cards, dice, dancing, and hunting.[193] These were pursuits that could raise the social status of merchants and bring them into contact with wealthy, courtly clients.

A century earlier, Boccaccio sought to distinguish a merchant's education and learning from other kinds of wisdom in the *Corbaccio.*[194] In the *Corbaccio*, the narrator, a spurned lover who is guided out of love's labyrinth by a soul from Purgatory, is reminded by his guide that in his youth he never learned any manual art and 'sempre l'essere mercatante avesti in odio', instead devoting himself to poetry and sacred philosophy, against his father's wishes.[195] The soul in Purgatory continued to explain that merchants falsely thought themselves wiser than others because they always believed that their profits were the result of their careful organisation, when they were in fact most often earned by fortune; *per avventura*.[196] According to Boccaccio, in reality, they knew little more than the distance from their *fondaco* or *bottega* to their

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[190] Leon Battista Alberti, *I libri di Famiglia*, in C. Grayson ed., *Opere Volgari* (3 vols, Bari, 1960), i, p. 68.
[191] R. De Roover, 'The Story of the Alberti Company of Florence 1302-1348, as Revealed in Its Account Books', *The Business History Review*, 32/1 (Spring, 1958), 46.
[192] Cotrugli, *Mercatura,* 134: 'True merchants are few in number'.
[193] Cotrugli, *Mercatura,* 129.
[194] A. Cornish, *Vernacular Translation in Dante's Italy: Illiterate Literature* (Cambridge, 2011), 39.
[195] Boccaccio, *Il corbaccio,* ed. G. Ricci (Turin 1977), 26: 'you always held being a merchant in hatred'.
[196] Boccaccio, *Corbaccio,* 26.

home, and their learning was limited to understanding trickery and profit.[197] Cotrugli's perfect merchant was a provocative ideal, created to defend the status of merchants and their art. This might be read as a response to the kind of charges that Boccaccio had levelled against merchants in the *Corbaccio*.

[197] Boccaccio, *Corbaccio,* 26.

‘This will make the perfect merchant’

Cotrugli’s perfect merchant was a model of best practice that he hoped his readers would aspire to. The perfection of a merchant’s art was always measured not by profits but rather by how he acquired a merchant’s *ragione, diriturra,* contribution to the common good and the ethics of his trade. The perfect merchant was meant to ask himself whether the intention behind future investments was ethical, whether the profits he had made were proportionate, and to consider how much material wealth was enough. Merchants audited transactions on the paper leaves of their *quaderni* and in the theatre of their own conscience. The perfect merchant did not seek the insatiable accumulation of material wealth driven by cupidity, which could bury him in Hell.[198] The perfect merchant reasoned prudently to mitigate fortune’s control over his material wealth. In contrast, spiritual goods were a safe haven, beyond the reach of fortune, in which merchants could invest for the sake of their souls.

> Si farà mercante perfecto et consequitarà mirabilmente il fine del desiderio suo, spetialmente si sarà punto aiutato e favorito de la prosperità de la fortuna. La qual el più de le volte sòl prestar favore a chi se governa con prudencia et con hordene de ragione [...] Unde l’è nato quell proverbio, che volgaramente se dicie che la fortuna non va in casa de macti e, se la vi va, dura poco.[199]

[198] Cotrugli, *Mercatura*, 158.
[199] Cotrugli, *Mercatura*, 51: ‘This will make the perfect merchant and the end of his desires will follow marvellously from this, especially if he is helped and favoured by the prosperity of fortune. Which more often lends favour to those who govern themselves with prudence and with ordered reason [...] From which is born that commonly said proverb, that fortune does not dwell in the house of the mad and, if it visits there, it will not stay for long’.

To face fortune with ordered reason was the making of Cotrugli's perfect merchant. According to Cotrugli's manual, although all merchants were subject to the rule of fortune, those who governed themselves with prudence and ordered reason were most likely to be loaned fortune's favour. For merchants, the maritime imagery of fortune was especially prominent.[200] Cotrugli thought that not only a merchant but also a helmsman ought to be fortunate, for a helmsman in a storm would be forced to make split-second decisions with *ragione*.[201] Fortune could render a merchant powerless and deprive them of the time they would need to consider and calculate their decisions.

Turns of fortune were thought to decide a merchant's material wealth. In Dante's *Inferno*, fortune had jurisdiction over monetary wealth and material goods. Virgil invited Dante the pilgrim to observe 'la corta buffa / d'i ben che son commessi a la Fortuna', as those who spent their material wealth without measure, the avaricious and the prodigals, struggled with one another.[202] In response, Dante asked Virgil to describe Fortune, which has 'i ben del mondo' in its claws.[203] Virgil replied that knowledge was no defence against swift Fortune, who ceaselessly anticipates, judges and acts.[204] Yet spiritual goods lay beyond the reach of fortune. Dante's depiction of Fortune was influenced by the threefold model of goods that Aristotle had cited in his *Ethics*: goods of fortune, goods of the body, and goods of the world.[205] The goods of fortune, or external goods, encompassed material wealth and social standing. The goods of body

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[200] H. R. Patch, *The Goddess Fortuna in Mediaeval Literature* (Harvard, 1927), 89.
[201] Cotrugli, *Navigatione*, 296.
[202] Dante, *Inferno,* VII, ll. 61, 62, p. 114: 'the short mockery of the goods which are committed to Fortune'.
[203] Dante, *Inferno,* VII, l. 69, p. 114: 'worldly goods'.
[204] Dante, *Inferno,* VII, ll. 85-90, p. 116.
[205] Aristotle, *Nicomachean Ethics*, I, 1098b, tr. W. D. Ross, J. O. Urmson, in J. Barnes ed., *The Complete Works of Aristotle* (2 vols, Oxford, 1995), ii, p. 1736.

were an individual's physical attributes: an individual's strength, constitution, or appearance. The goods of the soul included knowledge, memory, and virtue. Only the first of these three kinds of goods was thought to have been ruled by fortune.

Dante's readers shared this understanding of different types of goods. The Pisan scholar, notary and civic official, Francesco da Buti, explained this schema in his fourteenth-century commentary on the *Inferno*.[206] Da Buti taught grammar in Pisa near the church of San Paolo all'Orto in the 1350s.[207] His grammar manual, *Regule Gramaticales,* was widely circulated.[208] He was associated with the Compagnia di San Michele, a faction in Pisa that was seen to represent mercantile interests.[209] His commentary on Dante's *Inferno* grew out of public readings that he gave in Pisa.[210] Pisan merchants surely listened to them at first hand. The sermons that merchants heard drew comparable, if less fine-grained, distinctions between spiritual goods and material goods. Giordano da Pisa preached that spiritual goods were the only goods that 'stanno fermi' and that cannot be lost, unlike the goods of the world that ultimately flee everyone.[211]

Cotrugli was not the first writer to describe an ideal merchant. Similar advice was combined in *quaderni* that also taught commercial mathematics. For example, the fourteenth-century Venetian *vacchetta,* Riccardiano 2161 began with similar advice

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[206] Francesco da Buti, *Commentary on Inferno* 9, DDP.
[207] E. Malato and A. Mazzucchi*, Censimento dei commenti Danteschi 1 i commenti di tradizione manoscritta fino al 1480* (Rome, 2011), 193.
[208] R. Black, *Humanism and Education in Medieval and Renaissance Italy: Tradition and Innovation in Latin Schools from the Twelfth to the Fifteenth Century* (Cambridge, 2001), 5.
[209] Malato and Mazzucchi, *Censimento,* 194.
[210] Malato and Mazzucchi, *Censimento*, 197.
[211] Giordano da Pisa, *Quaresimale Fiorentino 1305-1306,* ed. C. Delcorno (Florence, 1974), 114: 'stay still'.

instructing merchants how to live honestly, in the knowledge that they may die tomorrow, before offering guidance on how to trade in Italy, Tunisia, Armenia and Egypt, and posing problems of geometry and arithmetic.[212] The three Florentine merchants, Dino Compagni, Giovanni Frescobaldi, and Francesco Pegolotti all wrote poems that describe an ideal merchant. The extensive similarities between their poems suggest that Pegolotti's may have followed Compagni's example. Compagni (c.1246-1324) was a Florentine merchant, civic official and chronicler. The ill-fortuned Compagni merchant company failed in 1341.[213] In his poem, the *Canzone del pregio*, he described how members of different professions could achieve prestige:

> S'aggrada pregio aver a Mercatante, / Dritura sempre usare a lui convene, / E longa provdenza li sta bene, / E che impromette non venga mancante / E sia se può di bella contenenza / Secondo a che mestiere orrato intenda; / E scarso a comperare e largo venda, / Fuor di rampogne con bell' accoglienza / La chiesa usare, / Per Dio donare / Il cresce in pregio; e vender ad un motto, / Ed usura vietar torre di tutto, / E scriver bello, e ragion non errar.[214]

Frescobaldi (c.1280-c.1320) was part of a family known for both the Frescobaldi merchant company and for the poetry of his father, Lambertuccio, and brother Dino.[215] His poem was written as advice to merchants travelling to England:

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[212] A. Bocchi, *Lo Zibaldone Riccardiano 2161: Una pratica di mercatura veneziana del primo Trecento* (Udine, 2021), 13, 37.
[213] G. Arnaldi, 'Compagni, Dino di Girolamo', *Dizionario Biografico degli Italiani*, 27 (1982), https://www.treccani.it/enciclopedia/dino-compagni_%28Dizionario-Biografico%29/ (12/07/22).
[214] Dino Compagni, *La cronica e la canzone morale "Del pregio",* ed. I. Del Lungo (Florence, 1923), 223; A. Sapori, 'La Compagnia dei Frescobaldi in Inghilterra', *ASI,* 102/1, (1944), 77: 'It befits a merchant to have prestige, / It is always worth him following straight principles, / And long providence suits him, / And not fall short on his promises / And he should be well composed / As befits his honoured work / And slow to buy and swift to sell / Without rebuke, reacting well, / He should go to Church, / Give for God, / Which will grow his prestige; and he should sell at a whisper, / And usury is forbidden above all else, / And keep your accounts faithfully and do not make mistakes'; The whole poem is edited in: Dino Compagni, *Canzone del pregio,* ed. N. Sapegno, in N. Sapegno, *Poeti minori del Trecento* (Milano, 1952), 282-288.
[215] Sapori, 'Frescobaldi', 4.

> Vestir basso color, essere umile / grosso in aspetto ed in fatto sottile; / male sia all'inglese se t'atterra; / fuggi le cure e pur chi ti fa guerra; / spendi con cuore e non ti mostrar vile; / pagare al giorno, a riscuoter gentile, / mostrando che bisogno di sotterra; / non far più inchiesta ch'ebbi fondamento; / compera a tempo se ti mette bene, / né t'impacciar con uomini di corte; / osserva di chi può 'l comandamento, / con tua nazione unirti t'appartiene, / e far per tempo ben serrar le porte.[216]

Pegolotti was a factor for the Bardi Company from 1310 until 1340. He was involved in the dissolution of the company at its failure and afterwards he worked for the Alberti company in 1348 before probably falling victim to the plague in Florence.[217] His poem is found at the start of his merchant manual:

> Quello che dee avere in sé il vero e diritto mercatante / Dirittura sempre usando gli conviene, / Lunga provedenza gli sta bene, / E ciò che promette non venga mancante; / E sia se può di bella e onesta contenenza / Secondo che mestieri o ragione intenda. / E scarso comprare e largo venda, / Fuori di rampogna con bella raccoglienza, / La chiesa usuare e per Dio donare / Crescie in pregio, e vendere a uno motto. / Usura e giuoco di zara vietare, / E torre via al tutto, / Scrivere bene la ragione e non errare. / Amen.[218]

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[216] S. L. Peruzzi, *Storia del commercio e dei banchieri di Firenze in tutto il mondo conosciuto dal 1200 al 1345* (Florence, 1868), 154; Sapori, ''Frescobaldi', 76-77: 'Dress in sombre colours, be humble, / important in appearance and subtle in your calculations; / woe betide the Englishman who knocks you down; / flee from cures and those who war against you; / spend with your heart and do not show yourself mean; / pay on time, collect with courtesy, / but pretend that you have a pressing need; / do not ask more questions than are necessary; / timely purchases will stand you in good stead, / do not involve yourself with men of the court; / observe who is in command, / unite with your nation, you belong to it, / and leave enough time to securely lock your doors'.

[217] M. E. Soldani, 'Pegolotti, Francesco di Balduccio', *Dizionario Biografico degli Italiani*, 82 (2015), https://www.treccani.it/enciclopedia/francesco-di-balduccio-pegolotti_%28Dizionario-Biografico%29/ (09/05/23).

[218] Francesco Pegolotti, *La pratica della mercatura,* ed. A. Evans (Harvard, 1936), 20: 'That which the straight and true merchant must have / It is always worth him using straight principles, / Long providence stands him in good stead, / And that means that promises are kept; / And that he should be of good and honest bearing / As befits this work or reason. / And slow to buy and swift to sell, /

All three poems describe an ideal merchant who negotiated the challenges that he faced with *ragione*, *dirittura*, and providence. Cotrugli's perfect merchant was also guided through volatile conditions by keeping these three ideas in mind. I will investigate *ragione, diriturra* and *providence* in turn before discussing the ideal merchant's contribution to the common good and their piety.

The perfect merchant was made by his *ragione*. In the first instance, this was the ordered reason of his accounts, the fruit of a merchant's well-kept set of cross-referenced *quaderni*.[219] Cotrugli's shame at merchants who made so many mistakes in their accounts was one of his motivations in writing his manual of the art of trade.[220] Compagni and Pegolotti end their poems with calls for merchants to write this kind of *ragione* without error. More widely, *ragione* encompassed the processes of reasoning used by merchants. Training in arithmetic allowed them to quantify and express problems in numerical terms in their accounts. The entries merchants made in their *quaderni* facilitated this way of thinking by allowing them to review past entries and to project future gains. This reason was the way in which merchants thought and was also the lens through which merchants continually reshaped their cultural horizons.

Reason, or *ragione*, was not merely accounting. It was an ordered way of thinking, influenced by the medium of *quaderni*, that aspiring merchants learned through their reading and experience and not merely accounting. Thinking through ventures with *ragione* entailed considering risk and how to limit fortune's reach. Cotrugli warned his

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Without rebuke, reacting well, / Go to church and give for God / Grow in prestige and sell at a whisper. / Forbid usury and gambling, / Above all else, / Keep your accounts faithfully and do not make mistakes. / Amen'.

[219] F. Edler, *Glossary of Medieval Terms of Business* (Harvard, 1934), 235.

[220] Cotrugli, *Mercatura*, 123.

readers that the greater the amount a merchant invested in a single venture, the greater the risk; 'gran nave, gran travaglio'.[221] He praised insurance as beneficial to the perfect merchant and the common good of cities in that it allowed merchants to handle more trade without exceeding an acceptable level of risk.[222] Spiritual goods were thought to be beyond the reach of fortune and risk, encouraging merchant charity.

Reckoning by *ragione* meant considering risks not only to a merchant's capital but also to their reputation and their soul. According to Cotrugli, the perfect merchant's 'perfecta ragione' was wisdom or knowledge of religion.[223] He warned that a merchant who charged interest on a loan made to someone who was trading overseas, as a way of limiting their financial risk to the dangers of travel, would be guilty of usury, risking both the legal and eschatological sanctions of that sin.[224] Even so, he suggested that a separate payment to such a lender for the danger alone, almost an insurance payment, would be legally, ethically and spiritually permissible.[225] In an early fourteenth-century penitential manual, the Pisan Dominican Domenico Cavalca distinguished between *sapienza* and *scienza*, the former being knowledge of eternal things, and the latter being the 'ragionale cognizione' of temporal things.[226] Although this kind of clerical source were not written by merchants, these were texts that and ideas that merchants engaged with in particular ways. Reason described an ordered, mercantile way of thinking, influenced by the meaning of *quaderni,* that was applied to investments that were at once material and spiritual. The eternal, too, was subject to merchant reasoning, even

[221] Cotrugli, *Mercatura*, 68: 'the larger the ship the greater the effort'.
[222] Cotrugli, *Mercatura,* 86.
[223] Cotrugli, *Mercatura,* 97.
[224] Cotrugli, *Mercatura,* 110.
[225] Cotrugli, *Mercatura*, 110.
[226] Domenico Cavalca, *Specchio di croce,* ed. B. Sorio (Venice, 1840), 160: 'rational reasoning'.

if this would yield only *scienza* and not full knowledge or *sapienza*. As an approach to knowledge, rather than a set of information, *ragione* could be applied to a wide range of problems within and beyond the confines of the marketplace.

After his *ragione,* the next most important quality of the perfect merchant was that he should follow *dirittura*, the straight principles of good conduct.[227] Following *dirittura* meant following virtue, a good of the soul, while thinking with reason. The Florentine Dominican Jacopo Passavanti spoke of the 'dirittura della ragione e della virtu'.[228] *Dirittura* has also been connected with justice. Dante described *dirittura* in connection with Aristotle's virtues and the effect of justice; 'la quale ordina noi ad amare e operare dirittura in tutte cose'.[229] *Dirittura* was also a general term for a tax on transactions.[230] Where *ragione* invoked arithmetic and calculation, *dirittura* invoked geometry, the straight line that must be followed, to explain merchant ethics. It was implicit that the intended end of this straight path was profit, material and spiritual, that served both an individual merchant and the common good.

The line of *dirittura* was imagined as a path through life to eternal judgement. If the timing of the opening of Dante's *Inferno* evoked a problem of arithmetic, its setting resonated with an exercise in ethical geometry:

> Nel mezzo del cammin di nostra vita
> mi ritrovai per una selva oscura

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[227] William Caferro has explored how Compagni and Pegolotti used the term *dirittura*: W. Caferro, 'Dante and *dirittura*: reframing the Florentine economy', *Dante Studies*, 138/1 (Baltimore, 2020), 210.
[228] Jacopo Passavanti, *Lo specchio della vera penitenza* (Florence, 1725), 140: 'the straightness of reason and virtue'.
[229] Dante, *Convivio*, IV, 17:6, p. 694: 'Justice, which orders us to love and use straight principles in all things'.
[230] F. Edler, *Glossary of Medieval Terms of Business* (Harvard, 1934), 106.

che la diritta via era smarrita.[231]

Da Pisa gave two sermons on *dirittura* in Florence on 20 December 1304, one in the morning at Santa Maria *Novella* and one in the evening at the cathedral of Santa Reparata. In his first sermon, he preached that the way to straighten the path of this life was to 'imitare gli uomini giusti', arguing that only by comparing themselves to the true measure of St John the Baptist, the city's patron saint, who embodied *dirittura*, could his audience judge their own 'stortura'.[232] In his second sermon, he reinforced this message, contrasting the safety of the 'via diritta' with the danger of the twisted 'via del peccato'.[233] Both invoked the biblical idea of the straight and narrow path to salvation.[234]

The meaning of *dirittura* was connected to honesty. In a fourteenth-century Tuscan vernacular version of Seneca's letters, honesty, rather than mere courtesy, was the true marker of *dirittura*.[235] According to Cotrugli, merchants were seen to be more honest than others because the art of trade depended on them keeping their promises.[236] He contrasted the perfect merchant's observance of the Roman Law principle of *bona fides* with fraudulent transactions. In legal commentaries, merchants who kept their accounts faithfully were seen as more trustworthy than others because of the system of writing they used.[237] It is in this context that the fourteenth-century Italian jurist Baldo degli

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[231] Dante, *Inferno,* I, ll. 1-3, p. 26: 'In the middle of the journey of our life / I found myself in a dark wood / for the straight way was lost'.
[232] Giordano da Pisa, *Avventuale Fiorentino 1304,* ed. S. Serventi (Turin 2006), 171:'to imitate righteous men', 'crookedness'.
[233] Giordano da Pisa, *Avventuale,* 194: 'straight path', 'path of sin'.
[234] Matthew 7:14.
[235] *Volgarizzamento delle pistole di Seneca e del trattato della provvidenza di Dio*, ed. G. Bottari (Florence, 1717), 412.
[236] Cotrugli, *Mercatura*, 149.
[237] M. Fortunati, *Scrittura e prova, I libri di commercio nel diritto medievale e moderno* (Rome, 1996), 35.

Ubaldi wrote: 'Nam mercator est nobilis et fide digna persona'.[238] A similar ideal merchant, whose moral integrity and identity was created by his writing, was carved on one of the fourteenth-century capitals of the external arcade of the Palazzo Ducale in Venice. Holding a scroll of accounts, this merchant symbolised honesty (Figure 2.12).[239]

[238] Baldo degli Ubaldi, *Commentaria in Sextum Cod.lib.* (Lyon, 1585), 99v: 'for the merchant is a reputable and trustworthy person'.
[239] T. Rizzo, *I capitelli del Palazzo Ducale di Venezia* (Venice, 1995), 46.

Figure 2.12 **Honesty, a capital of the Palazzo Ducale, Venice.**

Ragione and *dirittura* were claimed as identifiably mercantile qualities. An anonymous fourteenth-century manual of the art of trade reminded its merchant readers to be wary when striking deals, for other people often made judgements neither out of *ragione* nor *dirittura* but from 'favore disordinato'.[240]

Providence was the foremost of all the virtues that the perfect merchant was seen as needing to follow, and it was singled out by Pegolotti, Frescobaldi and Cotrugli. Where material goods were concerned, providence implied both foresight and preparation for the future. Da Certaldo wryly noted the importance of providence in his manual, writing that providence with the benefit of hindsight was worth little.[241] Cotrugli's perfect merchant was a *mercante provido*, who considered his desired future when ordering his present affairs.[242] He saw this virtue as the first of the traits of prudence: 'providencia, circuspectione, cautione et docilità'.[243] This association is confirmed in Giotto's earlier depiction of prudence in the Scrovegni chapel in Padua. Prudence is depicted with an open book, perhaps a *quaderno*, with a mirror in one hand and a compass in the other. The accompanying inscription reads:

> Res et tempus summa cura / agit[a]t Prudentia, / spec[u]letur [ut] futu[ra] / [su]a providentia. / Memoria iam elapse, / o[rd]inat pres[en]tia' / mens ruinam non est [p]assa, / hac do[n]ata gratia. / Sextu[s] [circu]mgi[r]at p[er]gens; / sc[it] f[u]turum spe[c]ulum / et antiqua vultus [v]ergens / [qu]o transit [s]e[c]ulum.[244]

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[240] Corti, *Anonimo,* 119: 'disordered favour'.
[241] Certaldo, *Costumi,* 83.
[242] Cotrugli, *Mercatura*, 128.
[243] Cotrugli, *Mercatura*, 128: 'providence, circumspection, caution, and a disposition to learning'.
[244] G. Ammannati, *Pinxit Industira docte mentis, le iscrizioni delle allegorie di Virtù e Vizi dipinte da Giotto nella Cappella degli Scrovegni* (Pisa, 2017), 29: 'Prudence considers things and time with great care, so as to investigate the future with foresight. She remembers things which have already past,

This focus on ordering present things and remembering the past in a *quaderno*, better to respond to the future, made providence a crucial trait of the perfect merchant. While turns of fortune were thought to out-plan and out-pace providence, this seems to have been the surest means of limiting fortune's power over a merchant's material wealth.

Providence depended on memory. Cotrugli wrote in his manual that he made his children memorise and recite lines from Virgil.[245] In this way, they could sharpen their rhetoric and their memories. Cotrugli's choice of Virgil reflected the breadth of learning that he encouraged merchants to attain. Nonetheless, he warned that merchants should not trust their memories alone and should keep careful records.[246] The considerable payment of thirteen ducats to a certain 'Maistro Piero *della memoria* for teaching me memory' appears in Barbarigo's accounts, and suggests that some merchants were taught mnemonic techniques.[247] As we have seen, merchant *quaderni* were also books of memory that made use of mnemonic structures and layouts. The perfect merchant was a man in the middle of the road of life, who kept to the straight path, had invested enough time to perfect his art, but had not passed the age at which the strain of his career and the cooling of his faculties and memory would invite a thousand mistakes.[248]

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orders things in the present; the mind does not suffer ruin if it is granted this grace. The compass turns in a circle keeping direction; the mirror knows the future, and the face turned towards where time passes knows things past'.

[245] Cotrugli, *Mercatura*, 172.
[246] Cotrugli, *Mercatura,* 82.
[247] F. C. Lane, *Andrea Barbarigo, Merchant of Venice, 1418-1449* (Baltimore, 1944), 20.
[248] Cotrugli, *Mercatura*, 187.

The models of the ideal merchant were at once intended to teach best practice and to justify the necessity and virtue of his profession. For Cotrugli, the perfection of commerce was inextricably connected to the formation of cities. Commerce had sustained the growth of mankind, supporting its spread across Earth.[249] After the invention of money as a universal measure, commerce flourished from human industry, generating the superabundance that sustained the association of men in republics.[250] Here, Cotrugli seems to have drawn on the Aristotelian arguments that man is a social being who cannot be self-sufficient,[251] and that money, as a measure, facilitated both exchange and the association of men in cities.[252] In the thirteenth century, Giles of Rome, approaching this question from the perspective of the origin of cities rather than the origin of trade,[253] argued that cities were perfect because they were the only the only kind of community that sustained humans through trade: 'Si enim civitas sit sufficiens et perfecta, nihil potest homo indigere in tota vita, quod non inveniat in civitate, sive hoc fiat per mercationem, sive aliter'.[254] Commerce concentrated the scattered commodities that cities needed. Just as development of commerce had laid the foundations for the growth of all cities, the perfection of a merchant's art was measured not just by his own success but also by the prosperity of his city. The idea of the common good was used to defend the status of merchants and their art.[255] Merchants

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[249] Cotrugli, *Mercatura,* 42.
[250] Cotrugli, *Mercatura,* 43.
[251] Aristotle, *Politics,* tr. B. Jowett, in J. Barnes ed., *The Complete Works of Aristotle* (Princeton, 1995), 2 vols, ii, 1988. 1253a
[252] Aristotle, *Nichomachean Ethics,* tr. W. D. Ross and J. O. Urmson, in Barnes, *Works*, 1789, 1133b
[253] M. S. Kempshall*, The Common Good in Late Medieval Political Thought* (Oxford, 1999), 267.
[254] Giles of Rome, *In II librum Sententiarum* (Venice, 1581), 681: 'For if the city is sufficient and perfect, a man cannot need anything in his whole life which he cannot find in the city, whether this be by commerce or otherwise'.
[255] J. Kaye, *A History of Balance 1250-1375: The Emergence of a New Model of Equilibrium and its Impact on Thought* (Cambridge, 2014), 107.

had a responsibility to ensure their cities would flourish. Additionally, the merchants of a city supported by flourishing trade were held in higher esteem.

The perfect merchant was eloquent and skilled in rhetoric.[256] This facilitated his exchanges and was a factor in the associations that made the perfect merchant's city. The thirteenth-century Florentine office-holder and teacher Brunetto Latini's account of the formation of cities was similar: 'the wise orators [...] extinguished battles, and men later formed associations to do business together and to practice commerce'.[257] In the twelfth century, Hugh of St Victor had defined commerce as a 'peculiar sort of rhetoric',[258] explaining that an eloquent speaker is called 'Mercurius [...] a mercatorum kirrius, a very lord among merchants'.[259] Uguccione da Pisa in his *Derivationes,* a prominent reference work for Dante and later writers, gave the god Mercury an etymology derived from 'merchant'. Mercury was a mediator and interpreter between the gods and men.[260] He was known for his eloquence and affability.[261] The art of commerce was seen in late medieval Italy as closely linked to the art of rhetoric.

The perfect merchant was a pious merchant. Cotrugli acknowledged that merchants were often 'inobservantissimi' and 'mundani'.[262] The expectations of merchants were not the same as those of clerics or of friars. However, a merchant's profession exposed him to specific and pronounced spiritual risks. Cotrugli devoted the entire second book

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[256] Cotrugli, *Mercatura,* 130.
[257] Brunetto Latini, *La Rhetorica*, ed. tr. S. D'agata D'Ottavi (Michigan, 2016), 30.
[258] Hugh of St. Victor, *Didascalicon*, ed. tr. J. Taylor (New York, 1991), 76.
[259] Hugh of St. Victor, *Didascalicon*, 77.
[260] Uguccione da Pisa, *Derivationes*, eds. E. Cecchini, G. Arbizzoni, S. Lanciotti, G. Nonni, M. G. Sassi, A. Tontini (2 vols, Florence, 2004), i, p. 744: 'Mercurium, qui mediator est et fidus interpres deorum et hominum'.
[261] Uguccione da Pisa, *Derivationes*, 760.
[262] Cotrugli, *Mercatura,*109.

of his manual to merchant religion and ethics. He dedicated individual chapters to attending mass, prayer, charity, and cases of conscience.[263] In the first of these, addressing fellow merchants, 'mercanti mei carissimi', he wrote that it was not enough for them to attend mass regularly because they were following the laws and expectations of the church, but rather that they should be prepared for it in their own hearts, as in this way they would comfort their souls, sharpen their intellects and purge their transgressions.[264] He noted the specific importance of this to merchants, who, compared to other men, were at greater risk of distraction by their business affairs.

The ideal merchant's charity provided a model of how merchants could mitigate the spiritual risks that were particular to their profession. Cotrugli described sincere charity as an excellent medicine for the health of a merchant's soul: tears of compassion from a true heart could guide his soul to an excellent fate.[265] The perfect merchant's charity was ordered by proportion so that it could be sustained over time; he should extend his hand to the poor, giving in charity according to his ability.[266] Cotrugli advised that this was not the same as restitution, which those who followed Cotrugli's advice and practised the merchant's art should not have to make.[267] He stopped short, therefore, of Christ's teaching on the subject.[268] In cases where a merchant failed to live up to this ideal, recompense should be made to the wronged party directly. Almsgiving was only an acceptable form of restitution in cases of *malis ablatis incertis* in which the wronged party could not be identified.[269]

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[263] Cotrugli, *Mercatura*, 97, 109.
[264] Cotrugli, *Mercatura*, 100-1: 'my dearest merchants'.
[265] Cotrugli, *Mercatura*, 108.
[266] Cotrugli, *Mercatura*, 106.
[267] Cotrugli, *Mercatura*, 120.
[268] Mark 12.43-44.
[269] Cotrugli, *Mercatura*, 120: 'uncertain washed sins'.

> La Donna nostra fue come ‘l mercante che d’ogni cosa guadagna di ciò che fa.[270]

The language of sermons addressed to merchants reinforced the affinity between the material and the spiritual that depictions of the piety of the perfect merchant sought to inspire. In the first of two sermons preached at Santa Maria *Novella* in Florence on 2 February 1304, the feast of the Purification of the Virgin, Giordano da Pisa compared Mary to a merchant who profited in every venture. In the second sermon, Da Pisa further developed the connection between the Virgin Mary and the ideal merchant. She was like a merchant in working, fighting, trading, and carrying. In working, she wove the finest white Egyptian linen, the purest and noblest of threads from which the best cloths were made, with the warm wool of her love and charity to make Christ’s clothes.[271] In fighting against the vice of usury, she was strong enough to triumph; so strong, in fact, that she never felt greed.[272] In trading, she was like a merchant who had nothing evil in his *bottega*.[273] The art of the merchant lay in exchanging the bad for the good and, in this sense, she was like ‘un abile mercante’, trading worldly goods for eternal goods.[274] Uguccione da Pisa had argued that commerce had derived from this idea of the profitable exchange of the material for the spiritual: ‘commercium quasi commutatio mercium. Illa ergo mirabilis incarnatio Iesu Christi fuit commercium, quasi

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[270] Giordano da Pisa, *Avventuale Fiorentino 1304,* ed. S. Serventi (Turin 2006), 580: ‘Our Lady was like the merchant who profited in everything that she did’.
[271] Giordano da Pisa, *Avventuale,* 587.
[272] Giordano da Pisa, *Avventuale,* 590.
[273] Giordano da Pisa, *Avventuale,* 591: ‘workshop’.
[274] Giordano da Pisa, *Avventuale,* 591: ‘able merchant’.

commutatio mercium, scilicet divinitas et humanitatis'.[275] In all this, Mary drew a useful profit, like the 'savio mercante'.[276] In carrying, her soul's ascension was like a great ship in bringing spiritual riches to heaven.[277] Merchants believed that their art was aimed at drawing a twin profit, spiritual and material. This belief was reinforced by the depiction of Mary as if she had been an ideal merchant in late medieval Italian sermons.

Cases of conscience are the conclusion of Cotrugli's discussion of the religion of the perfect merchant. Contemplating their conscience may have been a powerful motivation for merchants.[278] In invoking a merchant's conscience, Cotrugli seems to echo the manuals of late medieval confessors. Some confessors' manuals were compiled to pose questions that were of relevance to certain professions. The fourteenth-century Dominican Guy of Toulouse's *Regula mercatorum* was a selection of cases from John of Freiburg's *Summa confessorum*, tailored to the spiritual risks that merchants faced, especially determining the legitimacy of exchanges and the sin of usury.[279] Whereas confessors' manuals were compiled by priests and friars from practical experience of confession,[280] this part of Cotrugli's manual is made all the more valuable because its author had practical experience of trade.

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[275] Uguccione, *Derivationes,* ii, p. 762: 'Commerce, or rather the exchange of goods. Therefore, the miraculous incarnation of Jesus Christ was commerce, or rather the exchange of goods, that is to say divinity and humanity'.
[276] Giordano da Pisa, *Avventuale,* 591: 'wise merchant'.
[277] Giordano da Pisa, *Avventuale,* 592.
[278] Elizabeth Brown has argued for importance of the idea of conscience as a motivation in the context of the legitimacy of late medieval taxation: E. A. R. Brown, 'Moral Imperatives and Conundrums of Conscience: Reflections on Philip the Fair of France', *Speculum*, 87/1 (2012), 2.
[279] P. Biller, 'Confession in the Middle Ages: introduction', in P. Biller and A. J. Minnis, *Handling Sin: Confession in the Middle Ages* (York, 1998), 16; T. E. L. Chubb and E. Kelley, *Mendicants and Merchants in the Medieval Mediterranean (Leiden, 2012),* 165; P. Michaud-Quantin *Sommes de casuistique et manuels de confession au Moyen Age, XII-XVI siècles* (Louvain 1962)*,* 48; Guy of Toulouse, *La règle des marchands* (Provins, 1496), 28r, 38r.
[280] J. Le Goff, 'Métier et profession d'après les manuels de confesseurs du Moyen Âge [1964]', in J. Le Goff, *Un autre moyen âge* (Paris, 1999) 171.

Cotrugli used his cases of conscience to argue that the intention was the fundamental discriminator between licit and illicit behaviour: 'mercantilmente le buone e mali pratiche'.[281] The perfect merchant's intention was to seek proportionate profit in a way that benefited the common good. Positing the example of a merchant who stockpiled grain, Cotrugli gave three conditions under which this would be licit: if a merchant were acting for the common good with the aim of alleviating future shortages; if a merchant were trying to make a proportionate, and not excessive, profit; or if the merchant were acting out of necessity, for example to ensure his household would be fed. Cotrugli condemned any merchant who stockpiled grain to manipulate the market or to engineer a shortage. In similar terms, he argued that, even if they were granted by a valid charter, monopolies were unethical if they did not serve the common good of a city.

Loans were a particular area of concern: here merchants ran pronounced spiritual risks. Defining usury as lending in expectation of gain, Cotrugli qualified this remark by explaining that if a merchant did not expect to profit, then the loan was valid and not usurious.[282] For example, exacting a penalty specified in a contract for a debtor who failed to pay on time was not usury in his view, because there was no fraudulent intent on the part of the lender from the outset.[283] Nor was purchasing a debt at a discount usurious, as long as the discount was intended to cover the costs of collection.[284] Cotrugli asked his readers to use their judgement in considering the ethics of the art of trade. For example, he thought that a merchant should never refuse to extend the term of a loan to a borrower who was unable to pay at the precise time when it was due: to

[281] Cotrugli, *Mercatura,* 113: 'In mercantile terms, good and bad practice'.
[282] Cotrugli, *Mercatura,* 109.
[283] Cotrugli, *Mercatura,* 112.
[284] Cotrugli, *Mercatura,* 114: 'their own hard work'.

do so would be usurious.[285] Cotrugli reminded his readers that usurious agreements made without leaving any trace on paper in the form of letters or entries in *quaderni* or contracts were still usurious.[286] A merchant's conscience could not be protected by removing the paper-trail.

Cotrugli thought merchants should legitimately be compensated for the volatility of their trade. While he did not consider risk to be a sufficient reason to expect gain from a loan,[287] the sale of volatile commodities through forward contracts, for a set price at a future date, presented a different case.[288] Merchants should be compensated for their own industry, in planning ahead, the cost of transporting and storing goods, the wages they had to pay, the uncertainty of the future price of the good in question, and the opportunity cost of the merchant's capital had it not been invested in such a venture. However, he then posed a counter example of a merchant who was reselling goods that had not been imported over great distances and which were of relatively stable value.[289] He condemned forward contracts that sought excessive compensation in these cases as 'stochi' and 'strangoli'.[290]

Ideals of the merchant were held up as examples in the making of merchants in late medieval Italy. Cotrugli used his perfect merchant to defend the status of the art of trade. His perfect merchant was meant to strive with industry to earn profits, material and spiritual, which would also serve the common good.

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[285] Cotrugli, *Mercatura,* 110.
[286] Cotrugli, *Mercatura*, 112.
[287] Cotrugli, *Mercatura,* 110.
[288] Cotrugli, *Mercatura,* 112.
[289] Cotrugli, *Mercatura,* 113.
[290] Cotrugli, *Mercatura,* 114: 'sword-stabs', 'stranglings'.

A Constellation of Books

Books played an important role in the making of merchants. Da Certaldo encouraged merchants to read as widely as possible.[291] The fully fledged perfect merchant was also 'letterato', and well versed in Latin and vernacular literature, geography and cosmography.[292] Cotrugli told his readers to have their own private library of books, in addition to the household library, in the room where they slept.[293] Lists of books can be found in last wills and testaments in late medieval Italy.[294] For example in Arezzo Sam Cohn has investigated the books bequeathed by the notary Dominus Symoneus in 1338, by the surgeon Magister Angelus in 1348, and by the Merchant Baccio di Maso in 1412.[295] Lists of the books merchants owned and lent to one another reveal that the breadth of merchant reading sometimes lived up to Cotrugli's ideal of the perfect merchant's universal learning. Merchants read through the frame of their cultural horizons, and, at the same time, their reading continually reshaped these horizons.

Cotrugli's perfect merchant was a not only a *scriptore* and *abechista* but also a *quadernista*.[296] The fourteenth-century *Zibaldone da Canal* is an intriguing survival of a Venetian *quaderno* that contains problems of commercial mathematics, drawings, comments on astrology, medicinal recipes, written prayers, and fragments of vernacular literature. John Dotson has suggested that we read the *Zibaldone* as a 'commonplace

[291] Certaldo, *Costumi*, 55-56.
[292] Cotrugli, *Mercatura,* 133.
[293] Cotrugli, *Mercatura,* 159.
[294] C. Bec, *Les livres des Florentins 1413-1608* (Florence, 1984).
[295] S. K. Cohn, *The Cult of Remembrance and the Black Death: Six Renaissance Cities in Central Italy* (Baltimore, 1992), 20, 89, 109, 319; S. K. Cohn, 'Renaissance attachment to things: material culture in last wills and testaments', *Economic History Review* 65/3 (2012), 995.
[296] Cotrugli, *Mercatura,* 130.

book that grew out of a student's arithmetic notebook'.[297] The convergence of all these influences on the formation of merchant culture can be found in this kind of *quaderno*. *Quaderni* were often kept within families. They were important vehicles for the transmission of merchant culture between generations. As Sabrina Corbellini has argued elsewhere, a single *quaderno* could act as a 'kind of library'.[298]

The outline of Cotrugli's perfect merchant was shaped by the texts and tales that had passed across his desk. Merchant libraries contained vernacular literature and classical texts. The merchants Giovanni di Agnolo Capponi, Lodovico di Salvestro Ceffini, Domenico Caronelli, Antonio di Bartolomeo, Tommaso Raffacani, Muzio Coastanzo and Lapa Acciaiuoli all copied, commissioned copies of, or owned early texts of the *Decameron*.[299] In his free time when he was a young apprentice, D'Ancona was said to have read Boccaccio, Dante, and Petrarch.[300] On commercial voyages, he devoted time to searching for new texts, visiting many libraries in Greece.[301] In Cyprus, he acquired a very old codex of Homer's Iliad, Homer's Odyssey, the tragedies of Euripides, and a book by the grammarian Theodosius.[302] In his will, the Florentine merchant Michele Rodulfi, who died in Genoa in 1383, mentioned paper copies of Seneca's letters, of Dante and of Boccaccio.[303] We learn from an inventory of goods made by Raffaele Adorno's widow on 10 May 1396 that his library of 44 texts included works by Ovid, Virgil, Seneca, Cicero, Quintilian, Petrarch, and Boccaccio, in addition to Jacopo da

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[297] J. E. Dotson, 'Commercial Law in Fourteenth-Century Merchant Manuals', *Medieval Encounters* 9/2-3 (2003), 212.
[298] Corbellini, *Cultures*, 50.
[299] R. Daniels, *Boccaccio and the Book, Production and Reading in Italy 1340-1520* (London, 2009), 82, 87, 88, 92, 99.
[300] Cyriac, *Early Travels,* 19.
[301] Cyriac, *Early Travels,* 34.
[302] Cyriac, *Early Travels,* 64.
[303] G. Petti Balbi, 'Cultura e potere a Genova: La biblioteca di Raffaele Adorno (1396)', *Aevum* 72/2 (1998), 432; ASGe, Notarile, Nicolò de Belignano, cart. 376, cc. 185v-188v, 6 June 1383.

Voragine's *Legenda Aurea*, Uguccione da Pisa's *Derivationes* and a certain 'librum in lingua gallica'.[304] Adorno, the brother of the sometime Doge of Genoa, Antoniotto Adorno, had served as an ambassador for the city and invested in Famagusta and Chios.[305] While Adorno's library was likely to have been exceptionally well furnished, his interest in rhetorical works is revealing.

Two lists of books, one written in his *quaderno* in 1433 by the Florentine wool merchant Dietisalvi di Nerone,[306] whose brother Francesco was one of Cotrugli's business partners, and the other written in his *quaderno* by Giovanni da Uzzano,[307] merchant and author of a manual of the practice of trade, offer grounds for comparison between Cotrugli's ideal merchant's library and the books we know that merchants owned and lent to one another in late medieval Italy.

In 1433, Dietisalvi di Nerone wrote a list of the 36 books that he owned. For each, he described how the codex was bound, its author, whether it was glossed and, in some cases, the title of the work. One of the books, a parchment manuscript, bound in black leather, dealt with 'la materia di molte chose et paesi' and seems likely to have been a manual of the practice of trade.[308] Two of the books were glossed spiritual works: an ancient, beautiful, glossed book of psalms bound in red leather, and the letters of St Paul. Three of the books were works of vernacular literature: an old red leather volume of Dante, a paper codex of translations of Virgil, and a paper volume of Fazio degli Uberti (c.1301-c.1367), perhaps his unfinished poem *Il Dittamondo*, a work of

[304] Petti Balbi, 'Adorno', 435-6: 'book in the French language'.
[305] Petti Balbi, 'Adorno', 427.
[306] Chiappelli, 'Inventario', 247-252.
[307] Pisa, SNS-S, I, 2, fo. 185r.
[308] Chiappelli, 'Inventario', 252: 'the matter of many things and countries'.

geography and cosmography written in the style of Dante's verse. There were six books devoted to teaching Latin and grammar: three texts of Priscian, one by Alexandre de Villedieu (c.1175-1240), the Franciscan, grammarian, poet, and mathematician, one that may have been Francesco da Buti's *Regule Gramaticales* and an unidentified work; *Effimeron*.[309] The remaining 24 codices were all classical works of philosophy, rhetoric, poetry, satire, tragedy or history, by Boethius, Cicero, Juvenal, Lucan, Ovid, Persius, Plautus, Seneca, Statius, Terence, Valerius Maximus and Virgil. One of them, a copy of Cicero's *Brutus* bound in red leather, had only recently been rediscovered by Gerardo Ladriani and the earliest copies reached Florence from 1423.[310] Another, his beautiful copy of Plautus, glossed with *lettera moderna*, was leant by Dietisalvi to Piero di Cosimo dei Medici and later returned.[311]

Da Uzzano wrote his list of books on the leaf that followed a record of the birth and death of his children; it seems to have been important to him. Rather than a complete list of his library, it may just have been a list of the books that he lent to his friends and colleagues. Each loan of a book was recorded with the same form as a financial entry in a *quaderno*, arranged, not according to the manuscript, but rather by the person who had borrowed the book: Nicholo Barbigi, Antonio Checuino, Jacopo di Alamanno Salviati, Piero di Alamanno Salviati, Nicholo di Giovanni di Sando and Bernardo da Pistoia. These entries were reviewed with the comment, *rendello*, to show that the books had been returned. The books in Giovanni's list were similar to the vernacular works in Dietisalvi's library. It included: two glossed *quaderni* of Dante, a 'libretto de trionfi' [presumably Petrarch's *Triumphs*] e chanzioni di Dante', a book of Petrarch's

[309] Chiappelli, 'Inventario', 251.
[310] D. R. Thomas, 'The Text and Transmission of Cicero's Brutus' DPhil Thesis (Oxford, 2021), 232.
[311] Chiappelli, 'Inventario', 251.

sonnets, a book by Fazio degli Uberti, possibly the *Dittamondo,* and his own manual of merchant practice: 'uno mio libro che parla di mercatantia [...] per più parti'.[312]

Di Nerone's list and Da Uzzano's list show how texts circulated between merchants. The attention that Dietisalvi paid to the bindings of his books shows how they were also valued as a material display of a merchant's learning. Dietisalvi found some of his books notable for their age; others were recently rediscovered classical texts. In both cases, this seems to have made more prestigious volumes. While Da Uzzano's list lacks Dietisalvi's extensive collection of classical texts, he seems to have shared an interest in vernacular literature. Both lists contained merchant manuals. Where Da Uzzano was the author of his manual, Di Nerone was a professional reader of his.

Rather than a list of books, the fourteenth-century Venetian *Zibaldone da Canal* contained a synthesis of material from all the kinds of sources that have been singled out as formative influences on aspiring merchants in a single *quaderno*. It offered its readers: mathematical rules that are reminiscent of the *Regoluzze* of Paolo dell'Abbaco,[313] problems of geometry ('questo sì è lo amaistramento che insegna quanto si è l'area de un triangolo'),[314] and problems that describe the proportional division of profits between merchants: for example between investors in a newly built ship that sails back from Constantinople with its profits.[315] These problems were illustrated and decorated by drawings just as problems in *libri d'abaco* were.[316]

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[312] SNS-S, I, 2, fos. 185r-186v: 'my book which speaks of commerce […] in several parts'.
[313] *Zibaldone,* 9.
[314] *Zibaldone*, 34: 'this is the teaching that shows how to find the area of a traingle'.
[315] *Zibaldone*, 26.
[316] Images of Yale, Beinecke MS 327 are accessible at the following link: https://brbl-dl.library.yale.edu/vufind/Record/3592282 (09/05/2023); consulted online.

The *Zibaldone da Canal* was also used to record the kind of information that could be found in merchant manuals. It describes the various official lengths to be used for different textiles in Venetian markets.[317] There are conversions of weights and measures between different marketplaces, for example Crete and Venice.[318] There are descriptions of the varying qualities of particular commodities and how to identify them.[319] There is a comparable section in Pegolotti's manual.[320] It was used to record part of a tale of Tristan concerning King Milliadus.[321] The variety of material gathered in the *Zibaldone da Canal* reveals that compiling learning in a *quaderno* was an important part of a merchant's education. More than this, it was a source of entertainment.

A merchant's reading shaped his expectations of the world. At the same time, he read through the frame of those cultural horizons. The fourth *novella* of the second day of Boccaccio's *Decameron*, the story of Landolfo Rufolo,[322] can show how merchants brought their learning and experience to bear in order to read with *ragione*. As we have seen, Boccaccio's tales circulated among merchants and Giovanni Boccaccio himself was an author who shared a merchant's perspective. In his youth, he had learned merchant *ragione*. His father, Chellini, worked for the Florentine Bardi company from 1327 to 1338,[323] and Giovanni himself was an apprentice at the Bardi 'banco' in

[317] *Zibaldone,* 37-41.
[318] *Zibaldone*, 59.
[319] *Zibaldone*, 76-8.
[320] Francesco Pegolotti, *La pratica della mercatura*, ed. A. Evans (Harvard, 1936), 360.
[321] *Zibaldone*, 73-75
[322] Boccaccio, *Decameron*, II:4, pp. 166-175.
[323] A. Sapori, *La crisi delle compagnie mercantili dei Bardi e dei Peruzzi* (Florence, 1926), 259.

Naples.[324] Boccaccio seems to have based the character of Landolfo Rufolo on the Amalfitan merchant Lorenzo Rufolo, who turned to piracy when his fortunes failed.[325] The fictive frame and audience that Boccaccio created within the *Decameron* encouraged its readers to respond. The *novelle* of the *Decameron* are told to one another by a *brigata* of ten wealthy young Florentines, seven women and three men, who have decided to flee the plague, which arrived in the city in 1348, to a villa and garden outside, where they will pass the time by telling each other tales. They tell each other ten *novelle* a day for ten days. Each day, one of them is appointed as the ruler of the day's tales, and they set the theme that the stories will address. The *Decameron* was structured to explore the effects of literature on its audiences. This structure adds a further layer to the analysis of whether merchants may have read the *Decameron* in particular ways, through the frame of their cultural horizons.

The *novella* of Landolfo Rufolo explored an idea that was an especially fraught topic for merchants: fortune. Filomena ruled that, during the second day, they would tell *novelle* in which hopeless situations ended well. Lauretta, the narrator of the fourth *novella*, responding to Pampinea's *novella* of restored fortunes, argued that 'niuno atto della fortuna [...] si può veder maggiore che vedere uno infima miseria a stato reale elevare'.[326] She glossed the end of her tale by describing Landolfo, its protagonist, as 'balestrato dalla fortuna'.[327]

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[324] V. Branca, *Giovanni Boccaccio: profilo biografico* (Florence, 1977), 17: 'bench'.
[325] J. Caskey, *Art and Patronage in the Medieval Mediterranean, Merchant Culture in the Region of Amalfi* (Cambridge, 2004), p. 6.
[326] Boccaccio, *Decameron,* II:4, p. 166: 'no greater act of fortune can be seen than those which elevate a miserable wretch to royal status'.
[327] Boccaccio, *Decameron,* II:4, p. 173: 'hurled [literally cross-bowed] by fortune'.

Landolfo Rufolo, a wealthy merchant from Ravello on the Amalfi coast, 'non bastando la sua ricchezza', decided to risk all that he had gained for the chance to double his capital.[328] Landolfo invested all his funds in a single ship and sailed with it to Cyprus. When he arrived, there were already three other merchant ships in port carrying the same goods, and Landolfo was forced to sell at considerable loss.[329] To recover his losses, he bought a smaller ship and resorted to piracy. As if to justify Landolfo's activity, we are told that he mainly attacked Turkish ships.[330] After years of raiding shipping in the Mediterranean, he recovered his initial losses and decided to return home, without taking further risks.[331] His new smaller ship was faster but less seaworthy, and Landolfo was forced to shelter from a storm in an island bay. Two Genoese cogs returning from Constantinople that had also been forced there attacked Landolfo's ship, took everything from his hold, captured him and sank the boat. The Genoese cog that Landolfo had been imprisoned on was then shipwrecked on Cephalonia in a storm, while the other cog sailed on. Calling for God's help, Landolfo clung to a wooden chest in the storm to stay afloat for so long that he became 'quasi una spugna'.[332] The next day, the storm subsided and Landolfo was washed ashore on Corfu. He was helped by a woman washing plates in the sea and he discovered that a sack in the chest on to which he had clung contained precious stones. In the end, he was twice as rich as when he had left. Landolfo made his way home through Brindisi and Trani. On reaching Ravello, he sent money back to the good woman on Corfu who had

[328] Boccaccio, *Decameron*, II:4 p. 167: 'his wealth not being enough for him'.
[329] Boccaccio, *Decameron*, II:4, p. 168.
[330] Boccaccio, *Decameron*, II:4, p. 168.
[331] Boccaccio, *Decameron*, II:4, p. 169.
[332] Boccaccio, *Decameron*, II:4, p. 172: 'as if he were a sponge'.

helped him and to those who had helped him on the mainland. No longer consumed by his 'voler mercatare', he lived there honourably until the end of his days.[333]

Landolfo's tale almost seems to be an exercise from a *libro d'abaco*: a man sets out from Ravello to Cyprus with all his wealth invested on one ship with the aim of doubling it. However, without the proportional division of profits or losses between partners according to their shares in a venture that is normally the crux of these exercises, Landolfo's tale is a subversion of calculation according to merchant *ragione.* Landolfo has not taken any steps to diversify his risk by investing with partners, or investing in many ships, or investing in other ventures, as Cotrugli thought the perfect merchant should.[334] At first glance, the expectation that the tale will be one of doubling also seems well-founded: at the end of the tale, Landolfo has twice as much wealth as when he started. On closer inspection, this has not been the result of any straightforward doubling. By the time he was aboard the Genoese cog, he had lost all his wealth, regained it, and lost it all again. He doubled his losses before he was able to double his wealth. It is only the value of the precious gems in the chest that he clung to, a *deus ex machina*, that resolved this parody of an exercise in arithmetic.

Lauretta's attribution of Landolfo's trials and redemption from a hopeless situation to acts of fortune seems to have invited a challenge from merchant readers. Although the *novella* emphasises Landolfo's desire to be a merchant, his aim, his methods, and his responses to turns of fortune stand in marked contrast to those of the ideal merchant described by preachers in their sermons and merchants in their manuals. Landolfo did

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[333] Boccaccio, *Decameron*, II:4, p. 175: 'the desire to be a merchant'.
[334] Cotrugli, *Mercatura,* 73.

not think that his material wealth was enough. The perfect merchant would have known that it was impossible to be satisfied by material wealth alone and that he should aim to make material profits that benefited the common good, as well as to invest in spiritual goods that fortune could not reach. Landolfo did not use *ragione* to evaluate risk and to predict how his investment might end. This mistake was compounded by his failure to consider the *partir delle navi,* times at which ships tended to sail and the cargo which they normally carried, resulting in his avoidable ruin in Cyprus.[335] Reading Landolfo's *novella* with *ragione* could offer a further layer of enjoyment, anticipating these failings and debating their causes.

Boccaccio's tales were not sermons that preached best practice to his merchant readers, and, of course, they were written to entertain, yet part of the humour of these tales for merchants lay in how they interreacted with their cultural expectations. When Landolfo was ruined, he turned to piracy. This was the opposite of how an ideal merchant was meant to react to material poverty. Yet it was also uncomfortably close to how many merchants combined trade and piracy.[336] Even the coastal waters near northern Italy were seen to be dangerous. On 7 August 1398 having arrived safely in Piombino the Pisan Jacopo di Giunta,[337] wrote a letter to his father describing the power of fortune, the risks of storms and of piracy:

> Suole in de tempi del verno spesso il mare mostrarsi turbato e col suo rigido aspecto inpaurire / ciaschuno et cio no(n) è meraviglia, ma hora pare che p(er) mia sventura cio advengha che poi / che io giunsi in del Castel Piombinese mai

[335] Cotrugli, *Mercatura,* 63.
[336] V. Branca, 'L'Epopea dei mercatanti*', Lettere Italiane* 8/1 (1956), 18.
[337] O. Banti, *Iacopo d'Appiano: economia, società e politica del comune di Pisa al suo tramonto, 1392-1399* (Pisa, 1971), 332.

> no(n) e stato seno fortuna e tempesta siche / p(er) tanto io non gra(n)de dispecto che a questo modo i(n) vano il tempo corra et ad me ad / viene quel proverbio che volgareme(n)te si dice. all'omo sventurato no(n) li vale il per tempo levarsi […] ancora o gran paura di no(n) venire a man / de rubatori marini conciosiacosa che divisia cena, come altra volta vi scrissi. Et a questo / niente giova il dire vienci p(re)ghare iddio che ciauti e meni ad salvamento tutti […].[338]

The knowledge of sailing that merchants could acquire at first hand, or at second hand through correspondence and conversation, would have framed their reading of fortune and the risk of storms or piracy in Landolfo's tale.

Merchants valued reading, sought out books and prized their libraries. Their reading was not limited to practical texts, merchant manuals, the *libri d'abaco,* and books of grammar. Nor were practical texts ever exclusively practical. They read spiritual texts, literature, and poetry in the vernacular, as well as works of classical rhetoric and poetry. Merchants exchanged books with one another with networks of reading overlapping their commercial networks. Merchants read with *ragione.* They were attuned to fictional depiction of their art and prepared to approach their reading through calculation. Merchants read for enjoyment, sometimes at their own expense. The most entertaining texts may have been those such as the *novella* of Landolfo Rufolo, which engaged with the particular practical, ethical and spiritual challenges that merchants

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[338] ASPi, Miscellana di Manoscritti 77, Letter 393: 'Often in winter the sea shows itself to be agitated, its rigid aspect would frighten anyone, and therefore the things that happened are not to be marvelled at, though, after I had reached Castello Piombino they now seem to have been my misfortune. The voyage was never without its storms and fortune, so much so that I do not doubt that in this world time flies in vain and I am reminded of the popular proverb "it is not worth the unfortunate man's while to get up in the morning" […] I still have a great fear of falling into the hands of pirates, as I explained at dinner and as I wrote to you the other time. And as mere words can do nothing for us in this, let us pray to God to help us and lead us all to salvation […].'; Giusti recorded a similar Tuscan proverb: G. Giusti, *Raccolta di Proverbi Toscani* (Florence, 1853), 438: 'Non vale levarsi a buon'ora, bisogna aver ventura', 'It is not enough to wake up early, one must have luck too'.

faced. Every book that passed across their desks shifted their cultural horizons. They formed a constellation of books by which merchants were able to orient themselves and their identities as merchants. At the same time, their cultural horizons were a lens through which merchants read.

Conclusion: Defining the Merchant

The perfect merchant in late medieval Italy was not an efficient archetype of modern economic man. A merchant's profits, faith, and ethics, and their contribution to the common good were inseparable measures of the perfection of their art. Nor were merchant manuals precious treatises of economics and management. They devoted as much attention to a merchant's spirituality and learning as they did to how merchants should organise their traffic and manage their households. The figures of the ideal merchant that were found in manuals and preached in sermons were invented to inspire merchants to follow best practice. The perfect merchant calls the familiar categorisation of merchants into question.

Rather than defining late medieval merchants by the extent of their progress towards the ideal of the rational economic agent, they can instead be identified by their *ragione,* a learned way of thinking and responding to new knowledge. This *ragione* in late medieval Italy was composed of the literacy, mathematics and geometry that prepared aspiring merchants for their profession. It was taught by families, schools, and books as well as through direct experience of apprenticeships, travel, and trade. Merchants read the constellation of books that they acquired and exchanged with one another with their *ragione.* It was a *ragione* that facilitated surveying the world on paper, from the vantage point of a desk: a skill that gained value at a time when the volatility of markets and recurrent epidemics had raised the risks of travel.

The reach of merchant education extended beyond professional merchants. The wives of merchants in late medieval Italy learned commercial literacy. They were able to act

as unacknowledged partners in managing a merchant's investments and household. Merchant *ragione* was a versatile skill that was seen to be indispensable at all levels of society. As a path to social mobility, it was perceived to mitigate, but not subdue, fortune's rule. Late medieval Italy was perceived to be a society in which fortune's wheel turned more quickly than before. This volatility drove investment in education. Commercial literacy, mathematics, and geometry were increasingly seen to have been indispensable skills.

The writing, mathematics, and geometry that merchants learned in late medieval Italy were versatile skills that were not exclusively dedicated to their business practice. Even the earliest lines they wrote out to practise their script might be Dante's citation of Virgil in the *Inferno*, or copies of written prayers. Exercises in geometry and mathematics gave merchants an opportunity for entertainment and the chance to sharpen their wits. The mathematics of proportion were indispensable to accounting. They also offered a particular way of understanding justice. The geometry of gauging was integral to measuring and valuing goods. It was also an approach to understanding the topography of the afterlife.

The perfect merchant was an invented ideal that embodied how they were perceived in late medieval Italy and the practice that was expected of them. The perfect merchant, as an historicised ideal type, provides a us with a serviceable definition of the category of the merchant. Merchants were defined by the cultural effects of their education and profession. They considered the affinity between spiritual and material concerns in all their transactions and weighed tensions between the two in their consciences. They

were marked by the commercial rhetoric that they practised in seeking out profits that benefited both themselves and the common good.

Having investigated the perfect merchant and the grounding that merchants received in *ragione,* the next chapter of this thesis will explore the ways in which practical measuring influenced how merchants understood the idea of measure and applied measuring beyond the confines of the marketplace.

3. Measure

> Misura dura e però in ogni tuo fatto abbi misura acciò che tu non possi fallare, ché chi avrà misura ne' suoi fatti soprastarà a ogni vizio. Una sola cosa è quella che dei in te avere sanza misura, cioè amare Iddio.[1]

Measure was a virtue and a practice in late medieval Italy. It was a prominent idea in the cultural horizons of merchants. Merchants were measurers. Practical measuring, a skill that was grounded in a merchant's knowledge of commercial arithmetic and geometry, was a necessary first step in any valuation of their goods and property. Measuring as a system of quantification that allowed the unknown to be understood by its proportionate relationship to a known quantity was a component of how merchants thought. Their practical experience changed the ways in which merchants understood the idea of measure. Yet measure's significance was not limited by the confines of the marketplace. Measure, as proportionate conduct or thought, distinguished what was virtuous. *Dismisura* and *andare oltre misura*, to go beyond the bounds of measure, could be a vice. In this sense, measuring enacted justice.

> Cortesia non è altro se non misura, e misura dura e non è altro misura se non avere ordine ne' fatti tuoi. E però ciò che fai, fa con ordine e a fine di bene, e non potrai fallare.[2]

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[1] Certaldo, *Costumi*, 5: 'Measure endures, have measure in all your affairs so that you cannot err, he who has measure in his affairs will overcome every vice. One thing alone within you should be without measure, love of God'.
[2] Certaldo, *Costumi*, 13: 'Courtesy is nothing else but measure, and remember measure endures, and measure is nothing other than having order in your affairs. And therefore, that which you do, do it with order and do it to a good end, and you cannot fail'.

For merchants, measure was held to be the mark of courteous behaviour. Da Certaldo argued that courtesy was nothing other than measure. Measure was demonstrated by the order of a merchant's business and reason. This definition of courtesy as measure, the virtuous and proportionate mean between extremes that should guide conduct, was not uncontested. Dante had lamented that 'miseri volgari' had redefined courtesy as 'larghezza', and in doing so had ripped the idea away from its courtly origins.[3] Dante noted that in the virtuous courts of the past, 'cortesia' had been one with 'onestade'.[4] The claim that courtesy was really nothing else but measure should be read in the light of this contemporary anxiety that the sudden gains and social mobility of newly wealthy merchants provoked. The association of measure with courtesy challenged established definitions of social status.

Measure lay at the heart of the affinity between commercial practice, ethics, and merchant spirituality. It resonated with ideas of proportionality, justice, and virtue. Merchants imagined the topography of the afterlife and the duration of Purgatory through quantification and measuring, by proportionate comparison to worldly measure and time on Earth. That material goods or wealth could be quantified was the ultimate limit on their value. Spiritual goods and divine love were imagined to be of a higher order of value, and unquantifiable. Da Certaldo thought his readers should have only one thing that was measureless: their love for God.

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[3] Dante, *Convivio*, II:10, p. 292: 'the wretched unlettered', 'liberality'.
[4] Dante, *Convivio,* II:10, p. 292: 'courtesy', 'honesty'.

To understand the place of ideas of measure and proportion in the cultural horizons of late medieval merchants, this chapter, building on the preceding discussion of mercantile education and *libri d'abaco*, will start by investigating practical measuring: measuring tools, measurers, and records of measurements in *quaderni*. It will then expand its scope to consider how familiarity with measuring and proportion influenced the ethical ideas of *misura* and *dismisura*, and especially their relevance to merchants. A practical grounding in measuring and the mathematics of proportion interreacted with the ethical framework of measure, to change the ways in which late medieval merchants thought about the afterlife and the judgement of their souls. Finally, this chapter will examine how quantification and measuring extended into merchant eschatology and how it facilitated imagining the afterlife and its topography in particular ways.

‘Misura e pesa, non avrai contesa’[5]

This chapter will not attempt to survey the myriad systems of units in late medieval Italy, still less to place an overlay of conversions to modern units on what Irving Raymond and Robert Lopez termed the ‘anarchy of medieval metrology’.[6] Rather, the approach taken to measure here will be closer to that of Christian Bec’s investigation of the *mentalité* of Florentine merchants through a study of their vocabulary.[7]

The experience of practical measuring that merchants gained is not an unexplored area of study. Systems of measurement have always been a vital part of the infrastructure of trade. They were a point of contact between merchants and civic institutions. Alexander Murray saw trade from the central Middle Ages onwards as the ‘ultimate stimulus to government arithmetic’.[8] Studying markets in late medieval England, James Davis has shown how the assizes developed from the thirteenth century as institutions that audited the measurement, quality and price of the goods that fed the population.[9] Olivia Constable has shown how the *fondaco* was transformed from an institution that housed and regulated foreign traders to one that measured, taxed and secured commodities, when it was it brought to late medieval Europe from Islamic cities.[10] Emanuele Lugli has traced efforts to standardise measures, arguing that there was a heightened

[5] Tuscan proverb: G. Giusti, *Raccolta di Proverbi Toscani* (Florence, 1853), 81: ‘Measure and weigh, and there will be no debate’.
[6] R. S. Lopez and I. W. Raymond, *Medieval Trade in the Mediterranean World, Illustrative Documents* (New York, 2001), 12.
[7] C. Bec, ‘Au début du XVe siècle: Mentalité et vocabulaire des marchands florentins’, *Annales. Histoire, Sciences Sociales*, 22/6 (1967), 1206-1226.
[8] A. Murray, *Reason and Society in the Middle Ages* [1978] (Oxford, 2002), 196.
[9] J. Davis, *Medieval Market Morality. Life, Law and Ethics in the English Marketplace, 1200-1500* (Cambridge, 2013), 231.
[10] O. C. Constable, *Housing the Stranger in the Mediterranean World, Lodging, Trade and Travel in Late Antiquity and the Middle Ages* (Cambridge, 2003), 10.

preoccupation with systems of measurement in fourteenth-century Italy.[11] Although measuring was not a new phenomenon in late medieval Italy, it was increasing in intensity and sophistication.

The cultural effects of measuring's importance for commerce and taxation are less well explored. Studying thirteenth-century eschatology, Jacques Le Goff saw proportional measuring and a tendency to think by imagining landscapes and spaces as the midwives of Purgatory.[12] At the macro-scale, Alfred Crosby posited that the fourteenth-century fascination with measuring was an explanation for European hegemony and colonial expansion in the early modern period.[13] Crosby's conscription of measuring in the service of teleologies of European economic development seems just as distorted as seizing on late medieval merchants as the precocious forebearers of modern economic man. At the micro-scale, Dennis Romano's study of medieval Italian marketplaces identified measuring as one of the key stages in any transaction: 'approach, inspection, negotiation, agreement on terms, measurement and exchange'.[14] Peter Spufford has argued that measuring instruments, hand-scales and a cloth measuring rod, the *canna*, were the visual markers of a merchant: 'to be a merchant is to weigh and measure'.[15]

There have been valuable studies of the resonance of measure in vernacular literature with late medieval social and ethical anxieties. Kristina Olson has studied the nostalgic lament for a lost chivalric culture of 'cortesia' in Boccaccio's writings, as a means of

[11] E. Lugli, *The Making of Measure, and the Promise of Sameness* (Chicago, 2019), 116; E. Lugli, 'Hidden in plain sight: "the pietre di paragone" and the pre-eminence of medieval measurements in communal Italy', *Gesta*, 49/2 (2010), 90.
[12] J. Le Goff, 'Naissance du Purgatoire [1981]', in J. Le Goff, *Un autre moyen âge* (Paris, 1999), 1045.
[13] A. W. Crosby, *The Measure of Reality, Quantification and Western Society* (Cambridge, 1997), 19.
[14] D. Romano, *Markets and marketplaces in Medieval Italy, c.1100 to c.1440* (Yale, 2015), 111.
[15] P. Spufford, *Power and Profit, The Merchant in Medieval Europe* (London, 2002), 7.

criticising his own time and its mercantile outlook, which sought to reframe the idea of measure.[16] Teodolinda Barolini has placed Dante's use of *misura* as a form of justice at the point where the idea of the mean in Aristotle's ethics and of *mezura* in Occitan poetry meet.[17] Concentrating on fifteenth-century Italy, Arielle Saiber has shown how an interdisciplinary approach can cast new light on *misura,* in her exploration of the convergence of mathematics and writing contained in humanist debates over Protagoras's suggestion that 'man: is the measure of all things', and Lorenzo Valla's definition of rhetoric as 'the measure of all things'.[18] However, the appeal of *misura* to merchant readers in late medieval Italy still merits further exploration.

The growing reach of markets has been seen to have fostered a new way of thinking about measure in late medieval universities. Joel Kaye has argued that the urbanisation, commercialisation and bureaucratisation of western European society from the middle of the thirteenth century made it possible for scholars in the universities to think in ways that would not have been possible at an early stage.[19] This search for balance or equilibrium was a flourishing model that was applied across different disciplines in these years: in philosophy, politics, economic thought, literature, and medicine.[20] In his account, balance entailed 'relational thinking' and thinking about systems.[21] The fourteenth century saw a shift from the study of fixity to the study of motion; questions of quantification and of measurement replaced a preoccupation with essential qualities

[16] K. M. Olson, *Courtesy Lost: Dante, Boccaccio, and the Literature of History* (Toronto, 2014), 5.
[17] T. Barolini, 'Aristotle's mezzo, courtly misura, and Dante's canzone *le dolci rime*: humanism, ethics, and social anxiety', in J. Kiolkowski ed., *Dante and the Greeks* (Washington, 2014), 164.
[18] A. Saiber, *Measured Words: Computation and Writing in Renaissance Italy* (Toronto, 2017), 4.
[19] J. Kaye, *A History of Balance 1250-1375, The Emergence of a New Model of Equilibrium and its Impact on Thought* (Cambridge, 2014), 17, 463.
[20] Kaye*, Balance*, 1.
[21] Kaye*, Balance*, 6-7.

and perfection.[22] Whole systems that were thought to be naturally self-equalising were a new-found area of interest.[23]

Kaye has traced the overlapping and shifting ideas that were united by models of balance with subtlety. Yet he devoted less attention to the circulation of ideas between active participants in markets and the scholastic writers who created the intellectual common ground in which the model of balance emerged. Clerks and monks often had responsibilities in the financial administration of their institutions that informed how they thought about balance as an economic idea.[24] As a Franciscan and confessor, Peter of John Olivi was motivated to write on balance in economic exchange by his concern for the 'souls of buyers and sellers'.[25] Olivi's ideas were later diffused through the sermons of San Bernardino da Siena.[26] The reception of these ideas by merchants and the ways in which merchants practised and thought about quantification after the middle of the fourteenth century lie outside the scope of Kaye's inquiry. Kaye's overall paradigm elides definitions of balance as equilibrium and of balance as dynamic quantification.

Measure has also been studied in writings on the nature of money. Writing in 1900, Georg Simmel considered money to be a measure of mutual relations that were defined by instability. [27] Only as a theoretical ideal did money function as a 'stable balance' and a measure that could not be measured itself. For Simmel, the nature of money was

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[22] J. Kaye, *Economy and Nature in the Fourteenth Century, Money, Market Exchange, and the Emergence of Scientific Thought* (Cambridge, 1998), 1.
[23] Kaye*, Balance*, 8.
[24] Kaye*, Balance*, 80.
[25] Kaye, *Balance*, 58.
[26] Kaye, *Balance*, 114.
[27] G. Simmel, *The Philosophy of Money* [1899], tr. T. Bottomore and D. Frisby (New York, 2011), 204.

defined by its quality as a dynamic measure, a proportion that was in constant motion, reflecting the changing relationship between many objects.[28] The distinctions that Simmel drew between the ideal and practical nature of money offer a way of comparing the Aristotelian treatment of money in scholastic texts with how merchants thought about money as a measure in late medieval Italy.[29]

Setting measure and quantification against the cultural horizons of merchants in late medieval Italy offers a means of exploring how these ideas were shaped by their circulation in groups for whom questions of the commercial, ethical, and spiritual implications of measure were of direct concern. It will also offer a wider approach to a period after 1348 in which shared definitions of balance and *aequalitas* began to fragment.[30] In the specific case of merchants in late medieval Italy, the idea of measure appears to have been of greater significance than that of balance.

[28] Simmel, *Philosophy*, 555.
[29] Kaye, *Balance*, 45.
[30] Kaye, *Balance*, 473.

Practical Measuring

Primieramente, per farlo misurare [...][31]

For merchants in late medieval Italy, measuring was the first step in establishing value. The first of the payments that a merchant making port would have had to make was often a payment for the measurement of their cargo. In Pisa, Lucca, Genoa, and elsewhere, elected civic officials, the *misuratori*, measured imported goods. *Misura* could be established either by direct comparison to standard units of measure or indirectly through geometry and the mathematics of proportion. The myriad systems of measurement and local currencies of late medieval Italy meant that merchants had to be highly familiar with the conversion of these units through proportion.[32] By using monies of account, such as the *lire a fiorino,* to record valuations, merchants could make entries in their *quaderni* that were not fixed and that responded to the changing values of different currencies. This allowed merchants to think about valuations that were in motion and at a higher level than that of local currencies.

In late medieval Italy, measure was believed to have been the essential quality of money. Aristotle defined money as a universal measure: 'Money, then, acting as a measure, makes goods commensurate and equates them; for neither would there have been association if there were not exchange, nor exchange if there were not equality,

[31] Francesco Pegolotti, *La pratica della mercatura*, ed. A. Evans (Harvard, 1936), 209: 'First of all, to have it measured'.
[32] Christ, G., in, 'Weights, Measures, Monies: Venetian Trade in Mamluk Alexandria within an Imperial Framework', in, L. Rahmstorf, G. Barjamovic, and N. Ialongo (eds), *Merchants, Measures and Money: Understanding Technologies of Early Trade in a Comparative Perspective* (2 vols, Hamburg, 2021), ii, 216.

nor equality if there were not commensurability'.[33] Late medieval commentaries on Aristotle built on the definition of money as a measure to encompass notions of virtue. Thomas Aquinas's commentary on Aristotle defined human good as a life that was lived according to reason and rule of measure, which in this case meant the virtue of the mean between two extremes.[34] This definition resonated with his gloss on Aristotle's description of money as a measure, which explained that money acted as a 'mean of justice' in exchanges.[35] Olivi went further in explaining how money did not express a precise measure of value, but only 'the probable judgement of human estimation which measures the value within the limits of an appropriate latitude'.[36] According to Olivi, the just price at which exchanges were ethical was, in fact, a fluctuating range of prices.[37] These prices were in proportion to the underlying value of the exchange. They also incorporated a margin of error to account for the fact that merchants had to estimate the just price with imperfect information. For Olivi, the common good was the ultimate measure according to which monetary prices should be judged.[38] Money was understood as an estimated measure of changing proportional relationships between the parties of an exchange. The consequences of understanding money as a measure reframed marketplace ethics and were transmitted to merchants by laws, in manuals of the art of trade, and in sermons.

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[33] Aristotle, *Nicomachean Ethics*, V, 1133b1,15-18 tr. W. D. Ross, J. O. Urmson, in J. Barnes ed., *The Complete Works of Aristotle* (2 vols, Oxford, 1995), ii, p. 1789.
[34] M. S. Kempshall, *The Common Good in Late Medieval Political Thought* (Oxford, 1999), 84; Thomas Aquinas, Summa Theologica, IaIIae 64.I.
[35] Thomas Aquinas, 'Commentary on Aristotle's Nicomachean Ethics (c. 1271)', in E. W. A. Fuller, *A Source Book on Early Monetary Thought: Writings on Money Before Adam Smith* (Northampton, 2020), 31.
[36] Peter John Olivi, 'A Treatise on Contracts (c. 1295)', tr. R. Thornton and M. Cusato, in Fuller, *Writings,* 43.
[37] For the classic account of the theory of the just price see: J. W. Baldwin 'The Medieval Theories of the Just Price: Romanists, Canonists, and Theologians in the Twelfth and Thirteenth Centuries', *Transactions of the American Philosophical Society*, 49/4 (1959), 1-92.
[38] Olivi, 'Contracts', 44.

Money was not thought to be the same as its markers. Coins were tools that spared merchants the burden of measuring. They were a medium of exchange and a store of value.[39] Aquinas noted that coinage had been invented to facilitate trade by freeing merchants from the hassle of transporting and measuring their goods.[40] Jean Buridan offered a similar mythical origin for coinage, and added that coins were not perishable, that they were divisible in small increments, that they were portable, of predetermined weight and stamped with a design as proof of their value.[41] The word for coins, *moneta,* was believed to have been derived from *monere,* to warn, because the stamp that guaranteed their value was a warning against false measures.[42] The stamp alone could give coins their value. In Florence, a *fiorino di suggello* sealed bags of foreign coins, while clipped or worn gold florins were sold by the assayer's office, the *Saggio*, at a discount of between one and three per cent on the value of gold coins.[43] Bills of exchange, a means of circumventing the shortage of coins, were granted their value by the *fama,* the reputation, of the merchant who issued them, as distinct from the *fama* of a city whose emblem guaranteed the value of metal coins.

Direct measuring relied on uniform measuring tools. The goods that merchants traded were measured on scales, against measuring rods and in containers of known volumes. The lightest goods, gold, silver, silk and saffron, were measured on a *bilancia*, a balance, and all other goods were weighed with a *stadera*, a steelyard, both against

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[39] P. Spufford, *Handbook of Medieval Exchange* (London, 1986), xx.
[40] Thomas Aquinas, 'Commentary on Aristotle's Politics (c.1272)', in Fuller, *Writings*, 34-35.
[41] Jean Buridan, 'Commentary on Aristotle's Nicomachean Ethics (c. 1336)', tr. C. Saucier and E. W. A. Fuller, in Fuller, *Writings,* 51-52.
[42] Isidore, *Etymologies*, ed. S. A. Barney (Cambridge, 2006), 329; N. Oresme, 'Treatise on Money (1358)', tr. C. Johnson, in Fuller, *Writings,* 77.
[43] R. A. Goldthwaite, *The Economy of Renaissance Florence* (Baltimore, 2009), 53.

standard weights.[44] Lengths of textiles were compared to a *canna* or measuring rod. Grain was measured by the *staiora*, the volume that would fill a *staio*. The uniformity of these measuring tools was guaranteed by comparison to public examples of the standard units. In Porto Pisano, *canne* measuring rods were inspected and matched to the ones used by Pisa's officials.[45] These *canne* also had to be 'ferrate', capped with metal tips, to deter fraudulent alterations. The city of Pisa's weights and measures were described in a '*quaderno* speciale con buone coverte et fogli di bambace sane', compiled by the notary of the merchant court.[46] Physical examples of measuring tools were also kept and made by the merchant court.[47] The court required merchants who operated in Pisa to use measuring tools marked with their personal seals to guarantee their authenticity.[48] In Florence, too, steelyards and balances were sold with seals marking their authenticity.[49] The accuracy of measuring tools could be checked by comparison to *pietre di paragone,* carved spaces into which measuring instruments would fit. They were found displayed in public places, on the side of the Palazzo d'Accursio in Bologna, on the Palazzo della Ragione's Staircase of the Birds in Padua and on the apse of Modena cathedral.[50] At Orsanmichele in Florence, which was constructed as a civic grain store, representations of the *staio* of grain were carved within sight of the chutes from which it was dispensed. These are the same measures that can be seen in Domenico Lenzi's illuminated chronicle (*c*.1335) of the grain market in times of dearth and times of plenty.[51]

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[44] Pegolotti, *pratica,* 190.
[45] *Statuti inediti della città di Pisa dal XII al XIV Secolo*, ed. F. Bonaini (3 vols, Florence, 1854-1870), ii, p. 1095.
[46] *Statuti,* iii, p. 310: 'a special *quaderno* with good covers and clean paper leaves'.
[47] *Statuti,* iii, 310.
[48] *Statuti,* iii, 274.
[49] F. Edler, *Glossary of Medieval Terms of Business* (Harvard, 1934), 278.
[50] D. Romano, *Markets and Marketplaces in Medieval Italy, c.1100 to c.1440* (Yale, 2015), 82, 177.
[51] Romano, *Markets,* 28.

However, standard measures were not sufficient guarantees of accurate *misura* and just valuation. Merchants still needed to be expert in the practice of measuring. Sacchetti's description of measuring cloth against a *canna* in the tale of Soccobonel is instructive here.[52] In this tale, Soccobonel wanted to buy material for a 'cioppa da barone', a nobleman's cap, from a Florentine cloth merchant, a *ritagliatore*. They agreed on the price for each *canna* of the material. The *ritagliatore* placed a *canna* on the cloth and began to measure. This kind of direct measuring can be seen in an illumination from Bologna's 1329 *Statuti dei Mercanti* (Figure 3.1).

[52] Franco Sacchetti, *Il Trecentonovelle*, ed. D. Puccini (Turin 2008), XCII, p. 273.

Figure 3.1 **Measuring cloth with a *canna*.**

Soccobonel tried to deceive the Florentine by discretely pulling more material from under the *canna* so that it would be measured short by a *somesso*, a palm of material for every *canna*.[53] The Florentine realised what Soccobonel was trying to do and resolved to repay him in kind by holding back material as it was measured so that every three and half *braccia* would appear to be four.[54] In the end, rather than gaining a palm, or a quarter of a *braccia*, of material each time the *canna* was laid out on the cloth, Soccobonel lost twice as much to the Florentine.

As the tale continues, Soccobonel's lack of mercantile experience is brought into sharp relief. When cloth was sold unsheared it had to be shrunk and sheared, 'bagnato e cimato', before it was used.[55] The Florentine told Soccobonel to leave the cloth to soak overnight so that the material would turn out well for his cap. Soccobonel did this and took it to be dried by the *cimatore*, who charged him nine soldi for nine *braccia* of material, less material than Soccobonel expected. Soccobonel protested and the *cimatore* told him to measure it again for himself, which he did. The *cimatore* warned him that this kind of Florentine cloth should not be washed, because it shrinks.

Throughout this tale, Sacchetti implied that Soccobonel was trying to grasp beyond his reach, in his knowledge of measuring, and in his social status. The cap he asked for was more suitable for a patrician than for Soccobonel. Soccobonel is addressed as *buon uomo* and *gentiluomo* by the Florentine salesman and his companion.[56] Soccobonel had been offered a range of colours of cloth before he agreed to *cappadicielo* or azure.[57]

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[53] Sacchetti, *Trecentonovelle*, XCII, p. 274.
[54] Sacchetti, *Trecentonovelle*, XCII, p. 274.
[55] Edler, *Glossary*, 75.
[56] Sacchetti, *Trecentonovelle*, XCII, pp. 274, 275.
[57] Sacchetti, *Trecentonovelle*, XCII, p. 273.

Here, Sacchetti wondered if Soccobonel had chosen this colour because its name contained the sun, the moon, the stars and perhaps 'gran parte del Paradiso'.[58] In the end, rather than a nobleman's cap, Soccobonel was left with only enough material for a *mantellino,* which might best be called a *saltamindosso*, a short vest.[59] Direct measuring called for expertise as well as standard tools. It seems that an individual's knowledge of measuring could also be used to place them according to their social standing. The justice and virtue of accurate measuring equally invoked its shadow: the vice of fraud and false measurement.

At times, measuring was not entrusted to the merchants themselves but rather to appointed officials of the city in question, the *misuratori*. The appointment of official measurers, and fines for the use of false measures, not only facilitated the collection of taxes, but also associated measuring with ideals of just exchange and the reputation of cities as trustworthy marketplaces. In the city of Pisa, twelve professional *misuratori* were elected by the merchant court. These measurers were not allowed to hold any other office or exercise any other trade during their appointment. They pledged not to gamble on working days.[60] Pisa's 1344 statutes suggest that measurers were accompanied by a scribe who recorded their measurements.[61] When measuring textiles, they had to use the four *canne* that were kept in Pisa's merchant court, and they worked together in groups of three: 'cioè uno a porgere, et li altri a misurare'.[62]

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[58] Sacchetti, *Trecentonovelle*, XCII, p. 274.
[59] Sacchetti, *Trecentonovelle*, XCII, p. 275.
[60] *Statuti,* iii, p. 320.
[61] *Statuti,* ii, p. 1185.
[62] *Statuti,* iii, p. 319: 'that is one to put forward the fabric and the other two to measure'.

Measurers were also integral to the trade in bulk commodities. The accounts of the Genoese Officium Vitalium, which was responsible for buying grain for the city that could then be discounted and sold on to private merchants, record the activities of these measurers. Measuring was the first step in importing grain to Genoa. Pegolotti notes that ships arriving at the harbour had to pay 'four denari genovini piccoli' in tax for each 'mina' of grain, and, in addition, 'three soldi di genovini piccoli' to the measurers for every 100 'mine' of grain.[63] A loose paper note between the pages of the *quaderno* for the year 1393 records grain being measured in the 'sala officialium victuallium' with the office's own instruments by the 'mensuratoribus communis'.[64] A register of the same office from 1400 names the grain measurers for that year.[65] Pegolotti's manual notes the presence of similar measurers at Famagusta in Cyprus.[66] For Porto Pisano, Pegolotti's merchant manual specifies that grain was measured when it was transferred from larger ships, *barche*, to smaller ones, *piatte*, before it arrived in the city.[67] This type of transfer between ships can be seen in a detail from Ambrogio Lorenzetti's *The Miracle of the Grain Ships* from his *Scenes from the Life of St Nicholas* (Figure 3.2).

[63] Pegolotti, *Pratica,* 218.
[64] AC, 149, fo. 8r.
[65] AC, 152; V. Polonio, *L'amministrazione della res publica genovese fra tre e quattrocento: l'archivio antico comune* (Genoa, 1977), 144.
[66] Pegolotti, *Pratica,* 88.
[67] Pegolotti, *Pratica,* 209.

Figure 3.2 **Transferring grain in Lorenzetti's Miracle of the Grain Ships.**

Merchant ships arriving at Porto Pisano were entitled to storage space in the city's *fondachi*: 'fundaco di casa Gaytani, et di Guido Marignani et dei consorti; et dei filioli Cochi, et dei filioli Ardecase; et quello dei Senesi, et dei filioli Turchi di Mercato, et Garfagnini; et di quelli da Sanminiato; et quello del fondaco u dei fondachi in dei quali li panni li quali in della città di Pisa'.[68] All goods unloaded at the *fondachi* were measured, taxed and recorded in *quaderni*.[69] The *fondacari* were forbidden from keeping measuring instruments or measuring. Merchants arriving in Porto Pisano were not left to weigh their own goods and were required to be subject to the city's measurers.[70] The civic regulation of measuring was perceived to guarantee the justice of exchanges.

Part of the funding for Pisa's cathedral works depended on the accuracy of the measurement of grain imports.[71] Giovanni di Andrea dei Rossi di Pistoia kept a *quaderno* recording the grain that reached Pisa by land or by water from 1391 to 1399, when Grasso was *operaio*.[72] It was taxed at one *denaro* per *staio* for imported grain and two *denari* per *staio* for grain from within the city's *contado*. A loose note from this *quaderno* instructs its reader to 'lassare entrare la barcha di Gherardo di Matteo di Pisa con staia 450 di grano', a significant quantity of grain which presumably had already been checked and measured.[73] A letter preserved in the same fashion thanks the measurers for the large quantity of grain newly placed by the Porta della Legatia, the

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[68] Constable, *Housing,* 334; *Statuti,* iii, pp. 227, 427: 'the *fondaco* of the house of Gaetani, and of Guido Marignani and company; and of the Cocchi sons, and of the Ardecase sons; and that of the Sienese, and that of the sons of Turchi di Mercato, and those of the Garfagnani; and those from San Miniato; and those of any *fondaco* or *fondachi* in which textiles are stored in the city of Pisa'.
[69] Constable, *Housing*, 342.
[70] *Statuti,* iii, pp. 232, 321.
[71] The right of the *opera del duomo* to tax grain is recorded in the Pisa's 1310 statutes: *Statuti,* i, 268.
[72] OD, 708, fo. 1r.
[73] OD, 708, loose note: 'let the boat of Gherardo di Matteo from Pisa with 450 *staia* of grain pass'.

city's western gate on the southern bank of the Arno, and for the taxes raised, which would be used 'per contemplatione e memoria di S. Maria'.[74] Measuring, however practical a process, still displayed an affinity with the spiritual in Pisa.

Where direct measuring was impractical, merchants were familiar with techniques of measuring through geometry. As we have seen, the treatises that taught merchants mathematics devoted considerable attention to problems involving the calculation of areas or volumes by division into regular geometric shapes.[75] The technique was most often applied to landholdings, which are routinely described by the boundaries of these regular shapes and their areas. It could also be applied to proportional shares in goods or cargoes that were divided between partners according to the value of their investments. This second kind of measuring was seen as distinctive. In mathematical treatises, it is referred to as gauging or *asazare*.[76] The Pisan *Breve del Popolo* statute of 1323 describes the *stimatori* who would value property in cases of forced sales to the city.[77] In Palermo in Sicily, Pegolotti explained payments due to a particular group of *misuratori,* the *stimatori*, who estimated the tonnage of ships arriving at the harbour: 'stimatori che stimano la portatura delle navi e d'ogni altro legno che si carica [...]'.[78] Estimation kept commerce flowing at a speed that would have been unobtainable through direct measuring alone.

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[74] OD, 708, loose letter.
[75] Please see the preceding chapter of this thesis: 'The Perfect Merchant'.
[76] Oxford, Bodleian MS Canon. Ital., 244, fo. 86r.
[77] *Statuti,* ii, p. 502.
[78] Pegolotti, *Pratica,* 112: 'the estimators who estimate the tonnage of ships and of every other vessel that is loaded'.

For merchants whose investments spanned different cities and varied systems of units, proportion was critical to the conversion of weights, measures, and currencies. The opening of Pegolotti's manual gives the names of measures of length in diverse languages that Italian merchants often used:

> Canna e braccio e passo in più lingue. Alla in francesco e in fiammingo e inghilese, e Corda in provenzalesco. Picco in grechesco e in peresesco e in più linguaggi. Vara in ispagnuolo. Questi nomi vogliono dire misure con che si misura panni lani e teleline e zendadi ed altre cose che si misurano a conto di lungheze.[79]

As the manual continues, it is structured by the cities where merchants traded. For each of these cities, the conversions of relevant units to corresponding markets are given. For example, it offers the conversion rate of grain measures between Florence and Pisa: 'staio 1 di grano picchiato in Pisa fa in Firenze staia 2 e 11/16 colmi'; and between Pisa and Genoa: 'staia 100 di grano alla misura di Pisa fa in Genova mine 59'. [80] The focus of these manuals could be tailored to markets frequented by the merchants who copied them. The *Tarifa zoe notizia di pexi e mexure di luohgi*, an early fifteenth-century manual in Venetian dialect, seems to have been more specialised in longer distance exchange, and reminded its readers that: 'in Sarai [near the river Volga] all linen is sold by *picho*. And 100 *pichi* are equal to 118 *braza* in Venice'.[81]

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[79] Pegolotti, *Pratica,* 18: '*Canna* and *braccio* and *passo* in many languages. *Alla* in French and in Flemish and English, and *Corda* in Provençal. *Picco* in Greek and Persian and in many languages. *Vara* in Spanish. These names mean the measure by which one measures wool fabrics and woven fabrics and silk and other things that one measures by their length'.
[80] Pegolotti, *Pratica,* 197, 213: '1 *staio* of threshed grain in Pisa is equivalent to 2 staia and 11/16 *colmi* in Florence', '100 *staia* of grain according to Pisan measures is equivalent to 59 *mine* in Genoa'.
[81] Raymond, Lopez, *Trade,* 152.

Measuring by proportion meant that units of measure did not have to correspond to a fixed physical reality. In some cases, merchants used proportion to superimpose a stable value on fluctuating values. Monies of account, such as the *lira a fiorino*, *fiorino a fiorino* and the *fiorino a oro*, never circulated in physical specie but were critical to merchant bookkeeping.[82] They were measures of value but were not a medium of exchange, nor were they a store of wealth.[83] While their value in terms of physical currency fluctuated, the proportions of the sub-denominations of these currencies were fixed, facilitating calculations. This gave valuations in accounts a stability that was insulated from fluctuations in the metal content and value of physical coins.[84] In other cases, they allowed the value of a fixed unit of distance to fluctuate in proportion to the difficulty of travel. The length of a mile in a particular region could vary according to the nature of the terrain, distance being defined from the subjective perspective of a traveller: a mile in the mountains of Liguria was shorter in paces than one on the plains of Lombardy. Merchants would have been accustomed to using units defined by proportion as well as units that corresponded to perceived experience rather than an absolute measure.

The last step in measuring was to record measurements in *quaderni*. At first glance, this may seem relatively straightforward for many direct measurements. Balduccione recorded a grain purchase in 1361 in his *quaderno* as follows: 'a me dato staia 8 di grano per d. 20 lo staio, che fu pagato a dies 18 di maggio l. 8 d. 0'.[85] Iacopo di Colo

[82] G. Mandich, 'Il Fiorino di conto a Firenze', *ASI*, 146/1 (1988), 26.
[83] P. Spufford, *Money and its uses in Medieval Europe* (Cambridge, 1988), 411.
[84] Raymond, Lopez, *Trade,* 14.
[85] OD, 1312, fo. 62r: '8 *staia* of grain have been given to me at d. 20 per *staio*, and this was paid on 18 May £. 8'.

Porcellini, a Pisan *ritagliatore*, recorded the purchase and measurement of cloth in 1444 in this way: 'Comperai a dì 4 di maggio 1444 da Michele di Dato Lanaiolo una pessa di panno biancho Pisano mandato alla misura et misurato a dì 7 di maggio 1444 di canne 14 braccia 0 palmi 2 [...] l. 20 s. 38 d.0'.[86] Similarly, measurements and valuations through proportion can seem deceptively simple. In 1367, in a *quaderno* dedicated to recording his property, Grasso described his ownership of units or shares (*carati*) in a tower on the Lungarno in Pisa in this form: 'Charati tre e tre settimi della torre di […] chasa Rossi posta in Pisa […] tiene uno capo in Arno con via in mezzo l'altro capo in via publica l'atro uno in via Piuchalauo lato in della torre dell'erede di Messer Adolandino Golfo [...] l. 100.'[87]

These written records lent measurements authority. Moreover, they were a representation of the world that could be surveyed on paper. Recording measurements on paper reinforced among merchants the habit of quantifying the world around them in a format that lent itself to calculation and review. The complexity of landholdings could be reduced to regular shapes with identifiable boundaries. It was possible to record the valuation of shares in a single item, which made it easier to divide investments between partners. By turning the pages of a *quaderno*, a merchant could see in a moment years of grain transactions or cloth purchases, or survey all their lands and property from their desk.

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[86] OSC, 15, 2006, fo. 52r: 'I bought on 4 May 1444 from Michele di Dato wool-worker a piece of white Pisan cloth, sent to the measurers and measured on 7 May 1444 at 14 *canne* 0 *braccia* and 2 *palmi* [...] l. 20. s. 38. d. 0'.

[87] OD, 1319, fo. 4r: '3 and 3/7 shares in the tower of […] Casa Rossi found in Pisa […] it has one side on the Arno with Via di Mezzo, the other side in the public street, the other side in Via Piuchaolauo, the last side next to the tower of the heirs of Messer Adolandino Golfo l. 100'.

The units of measure kept by late medieval Italian cities and the professional measurers whom they employed facilitated commerce. The measurers represented the *fama*, or reputation, of their towns and were seen to secure justice in exchanges in its name. These measurers enacted the idea that cities were associations of men that were supported and maintained by commerce ordered towards the common good. It is in this sense that measure was held to be a civic virtue. Merchants knew that measuring depended not only on the instruments used, but also on the behaviour and attentiveness of the parties involved. Expertise in measuring was a distinctive attribute of the merchant. As such, measuring was entangled with prevailing anxieties concerning the social status and professional identity of merchants in late medieval Italy. Recording measurements on paper was an attempt to fix their validity and claims to accuracy. More than this, it meant that merchants could quantify and arrange the world around them on paper.

Measure As a Virtue: 'Measure Endures'

Measure endures. Da Certaldo advised merchants to have measure in all their affairs, to safeguard them from failure and from every vice. Just as accurate measuring was essential to success in the marketplace, another kind of *misura*, the proportionate mean between extremes, could ensure that a merchant's activity was virtuous. From this core definition of the virtue of measure, concentric circles of meaning radiated outwards, encompassing ideas of balance and of courtesy. The mercantile reception of the virtue of measure can be investigated by tracing its Aristotelian roots, its dissemination in vernacular writings and its depiction in late medieval art.

At its root, the idea of *misura* as the virtue of the proportionate mean can be traced to Aristotle's discussion of justice in the *Nicomachean Ethics.* For Aristotle, proportion defined justice: 'the just, then, is a species of the proportionate: for proportion is the equality of ratios'.[88] He drew a distinction between equality in exchanges according to arithmetical proportion and geometrical proportion. Whereas the former was a 1:1 ratio, the latter considered the relative merits, the effort, skill, and labour of the parties involved. Geometrical proportion underpinned the Aristotelian notion of the just mean. In this definition, 'this species of the just is intermediate and the unjust is what violates the proportion; for the proportional is the intermediate'.[89] Aristotle's just mean laid the foundations for the virtue of *misura*.

[88] Aristotle, *Ethics*, V, ii, p. 1785.
[89] Aristotle, *Ethics*, V, ii, p. 1785.

If merchants were unlikely to have engaged with Aristotle's ideas directly, it seems probable that they would have encountered the dissemination of these ideas mediated through vernacular derivatives. Dante's *Convivio* , which he wrote in the vernacular for all men, is partly devoted to explaining the virtue of *misura* as the just mean: 'e veggendo che nelle nostre operazioni si potea peccare e peccavasi nel troppo e nel poco, dissero che la nostra operazione sanza soperchio e sanza difetto, Misurata col mezzo per nostra elezione preso, ch'è vertù, era quell fine che al presente si ragiona; e chiamaronlo operazione con virtù'.[90] A further meaning of *misura* in Dante was that of the importance of continually measuring ourselves. When judging themselves 'con quella misura che l'uomo misura se medesimo', the generous man overestimates his qualities, and the meagre man undervalues them.[91] He warned that no man was truly a 'giusto misuratore', and that everyone judges with 'le misure del falso mercatante'.[92] This is a justification for charity, because the good should be weighed against lighter measures on finer scales and the bad against heavier ones.

The Florentine poet Antonio Pucci (c.1310-1388) praised Dante for having crowned Florence's fame with his measured verse, in his sonnet written for the portrait of Dante in the chapel of Florence's Bargello:

> e 'l suo parlar fu con tanta misura
> che 'ncoronò la città di Firenze

[90] Dante, *Convivio*, IV, vi, 13, pp. 592-594: 'and seeing that in our actions we can sin and have sinned in having too much and too little, I say that our actions should be without excess and without deficit, measured by the by the mean of our own choice, that is to say virtue, that end about which we are currently reasoning; and they called it acting with virtue'.
[91] Dante, *Convivio*, I, xi, 20, p. 174: 'that measure by which a man measures himself'.
[92] Dante, *Convivio*, I, ii, 8-9, p. 110: 'just measurer' 'the measures of the false merchant'.

di pregio onde ancor fama le dura.[93]

This was an invocation of measure as poetic metre, but also measure as an expression of justice and the virtue of the mean. Dante's *Inferno, Purgatorio* and *Paradiso* were ordered by the proportional justice of measure. Avarice was the result of the failure of measure as a virtuous mean. In *Purgatorio*, Statius had explained that his sin of avarice was the sin of lacking measure, and that it had been punished by a proportionate length of time in Purgatory:

Or sappi ch'avarizia fu partita
troppo da me, e questa dismisura
migliaia di lunari hanno punita.[94]

In the seventh canto of Dante's *Inferno*, the avaricious, who have a desire to accumulate wealth cry: 'Perché tieni?' and the prodigals, who wish to hoard it, respond: 'Perché burli?' Both acted beyond the limits of measure, thereby earning their punishment.[95] Virgil described their joint damnation as being that of those who 'con misura nullo spendio ferci'.[96] Illuminated manuscripts of the *Inferno* often depict this scene as two groups engaged in a futile struggle over heavy boulders. This is how these verses were illuminated by Francesco Traini in the Chantilly *Inferno,* a Pisan manuscript presented by the Carmelite Friar and Dante commentator Guido of Pisa to Lucano Spinola from the Genoese family of noble merchants c.1345 (Figure 3.3).[97] They were also depicted

[93] Sapegno, *Poeti,* 360: 'And he spoke with such measure that it crowned the city of Florence with virtue the fama of which endures still'.
[94] *Purgatorio,* XXII, ll. 34-36, p. 364: 'Now know that avarice was too distant from me, and thousands of months have punished this lack of measure'.
[95] *Inferno,* VII, l. 30, p. 112: 'Why do you grasp?', 'Why do you hurl?'.
[96] *Inferno,* VII, l. 42, p. 114: 'spend without measure'.
[97] P. Brieger and M. Meiss, 'Catalogue', in P. Brieger, M. Meiss and C. S. Singleton, *Illuminated Manuscripts of the Divine Comedy* (2 vols, New York, 1969), i, 216; C. Balbarini, *L'inferno di Chantilly, cultura artistica e letteraria a Pisa nella prima metà del trecento* (Rome, 2011), 101.

in this way by a Neapolitan illuminator around the year 1370 (Figure 3.4),[98] and in a late fourteenth-century Italian illuminated manuscript (Figure 3.5).[99]

[98] Brieger and Meiss, 'Catalogue', 258.
[99] Brieger and Meiss, 'Catalogue', 252.

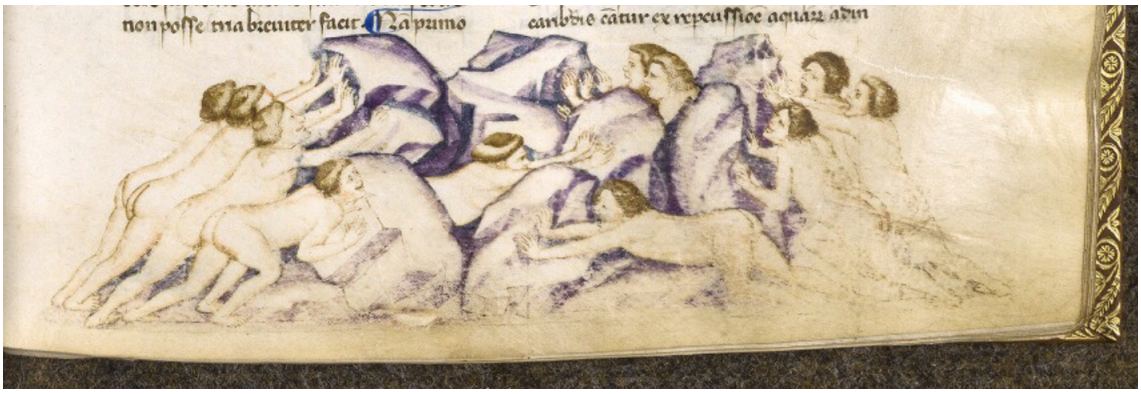

Figure 3.3 **The avaricious and the prodigals, Chantilly Inferno.**

Figure 3.4 **The avaricious and the prodigals, BL Additional MS 19587.**

Figure 3.5 **The avaricious and the prodigals, Holkham Inferno.**

A Pisan illuminator, working around the year 1385, instead chose to depict the *contrapasso* for breaking measure as an endless struggle between two groups armed with measuring tools: dismantled scales, a disassembled steelyard and money pouches (Figure 3.6). For Dante's late medieval readers, practical measuring, marketplace ethics and the association of measure with justice, in transactions and eternity, could be united in a single image.

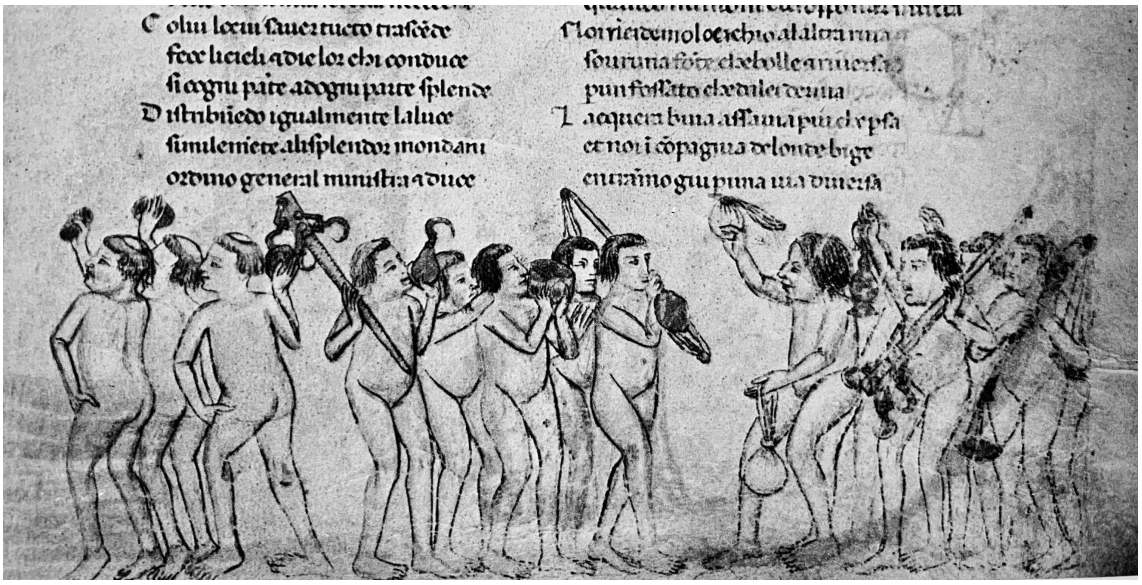

Figure 3.6 **The avaricious and the prodigals, Altona Inferno.**

Dante thought that changing understandings of measure were an effect of merchant culture on wider society. He blamed merchants for the social disruption that had caused the virtue of measure to fail in Florence:

> La gente nuova e i sùbiti guadagni
> orgoglio e dismisura han generate,
> Fiorenza, in te, sì che tu già ten piangi.[100]

In this account, the rapid rise to wealth and status of merchants who could earn sudden profits in volatile markets, had made Florence a proud city where the virtue of measure had been replaced by the vice of *dismisura,* that of disproportionate appetite or wealth. In contrast, after Dante, Da Certaldo sought to redefine courtesy as measure in his manual of the art of trade: 'cortesia non è altro se non misura'.[101] This was a provocative and conscious attempt to justify the status of merchants and the ethics of trade by reclaiming *misura*. Measure was a contested idea, at once used to condemn the social mobility that commerce could bring and to defend the status of merchants when redefined as courtesy.

Boccaccio participated in this conflict over definitions of courtesy and measure in the *Decameron*.[102] The narrators of the *Decameron* who provide a fictive frame for its *novelle* are presented as having carefully weighed and judged the characters in the tales that they told and heard: 'molto misuratamente parlare'.[103] Measured thought entailed

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[100] *Inferno,* XVI, ll. 73-75, p. 250: 'The new people and the sudden gains have generated pride and lack of measure, Florence, in you, so that you already weep for it'.
[101] Certaldo, *Costumi*, 13: 'courtesy is nothing else but measure'.
[102] Olson, *Courtesy,* 1.
[103] Boccaccio, *Decameron*, Conclusione dell'Autore, ii, pp. 1258-1259.

taking enough time to weigh problems without being impulsive. In the eighth *novella* of the first book of Boccaccio's *Decameron,* Guglielmo Borsiere, a Florentine mentioned in Dante's *Inferno* and glossed by Boccaccio as an honourable 'cavaliere di corte',[104] rebuked Erminio Grimaldi, an extremely wealthy Genoese merchant, for his unwillingness to loosen his purse strings, despite his wealth. He was consumed by avarice because he saved his riches 'oltre misura'.[105] Borsiere told Grimaldi: 'fateci dipingere la Cortesia' on the walls of his home.[106] Boccaccio's *novella* not only contrasted courtesy with fallen commerce that failed to abide by the limits of measure. Borsiere and Grimaldi were juxtaposed as representatives, respectively, of chivalry and greed, of Florence's past and of Genoa's present. Conflict over the idea of measure extended into the mythical past and the commercial rivalry between late medieval Italy cities.

Measure, in addition to courtesy, was an idea that could be painted in late medieval Italy. Measure can be traced in Giotto's frescoes for the Arena chapel in Padua. As the inscription on the tomb of Enrico Scrovegni, a merchant infamous for his usury, reminds us, the triumph of the divine virtues over the profane vices was an explicit message encoded in the chapel.[107] Sincere anxiety concerning the ethical and spiritual risks of commerce seems to have been the motivation for the chapel's construction.[108] It was a place where an audience, merchants among them, would hear sermons and

[104] Boccaccio, *Commentary on Inferno 16*, DDP: 'knight of the court'.
[105] Boccaccio, *Decameron*, I:8, i, p. 110: 'beyond measure'.
[106] Boccaccio, *Decameron*, I:8, i, p. 110: 'Have Courtesy painted'.
[107] J. H. Stubblebine, *Giotto, The Arena Chapel Frescoes* (London, 1969), 111.
[108] A. Derbes and M. Sandona, *The Usurer's Heart, Giotto, Enrico Scrovegni and the Arena Chapel in Padua* (Pennsylvania, 2008), 14

could, if penitent of their own sins, earn indulgences in remission of a soul's stay in Purgatory.[109]

In the space of the chapel, the six virtues depicted at the dado level of the south wall facing six vices on the north wall, all in grisaille, are inseparable from the consequences of abiding by vice or virtue as these are depicted in the Last Judgement on the entrance wall. Measure was a quality that was personified in the balance and poise of the virtues. Prudence is depicted seated at a writing desk. Fortitude stands firm, braced against a shield. Concord stands calmly holding a sheathed sword. Justice is enthroned in an open monumental architectural frame (Figure 3.7). Faith stands directly looking at the viewer as if addressing them. Charity stands on coin sacks that lift her high enough to offer a heart to God. Of the virtues, only hope shows instability as she leans up and towards an offered crown. In contrast, the vices are off-centre or unstable, showing *dismisura* or lack of measure. Despair is shown hanged and does not support herself. Envy's back is arched forward, reaching out a clasping hand. Infidelity leans backwards. Injustice, an exception, is seated but, in contrast to Justice, he is bloated, distracted, to one side, and framed by a fortified, but crumbling, arch. Wrath is arched back, tearing at her clothes. Inconstancy shows the most movement and the least balance of all as she falls, her clothes flowing, slipping on a spinning disk. Foolishness (*stultizia*), not one of the conventional Christian vices yet appearing here as a significant link between the imbalance of sin in general and the recklessness of the improvident merchant, stands twisted with his feet, arms and gaze pointed in different directions.

[109] Derbes and Sandona, *Arena Chapel,* 2.

Figure 3.7 **Giotto, *Iusticia* in the Arena Chapel, Padua.**

This idea of measure and balance is further developed in the virtue of justice. The inscriptions accompanying these frescoes merit close attention. They were written at the same time as the frescoes were painted and, as Giulia Ammannati has argued, it is reasonable to assume that image and text were reciprocal influences on each other and intended to work together in concert.[110]

> Equa lance cuncta librat / perfecta Iusticia: / coronando bonos, vibrat / ensem contra vicia. / Cuncta gaudent libertate / ipsa si regnaverit; / agit cum iocunditate / quisque quod voluerit. / Miles probus tunc venatur; / cantatur et luditur; / mercatori via da[tu]r: / p[re]do [t]u[n]c a[bs]c[on]ditur.[111]

The inscription below the figure of Justice describes her holding all things in balance. Here, balance has the double meaning of proportionate justice and physical scales: *bilancia*. In the left-hand scale, an angel leans out to crown a figure seated at a desk. Although this portion of the fresco has been damaged, it might have been another depiction of prudence seated at a writing desk. To a merchant who would have encountered this depiction, it may have represented rewards bestowed on those who kept recorded measurements in their *quaderni* and who abided by the virtue of measure.

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[110] G. Ammannati, *Pinxit industria docte mentis, le iscrizioni delle allegorie di Virtù e Vizi dipinte da Giotto nella Cappella degli Scrovegni* (Pisa, 2017), 19.
[111] Ammannati, *Pinxit*, 55: 'Perfect Justice holds all things in equal balance, she crowns the good, shakes her sword against the vices. All enjoy liberty under her reign, everyone pursues with joy the activity which they prefer. The good soldier goes to hunt, to sing, and to amuse themselves, the road is given to the merchant: it is time for the highwayman to hide themselves'.

As a virtue, measure was the just mean between two extremes. This Aristotelian definition of measure circulated among merchants through vernacular literature and late medieval art. It was the kind of dynamic measure, governed by proportion, that merchants had to understand in order to carry out conversions between different units and to keep their accounts. Dante used the virtue of measure to condemn excessive wealth, greed, and social aspiration. However, as the depiction of the avaricious and the prodigals locked in battle and armed with measuring instruments reveals, the meanings of Dante's work and of measure were contested. The virtue of measure was also taken up in defence of the merchant's profession. Trade required constant measuring, ethical and practical. Measure was a virtue that merchants were especially well placed to understand and acquire. The redefinition of measure as courtesy was a defence of the social status of the merchant's art and its usefulness to society.

Measuring the Afterlife: Beyond Measure

> Una sola cosa è quella che devi in te avere senza misura, cioè amare Iddio, però che quanto più l'ami con tutto il tuo cuore, più se' accettevole a lui.[112]

If, as Da Certaldo's manual suggested, the perfect merchant's love of God ought to be disproportionate and without measure, ideas of measure and proportion still seem to have changed the ways in merchants thought about their afterlives. Measuring offered both a means by which the eschatological justice, the judgement of souls, could be understood, and a means of imagining the landscapes of the afterlife. That the limits of quantification were seen as exceeded in the love of God and in investments in spiritual goods indicates the extent to which merchant spirituality could be constructed in reference to these ideas.

Practical measuring and its limits can be traced in St Nicholas of Bari's miracle of the grain and late medieval sermons. Mercantile readings of Dante's *Commedia* in late medieval Italy will be especially useful in exploring ideas of measure and proportion in the afterlife. Attempts by Dante's readers to visualise the dimensions of his *Inferno* show how measuring through geometry could shape eschatological landscapes. The landscapes and the punishments of *Purgatorio* were shaped by proportion and in imagining the fates of their souls this can be seen as the place that overlapped most with the measuring that merchants used in their worldly investments. Yet Dante's merchant

[112] Certaldo, *Costumi,* 5: 'You should only have one thing that is without measure, that is love of God, for the more you love him with all your heart, the more you are acceptable to Him'.

readers were equally aware of the limits of measuring. The unquantifiable in merchant spirituality can be investigated through Dante's *Paradiso*.

The overlap between measurement and spirituality has been most closely explored through the symbolism of measuring tools. Virginia Brilliant studied scales as part of the iconography of the particular judgement of souls.[113] Her work has focused on art that was sponsored by successful merchant families. A detail from Orcagna's altarpiece of 1357 for the Strozzi Chapel in Santa Maria *Novella* in Florence depicts an act of *psychostasia*, the weighing of a newly departed soul, showing an angel holding the scales and a sword, while a demon adds weights to the balance. Angels painted by Guariento for the Capella Carrarese in Padua between 1355 and 1360 also depicted the weighing of souls (Figure 3.8).[114] In one of these a demon tips the eschatological scales in the attempt to claim a soul and is lanced by the angel, defending the justice of the scales.

[113] V. Brilliant, 'Envisaging the Particular Judgment in Late-Medieval Italy' *Speculum,* 84/2 (2009), 328.
[114] F. Flores D'Arcais, *Guariento* (Venice, 1965), 23.

Figure 3.8 **Guariento, an angel weighing souls.**

Late medieval preachers condemned fraud involving measuring and the alteration of measuring tools.[115] More significantly, they asked that their audiences should strive to measure themselves and their own conduct. In one of his sermons, San Bernardino da Siena contrasted the eschatological *canna* of the Apocalypse, which would be used to measure church and the community of the church, to 'canne de' mercatanti'.[116] The *canna* of the Apocalypse had three qualities: it was hollow, it was light and it was apt for measuring.[117] This hollow construction and lightness meant that, unlike the *canne* used by merchants, it could be used by anyone, rich or poor. As an accessible measure of sin, rather than material value, it encouraged humility, charity, and love, rather than pride and greed.[118] San Bernardino called for his audience to use this *canna* to measure their own souls, the *fama,* or remembered reputation, of their lives and the ethics of the cities to which they belonged: 'Che se non hai la canna da misurare queste cose, tu vai indietro: la città, l'anima, la fama e la vita [...]'.[119]

Measuring as quantification offered a different means of approaching eschatology. St Nicholas's miracle of the grain ships offers a rich example of the part played by direct measuring in merchant spirituality. St Nicholas was known for his intercessions on land or sea and the miracle of the grain ships in particular invokes the Mediterranean grain

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[115] R. De Roover, *San Bernardino of Siena and Sant' Antonino of Florence; the Two Great Economic Thinkers of the Middle Ages* (Harvard, 1967), 12.
[116] San Bernardino da Siena*, Antologia delle prediche volgari, economia civile e cura pastorale nei sermoni di San Bernardino da Siena,* eds. F. Felice and M. Fochesato (Siena, 2010) 85: 'merchant's *canne*'; Revelation, 11, 1-2: 'Et datus est mihi calamus similis virgae, et dictum est mihi: Surge, et metire templum Dei, et altare, et adorantes in eo: atrium autem, quod est foris templum, ejice foras, et ne metiaris illud', 'And there was given me a reed like unto a rod: and the angel stood, saying, Rise and measure the temple of God, and the altar, and them that worship at them. But the court which is without the temple leave out and measure it not [...]'.
[117] San Bernardino, *Prediche,* 84.
[118] San Bernardino, *Prediche,* 86.
[119] San Bernardino, *Prediche,* 87: 'You who do not have the *canna* to measure these things, you are going backwards in your city, your soul, your *fama* and your life'.

trade and its sea routes.[120] In this miracle, first attested to in a ninth-century source, St Nicholas interceded to convince a convoy of ships that was taking grain to Constantinople from Alexandria in Egypt, to unload grain to replenish the city of Andriake's granaries at a time of famine.[121] The unloaded grain was miraculously replenished as it was unloaded, so that the holds of the ships were just as full when they departed as when they had arrived. The 13th-century Dominican and archbishop of Genoa, Jacopo da Voragine, gave an account of this miracle in his *Legenda Aurea*, that later circulated in many vernacular translations. It was depicted by Ambrogio Lorenzetti in his 1332 scenes from the life of St Nicholas.

Da Voragine's account gave precise figures for the amount of grain that St Nicholas asked the sailors to unload: 'cento mogia per ciascuna nave'.[122] The sailors were reluctant to agree. They explained that their cargo had been measured in Alexandria and that they were bound to deliver that same measure of grain on their arrival in Constantinople. St Nicholas reassured them by promising that, through God's virtue, the official measurer in Constantinople would not find their cargo light.[123] Through his intervention, St Nicholas's city received enough grain to last for two years in a time of famine with seeds to spare for sewing new crops, yet the cargo of each ship was still measured as correct when they reached Constantinople.[124] To a mercantile audience, Da Voragine's setting of this miracle in the technical detail of the grain trade would have been recognisable. While the miracle itself goes beyond the limits of measure and

[120] M. Bacci, *San Nicola, Il grande taumaturgo* (Bari, 2009), 57.
[121] Bacci, *San Nicola*, 12.
[122] Jacopo da Voragine, *Legenda* Aurea, in G. Varanini, G. Baldassarri, *Racconti esemplari di predicatori del due e trecento* (3 vols, Rome, 1993), i. p. 47: '100 *moggia* for each ship'.
[123] Voragine, *Legenda Aurea*, 48.
[124] Voragine, *Legenda Aurea*, 48.

defies methods of quantification through divine intervention, it is still placed by Da Voragine in an identifiable context. The measuring units cited, the role of appointed officials in measuring cargoes and the importance placed by cities on avoiding famine were all prominent features of the late medieval grain trade.

In Ambrogio Lorenzetti's depiction of this scene there is a similar level of technical detail (Figure 3.9). As we have already seen, the grain shipment is captured at the moment of its transfer from larger ships at anchor to ones of a shallower draught that can bring it to the city. The transfer of grain to smaller ships in sacks is mirrored above by two angels wrapped around sacks that are dispensing grain to replace each *mogia* that is unloaded. While the sacks of grain on the ship are enclosed and complete, of set volumes, the sacks held by the angels above take the form of chutes, one tapering into a cloud, the other tapering to the edge of scene (Figure 3.10). Miraculous intervention is shown, in direct contrast to measured Earthly commodity, as unquantifiable and beyond measure. At the corner of the frame, on the shore behind St Nicholas, two people talking to each other are richly clothed in red and green. A merchant in late medieval Italy would likely have recognised themselves in these figures, who seem to be discussing the ships arriving at the market and the ones following them on the horizon. The larger ships are marked with the Pisan cross and Ghibelline eagle, invoking the Arno grain trade that replenished Pisa, Florence, and Tuscany, despite the story's original Anatolian setting.

Figure 3.9 **Lorenzetti's miracle of the grain ships.**

Figure 3.10 **Limitless grain sacks, Lorenzetti's miracle of the grain ships.**

The Dominican Giordano da Pisa drew attention to the same contrast between quantifiable worldly goods and immeasurable spiritual goods in the sermons that he gave at Santa Maria Novella in Florence in 1305 and 1306. In one sermon, Da Pisa identified four kinds of measuring: by number, quantity, possibility, and age.[125] Spiritual goods exceed measurement in all these respects. They are infinite in number and quantity whereas worldly goods are finite, so that 'il minimo bene di paradiso passa tutti i bene che si potessero avere in questo mondo'.[126] They represent limitless possibility, whereas the possibilities of worldly property are bounded: 'non fu mai nullo imperadore che di questo mondo fosse signore, pur la millesima parte, anzi non d'uno granello di rena a tutta quella del mare'.[127] Worldly goods are eroded by time, whereas spiritual goods are eternal. By comparison, even a lifetime of food is of little substance, for supposing that a man might eat a *moggia* of bread each year for 80 years, 80 *moggia* of grain, 80 *cogna* of wine, together with all the meat and all the vegetables which he would consume would still fit in a small house.[128]

In another sermon, Da Pisa addressed the failure of his audience to accurately measure and value their sins. In the first part, he reminded his audience that the gravity of sin is a question of conscience depending on an individual's will: 'quanto la volontà è peggiore, tanto è più grave il peccato'.[129] But only God is able to weigh souls and to perceive the will which lies behind a sin: 'Idio n'è il pesatore'.[130] Continuing, he

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[125] Giordano da Pisa, *Quaresimale Fiorentino 1305-1406,* ed. C. Delcorno (Florence, 1974), 186.
[126] Giordano da Pisa, *Quaresimale,* 186: 'the least goods of paradise surpass all the goods that one can have in this world'.
[127] Giordano da Pisa, *Quaresimale,* 187: 'there was never an emperor who was lord of this world, not even a thousandth part of it, not even a grain of sand in all of the sands of the sea'.
[128] Giordano da Pisa, *Quaresimale,* 190.
[129] Giordano da Pisa, *Quaresimale,* 16: 'the worse the intent the greater the sin'.
[130] Giordano da Pisa, *Quaresimale,* 17: 'God is the weigher of them'.

presented his audience as being equally poor measurers of the quantity as well as the quality of their sins. In passing judgement, God will not rely on the inaccurate reckoning of sins as they are remembered, but rather will audit the well-kept *quaderni* in which everyone's sins, however great or small, have been measured and recorded: 'e però al giudicio trarrà Idio fuori i *quaderni* di tutti i peccati e a ciascheduno porrà innanzi il *quaderno* de peccati suoi, il quale leggendo si raccorderà di tutti i peccati che gli erano usciti di mente, e non solamente de' grossi ma di tutti i minimi'.[131]

> Questo dubbio è da schiarare e da disputare stamane: la mercatantià è cosa buona o non? S'ella è buona, come gli cacciò? S'ella non è buona, come è scritta per buona, e come è licita?[132]

In a sermon addressing merchants directly, Da Pisa declared that he would shed light on the question of whether commerce could be ethical. In answer, he explained that the invention of money to replace barter had allowed more accurate measurement of value. Ventriloquising his listeners, he then asked why the merchants of the day brought shame to Christ if commerce had been such a good and necessary invention in distributing, worldly goods, *beni terreni*.[133] He unravelled this knot of his own making by explaining that 'la mercatantìa, [...] è buona da sé di sua natura', but that 'sì può l'uomo farla male e contra Idio'.[134] Merchants could sin in their intention and their

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[131] Giordano da Pisa, *Quaresimale,* 17: 'For at the judgement God will take out all the *quaderni* of all the sins and will put the *quaderno* of our own sins before each of us, in reading this *quaderno* He will remember all the sins set forth from our minds, not only the great sins but all of the smallest sins too'.
[132] Giordano da Pisa, *Quaresimale,* 268: 'This is the doubt that it is to be clarified and discussed this morning: is the art of trade a good thing or not? If it is good, why did Christ cast the merchants from the temple? If it is not good, why is it written that it is good and how is it licit?'.
[133] Giordano da Pisa, *Quaresimale,* 269.
[134] Giordano da Pisa, *Quaresimale,* 269: 'the art of trade is a good thing in itself and in its nature', 'thus man can render it evil and turn it against God'.

actions as buyers or sellers.[135] Merchants could sin by participating in unjust exchange whether with their tongues or their hearts or in their deeds.[136] When they sinned with their tongues, they misled their counterparties. When they sinned with their hearts, they sinned in falsely representing the nature, quality, price or measure of an item.[137] Of course, a merchant is permitted to reflect the effort made in bringing an item to market in its price, 'quella che vale in India dieci lire, può valere qui venti e trenta e quaranta', but on no account must they sell time.[138] Yet in this he warned merchants that they must remember that the goods of this world are base, while only spiritual goods are noble. This is because worldly goods can be measured whereas spiritual ones 'non hanno misura'.[139] Following from this, worldly goods can be valued in monetary terms, yet the spiritual value of a prayer is incalculable: 'un paternostro non si potrebbe comperare per tutto 'l reame di Francia né per tutto 'l mondo'.[140]

Accurate measuring ensured the justice of a transaction or a valuation. Merchants who stayed within the bounds of measure in their trade abided by the ethics of their profession. Merchants were warned that their own estimation of their sins was unlikely to be an accurate one, so that they should err on the side of caution. They were told that the goods of paradise could not be contained in any measure, underlining their unquantifiable value. Spiritual goods were seen as infinite and eternal. When direct

[135] Giordano da Pisa, *Quaresimale,* 269.
[136] Giordano da Pisa, *Quaresimale,* 272
[137] Giordano da Pisa, *Quaresimale,* 271.
[138] Giordano da Pisa, *Quaresimale,* 272: 'that which is worth 10 lire in India, might be worth 20 or 30 or 40 [in Florence]'.
[139] Giordano da Pisa, *Quaresimale,* 270: 'do not have measure'.
[140] Giordano da Pisa, *Quaresimale,* 270: 'one could not buy a single paternoster in exchange for the whole realm of France or even for the whole world'.

measuring was invoked, it was to accentuate this contrast with material, temporal goods that could be quantified and valued.

> Tu non hai fatto sì a l'altre bolge;
> pensa, se tu annoverar le credi,
> che miglia ventidue la valle volge.[141]

Virgil's response to Dante's amazement at having seen so many in Hell is to remind him that the circumference of the ninth *bolgia* is 22 miles. This is the first exact measurement of the landscape of the *Inferno* provided to readers of his poem.[142] It unites a physical sense of its area and volume with the notion of the number of souls it hosted at the time of Dante's journey. Jacopo Alighieri, Dante's son, in the first commentary on *Inferno* written in 1332, explained that, from this measurement of the circumference, the shape of Hell could be established by arithmetic.[143] Further into the depths of *Inferno*, when readers were given the measure of one of its inhabitants, they were told that Antaeus, the giant son of Neptune and Earth, stood 'ben cinque alle' tall, above the cave-floor, excluding his head.[144] In about the year 1400, an anonymous Florentine commentator offered its conversion into more familiar units: 'alla è una misura in Fiandra, come noi diciamo qui *canna*, ch'è intorno di braccia ij e mezzo'.[145] Both these measurements, and the responses they elicited from late medieval

[141] Dante, *Inferno*, XXIX, ll. 7-9, p. 450: 'You did not do this at the other depths. Consider, if you think to number them, that the valley goes twenty-two miles round'.
[142] C. S. Singleton, *Inferno Commentary* [1970] (Princeton, 1989), 527.
[143] Jacopo Alighieri, *Commentary on Inferno* 29, DDP.
[144] Dante, *Inferno*, XXXI, l. 113, p. 488: 'a good five *alle*'.
[145] Anonimo Fiorentino, *Commentary on Inferno 31*, DDP: '*alla* is a unit of measure in Flanders, just as we say *canna* here, and it is roughly equivalent to 2 ½ *braccia'*.

commentators on Dante's work, suggest a fascination with imagining the afterlife by measuring its landscapes.

As we have already seen, Dante's works and their commentaries were not rare in the libraries of late medieval merchants. Giovanni da Uzzano recorded owning and lending, among other volumes, two '*quaderni* di Dante chiosati', in one his of *quaderni*.[146] In the late fourteenth century Dante's *Inferno, Purgatorio* and *Paradiso* were copied into a typical Florentine merchant's paper *vacchetta*, in all probability by a merchant rather than by a professional scribe.[147] Evidence for a preoccupation with measuring *Inferno* seems to reflect commercial reliance on the mathematics of measurement and a mercantile interest in solving, for entertainment as much as practice, mathematical problems of measuring or proportion. Antonio Manetti's lost commentary on the measurements of *Inferno* is a later example, and one of the richest, of these attempts to measure the afterlife. Apart from writing on Dante (and Brunelleschi), especially from the perspective of mathematics and cosmography, Manetti was familiar with the world of merchants. Though not a merchant himself, he was the son of a silk trader and he was an official in the *fondaco* of Florence's silk guild in 1440.[148] The contribution of Manetti's work on the *Commedia* can be seen in the writings of Cristoforo Landino and Girolamo Benivieni. In his 1481 commentary on *Inferno*, Landino claims to have based his plan of *Inferno* on Manetti's and his particular 'ingegno matematico'.[149] After

[146] SNS-S, I, 2, fo. 185r: '2 glossed *quaderni* of Dante'.
[147] S. Picarelli, 'Nel cantiere di un mercante copista per passione: il Pluteo 90 Inf. 42 della Biblioteca Medicea Laurenziana di Firenze', in C. Perna (ed), *Immaginare la Commedia* (Rome, 2022), 25; Florence, Biblioteca Medicea Laurenziana, Pluteo 90 inferiore 42: https://www.dante.unina.it/ms/250037 (09/05/2023); consulted online.
[148] G. Tanturli, 'Antonio Manetti', *Dizionario Biografico degli Italiani*, 68 (2007), https://www.treccani.it/enciclopedia/antonio-manetti_(Dizionario-Biografico)/ (09/05/23).
[149] Cristoforo Landino (1481), *Commentary on Inferno* 3, DDP: 'mathematical genius'.

Manetti's death in 1497, Girolamo Benivieni published a dialogue between himself, Manetti and Manetti's brother, Benedetto, on the site, form and size of Dante's *Inferno*.[150] Although both Landino and Benivieni claimed to have based their plans of *Inferno* on Antonio Manetti's works, the measurements and plans that emerge in these texts do not agree with each other.[151] Here, I will explore Benivieni's version, which offers a more extensive description.

In the *Dialogo*, the character of Antonio Manetti expects his readers to have a basic grounding in geometry, arithmetic, astrology, and cosmography: 'almeno avere vista la Sfera'.[152] They should also be familiar with 'la carta da navigare'.[153] These were also the kinds of texts with which an ideal merchant should have been familiar. Considering the cone shape of *Inferno,* he arrives at the measurements of a diameter of 35 miles at its widest point and a depth of 81 $^{3}/_{22}$ miles.[154] To arrive at these measurements from the information provided by Dante, he offers his readers, through the dialogue, two different approaches: that of geometry and that of proportion. In the first method, he compares the shape of *Inferno* to a well, an example that would have been familiar to readers of *libri d'abaco*. To arrive at its depth by geometry, he sets the problem in the language of someone using an astrolabe to make the measurement.[155] This is also a recurrent kind of exercise in vernacular mathematical treatises. The alternative approach, working backwards with proportion, assumes that from circle to circle, the

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[150] G. Benivieni, *Dialogo di Antonio Manetti, Cittadino Fiorentino circa al sito, forma e misure dello inferno di Dante Alighieri poeta eccellentissimo* (Florence, 1506), 1r.
[151] J. E. Kleiner, 'Mipmapping the Underworld: Essays on Error in Dante' (PhD thesis, Stanford University, 1991).
[152] Benivieni, *Dialogo*, 4v: 'they should have at least seen the Sphere [Presumably Dati's *La Sfera*. Gregorio Dati was a Florentine silk merchant who was also active in the silk guild and died only five years before Antonio Manetti was listed as *fundicarius*]'.
[153] Benivieni, *Dialogo*, 4v: 'marine charts'.
[154] Benivieni, *Dialogo*, 8.
[155] Benivieni, *Dialogo*, 12.

same proportion applies, in order to reconstruct the dimensions of *Inferno*: this yields much the same results.[156] Manetti's character clarified that mathematicians call this approach suspended proportion; *commutata proportione*.[157]

> La facia sua mi parea lunga e grossa
> come la pina di San Pietro a Roma,
> e a sua proporzione eran l'atre ossa [...][158]

Manetti not only measured *Inferno* showing two different ways of making his calculation, but he also measured Lucifer's height. Taking Dante exactly at his word in saying that the giant Nimrod's face was as long as the Roman bronze pinecone that once stood in the Campus Martius, Manetti uses the height of this object to measure Nimrod (Figure 3.11). The Pina di San Pietro is 5½ braccia tall. Painters reckoned that an entire person's height according to ideal proportion was nine times that of their head alone and Manetti revised this to eight times, as such ideal proportions are rarely found in reality. In this way, he arrived at a height of 44 braccia for Nimrod.[159] Knowing Nimrod's height and its proportional relationship to Lucifer's height above the ice, he arrives at the conclusion that Lucifer's upper body rose 500 *braccia* above the ice, being in total 1,000 *braccia* tall.[160] If, at first glance, this calculation seems tenuous and convoluted, then, on closer inspection, it may have been deliberately complex in order to give the reader a more entertaining mathematical problem.

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[156] Benivieni, *Dialogo*, 14r.
[157] Benivieni, *Dialogo*, 35.
[158] Dante, *Inferno,* XXXI, ll. 58-60, p. 484: 'His face appeared to me to have the length and bulk of Saint Peter's pinecone at Rome and the other bones were in proportion'.
[159] Benivieni, *Dialogo*, 19r.
[160] Benivieni, *Dialogo*, 21.

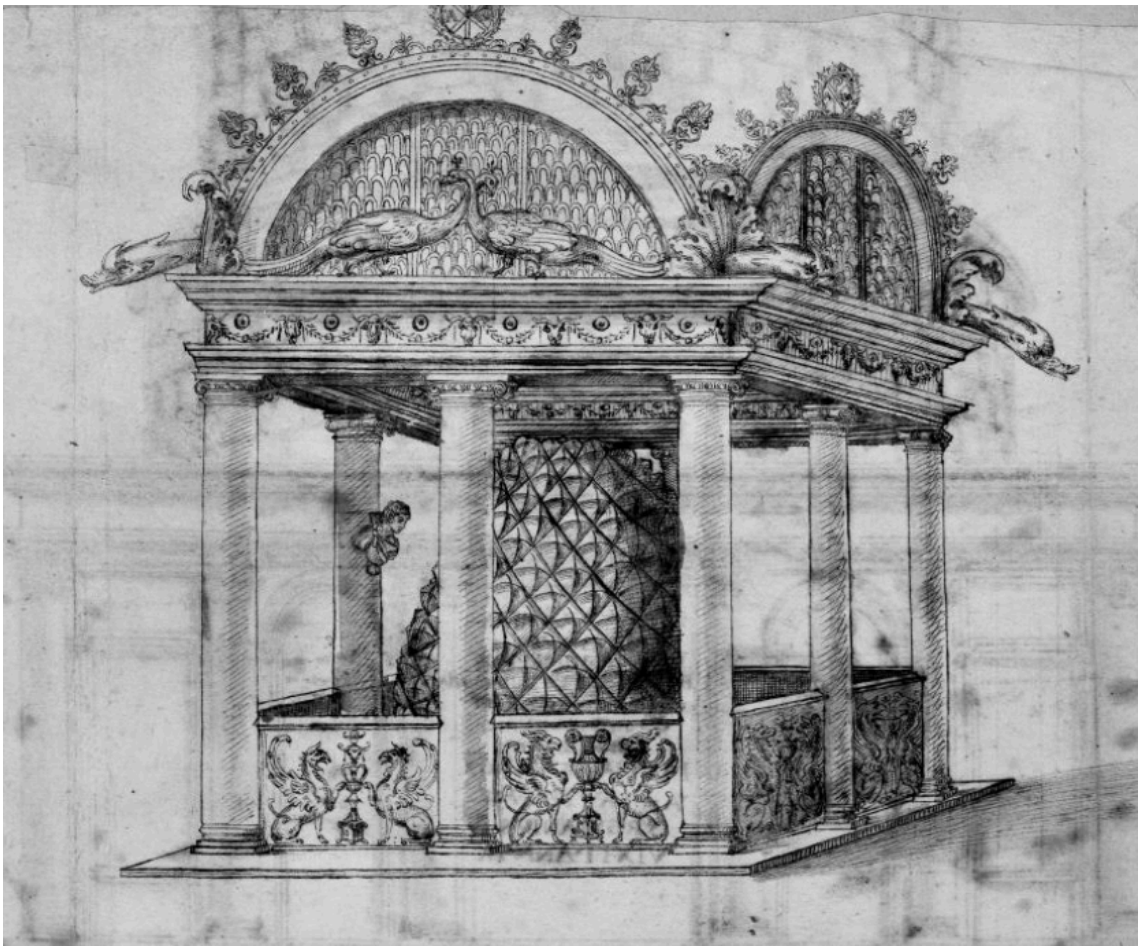
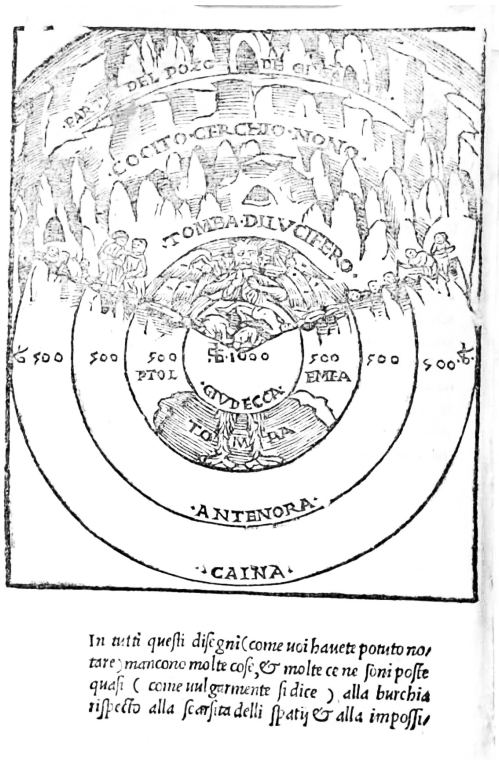


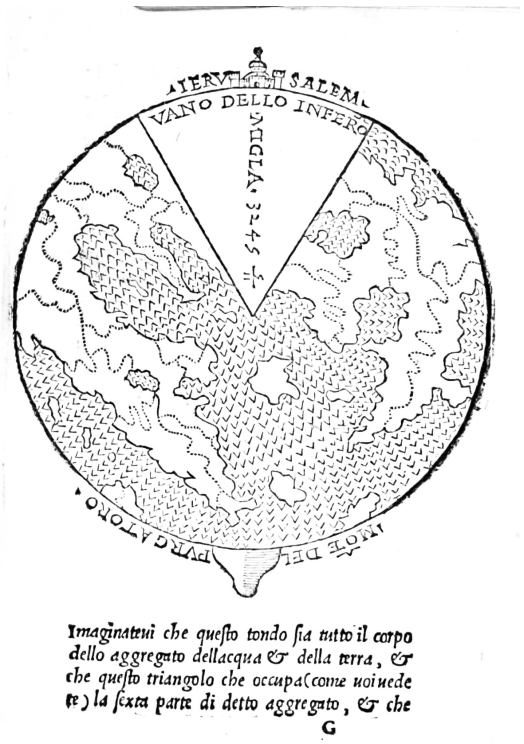
Figure 3.11 **The Cantharus and Pigna of Old St. Peter's c. 1515-25.**

Manetti's dialogue as published by Benivieni ends with illustrations of Manetti's calculations and an itinerary of Dante's journey through this measured landscape (Figure 3.12). One of these illustrations shows the depth of the cone of Hell beneath Jerusalem and opposite Mount Purgatory, both joined by the shared horizon of the Earth's circumference (Figure 3.13). The traces left by Manetti's lost commentary on Dante's *Inferno* show how merchants could use quantification to orient themselves within cultural horizons that were always shaped by the affinity between the material and the spiritual.



In tutti questi disegni (come voi hauete potuto no-
tare) mancano molte cose, & molte ce ne sono poste
quasi (come nul gerrmente si dice) alla burchia
rispetto alla scarsita delli spatij & alla impossi-

Figure 3.12 **Measuring the circles of Dante's *Inferno*.**



Imaginatevi che questo tondo sia tutto il corpo
dello aggregato dellacqua & della terra, &
che questo triangolo che occupa (come voi vede
te) la sexta parte di detto aggregato, & che
G

Figure 3.13 **The depth and place of Dante's *Inferno*.**

Practical measuring, and measure as the virtue of the mean, positioned the idea of measure in merchant spirituality. Sermons addressed to merchant audiences condemned the falsification of measures and fraud in measuring. Preachers invited merchants to weigh their own actions in their consciences. They contrasted the quantifiability of worldly goods with the unquantifiable and limitless value of spiritual goods, divine love, and prayer. Depictions of the weighing of souls reinforced this sense of eschatological measurement. For merchants, proportion, measure, and quantification were ways to imagine the ordered landscapes of eschatological justice and the topography of hell. Measure permeated the cultural perspectives of merchants in late medieval Italy and provided a frame through which merchants could imagine their afterlives.

Conclusion: Have Measure in All Your Affairs

Measure held a prominent place in the cultural horizons of merchants in late medieval northern Italy. The idea of measure was grounded in merchant *ragione,* the ways in which merchants learned to think about problems through calculation, and marketplace practice. Measuring at once enacted and symbolised the justice of markets in late medieval Italy. Cities invested in standard units of measure and professional measurers to facilitate trade and taxation. They also defended a city's reputation as a marketplace where just transactions served the common good.

For individual merchants, too, accurate measuring was an integral part of their profession and a marker of ethical conduct. As the virtue of the mean between extremes, measure was a dynamic and proportionate ideal that was meant to govern how merchants conducted their art. It was used to condemn the excess and social disruption that sudden profits could bring. The virtue of measure was upheld in defence of the social standing of merchants who abided by the ethical bounds of measure. Those who were caught breaking the bounds of measure were liable to censure, whether by their fellow merchants, by the officials who regulated measures or by writers and preachers in their works.

For merchants, the idea of measure and the practice of measuring extended into the contemplation of their afterlives. Preachers asked merchants to measure their conduct so that their conscience would guide them in following the virtue of measure. Merchants knew that spiritual goods, divine love, and prayer were unquantifiable and valuable beyond all measure. While merchants were aware of the limits of measuring,

it still provided a lens through which they could review their investments, contemplate justice, emulate virtue, and imagine the afterlife.

Building on the importance of measure and quantification for merchants in late medieval Italy, the ways in which merchants quantified and perceived time will be the subject of the chapter that follows.

4. Time

> [A] Pisa migliorano i denari di ragione ogn'anno per Pasqua di Resurresso, perché si pagono i soldati, e migliorano da giugno a settembre per molti denari si traggono di suggello per mandarli a Vinegia, che vi sieno nella stagione delle galee per Levante.[1]

Merchants in late medieval Italy were thought to be experts on time. They had to keep track of the changing values of commodities at different times in different places. Traffic flowed between late medieval markets following an established rhythm. The merchant Da Uzzano explained that in Pisa money was a commodity that the commune manipulated each year at Easter and between June and September so that it would be less expensive when the city paid its soldiers. Pisa's markets were integrated with Venice's markets in the first half of the fifteenth century and these patterns of changing prices there reflected those in Venice, where the regular departure of galleys set the rhythm of market prices.[2] Da Uzzano's focus on money as a commodity and on the seasonality of its value was not unusual. An anonymous Florentine merchant manual of 1443 compared the art of the currency changer to that of a bird catcher who had to anticipate patterns of avian migration.[3] The ways in which merchants had to reckon with time when managing their investments reshaped their wider understanding of time

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[1] Uzzano, *Pratica,* 155: 'In Pisa money of account is more valuable every year at Easter, because the soldiers are paid then, and because those who live in the surrounding country have many payments to make, and moneys of account are more valuable from June to September for bullion is taken out of sealed pouches to be sent to Venice in time for that market in the season of the galleys leaving for the Levant'.

[2] D. Stöckly, *Le système de l'incanto des galées du marché à Venise* (Leiden, 1995), 2.

[3] R. C. Mueller, '"Chome l'ucciello di passagio": la demande saisonnière des espèces et le marché des changes à Venise au Moyen Àge', in R. C. Mueller*, Venezia nel tardo medioevo economia e società* (Rome, 2021), 154.

and made perceptions of time an integral part of their cultural horizons. Their professional expertise in handling time was also thought to have made them especially prone to wasting or misusing time, or to valuing time in convincing yet false ways.

The ways in which merchants perceived time, and the anxieties that this could provoke, are best explored through the ideas and practices that made their perceptions of time so distinctive. When they kept their *quaderni*, merchants created records that they hoped would order and resist time. The different scales at which merchants contemplated time, the scale of their daily lives and transactions, of their commercial partnerships over the years, of the changing generations of their families, astrological time and eschatological time were intertwined in the entries that they wrote in their *quaderni*. This layering of time, of memories, of present transactions and of the calculated and projected future makes their *quaderni* even more valuable as sources for their cultural perspectives. Strikingly, merchants easily combined these eminently practical approaches to time with the ways in which they thought about their own identities, as professional practitioners of the art of trade, as partners in companies, as part of a family and as members of the community of the living and the dead.

Having investigated the effect of the medium of *quaderni* on the distinctive ways in which merchants perceived time, this chapter will turn to address specific advice on how merchants should handle time, which they received through the merchant manuals and penitential works they read, and in the sermons they heard. At first glance, this advice seems to have been essentially practical. Da Uzzano's description of the patterns and causes of seasonal changes in the value of money in Pisa was advice of this kind.

Finally, this chapter will investigate the 37th *novella* of Giovanni Sercambi's *novelliere*. This *novella* described the foundation of a merchant partnership in Milan and gave an entertaining account of how the mercantile perception of time might be exploited. Sercambi (1348-1424) was a vernacular author, civic official and chronicler in late medieval Lucca. He was also a merchant, a *speziale,* selling spices, medicines and even trading in paper.[4] His *novelliere*, a vernacular *novelle* set in the fictive frame of stories told as entertainment by a group of travellers fleeing an outbreak of plague in Lucca, survives in a single fifteenth-century manuscript, Trivulziana MS 193.[5] The original autograph, now lost, is mentioned in Sercambi's will.[6] Despite the limited evidence for its circulation, the author seems to have gathered his *novelle* from Italian, Provençal, and classical sources, as well as from tales that circulated as part of an oral tradition. The horizons of Sercambi's *Novelle* are the cultural horizons that were visible from the counter of a *speziale's bottega* in late medieval Lucca.[7]

[4] 'Il memoriale di Iacopo di Coluccino Bonavia medico lucchese', ed. Pittino-Calamari, *Studi di Filologia Italiana,* 24 (1966), 92, 115-157, 172-173.
[5] Milan, Archivio Storico Civico e Biblioteca Trivulziana, MS 193.
[6] G. Sinicropi, 'Nota Bio-Bibliografica', in Giovanni Sercambi, *Novelle*, ed. G. Sinicropi (2 vols, Bari, 1972), ii, p. 762.
[7] R. A. Pratt, 'Giovanni Sercambi, Speziale', *Italica,* 25/1 (1948), 12-14.

Merchant Time

Before we can explore the ways in which merchants in late medieval northern Italy perceived time, we must first set their perceptions of time in the context of Jacques Le Goff's seminal essay of 1960 on merchant time and its legacy.

> Quand s'organise un réseau commercial le temps devient objet de mesure.[8]

According to Le Goff, merchant time, a particular kind of measured time, was an emergent property of commercial networks. As the trade routes that supported these networks organised themselves, time increasingly became the object of measurement. It was measured with money to reflect time as effort, the time required by the distance of exchange, and the opportunity cost of time. The measurement and valuation of time, although not a conscious project of individual merchants, changed the ways in which merchants perceived time. Merchant time was sufficiently distinctive that there were points of anxiety and tension between other ways of thinking about time in late medieval Italy. The sin of usury, lending in expectation of disproportionate gain that made an exchange unjust, was judged by a merchant's motivations as well as the timing and place of the transaction.[9] The theoretical just price of any exchange, against which usury was to be judged, was not a 'transcendental value' but rather an estimation that

[8] J. Le Goff, 'Au moyen âge: temps de l'église et temps du marchand [1960]', in J. Le Goff, *Un autre moyen âge* (Paris, 1999), 57 : 'When a commercial network organises itself, time becomes the object of measurement'.
[9] O. Langholm, *The Merchant in the Confessional, Trade and Price in Pre-Reformation Penitential Handbooks,* (Boston, 2003), 125.

always changed according to the time and place of the exchange.[10] According to late medieval theory, merchants who were judged to have broken the bounds of measure in the valuation of time, distance and risk, or who were motivated by greed for excess profits, should have their *fama* defaced beyond measure.[11] The particular kind of valued time that was a product of merchant's commercial networks was the source of distinctive ethical and spiritual challenges.

> Le marchand découvre le prix du temps dans le même instant qu'il explore l'espace.[12]

In Le Goff's analysis, merchant time was a function of thinking about space. The distances between the points of a commercial network created the context in which it was possible for merchants to draw a profit from differences in demand at different times in different places. Conversely, merchants who were not attentive to seasonality and the pace of commerce in different markets were at risk of suffering heavy losses. Le Goff's model resonates with late medieval myths of the origin of trade, money, professional merchants, and cities. According to these myths, the task of the merchant was to gather the scarce and disparate goods that would allow men to congregate in cities and to sustain the markets of these cities so that they would flourish. It was seen as fitting that merchants received proportionate rewards for the time and effort they spent in gathering goods across great distances.

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[10] J. W. Baldwin 'The Medieval Theories of the Just Price: Romanists, Canonists, and Theologians in the Twelfth and Thirteenth Centuries', *Transactions of the American Philosophical Society*, 49/4 (1959), 20.
[11] Pierre de Jean Olivi, *Traité des Contrats,* ed. S. Piron (Paris, 2012), 172.
[12] Le Goff, 'Temps', 59: 'The merchant discovers the price of time in the same instant as when he explores space'.

> Et le temps de l'Église ? Le marchand chrétien le reteint comme un autre horizon de son existence.[13]

Le Goff's argument was more subtle than is often recognised. In order to draw distinctive features of merchant time as a perception of time that had emerged from commercial networks into sharp focus, he set it against the background of church time. Church time comprised perceptions of time that were ordered by the narrative of biblical history. This was time with a direction: it was oriented towards Judgement, and it ceaselessly anticipated the limitless and incalculable time of eternity.[14] Rather than describing merchant time and church time as mutually exclusive frames, however, Le Goff emphasised that, for merchants, church time was another horizon of their existence. Despite points of tension and conflict over perceptions of time, such as usury, the distinctive elements of merchant time were perfectly compatible with merchants who observed solemn feasts, contemplated the eternal fates of their souls and, in some cases, commissioned works of art that they hoped would immortalise their fame as pious merchants.[15]

Merchants have been characterised as the early adopters or drivers of a modern sense of time. In the 1970s, the historian John Larner argued that the precision of merchant accounting and new mechanical clocks were part of a new way of thinking about time by subjecting it to 'rational ordering' so that it might be controlled.[16] In a contemporary

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[13] Le Goff, 'Temps', 60: 'And Church Time? The Christian merchant retained it as another horizon of their existence'.
[14] Le Goff, 'Temps', 51.
[15] Le Goff, 'Temps', 60.
[16] J. Larner, *Culture and Society in Italy, 1290-1420* (London, 1971), 28.

study, the literary scholar Ricardo Quinones detected a new sense of time that was measured by the clock and valued in terms of money in the writings of Dante and Petrarch.[17] In the late 1980s, Steven Epstein argued that merchants in late medieval Genoa pre-empted the proliferation of the mechanical clock in their rational perception and ordering of time.[18] The timing of the contracts of their exchanges were recorded by notaries with precision, down to the canonical hour of the day.[19] This argument, that the way in which merchants perceived time was rational and anticipated technological change, is enduring. More recently, Simona Cohen has argued that, by the middle of the fourteenth century, the mercantile economy supported new perceptions of time epitomised by mechanical clocks.[20]

Studying the ways in which merchants perceived time as a means to trace the rise of a modern rationality is a forced approach, lacking the subtlety and complexity of Le Goff's exposition of merchant time. If networks of exchange created conditions in which merchants might perceive time in distinctive ways in late medieval Europe, it does not follow that merchants became more 'rational' in their attitudes to time. Evidence of the measurement of time is not necessarily evidence for the belief that it was possible to control time by measuring it. The cultural effects of the proliferation of mechanical clocks for merchants were not necessarily different from the effect on other groups in society.[21] Gerhard Dohrn-van Rossum has warned against conflating the ways in which merchants have perceived time with the proliferation of mechanical

[17] R. J. Quinones, *The Renaissance Discovery of Time* (Harvard, 1972), 8.
[18] S. A. Epstein 'Business Cycles and the Sense of Time in Medieval Genoa', *The Business History Review,* 62/2 (1988), 259-260.
[19] Epstein, 'Cycles', 251.
[20] S. Cohen, *Transformations of Time and Temporality in Medieval and Renaissance Art* (Leiden, 2014), 50, 52.
[21] C. M. Cipolla, *Le macchine del tempo, l'orologio e la società 1300-1700* (Bologna, 1981), 17.

clocks.[22] The idea that merchants in late medieval Italy anticipated a modern rationality instigated by mechanical clocks seems more preposterous still.

The history of perceptions of time has been handled with greater subtlety in recent scholarship, which has not concentrated on merchants alone. Peter Burke has encouraged historians to resist the temptation to highlight how particular groups experienced time in distinctive ways at the expense of acknowledging that past perceptions of time were just as complex as they are today, and that, as Le Goff had already argued in the case of medieval merchants, it is perfectly possible for an individual to perceive and experience time in different ways in different contexts without a conflict arising.[23] It is in this vein that Matthew Champion's exploration of 'temporalities', structures through which time was measured and perceived, in the medieval Low Countries has shown the complex ways in which different temporalities could interact with one another in a 'polyphony' of time.[24] The range of the sources that he used to describe the synaesthesia of temporalities, which were at once heard in prayer, music and chimes, read in records and seen in paintings, is especially inspiring.[25]

Quaderni have not escaped attention as sources for late medieval perceptions of time. Fulvio Pezzarossa, Angelo Cicchetti and Raul Mordenti have all identified a particular kind of *quaderni*, books of family memory, as books that were written in conscious

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[22] G. Dohrn-van Rossum, *History of the Hour*, tr. T. Dunlap (Chicago 1996), 227.
[23] Burke, 'Reflections on the Cultural History of Time', *Viator* 35, (2004), 618.
[24] M. S. Champion, *The Fullness of Time: Temporalities of the Fifteenth-Century Low Countries* (Chicago, 2017), 27.
[25] Champion, *Fullness,* 21; M. S. Champion, 'A Fuller History of Temporalities*', Past and Present,* 243/1 (2019), 266.

defiance of mortality.[26] They were texts in which habits formed by bookkeeping and the need to update financial accounts every day blurred the distinction between the time being narrated and the time of writing.[27] These books, referred to as 'libri di famiglia', memorie di famiglia', 'ricordi', and 'ricordanze', have been seen as a distinctive offshoot of mercantile literacy, and a peculiarly Florentine form of writing, developed in the fourteenth century before flourishing in the fifteenth century.[28] Here, I will consider blank bound *quaderni* as a medium, instead of emphasising the distinctions between subspecies of the type. James Grubb has supported this interpretation of their quintessentially Florentine character and has suggested that social memory in Venice was found in public texts and not in such individualistic records.[29] Grubb's argument is complicated by questions of survival. The fourteenth-century Venetian *Zibaldone da Canal* is a *quaderno* that was passed down between generations.[30] While the preservation of *quaderni* seems to have been relatively far poorer in Venice than in Florence, and despite variations in styles of merchant writing in different cities, it should be remembered that absence of evidence is not necessarily evidence of absence.

Returning to study how merchants perceived time in late medieval Italy is a further way to critique those narratives that cast individual merchants as the heralds of a rational modernity. Merchants who contemplated the timing of their investments and the fluctuation of marketplaces also kept histories of their families and took astrology and

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[26] A. Cicchetti and R. Mordenti, *La scrittura dei libri di famiglia,* in A. Asor Rosa, *Letteratura italiana, III, 2. Le forme del testo. La prosa* (Turin 1984) 1127; F. Pezzarossa, 'La Tradizione fiorentina della memorialistica', in G. M. Anselmi, F. Pezzarossa, and L. Avellini, *La "memoria" dei Mercatores, Tendenze ideologiche, ricordanze, artigianato in versi nella Firenze del Quattrocento* (Bologna, 1980), 91.
[27] Niccolò Martelli, *Ricordanze dal 1433 al 1483,* ed. F. Pezzarossa (Rome, 1989), 54, 58.
[28] Pezzarossa, 'Tradizione Memorialistica', 42.
[29] J. S. Grubb, 'Memory and Identity: Why Venetians Didn't Keep *Ricordanze'*, *Renaissance Studies* 8/4 (1994), 375, 384.
[30] *Zibaldone*.

the alignment of the stars into serious consideration in both these spheres. Not only profit and loss, but also purgatorial time was subject to calculation. Despite the time that has passed since Le Goff's essay was published and the attention that has been devoted to this topic in the intervening years, as Alexander Murray has suggested, the confluence of perceptions of time and the cultural effects of money present an inexhaustible area of study.[31]

[31] A. Murray, 'Time and Money', in M. Rubin (ed), *The Work of Jacques Le Goff and the Challenges of Medieval History* (Woodbridge, 1997), 4.

Time in *Quaderni*

When merchants kept their *quaderni,* they attempted to order time in distinctive, calculable ways that merged different scales of timekeeping with the pattern of their business transactions. Their layout offered a frame in which they recorded their transactions each day. Turning the leaves of their *quaderni*, merchants reviewed past investments to project future revenues. Merchants used these same layouts to record family history. Astrology played an important part in the ways in which merchants considered the timing of their affairs and even the timing of their families. This merger of different scales of timekeeping on the pages of *quaderni* transformed their experience of time. It was also a merger that amplified the tensions and anxieties that had emerged from the quantification and valuation of time that was not strictly commercial in late medieval Italy. The experience of time was just and complex for merchants in late medieval Italy as it is today. It proved resistant to this kind of ordering.

Entries in *quaderni* were arranged to facilitate the review of investments. At the head of every page, the year was prominently inked into its own box, in line with the contemporary pagination. The number of leaves devoted to a single year offered an approximation of the intensity of a merchant's traffic in that year. This layout was used in the *quaderni* of the Pisan merchants Miliadusso Balduccione,[32] Parazone Grasso,[33] Ranieri di Jacopo Astaio,[34] and Iacopo di Colo Porcellini.[35] Within the layout of a page, individual entries were grouped together as part of the same transaction. Two running

[32] OD, 1312.
[33] OD, 441; OD, 1323.
[34] OD, 1331.
[35] OSC, 2006; OSC, 2007.

entries from Ranieri di Jacopo Astaio's *quaderno* detailing payments for cloth, made by the banker Michele da Buti and by a Corsican merchant, Ricovero di Bertuchulo dal Vero, show how an individual page would be updated over time (Figure 4.1). Di Jacopo Astaio returned to these entries on receipt of payment for the cloth he sold, and updated them over the course of three years. A loose-leaf note preserved at the back of his *quaderno,* recording payments on days in April and May, is indicative of the way that more ephemeral forms of writing fed into the record of transactions he kept in his *quaderno* (Figure 4.2).

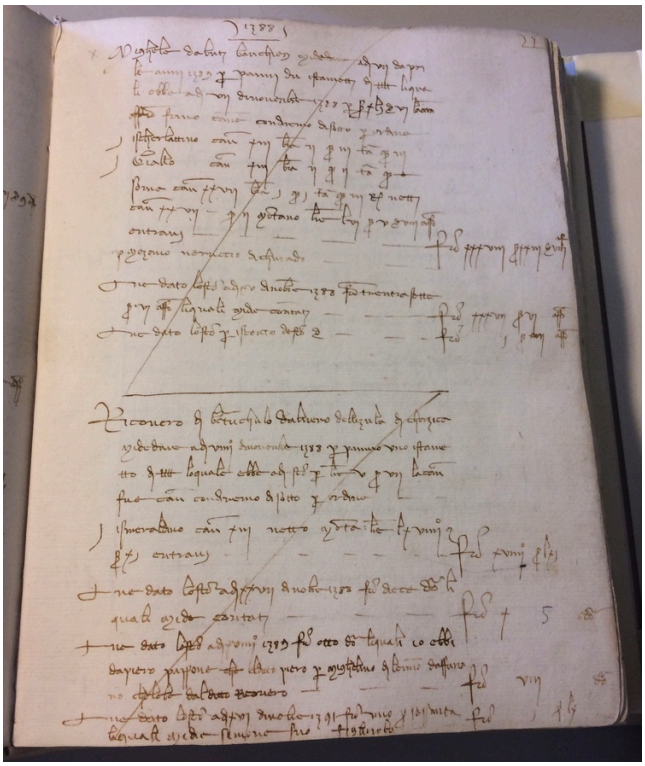

Figure 4.1 **The layout of Ranieri di Jacopo Astaio's *quaderno*.**

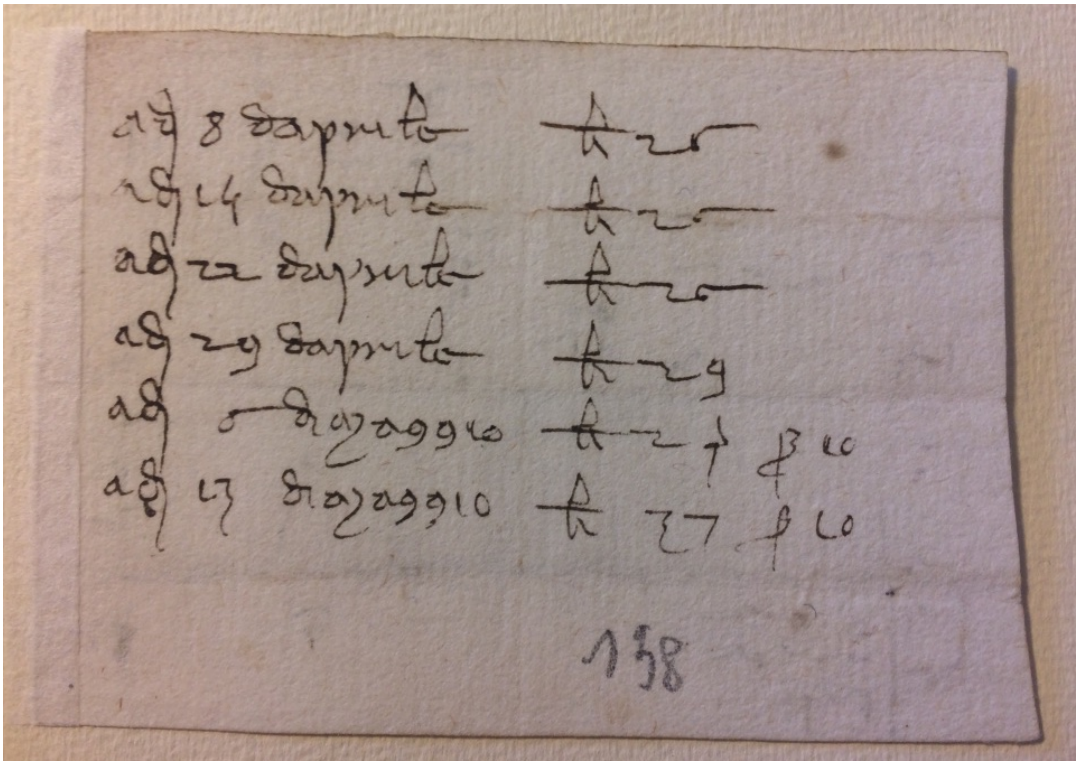

Figure 4.2 **Ranieri di Jacopo Astaio's *quaderno,* a loose note.**

The order and predictability that merchants sought to impose on time in their *quaderni* was easily disrupted. The shock of recurrent epidemics was enough to break the patterns of Balduccione's *quaderno*. In 1348, he laid out a series of entries in expectation of future rents in grain for land leased by Guido di Grandone, Mighele di Grandone and Barsotto di Vanni.[36] The spaces he left to record their payments of rent in harvested grain were never filled. In the left-hand margin, Balduccione laconically added the comments 'È morto, non la tiene più' and 'È morto'.[37] When a merchant reviewed the entries in his *quaderno*, the abrupt shock of a new wave of a recurrent epidemic would have been highlighted by the interruption of the familiar patterns of revenue. A loose letter preserved in Ser Biagio delle Brache's *quaderno*, written to him by Francesco Pipinelli in 1348, asked Delle Brache to make a payment on behalf of a departed mutual friend, Cholo, to Piero da Crespina.[38] Cholo had recorded this debt in his *ragione*, but was too ill to make it, and had feared for his soul. Pipinelli's hope seemed to be that if Biagio could balance Cholo's unsettled account, it would be to the benefit of Cholo's soul.

When merchants used the same layouts to record their family histories in their *quaderni,* these proved just as vulnerable to disruption. A *quaderno* started by Ranieri Grasso, Parazone's brother, to record customs accounts of Pisa's iron trade in Elba, was repurposed by Parazone to keep a record of his brother's estate. The original invocation was crossed out and Parazone wrote a new invocation, asking that God grant that his accounting might be useful to his brother's heirs, just as it might be valuable to his

[36] OD, 1312, fo. 88r.
[37] OD, 1312, fo. 88r: 'He is dead and does not hold it any more', 'He is dead'.
[38] OD, 1290.

reputation or 'onore' and his own salvation.[39] In 1440, Da Uzzano made a list in his *quaderno* of all his children, which he would update over time.[40] As if receiving a loan from another merchant and perhaps in recognition of the severity of childhood mortality, the births of his children are described as divine loans: 'Iddio piacque a prestarmi [...]'.[41] The same language of time on loan to mankind from God, in the hope that they might use it well and profit, can be found in the dialogue of St Catherine of Siena.[42] Giovanni's son Alamanno, perhaps named for his colleague Alamanno Salviati, was born on 'dì xxii di febbraio 1439 a ore xvii' and died on 'xii febbraio 1440'.[43] His son Bernardo, who shared his father's name, was born on 'xiiii di lulglio 1441 a ore xvii'.[44] Nicholo was born on 'dì ii d'agosto 1442 a ore iii di note,' and died on 16 September 1442.[45] His daughter Maddalena was born 'a dì 5 di settembre 1443 a ore 3 di notte' and died less than a month later. Francesca was born 'a dì iiii di maggio 1444 a ore 4 di notte'.[46] In this list, we can hear the hours struck by bells in Florence, time perceived through the lens of family and generations, as well as the fleeting length of lives.

Merchants kept time in their *quaderni* to the greatest degree of precision when they recorded the hour of the birth of their children. The hour of a person's birth was thought to affect their disposition and appearance, depending on which planets were in

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[39] OD, 1322, fo. 1r: 'honour'.
[40] SNS-S, I, 2, fo. 181v; F. G. Bruscoli, 'Giovanni da Uzzano', in *Dizionario Biografico degli Italiani,* 97 (2020), https://www.treccani.it/enciclopedia/giovanni-da-uzzano_(Dizionario-Biografico) (09/05/23).
[41] Pisa, SNS-S, I, 2, fo. 181v: 'It pleased God to lend to me'.
[42] G. Barthoil, 'Aspects du temps dans le "Dialogo" de Catherine de Siene', in D. Maffei and P. Nardi, *Atti del Simposio Internazionale Cateriniano-Bernardiniano* (Siena, 1982), 9.
[43] Pisa, SNS-S, I, 2, fo. 181v : 'on 22 February 1439 at the seventeenth hour' '12 February 1440'.
[44] Pisa, SNS-S, I, 2, fo. 181v: '14 July 1441 at the seventeenth hour'.
[45] Pisa, SNS-S, I, 2, fo. 181v: 'On 2 August 1442 at the third hour of the night'.
[46] Pisa, SNS-S, I, 2, fo. 181v: 'On 3 May 1444 at the fourth hour of the night'.

conjunction at the time, as well as on the relevant sign of the zodiac and ascendants.[47] Cotrugli described how certain signs of the zodiac were predisposed to the art of trade in his *De Navigazione* (1465), a merchant manual that included a portolan sailing guide. Those who were born under the sign of Taurus would be thieves or good merchants.[48] Virgo's *fortuna* resided in the *minutaglia,* the common people, and in every kind of merchandise.[49] To be born a Scorpio was to be born a good singer and good merchant.[50]

The course of the stars was just as important to merchants when considering the timing of their investments. According to Cotrugli, Cancer was an auspicious sign under which to set out on business trips, in contrast to Aquarius.[51] Cancer falls in the summer months, in which the prevailing weather conditions made travel least risky, whereas Aquarius falls in the winter. Rationalisations of timing through astrology were compatible with practical considerations. Mercury, the sixth planet, rendered men eloquent merchants.[52] The hour of Mercury was a good time to start a journey by land or sea. This kind of astrological timing was personal and had to be tailored to match the hour of one's birth. Under the influence of Virgo, Tuesdays, Wednesdays, and Sundays were fortunate days.[53] Under the influence of Mercury, Friday and Saturday were good days, whereas Sunday was an unfortunate day.[54] Quaderni were suitable spaces in which to make these personal calculations of timing.

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[47] D. Canaris, 'Debating Astrology in the Renaissance Pierre d'Ailly (1351-1420), Marsilio Ficino (1433-1499), Giovanni Pico della Mirandola (1463-1494)', in M. Heiduk, K. Herbers and H-C. Lehner (eds), *Prognostication in the Medieval World: A Handbook* (Berlin 2020), 773.
[48] Benedetto Cotrugli, *De navigatione*, ed. P. Falchetta, in Falchetta, '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), 316.
[49] Cotrugli, *Navigatione,* 317.
[50] Cotrugli, *Navigatione,* 318.
[51] Cotrugli, *Navigatione,* 317-318.
[52] Cotrugli, *Navigatione,* 320.
[53] Cotrugli, *Navigatione,* 317.
[54] Cotrugli, *Navigatione,* 321.

In their *quaderni,* merchants predicted which days would be the fortunate days in any given month. Da Uzzano's merchant manual listed the 'giorni che fanno fortuna' and named the stars that rise on particular days of the month that marked a run of fortunate days: 'primieramente giennaio al quarto giorno si lieva una stella c'a nome Ezar, e fa fortuna 5 giorni [...]'[55] This was a longstanding element of the outlook of merchants in medieval Europe. Yale Beinecke MS 923 is a 13th-century French bat book, a type of folded manuscript that could hang from a travelling merchant's belt, that contained a calendar of fortunate and unfortunate days as well as a list of the dates of the Champagne trade fairs.[56] The fourteenth-century Venetian *Zibaldone da Canal* contained a table in which the days of the month were marked with symbols denoting fortunate days, unfortunate days, and days in which a rising star might bring profit to a merchant's venture: 'tuti questi sì è li dí de lo mexe li qual sì è scriti qua de suso [...] e questi sé cossì fati * // sì è stelle che se leva in lo mexe fa contanti dí fortuna'.[57] Late medieval Dominican preachers condemned the astrological timing of new ventures, investments, and partnerships as sinful vanity.[58] The extensive condemnation of this use of astrology is perhaps indicative of its popularity among merchants.

Merchants used their *quaderni* to contemplate eschatological time as well as to reckon time on Earth. Two precisely quantified lengths of time, 11,759 years and 76 days, and

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[55] Uzzano, *Pratica,* iv, p. 282: 'days that make fortune', 'at the beginning of January on the fourth day a star called Exar rises, and it makes 5 fortunate days [...]'.
[56] J. Gumbert, *Bat Books a Catalogue of Folded Manuscripts Containing Almanacs or Other Texts* (Turnhout, 2016), 45-46; Yale, Beinecke, MS 923: https://collections.library.yale.edu/catalog/2057840 (09/05/2023); consulted online.
[57] *Zibaldone,* 110-111: 'all of these are the days of the month which are written here below [...] and the stars which rise in a month and make money on fortunate days are marked this way *'.
[58] Jacopo Passavanti, *Lo specchio della vera penitenza* (Florence, 1725), 256: 'and it is not without great sin'.

10,699 years and 354 days were the results of the most intriguing calculations in Balduccione's *quaderno*.[59] Balduccione had summed up two sets of the 'p(er)doni di S. Piero a Grado', the time that could be remitted from a soul's stay in Purgatory as a reward for the truly penitent pilgrim who heard mass on specific days at the church of S. Piero a Grado near Pisa (Table 4.1).[60] Balduccione had set out this calculation in the same form as the business accounts in his *quaderno,* as if he had been adding up profits from a year of grain trading (Figure 4.3). His calculation of the first set of pardons was one day short of the correct figure. His second calculation was less careful than the first and was eight years and 138 days short of the true total. Although Balduccione tried to use his *quaderno* to imagine time in Purgatory by precise conversion to time on Earth, he seems to have made his calculations hurriedly.

[59] OD, 1312, fo. 107v.
[60] OD, 1312, fo. 107v: 'the pardons of S. Piero a Grado'.

Table 4.1 **Balduccione's Calculation of the Pardons of S. Piero a Grado**

1st Set of Pardons			
Date	**Name**	**Years**	**Days**
6 January	Epiphany	2,200	48
25 January	Conversion of St Paul	2,200	48
1st day of Holy Week	Palm Sunday	2,200	48
6th day of Holy Week	Good Friday	239	245
2nd day of Eastertide	Easter Monday	239	245
40th day of Eastertide	Feast of the Ascension	2,239	245
22 February	The 'cattedra' of St Peter	2,200	48
	Lazarus Sunday	239	245
Total Time		11,759	77
Balduccione's Total		11,759	76

2nd Set of Pardons			
Date	**Name**	**Years**	**Days**
50th day of Eastertide	Pentecost	239	245
1st Saturday after Pentecost	1st Saturday after Pentecost	239	245
29 June	Feast of Saints Peter and Paul	2,200	48
30 June	Octave of Saints Peter and Paul	239	45
	The 'sagra' of Saint Peter	239	245
15 August	Assumption of Mary	2,200	48
28 October	Feast of Saint Simon the Zealot	2,200	48
13 November	Feast of Saint Brice	2,200	48
25 December	Christmas Day	239	245
64th day before Easter	Carnival Sunday	239	245
	Every Saturday in Easter	230	245
1 August	Feast of Saint Peter in Chains	239	245
Total Time		10,708	127
Balduccione's Total		10,699	354

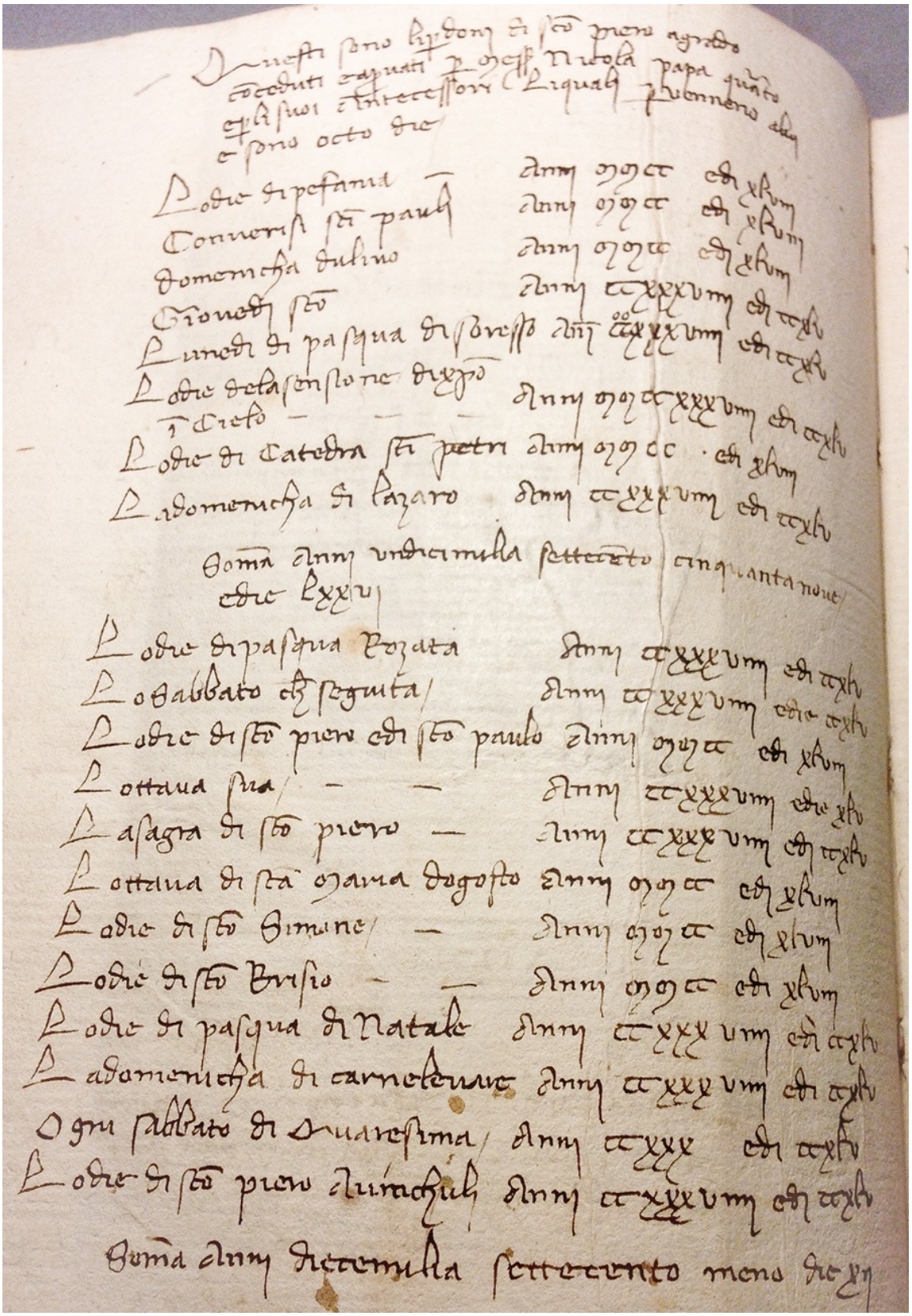

Figure 4.3 **The 'pardons of S. Piero a Grado'.**

Purgatorial time was not the same as time on Earth, although, unlike eternity, it was finite and susceptible to measurement by proportion. Alexander of Hales in his Gloss on the Sententiae of Peter Lombard describes Purgatory's punishments as expressing 'proportionality [...] the similitude of proportions', a definition borrowed from Euclid's elements.[61] In Purgatory, justice was ordered by proportion, just as the justice of exchanges was thought to have been ordered by proportion in late medieval markets. In Dante's *Purgatorio*, Oderisi, the illuminator of miniatures, reminded Dante the pilgrim that the length of 1,000 years in Purgatory ought to be understood in proportion to the slow rotation of the heaven of the fixed stars and to eternity:

'[...] pria che passin mill'anni? ch'è più corto
spazio all'etterno, ch'un muover di ciglia
al cerchio che più tardi in cielo è torto'[62]

In *Convivio*, Dante outlined this movement of the stars at the edge of human perception: 'lo movimento quasi insensibile che fà da occidente in oriente per uno grado in cento anni,' a full rotation would take 36,000 years.[63] The time that Statius told Dante he had to spend to purge his prodigality could be measured indirectly by its proportion to thousands of phases of the moon.[64] One thousand lunar orbits would equate to more than 74 years. The sums of Balduccione's calculations reckoned lengths of time that accorded with these depictions of Purgatory.

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[61] Alexandre de Hales, *Glossa in IV libros sententiarum Petri Lombardi, Bibliotecca Franciscana shcolastica Medii AEvi*, t. XV, (Quaracchi, 1957), 352-353: '*Est autem proporitonalitas similitudo proportionum',* cited in J. Le Goff, 'La naissance du Purgatoire [1981], in J. Le Goff, *Un autre moyen âge* (Paris, 1999), 309.
[62] Dante, *Purgatorio*, XI, ll. 106-8, p. 178: '[...]before a thousand years shall pass? which is a shorter space to eternity than the blink of an eye to the slowest-turning circle in the heavens'.
[63] Dante, *Convivio*, II: XIV, 11, p. 330; C. S. Singleton, *Purgatorio Commentary* [1973] (Princeton, 1991) 238.
[64] Dante, *Purgatorio*, XXII, ll. 31-36, p. 364.

The value of a pilgrimage to S. Piero a Grado was most valuable on the feast of Christ's Ascension, according to Balduccione. Archbishop Federico Visconti (1200-1277) had noted that S. Piero a Grado was especially busy on that day: 'propter pressuram hominum qui ibidem fere suffocabantur'.[65] The next most profitable days were those associated with the Virgin Mary and the saints Paul, Peter, Brice, and Simon the Zealot. This hierarchy of saint's feasts calls to mind the invocations that were found at the start of the *quaderni* that merchants kept. As a merchant, Balduccione would have been used to converting currency values and keenly aware of the seasonality of markets. This awareness and experience, in combination with the medium of his *quaderno,* allowed Balduccione to imagine the horizon of purgatorial time in a distinctive way.

Merchants were asked to consider timing and place when determining if their transactions ran the risk of usury. The place invoked in Balduccione's calculations of time in Purgatory is significant too. S. Piero Grado stood at the centre of Pisan networks of commerce and piety, where the Arno joined the sea, across the river from Porto Pisano.[66] Its altar is said to have been the first consecrated in Latin Christendom after St Peter was swept there by a storm on his voyage from Antioch to Rome.[67] The basilica of S. Piero a Grado was the perfect site for the eschatological calculation Balduccione used to imagine how time would pass for a soul in the afterlife in proportion to the passage of time on Earth.

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[65] Federico Visconti, 'Codice Laur', S. Crucis XXXIII, Sin.1, C.29v, in E. Tolaini*, Lo Sposalizio del Mare*, 54: 'The pressure of the crowd was such that those there were almost suffocating'.
[66] F, Donati, 'Inediti sul porto Pisano a San Piero a Grado', in M. M. Donato and M. Ferretti (eds), *"Conosco un ottimo storico dell'arte [...]"* (Pisa, 2012), p. 315.
[67] E. Toliani, *Lo sposalizio del mare, e altri saggi sul San Piero a Grado* (Pisa, 2004), p. 13.

S. Piero a Grado, was also a focal point of confraternal worship in Pisa. The treasurer of the Pisan confraternity dedicated to Saint Lucy was meant to send representatives of their members to S. Piero a Grado on Carnival Sunday, Good Friday, and at the feast of the Ascension every year.[68] The fourteenth-century statues of the Pisan confraternity of the *Compagnia della Crocione* contained similar lists of pardons with comparable valuations of pilgrimages to S. Piero a Grado in terms of thousands of years and days of Earthly time.

By keeping *quaderni*, merchants experienced time in overlapping and non-linear ways. They were versatile books in which merchants accounted for the rhythm of commerce over a single year, the trends that emerged over many years, the generations of their family and in which they could even try to calculate the measure of purgatorial time.

[68] *Statuti Inediti della Città di Pisa dal XII al XIV Secolo,* ed. F. Bonaini (2 vols, Florence, 1854), i, 709.

How Merchants Should Handle Time: This World Is Like a Fair

> Onde se 'l mercatante udisse che si facesse una fiera in Francia che durasse uno anno, ove si facesse grande guadagno, e egli per sua negligenza s'avesse lasciato perdere mezzo 'l tempo overo tutto, che non ne potesse avere fiore, come si dovrebbe costui, ch'avrebbe perduto cotale guadagno! Questo stallo del mondo è a modo d'una fiera che qui à ordinato Idio la fiera e 'l guadagno. E quanto dura? Infino alla fine tua, non più. Se allora ài bene guadagnato, bene ne vai, altrimenti non ci puoi mai ritornare più né più fare mercantia. Chi cci toglie questo tempo? Il peccato mortale [...][69]

Da Pisa preached that all the world was a fair. In the same way that a merchant would not want to miss the chance to profit from a fair that lasted for just a year in France, so they should not squander the chance to secure divine profits in their lifetimes. Sin took away and wasted time. Other sermons aimed at merchant audiences took up the theme of wasted time in strikingly similar terms. Domenico Cavalca condemned at length 'il perdimento di tempo' and its eschatological opportunity cost.[70] He criticised slovenly workers who arrived late or worked slowly. Merchants who 'vogliono i grandi guadagni [...] ma non si vogliono affaticare nè sudare lavorando,' would end up 'nel loro oscuro inferno'.[71] The twin ideas that merchants should not waste lengths of time and that

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[69] Giordano da Pisa, *Avventuale Fiorentino 1304,* ed. S. Serventi (Turin 2006), 583: 'If a merchant heard that there was a fair in France which lasted a year, where one could make great profits, and if by his negligence he were to have wasted half or even all that time, which could not now bear fruit as it should have, how much profit would he have lost! This pew of the world is like a fair organised by God in its arrangement and its profits. And how long will it last? Until your last day and no longer. If therefore you have made a good profit, off you go, if it was otherwise you can never return nor carry out any more business. Who takes this time from us? Mortal sin'.
[70] Cavalca, *Disciplina,* 97, 103, 127: 'wasting time'.
[71] Cavalca, *Specchio,* 249: 'desire great profits [...] but do not want to tire themselves nor sweat while working' 'in their dark hell'.

merchants should not devote inappropriate moments of time to commerce or entertainment lay at the heart of popular perceptions that time was misused by merchants in late medieval Italy.

The invocation not to waste time was a commonplace of manuals of the art of trade that were written for merchants. Da Certaldo counselled his readers to wake up early: 'chi troppo dorme lo tempo perde'.[72] He also cautioned them not to put off until tomorrow what could be done today.[73] More straightforwardly still, Cotrugli, citing Cicero, warned: 'non perdervi lo tempo'.[74] At the very least, Cotrugli thought that merchants should not be seen to run late. Cotrugli warned of the disastrous consequences for a merchant who did not pay his debts promptly: 'deve lo mercante essere solicito ne lo scodere quando lo tempo viene e non lasare invechiare lo debito'.[75]

The danger of wasting time was an idea that evoked the affinity between the material and the spiritual, which characterised the culture of merchants in late medieval Italy. Merchants reasoned the value of time through its opportunity cost and through tariffs that equated sins and transgressions with lengths of time. In general terms, this was an idea that was diffused throughout society in penances. In an early fifteenth-century Pisan copy of the fourteenth-century Benedictine Giovanni delle Celle's vernacular translation of Bartolomeo da San Concordio's *Summa de casibus conscientiae*, the case was made that every mortal sin should equate to a penance of seven years and 333 days, even though, in reality, the imposition of a penance was at the discretion of a priest or

[72] Certaldo, *Costumi*, 155: 'he who sleeps too much loses time'.
[73] Certaldo, *Costumi*, 230.
[74] Cotrugli, *Mercatura*, 50: 'do not waste time'.
[75] Cotrugli, *Mercatura*, 65: 'a merchant must be timely and must not delay when the time comes to collect what he is owed, lest debt grow old'.

confessor who had to consider the circumstances of the sin and the condition of the sinner to arrive at a measured penance.[76]

Merchants seem to have taken up the idea of tariffs in time for sin in particular ways. On 1 January 1403, the Florentine merchant Goro Dati (1362-1435), considering that he had arrived at the age of 40, thought that he should put more effort into following God's commandments, so he wrote a pledge not to work for temporal gain, or to cause others to work for him to the same end, on holy days and feast days: '[...] questo dì propongo e dilibero una cosa da qui inanzi oservare, cioè che in perpetuo mai in alcuno dì di festa sollenne e comandata dalla santa Chiesa io non debo stare a botega, né andarvi a fare alcuno esercizio, né consentire o comandare che altri per me il facia d'opera di Guadagno o utile temporale [...]'.[77] However, crucially, Goro qualified his pledge: 'con questo salvo che se alcuno caso molto necessario fosse, per ogni volta io sono tenuto il dì sequente a dare a' poveri di Dio per limosina fiorni uno d'oro. E questa scrittura ho fatta per tenere meglio a mente e per mia confusion se contro a cìo facessi'.[78]

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[76] Bartholomaeus de Sancto Concordio, Giovanni, dalle Celle, *Summa de casibus conscientiae*. [between 1400 and 1450], Yale Beinecke MS 795, Fo. 14v. https://collections.library.yale.edu/catalog/10923623 (09/05/2023), consulted online.

[77] I am extremely grateful to Pietro Del Corno for having drawn my attention to this example: Goro Dati, *Libro Segreto*, in *Mercanti Scrittori, Ricordi nella Firenze tra Medioevo e Rinascimento, Paolo da Certaldo, Giovanni Morelli, Bonaccorso Pitti e Domenico Lenzi, Donato Velluti, Goro Dati, Francesco Datini, Lapo Niccolini, Bernardo Machiavelli*, ed. V. Branca (Milan, 1986), 549: ' [...] from this day I propose and decide something that I will observe from here on, that is that in perpetuity I will never again work on any solemn feast day and, as commanded by the holy Church, I should not visit my *botega*, nor go there to conduct any business, nor ask or command any one else to do such a thing for me if it is a question of profit or temporal gain [...]'

[78] Dati, *Libro Segreto*, 549: 'with this exception, that if any extremely necessary case emerges, for each time [that I break this pledge] I am bound to give 1 gold florin in in alms to God's poor'.

Goro rationalised the sin of failing to observe a solemn feast as having cost one gold florin. He used his *quaderno* to write a pledge that he thought he might break with a clause that told him what to do in that eventuality. It is an entry that recalls the foundation contracts of merchant partnerships that merchants copied into their *quaderni* with their clauses explaining the results of any breach of their conditions. In writing this entry in his *quaderno*, Goro contemplated his age and the time value of money, while asserting a distinction between the observance of sacred time and the mercantile virtue of industriousness, even if this was a distinction that he undermined in the same flourish of ink.

The ways in which merchants perceived time were shaped by the medium of their *quaderni*, the advice they read and the sermons they heard. Of course, in many senses they perceived time in the same way as other groups of society in the later Middle Ages. The liturgical calendar, the time of families and their generations, the revolving chronometer of the heavens, the prospect of a soul's stay in Purgatory, and the eternal time of divine justice were familiar markers of the experience of time across late medieval Italy. Nonetheless, these markers interacted with a merchant's cultural horizons in particular ways. Different scales of time were merged on the leaves of *quaderni*. It was possible to convert purgatorial to time on Earth by calculating with merchant *ragione.* Merchants wrote contracts and tariffs that described how they would use time, as if time were a merchant partnership or a set of textiles. A merchant's attempts to order or calculate time, and the instances where these attempts failed, gave them a distinctive awareness of the experience of time that was shaped by their profession.

Conclusion: Time and Sercambi's *Novella* of Daniello and Princivalli

The founding of a commercial partnership in Milan marks the beginning of Sercambi's 37th *novella*: 'si contrasse in Milano una compagnia'.[79] Daniello is sent to Viterbo with an account worth 1,000 florins in goods. Daniello trades to great effect, and 'sentendo [...] il gran guadango che a Viterbo si faceia', his masters 'più volte li scrissero che il conto mandasse a Milano'.[80] Although his trade is highly profitable, Daniello's personal spending has been extravagant, so he does not send his *quaderno* to Milan. Princivalli is sent from Milan to inspect Daniello's *quaderno* and to sign off his accounts. When Princivalli arrives on a Saturday, Daniello deceives him by opening 'una cassa' with 'molti fiorini contanti in gran quantita', and convincing him to wait until the next day before they review the Viterbo *quaderno*.[81] Daniello invites Princivalli to stay with him and, keeping him in an underground room, warns him that 'le notti ci sono più grandi che a Milano'.[82] Princivalli is tricked into thinking that a single night has passed, when in reality he has spent a week in Daniello's room. The following Sunday, Daniello insists they go to mass, and delays Princivalli to the point where he suggests that they look at the *quaderno* on Monday. Horrified by the thought of spending another interminable night in Viterbo, Princivalli returns to Milan: 'se io ci stesse un'altre note io morrei. E poi che non ti piace di fare oggi il conto, io me ne

[79] Giovanni Sercambi, *Il novelliere*, 22, ed. L. Rossi (3 vols, Rome, 1974), i, 37, p. 230: 'they formed a company by contract in Milan'.
[80] Sercambi, *Novelliere,* 37, i, p. 231: 'hearing [...] the considerable profits which were being made in Viterbo', 'wrote to him many times requesting that the account book be sent to Milan'.
[81] Sercambi, *Novelliere,* 37, i, 232: 'a coffer', 'many Florins, a large quantity of coins'.
[82] Sercambi, *Novelliere,* 37, i, 233: 'the nights are longer than they are in Milan'.

vo' andare e riferirò a' nostri maestri come la bottega è ben fornita et di molti contanti'.[83]

The knowing humour of this *novella* seems to have been an entertaining attempt to warn against negligence in merchant practice. The founding partners of the company fail to audit the accounts of their factor and are too readily distracted by a veneer of liquidity. The *novella's* criticism of Lombardy's credulous merchants implies praise for the rigour of Tuscan merchant practice. The local specificity of late medieval time-keeping, without standardised hours across northern Italian cities, lends a thin plausibility to the claim that nights in Milan were longer than they were in Tuscany.

More importantly, the tale of Daniello and Princivalli shows that the ways in which merchants perceived time were held to have been distinctive in late medieval Italy and that they could be exploited. The same concerns that time should be used industriously and that solemn feasts should be observed, which Goro Dati juggled and subverted in his *quaderno*, were also central elements of Sercambi's *novella*. The young factor Daniello usurped the control of time for his own ends and exploited the cultural horizons of Princivalli, an experienced merchant, to alter his perception of the passage of time. The observance of Sunday mass is contrasted with the time that ought to be devoted to business affairs but has been wasted. Attendance at mass appears to have the cynical motivation of distracting Princivalli from his audit. The tricks that merchants play with time in this *Novella* are reflections of the contemporary debate over how time should be marked and understood.

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[83] Sercambi, *Novelliere,* 37, i, 235: 'If I were to spend another night here I would die. As you do not wish to go over the accounts today, I want to leave and go to report to our masters that the *bottega* is well furnished with lots of specie'.

5. Charting Horizons

> Godi, Fiorenza, poi che se' sì grande
> che per mare e per terra batti l'ali,
> e per lo 'nferno tuo nome si spande![1]

As Dante reminded his readers with bitter praise, the growing reach and reputation of Tuscan merchants in late medieval Italy spanned not only seas and land, but even reached into the circles of *Inferno*. His use of *spande* invoked his earlier depiction of the quintessential and well-travelled symbol of Tuscan commerce, the gold florin. Florence was a city which: 'produce e spande il maladetto fiore / ch'ha disvïate le pecore e li agni, / però che fatto ha lupo del pastore.'[2] Here, Dante seems to have subverted a boast inscribed on a familiar Florentine landmark, the Bargello, depicting the city as full of riches, its power reaching across land, sea and all the globe.[3] That commercial and eschatological horizons were contiguous in this description, and that the topography of trade routes, of Florence and of the afterlife overlapped in Dante's verse would not have surprised a merchant reader of the canto in late medieval Italy.

This chapter will seek to gather evidence of a particularly mercantile way of imagining geographical horizons, characterised by an affinity between commercial and spiritual

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[1] Dante, *Inferno*, XXVI, ll. 1-3, p. 270: 'Rejoice, O Florence, since you are so great that over sea and land you beat your wings, and your name is spread through Hell!'
[2] *Paradiso*, IX, ll. 130-132, p. 102: 'Produces and scatters the accursed flower that has caused the sheep and the lambs to stray, because it has made a wolf of the shepherd'.
[3] C. S. Singleton, *Inferno Commentary* [1970] (Princeton, 1989), 448; J. Mac Cracken, 'The Dedication Inscription of the Palazzo del Podestà Dating from the Period of the First Democracy (1250-1260) Probably Composed by Brunetto Latini', *Rivista* d'Arte, 30 (1955), 185: The inscription read 'que mare, que terram, que totum possidet orbem', 'who rules the sea, the land, and, in fact, the whole world'.

landscapes. The imagined geographical horizons of late medieval merchants were drafted on the pages of their *quaderni*. The way in which they imagined and charted space was informed by the geometry and mathematics that a perfect merchant ought to have learned and ordered by ideas of measure and proportion. Merchant trade routes spanned both the markets of Mediterranean cabotage and sacred sites. The ways in which they imagined the geographical span of their investments, and the routes along which their traffic flowed, were also used to think about the landscapes of the afterlife. As we have seen, merchants sought to orient themselves in space and time when they imagined their horizons. The ways in which merchants in late medieval Italy imagined landscapes were the counterpart to their perceptions of time; both were integral and inseparable components of their cultural perspectives.

While late medieval routes have been studied in great depth from the perspective of economic history, their cultural significance has received comparatively little attention.[4] Merchants were identified with the trade routes from which they profited. Not only their fortunes but also their identities and outlooks could depend on their understanding of the places their trade and cabotage spanned. They had to be familiar with measures and commodities of different markets, with the latest prices set in those places and with the maritime, river, and road routes by which their goods were transported. Even a sedentary merchant who did not travel might survey the world from his writing desk, reading and dispatching commercial letters, auditing the *quaderni* kept by factors in different cities, peering at maps for the distances between ports, copying

[4] There are of course exceptions, notably: D. Wallace, *Europe, A Literary History, 1348-1418* (2 vols, Oxford, 2016); D. Wallace, *Premodern Places, Calais to Surinam, Chaucer to Aphra Behn* (Oxford, 2004).

poems whose stanzas encompassed geography and cosmography, or reading *novelle* structured around fictive journeys and portolan sailing guides.

The ways in which merchants imagined the geography of the world and the topography of the afterlife reacted with one another. On the one hand, the markers by which merchants could orient themselves on their journeys could also be holy sites or places from the biblical past. On the other hand, the eschatological topography of Dante's *Commedia* was fraught with the risks of physical travel, especially of the *pelago*, a voyage beyond the sight of land. It was in the perspective of these overlapping Earthly and spiritual horizons that Giordano da Pisa compared the Virgin Mary to a merchant who found profit in every venture and to a great ship carrying a considerable weight of valuable cargo with her into the heavens.[5] Such an elective affinity can also be seen in the merchants' understanding of journeys and risk, in which the commercial and spiritual overlapped. To mitigate risk, merchants insured their cargoes while simultaneously invoking divine protection and calling on saintly intercession when necessary. Merchants who thought about landscapes and journeys were surveying both commercial and spiritual horizons.

The *quaderno* that Neri di San Miniato gave his son Domenico will be the focus of this inquiry.[6] It is a source that contains in microcosm the range of material that merchants gathered when imagining their geographical horizons. Reading this *quaderno* alongside other sources that merchants drew on when imagining their geographical horizons will bring the geographical horizons of late medieval merchants into sharp relief.

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[5] Giordano da Pisa, *Avventuale Fiorentino 1304*, ed. S. Serventi (Turin 2006), 585.
[6] Yale, Beinecke, MS 1030, https://collections.library.yale.edu/catalog/2026466 (09/05/2023), consulted online.

Before turning to Neri Di San Miniato's *quaderno*, the historiography of merchant geography and of trade routes merits attention. The study of the ways in which merchants imagined their geographical horizons can be seen as lying between two different approaches; in the shadow of both.[7] Merchants in search of profit and the sources of commodities have been cast as the drivers of the expansion of geographical horizons and the 'discovery' of lands at the frontiers of late medieval Europe.[8] In this frame, the marine charts that mapped their trade routes have been cited as evidence of a newly precise way of representing reality.[9] At the same time, merchants have also been cast as procurers of exotic goods and the source of marvellous tales of distant lands. Accordingly, the traces of a vernacular merchant manual and the structure of a portolan sailing guide have been detected in Rustichello da Pisa's account of Marco Polo's travels.[10] While merchants in late medieval Italy imagined their geographical horizons in a distinctive way, it does not necessarily follow that they were the heralds of a modern empirical approach to describing space. If a few merchants did venture beyond familiar horizons, for example the Genoese brothers Ugolino and Vadino de Vivaldi, who never returned from their voyage west of the Mediterranean, and who may have inspired Dante's depiction of Ulysses, the majority could imagine their geographical horizons without having to travel at all.[11]

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[7] P. Biller, *The Measure of Multitude, Population in Medieval Thought* (Oxford, 2000), 4.
[8] J. R. S. Philips, *The Medieval Expansion of Europe* (Oxford, 1998), 98.
[9] M. Kempshall, 'Space, Time and the World', in I. Lazzarini, *The Later Middle Ages* (Oxford, 2021), 138.
[10] F. Borlandi, 'Alle origini del libro di Marco Polo', in A. Fanfani ed., *Studi in Onore Di Amintore Fanfani* (Milan, 1962), 108; E. Vicentini, 'Il Milione di Marco Polo come Portolano', *Italica,* 71:2 (1994), 145.
[11] A. E. Nordenskiöld, *Periplus An Essay on the Early History of Charts and Sailing directions, Tr. F.A. Bather* (Stockholm, 1897), 114; B. Nardi, *Dante e la cultura medievale* (Bari, 1949), 153.

The period after 1348 and the arrival of recurrent epidemics has been characterised by Benjamin Kedar as one in which 'the contraction of the spirit outstripped the contraction of opportunities', horizons of exchange narrowed, and the opportunistic outlook of the previous century faded.[12] The eclipse of heroic travelling merchants by 'sedentary merchants' who wrote to factors and kept their accounts has been seen as a sign of this retreat. Yet merchants who, perhaps wisely, delegated overseas travel to their factors still responded to the risks and volatility of markets in late medieval Italy in sophisticated ways. Norman Gras saw the figure of the 'sedentary merchant', who controlled his investments from his desk without travelling, as an innovation in business history that mitigated the risks of travel.[13] Surveying the world on parchment or paper made a particular kind of geographical knowledge essential to late medieval merchants. Francesco di Marco Datini, writing about his investments, promised to be 'like a mariner who, though he is much afraid, does not cease to sail'.[14] By approaching the culture of merchants in late medieval Italy from the perspective of how they imagined the geographical horizons, and how they thought about the risks of journeys, simplistic responses to the falling volumes of goods exchanged in the wake of recurrent epidemics may be challenged.

The language used to articulate the risks of travel could also express the particular eschatological risks that the souls of merchants faced. Emily Kelly and Cynthia Turner Camp, in their study of merchants calling on the protection of saints as intercessors, implicitly linked the practical dangers of travel and late medieval perceptions of the

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[12] B. Z. Kedar, *Merchants in Crisis, Genoese and Venetian Men of Affairs in the Fourteenth-Century Depression* (London, 1976), 132.
[13] N. S. B. Gras, *Business and Capitalism, An Introduction to Business History* (New York, 1939), 68, 78.
[14] I. Origo, *The Merchant of Prato* (London, 1957), 39.

pronounced spiritual occupational hazard entailed in being a merchant.[15] The overlap between the horizons of commerce and of merchant spirituality has been investigated from a different perspective by Michele Bacci, who has shown that late medieval maritime prayers served a dual purpose, providing travellers with a means of orienting themselves by recognising a section of the coastline while calling for divine help.[16] It is in this light that merchants who insured their cargoes wrote prayers in their *quaderni* that they would arrive safely. Datini in Prato oversaw his companies in Pisa, Florence, Genoa, Barcelona, Valenza, and Maiorca, and he also recorded a nine-day pilgrimage with the Bianchi from Florence to Arezzo, with the expenses incurred along the route, in a single *quaderno*.[17] This overlap of a merchant's spiritual and commercial horizons has tended to be underexplored in studies of Italian merchants and their trade routes in the late Middle Ages.

[15] E. Kelley and C. T. Camp, *Saints as Intercessors between the Wealthy and the Divine*, *Art and Hagiography among the Medieval Merchant Classes* (New York, 2019).
[16] M. Bacci, 'Portolano sacro santuario e immagini sacre lungo le rotte di navigazione del Mediterraneo tra tardo medioevo e prima età moderna', in E. Thunø and G. Wolf (eds.), *The Miraculous Image, In the Late Middle Ages and the Renaissance* (Rome, 2004), 225.
[17] J. P. Byrne, 'The Merchant as Penitent: Francesco di Marco and the Bianchi Movement of 1399', *Viator,* 20 (1989), 222; L. Mazzei, *Lettere di un notaro a un mercante del secolo XIV, con altre lettere e documenti,* ed. C. Guasti (Florence, 1880), xcix-cviii.

The Miniato del Sera *Quaderno*: 'Chi vedrà detto libro voglia vedere la bellezza del mondo'[18]

The quaderni of late medieval merchants at once documented travel and, in some cases, were travelling documents. The geographical information that merchants selected and gathered on their pages was not only practical, but it was part of the identity of being a merchant. Travel, real or imagined, was seen as a step towards a mercantile fortune and status. Goro Dati (1362-1435), a Florentine merchant who was involved in the city's silk guild and who traded in Valencia in Spain, saw a particular knowledge of the world as the essential foundation for prosperous merchants 'che vanno per lo mondo in loro giovinezza e guadagnano e acquistano pratica e virtù e costumi e tesoro'.[19] A successful merchant, whose horizons had already encompassed Mediterranean sailing routes and distant lands, might consider the best place to build their home.[20] All of these ways in which merchants in late medieval Italy charted their horizons can be found in microcosm in Yale Beinecke MS 1030, a *quaderno* owed by Neri di San Miniato and passed on to his son Domenico. The material form of this *quaderno* and its content, the incipit describing its purpose, the accounts it contains, its copy of Dati's *La Sfera*, its selections from Brunetto Latini's *Tresor,* and its portolan sailing guide will be examined in turn to reveal the frame in which merchants gathered the knowledge that would inform their geographical horizons.

[18] Yale, Beinecke, MS 1030, fo. 2r: 'Those who see this book should see the beauty of the world'.
[19] Goro Dati, *Istoria di Firenze* (Florence, 1735), 55: 'Who go out into the world in their youth and profit and gain experience and virtue and customs and treasure'.
[20] Yale, Beinecke, MS 1030, fo. 50r.

The Miniato del Sera *quaderno* has received relatively little scholarly attention. Dario del Puppo's survey of manuscripts of *La Sfera*, a vernacular poem of cosmography and geography attributed variously to Goro Dati, or to his brother the Dominican Leonardo Dati, singled out this codex as evidence of how such texts were copied by merchants and others of the 'mercantile ethos'.[21] Patrick Gautier Dalché has also read *La Sfera* as a work that is best seen as part of the cultural horizons of merchants and which was often copied into their books.[22] However, this codex has not been approached as a whole work at any great length, nor has it been set alongside the other sources that could inform a merchant's geographical horizons, from *novelle* to merchant manuals and marine charts.

Beinecke MS 1030 is a *quaderno* of paper quires sewn on to three leather straps and bound in limp vellum (Figure 5.1). The binding would have wrapped around the text to protect the edges of the leaves, and a metal buckle survives that would have fastened the *quaderno* shut. The front cover of this *quaderno* is titled 'A' in ink, and another ink 'A' has been written on the wrap-around edge of the binding. It measures 307mm by 229mm and contains 107 folios. It is a light and portable binding of a type and size that correspond to other merchant *quaderni*.

[21] D. del Puppo, 'Literary Imagination and Mercantile Pragmatism in Goro Dati's *Sfera*', in F. Alfie and A. Dini (eds), *"Acessus ad Auctores" Studies in Honor of Christopher Kleinhenz* (Arizona, 2011), 348.
[22] P. G. Dalché, 'Les cartes marines comme source de réflexion géographique au XVe siècle', in I. Baumgärtner, Nirit Ben-Aryeh Debby, Katrin Kogman-Appel (Eds.), *Maps and Travel in the Middle Ages and the Early Modern Period* (Berlin 2019), 179.

Figure 5.1 **Yale Beinecke MS 1030.**

The Miniato del Sera *quaderno* contains a loose leaf with two 16th-century poems and an incipit recording deaths and births in the family, as well as describing how the book was handed down between generations. A set of accounts kept by Pegolo di Iacopo da Firenze for the years 1423-1424 follows: 'Questo libro è di Pecholo de lo padre d'Iacopo da Firense, / nel quale iscriverè tutti et ceschuno debitore et creditore'. It also contains copies of vernacular sermons, Dati's *La Sfera* with illustrations, selections from an Italian translation of Latini's *Tresor*, a treatise on astrology, 'L'Arte di Ptolomia', and a portolan sailing guide.[23] The *Sfera, Tresor,* astrology treatise and portolan seem have been written in the same hand, and were likely to have been copied in the 1420s by Neri di Miniato del Sera, who may have been the kind of amateur scribe categorised by Vittore Branca as 'copisti per passione'.[24]

Medieval pagination running down from 40 to 32, that is now upside-down in the bottom left-hand corners of the verso folios from fo. 100v to fo. 108v, suggest that codex was thought of as a blank bound volume, and show how it was repurposed by a later author. Folios 43 and 45 are missing, interrupting the verses of *La Sfera*, perhaps an indication of its frequent use. The current final folio, fo. 109v, with the medieval pagination number 15 in its bottom left-hand corner, could suggest that a further quire of 16 folios has been lost between this leaf and fo. 108v.[25] The material form and content of this *quaderno* make it an invaluable source through which the construction and specificity of the geographical horizons of merchants can be studied.

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[23] Beinecke, MS 1030, fo. 2r.
[24] V. Branca 'Copisti per passione', in *Studi e problemi di critica testuale* (Bologna 1961), 69-83; according to the catalogue, the now lost ASFi, Convoni-Girolami, 585 contained some of Neri di Miniato's private papers dating from 1437.
[25] An analysis of the sewing structure of the manuscript will be necessary to resolve this question.

> Richordo come morì Neri d(e) Miniato de S(er)a ’n M468 d’aghosto / la vilja d(e) Santo Lorenzo, e laciò questo libro a Domenicho / d(e) Neri d(e) Miniato de S(er)a, suo figliuolo, perché si diletava / de navichare e voleva sapere più chosse dell mondo, e cierchò / asiai paesi d(e) tere di mare e vide degnie chose p(er) lo mondo /. E chosì vole che chi vedrà detto libro voglja vedere l(e) beleze dell mo[n]do/ p(er) aqua, e dive[n]terà praticho e buono merchata[n]te de tute le mercha/tantia che vole, Toscha[n] di Leva[n]te o d(e) Pone[n]tte, e sarà p(er)sona praticha / se sieghirà detto lib[r]o. A volere sapere e’ buoni paesj da merchatanti / si seghirà questi mari, che sono da fare uomini i(n)dustri e navichati,/ e d(i) buona merchatan[n]tia, e averà buona fine d’esie. M480 // marzo.[26]

A note on the second folio of the Miniato del Sera *quaderno* bears eloquent witness to the perception that an interest in travelling, in knowledge of distant places, and in the beauty of the world was the making of a good and industrious merchant. A merchant should know these things so they could profit from international trade, but they should also delight in them, selecting and recording cosmographical and geographical knowledge to be passed down to their children. Serving more than just a practical purpose, a particular knowledge of geography was part of an identity as a good merchant. This note also reveals the transitory nature of the merchant’s status. Travel,

[26] Beinecke MS 1030, fo. 2r: ‘This is Pegolo son of Iacopo di Firenze’s book in which he will write one and all debtors and creditors’, ‘I remember how Neri di Miniato del Sera died in August 1468 on the vigil of Saint Lawrence and left this book to Domenico di Neri di Miniato del Sera, his son, because he delighted in sailing and wanted to know more things about the world and to find many countries by land and sea and to see worthy things across the world; and in this way he wanted that those who see this book should see the beauty of the world by water and become practical and good merchants of all the goods that are found in Tuscany or to the East or to the West, and they will be a practical person if they follow this book in seeking knowledge and good lands of merchants, and if they follow these seas which will make men industrious and good sailors and good merchants, and a certain good end will be theirs. March 1480’.

or imagining geographical horizons with texts, was part of a merchant's training: in this case, it seems, that of Neri's son Domenico or any other reader of the *quaderno*. Cotrugli, in his merchant manual, recommended to his readers that at the end of a successful career, after so many 'orlogii, disegni, vigilie, trafichi, scrictitare, contracti, navegare per mare et per terra', a successful merchant should rest.[27] More than this, the good end to which the note referred must also be a reference to the horizon of eschatological landscapes that would have been contiguous with the horizons of worldly geography that a merchant could construct from these texts.

The Miniato del Sera *quaderno*'s focus on geography is shared by Pegolotti's famous merchant manual. Pegolotti began his guide to merchant practice by invoking the divine, and drawing out the conversion of measures as fundamental to understanding the different parts of the world:

> In Nomine Domini, Amen. Questo libro è chiamato, libro di divisamenti di paesi e di misure di mercantantie, e d'altre cose bisognevoli di sapere a mercatanti di diverse parti del mondo, e di sapere che usano le mercatantie e cambi, e come rispondono le mercatantie da uno paese a un altro e da una terra a un'altra [...][28]

In both these works, it is knowledge of the world that is essential to the making of a merchant. The range of Pegolotti's manual spanned the reach of contemporary trade

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[27] Benedetto Cotrugli, *Libro de l'arte de la mercatura*, ed. V. Ribaudo (Venice, 2016), 187: 'Successes, designs, vigils, transactions, writings, contracts, travels by land and sea'.
[28] Francesco Pegolotti, *La pratica della mercatura,* ed. A. Evans, (Harvard, 1936), 3: 'In the name of God, Amen. This book is called the book of the explaination of lands and of measures of goods, and of other things which merchants ought to know about different parts of the world, and of knowing what goods and exchanges are used, and how the goods of one country correspond to the goods of another land [...]'

networks from Tana on the Black Sea, through Constantinople, to the Mediterranean, Alexandria, Genoa, Pisa, Florence and Venice, Sicily, Naples and Tunisia, as far as London and Bruges to the north; and it is mirrored by the texts selected by Neri di San Miniato.[29] Both these works seem to have been assembled with the aim of teaching a new generation of merchants. To this end, Pegolotti's manual and the Beinecke *quaderno* could have been used to imagine journeys and landscapes to which their readers need not necessarily have travelled in person.

The differences between the geographical horizons of the Miniato del Sera *quaderno* and Pegolotti's *Pratica* reveal the extent to which their detail was dependent on the scale of the merchant in question and their own interests. The start of Pegolotti's manual offered a rudimentary vocabulary translated into local languages of late medieval Italian trade routes. For example, Pegolotti listed the different terms used for markets in local languages in his guide: 'Mercato in Toscana, e piazza in più lingue. Bazarra e raba in genovesco. Fondaco in più lingue. Fonda in Cipri. Alla in fiammingo. Sugo in sarcinesco. Fiera in Toscana e in più linguaggi. Panichiero in grechesco.'[30] Then Pegolotti's focus shifted to the units of measure used in each place and the conversions between these units. His explanation of these units began in the Black Sea, moving clockwise through Mediterranean ports before turning to northern Europe. Finally, Pegolotti described how merchants could judge the quality of particular commodities and avoid counterfeits.[31] By contrast, the texts collected by Neri di San Miniato devote far more attention to sailing in these seas, and less to weights and currencies. Whereas

[29] Pegolotti, *Pratica,* 23, 32, 69, 73, 108, 177, 237, 254.
[30] Pegolotti, *Pratica,* 17: '*Mercato* in Tuscany and *piazza* in many languages. *Bazarra* and *raba* in Genoese. *Fondaco* in many languages. *Fonda* in Cyprus. *Alla* in Flanders. *Sugo* in Arabic. *Fiera* in Tuscany and in many langauges. *Panichiero* in Greek'.
[31] Pegolotti, *Pratica,* 360.

the geographical horizons bound together in the Miniato del Sera *quaderno* were tailored to a smaller scale of Tuscan merchant, Pegolotti's manual was originally written for use by factors of the Bardi company, which, before its collapse, was estimated to have been at least half as large again as the Peruzzi company, which had a staff of 888 in 1336.[32] An identifiably mercantile approach to geography did not entail uniform geographical horizons at different scales of commercial activity.

Far from being copied from the start as a compendium of geographical texts, the Miniato del Sera *quaderno* was a working merchant book, that was adapted to this task over time. The note at the start of the Miniato del Sera *quaderno* is followed by a set of accounts of Pagolo di Iacopo da Firenze. It is possible that this is the same Pagolo di Iacopo who, aged 37, was recorded as a 'rigattiere' and 'linauolo' in the Florentine Catasto of 1427, who dealt in secondhand clothes and whose total estate was reckoned to be worth 2,045 florins.[33] The accounts were a record of his 'debitori e creditori', for the years 1423 and 1424. Their geographical range seems firmly Tuscan and with a focus on the Valdarno Superiore: the accounts name counterparties from San Giovanni and Arezzo. It is possible that he was employed to collect revenues owed to the city of Florence. The largest transaction recorded in these accounts was a payment of 1,726 florins to the commune of Florence, which also paid him a monthly salary of 36 lire at the time.[34] The labelling of the binding of this *quaderno* as 'A' would have been in

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[32] E. Hunt, *The Medieval Super-Companies: A Study of the Peruzzi Company of Florence*, (Cambridge, 1994), 39.
F. C. Lane and R. C. Mueller, *Money and Banking in Medieval and Renaissance Venice, Coins and Moneys of Account* (2 vols, London, 1985), i, p. 71.
[33] *Online Catasto of 1427*. Version 1.3. Eds. D. Herlihy, C. Klapisch-Zuber, R. Burr Litchfield and A.Molho. (Brown University, Providence, R.I., 2002); http://cds.library.brown.edu/projects/catasto/ (09/05/2023): 'second hand cloes dealer', 'wool merchant'.
[34] Beinecke, MS 1030, fos. 3v, 4r.

keeping with the practice of ordering different books of accounts that could be cross-referenced with each other alphabetically. While Pagolo di Iacopo da Firenze did not copy the other texts in this *quaderno*, his book of accounts seems to have been repurposed by Di San Miniato to contain them. This not only reveals the versatility of *quaderni* as a medium that might be used to track a merchant's investments and let them imagine distant places, but it is also indicative of the relatively small scale and limited range of activity that this particular *quaderno* may be associated with. Yet it is evident that even a merchant whose investments appear to have been concentrated on the interior of Tuscany could be interested in charting the shores of the Mediterranean and the Black Sea.

Copying Dati's *La Sfera*: 'Figurar la terra e 'l mare e' venti'[35]

In *La Sfera,* Dati warned that neither for avarice nor for 'marviglia' should anyone 'passar più oltre' the western limit of the Mediterranean.[36] Of course, Dati would have known that Atlantic commerce flourished in his time. The earliest documented Genoese galleys had sailed to and from England, beyond the Pillars of Hercules in 1277,[37] and the first regular Venetian convoys sailed to England on their way to Flanders from 1315.[38] He seems instead to have invoked a different sense of geography here, one invoking myths of the lost Vivaldi brothers' expedition,[39] and one that made a similar connection between eloquence, exploration, greed and eschatological risk that Dante had made in his depiction of Ulysses's shipwreck in his *Inferno*.[40] The horizons recorded in the copy of *La Sfera* in the Miniato del Sera *quaderno* were at once geographical and spiritual, real and imaginary. They were copied out of practical interest and for curiosity; a desire for profit and a desire to know more about marvels. It is a rich example of how merchants in late medieval Italy assembled their geographical horizons. *La Sfera* was an extremely popular work in late medieval Italy and survives in many manuscripts.[41] Starting with the divine creation, cosmography and astrology, it described the elements, Hell, weather, mountains, seas, tides, horizons, day and night, the seasons, the humours, the soul, and the geography of the world as far

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[35] Dati, *La Sfera,* eds. G. Fiovvani, M. Tolosani da Colle (Rome, 1863), 13.
[36] Dati, *Sfera,* 17: 'wonder', 'overstep'.
[37] M. Doehaerd, 'Les galeres génoises dans la manche et la mer du nord à la fin du xii siècle et au début du xiv', ASI, 97/4 (1939), 5-76; R. S. Lopez, 'Majorcans and Genoese on the North Sea Route in the Thirteenth Century', *Revue Belge de philologie et d'histoire,* 29/4 (1951), 1163.
[38] D. Stöckly, *Le système de l'incanto des galées du marché à Venise* (Leiden, 1995), 2.
[39] B. Nardi, *Dante e la Cultura Medievale* (Bari, 1949), p. 153; R. S. Lopez, Studi sull'economia Genovese nel medio evo (Turin 1936), 6.
[40] Dante, *Inferno*, XXVI, ll. 89-142, pp. 402-404.
[41] L. Bertolini, 'Censimento dei manoscritti della *Sfera* del Dati', *Annali della Scuola Normale Superiore di Pisa Classe di Lettere e Filosofia* 12/2 (Pisa, 1982), 665.

as Tana on the Black Sea, in vernacular verses. It would have been read in the context of the landscapes sketched by other late medieval poems, notably Dante's *Commedia* and Fazio degli Uberti's *Dittamondo*. It emerged from, and was well adapted to, merchant literacy. The verses of *La Sfera* drew no sharp boundaries between the divine ordering of the world, the operation of divine will through the influence of the planets, the landscape of *Inferno,* the quality of souls, and the coastlines that were plied by merchant traffic.

The verses of *La Sfera* cannot be studied in isolation from the images that accompanied them. It was routinely illustrated with maps and diagrams that could allow merchants to chart their horizons while reading the poem. These illustrations seem to have been consistent across different surviving examples of *La Sfera*, although they varied in richness. The coastlines that are depicted in copies of *La Sfera* have received close attention since Adolf Erik Nordenskiöld proposed in the nineteenth century that they may be seen as echoes of now lost illustrations of coastlines, which would have aided late medieval navigation alongside portolan sailing guides and marine charts.[42] Federico Botana has examined them as evidence for how the basics of geography and seafaring were taught to Florentine merchants.[43] The interaction of text, image and codex can be studied closely through the example of the Miniato del Sera *quaderno*.

> Quel cerchio del confine è l'orrizonte [...][44]

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[42] A. E. Nordenskiöld, *Periplus: An Essay on the Early History of Charts and Sailing directions,* Tr. F.A. Bather (Stockholm, 1897), 45.
[43] F. Botana, *Learning through images in the Italian Renaissance: Illustrated Manuscripts and Education in Quattrocento Florence* (Cambridge, 2020), 18.
[44] Beinecke, MS 1030, fo. 33v; Dati, *Sfera,* 10: 'That bounding circle is the horizon.'

La Sfera's definition of a horizon and its illustration shows how a grounding in commercial mathematics would have lent Dati's poem and its description of cosmography a particular resonance (Figure 5.2). This verse asks its reader to imagine standing on the top of a mountain, looking around them in every direction. From this vantage point, the sky will seem curved like the arch of a bridge balanced on the earth. The circle of which the curve is a part is the horizon. It is a description that uses the same technique of describing geometry in terms of familiar architectural features as is found in vernacular mathematical treatises. An illustration of the horizon and the solar terminator dividing night and day is given on the next folio, which describes the changing length of days across the seasons.[45] Federico Botana has drawn attention to the similarity between the diagrams in manuscripts of *La Sfera* and in mathematical treatises.[46] The fifteenth-century manuscript Canon. Ital. 188, preserved in the Bodleian Library, is just such a text, that contains a series of exercises in the geometry of triangles within semicircles.[47] To understand Dati's cosmography, readers were invited to perceive the world from a different perspective by imagining it in the terms of a problem of geometry. More than merely employing a similar technique of displaying information to works of commercial mathematics, *La Sfera* can be seen as evidence of how merchants could picture the world and their place in it through geometry.

[45] Beinecke, MS 1030, fo. 33v; Dati, *Sfera,* 16.
[46] Botana, *Images,* 208.
[47] Oxford, Bodleian, MS Canon. Ital. 188, fos. 66r-68v.

Figure 5.2 **The horizon.**

To understand the curvature of the Earth through geometry did not exclude complementary explanations from other sources. One of the chapters, selected and copied on a later folio from an Italian vernacular version of Latini's encyclopaedic text the *Tresor*, returns to this image of a horizon and describes an imagined view from a high mountain as part of the reason why the world is known to be round.[48] In the version copied in this *quaderno*, in an addition to Latini's discussion of the necessity of the Earth's roundness in the movement of the divine spheres, the world is shown to be round because this shape can accommodate more people and more languages, as God intended.[49] A horizon defined by geometry and the practical problem of making enough space for the variety of peoples and languages could be glossed by spiritual justifications.

La Sfera was at once a practical and a spiritual text. Its verses set out the practical consequences of divinely ordered cosmography. It begins with a prayer 'Al Padre, al Figlio allo Spirito Santo'.[50] It then describes the creation of the heavens and the Earth. The heavens, in particular, represent divine 'infinito amore', and within the great circumference of the firmament, each of the numberless stars has its own particular influence on man on Earth.[51] This seems to be the same 'amore' that moves Dante the pilgrim, the sun and the other stars at the end of *Paradiso*. The signs of the zodiac and the influence of the sun and the planets on men follow. The circle of the zodiac revolves every month in 12 signs, six in each hemisphere, represented by men, plants creatures,

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[48] Beinecke, MS 1030, fos. 62v, 63r; Brunetto Latini, *Li Livres Dou Tresor*, eds. P. G. Beltrami, P. Squillacioti, P. Torri, S. Vatteroni (Turin 2007), I:104, pp. 136-141; *Il Tesoro di Brunetto Latini volgarizzato*, ed. Chabialle, II:35 (4 vols, Bologna, 1878), i, 309-315.
[49] Beinecke, MS 1030, fo. 62v.
[50] Beinecke, MS 1030, fo. 25r; Dati, *Sfera,* 1: 'To the Father, to the Son, to the Holy Spirit'.
[51] Beinecke MS 1030, fos. 25r-26r; Dati, *Sfera*, 5.

and ships.[52] The sun measures time, and shines on the land, the air and sea, and the virtuous light of God allows all vision.[53] The book depicted a cosmography of sacred order.

According to *La Sfera's* astrology, the planet Mercury was especially auspicious to merchants: 'Mercurio fa l'uom e(se)r ben parlannte / e cho' industria di merchattanttia'.[54] Cotrugli's treatise on navigation, a work that also devotes attention to both cosmography and geography, describes Mercury's effect on man's eloquence in similar terms: 'Mercurio [...] fa li homini belli, parlatori, mercanti, procuratori, iudici, advocati et tractatori d'ogni cosa.'[55] This is same industriousness that the texts in this *quaderno* were gathered to inspire. Where *La Sfera* had associated Venus with gold and silk, which could incline men to vanity and unchecked desire, Mercury's star was silver, perhaps because, unlike gold, it was a metal had to be burnished for its virtue to shine. For a merchant copyist or reader of *La Sfera*, imagining the heavenly spheres and considering their influence was also a recognition that their trade always took place within the frame of divine will.

In the verse of *La Sfera,* no sharp distinctions were drawn between the horizons of eschatology and of commerce, of biblical history and of the classical past. The whole poem was ranged between two eschatological extremes. The desire to ascend to the

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[52] Dati, *Sfera*, 5.
[53] Dati, *Sfera*, 6.
[54] Yale, Beinecke MS 1030, fo. 28v; Dati, *Sfera*, 7: 'Mercury makes a man a good speaker with the industriousness of commerce'.
[55] Cotrugli, *De Navigazione,* ed. P. Falchetta, 'Il trattato *De Navigatione* di Benedetto Cotrugli, 1464-1465, edizione comentata del MS Schoenberg 473 con il testo del MS 557 di Yale', *Studi Veneziani*, 57 (2009), 172: 'Mercury makes men beautiful speakers, merchants, representatives, judges, advocates and dealmakers in all things'.

beautiful and noble stars of the heavens is announced at the start of the poem; 'l'alma genttile d'amor tutta si acende, / disiando potter salire a quelle / nobili criatture e chiare stelle'.[56] From the infinite outermost sphere of the firmament the stanzas descend through the Earth at the centre of all the heavenly spheres down to *Inferno,* the eternal home of the damned, with the fallen angels cast out to heaven; 'Niun'alttra chossa l'è dentro o di sotto, / Se non l'I(n)ferno, luogo di danatti'.[57] It is here that souls must redeem the balance of their sin, paying as a merchant would to balance their accounts: 'fanno pagare all'anime lo schotto, Ch'hanno volute morir ne'peccati'.[58] Readers are reminded to fix their gaze on the heavens: 'Perchè nel Mondo niuna cosa dura. E sopra tutte queste cose in celo / Volando andrà con amoroso zelo'.[59]

The landmarks of the biblical past anchor the geography of *La Sfera's* verses. Having described the world as a T-O Map, one divided between Europe, Asia and Africa, the poem located the garden of Eden in Asia, the first part of the world inhabited by man.[60] 'Monti Ermini', Mount Ararat, is marked out as the resting place of the Ark after the flood (Figure 5.3). Egypt has the title of the land 'd'antichi padri e di Santi Romiti'.[61] Mount Sinai, where divine law was handed down and Saint Catherine was buried, is a sacred site named in the poem along with the Holy Land, the Holy Sepulchre and Mount

[56] Beinecke, MS 1030, fo. 25v; Dati, *Sfera*, 5: 'The gentle soul of love sparks all things, desiring to be able to climb to those noble creatures and bright stars'.
[57] Beinecke, MS 1030, fo. 32r; Dati, *Sfera*, 9: 'There is nothing else within or below but Hell the place of the damned'.
[58] Beinecke. MS 1030, fo. 32r; Dati, *Sfera*, 9: They make the soul pay its balance, for they wished to die in sin'.
[59] Beinecke, MS 1030, fo. 36v; Dati, *Sfera*, 12: 'Because in the world nothing lasts. And above all these things the soul will go flying with zealous love to Heaven'.
[60] Beinecke, MS 1030, fo. 39r; Dati, *Sfera*, 14.
[61] Beinecke MS 1030, fo. 41r; Dati, *Sfera*, 15: 'The Church Fathers and Hermit Saints'.

Carmel.[62] Holy places are just as prominent in *La Sfera* as the great merchant ports of Alexandria and Famagosta.[63]

[62] Dati, *Sfera*, 18.
[63] Dati, *Sfera*, 18, 19.

Figure 5.3 **The Holy Land.**

In the illustration showing this horizon of the Holy Land in the Miniato del Sera *quaderno*, Noah's Ark lies perched on the mountaintop, above the rivers Euphrates and Tigris. Text is written over the uncharted paper of India and Persia, with the Indian Sea flowing over the fore edge of the folio (to the right, above) and the Mediterranean bounding its bottom edge (at the bottom, above). Nineveh, Baghdad, Babylon, and Damascus lie downstream, and the sweep of the river and sea is crowded with holy places: Mount Sinai with the monastery of St Catherine, the river Jordan, Judea. Even Cairo and Mecca are depicted on the margin of this view. While *La Sfera* praised Damascus as a city known across the world as 'mercatantesca e di gran nobilitade', to a reader of this *quaderno,* the present wealth of these cities and their place on the coasts that were plied by the traffic of Mediterranean trade could not have been seen without, at the same time, recognising the topography of the biblical past.[64] The hagiography of the Pisan merchant Saint Ranieri, who sailed to the Holy Land in the 12th-century in search of profit but who abandoned trade to become a pilgrim there before returning to Pisa, is an example of how travel to the Holy land could bring great material and spiritual rewards for merchants.[65] A merchant imagining the horizons of his investments by reading this *quaderno* could at the same time imagine travel to holy places and consider the eschatological horizon of their soul's fate.

The passing of time in the landscapes charted in *La Sfera*'s verses was marked by ruins. It was a poem in which the past and geography were united by the same horizon. To a merchant reader of this *quaderno,* imagined travel would also have been an occasion

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[64] Dati, *Sfera*, 18: 'a merchant city of great nobility'.
[65] Fr. Benincasa, *Vita Raynerius, Confessor Pisis in Hetruria, Auctore Fr. Benincasa, coævo & familiari, Ecclesiæ S. Mariæ Pisis Canonico*, in *Acta Sanctorum Junii* (7 vols, Paris, 1867), iv, pp. 347-381: '[...] partes ad transmarinas, mercandi lucrique faciendi causa [...]', '[...]travelling overseas for the purpose of commerce and making profit [...]'.

for learning moral tales and classical history. The ruined tower of Babel is placed on the shores of India and explained as an illustration of the dangers of pride (Figure 5.4). A passage of Dante's *De vulgare eloquentia* would have offered a merchant reader an explanation of why a market was a 'mercato' in Tuscan and Souk in Arabic, since business, of necessity, had to be carried out it many different languages after the Tower of Babel's builders were scattered across the world.[66] Here, Babel is depicted in a way that is reminiscent of the towers that illustrated problems of geometry in late medieval mathematical treatises, only cut short and fractured. The poem promises that some reminders of the city of Carthage can be seen near the trading port of Bizerte on the cost of North Africa: 'P(er) fama, quivi presso fu Charrtagine / La grande; e se ne vede alchuna i(m)magine.'[67] As it is drawn in this *quaderno*, Troy burns still in the same red ink that marks it as a harbour between Ephesus and Edremit (Figure 5.5).

[66] Dante, *De Vulgare Eloquentia*, I:VI, p. 1170: 'Quoniam permultis ac diversis ydiomatibus negotium exercitatur humanum [...]', 'Since human business is now conducted in so many different idioms [...]'.
[67] Beinecke, MS 1030, fo. 44r; Dati, *Sfera,* 17: 'It is reputed that near here there was Carthage the Great; and one sees a few traces of it'.

Figure 5.4 **The Tower of Babel.**

Figure 5.5 **Troy.**

The horizon of the classical past overlapped with the horizons of Mediterranean trade. For *La Sfera's* readers and copyists, even before Cyriaco d'Ancona's investigation of classical epigraphy, knowledge of the physical imprint left by the past seems to have been valuable erudition as an identifier of a good and well-read merchant. The ruins in the text and images of *La Sfera* reveal that to chart geographical horizons was also to think about specific pasts. Babel and Troy were both examples that warned against taking disproportionate pride in Earthly things and against refusing to accept the transient nature of material wealth or worldly *fama*. These would have been resonant warnings for merchants who, because of their profession, were thought to have been especially susceptible to an excessive focus on the material world.

La *Sfera* contains many features of portolan sailing guides, such as Da Uzzano's guide, written in the same hand at the end of this *quaderno*.[68] Its description of the Mediterranean moved along the coast from Gibraltar to Tana on the Black Sea. Portolan guides described the perilous approaches to ports and the dangers and the perils of rocks and shallows. As *La Sfera* warned: 'entrar de'porti / V'è bisogno pratica e grand'arte' and 'scoli son molti per lo mar coperti'.[69] However, this general advice presented only the principle behind a portolan guide and not the detail that a mariner or navigator would have required. As well as describing the coastlines and ports, portolan sailing guides contained directions and distances for *pelaghi*, open-sea crossings beyond the sight of land. From Tunis to Sardinia or Sicily, a geometrical triangle worthy of a

[68] Giovanni da Uzzano, *Compasso*, in G. F. Pagnini ed. *Della decima e di varie altre gravezze imposte dal comune di Firenze: della moneta della mercatura de' Fiorentini fino al secolo XVI* (4 vols, Lucca, 1761), iv, 199-278; Beinecke, MS 1030, fos. 81v-108r.
[69] Dati, *Sfera,* 13: 'Making port requires great skill and experience', 'there are many rocks covered by the sea'.

problem from a *libro d'abaco*, the open-sea crossing is 200 miles.[70] Again, here it seems more akin to a puzzle for a merchant reader to engage in than a precise distance to be sailed on a given bearing.

La Sfera also resonated with late medieval marine charts. It invoked these charts as part of the equipment expected of both merchants and pirates at sea: 'E cholla chartta, dove son segnatti / e' ventti e' portti e tutta la marina, / Vanno per mare merchatanti e piratti, / Que' per guadagno e questi pe(r) rapina'.[71] The closeness of merchants and pirates, profit and theft, was perhaps reflected in Dati's sense of the difficulty, at times, of distinguishing between the two. The crossings between Tunis and Sardinia or Sicily are traced in red ink on the illustration that accompanies these verses (Figure 5.6).[72] The names of ports are written in the same red ink with which larger harbours were marked on late medieval marine charts. The label 'Sardigna' is written and oriented from the perspective of looking out towards North Africa from its southern tip, inviting a reader to rotate the map, just as maritime charts were made to be turned when used. To navigate *La Sfera*'s measured verses and to imagine geographical horizons, a reader had to orient the *quaderno* to read names of distant harbours, turning its leaves to move along its coastlines.

[70] Beinecke, MS 1030, fo. 44r; Dati, *Sfera,* 17.
[71] Beinecke, MS 1030, fo. 37r; Dati, *Sfera,* 13: 'And with the chart, where are marked the winds and the ports and all the marine, merchants and pirates go to sea, these for profit and those for plunder'.
[72] Beinecke, MS 1030, fo. 44r.

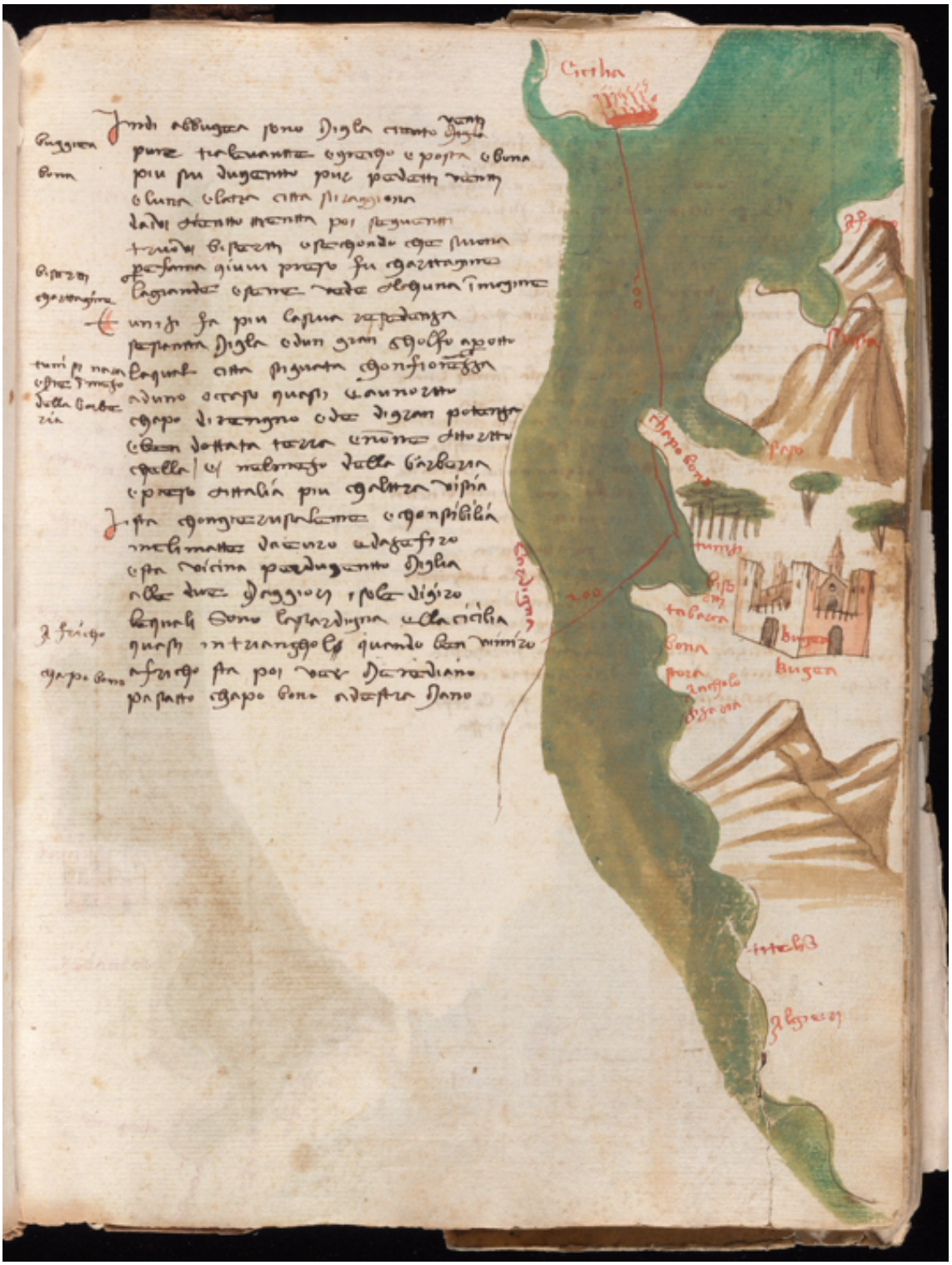

Figure 5.6 **Sea crossings between Tunis, Sardinia, and Sicily.**

It is through this resonance with the paperwork, portolans and marine charts, which were essential tools of travel, that *La Sfera* invited its readers to imagine journeys in the world that it charted and to navigate its verses. Its structure, toponyms, measurements, and illustrations were shaped by the documents of late medieval maritime travel and, more than this, it offered its readers a description of how to navigate. At the start of the poem, the pole star is highlighted as a fixed point of reference by which sailors and readers could orient themselves: 'la Polla in su che il polo gira / con quelle sette e due, che vanno i(n)torno, / La qual pe[r] niscistà molto si mira / Da'naviganti quando manga il g[i]orno'.[73] The poem aims to 'figurar la terra e'l mare e' venti'.[74] A basic primer in the eight winds or sailing directions is a necessary first step to this 'figurar', or imagining of the world (Figure 5.7).

[73] Beinecke, MS 1030, fo. 26r; Dati, *La Sfera,* 5: 'The star above around which the pole rotates with those seven and two [Ursa Major] that surround it, which of necessity many make their aiming point, such as sailors when the day is gone'.
[74] Dati, *Sfera,* 13: 'To figure the land and the sea and the winds'.

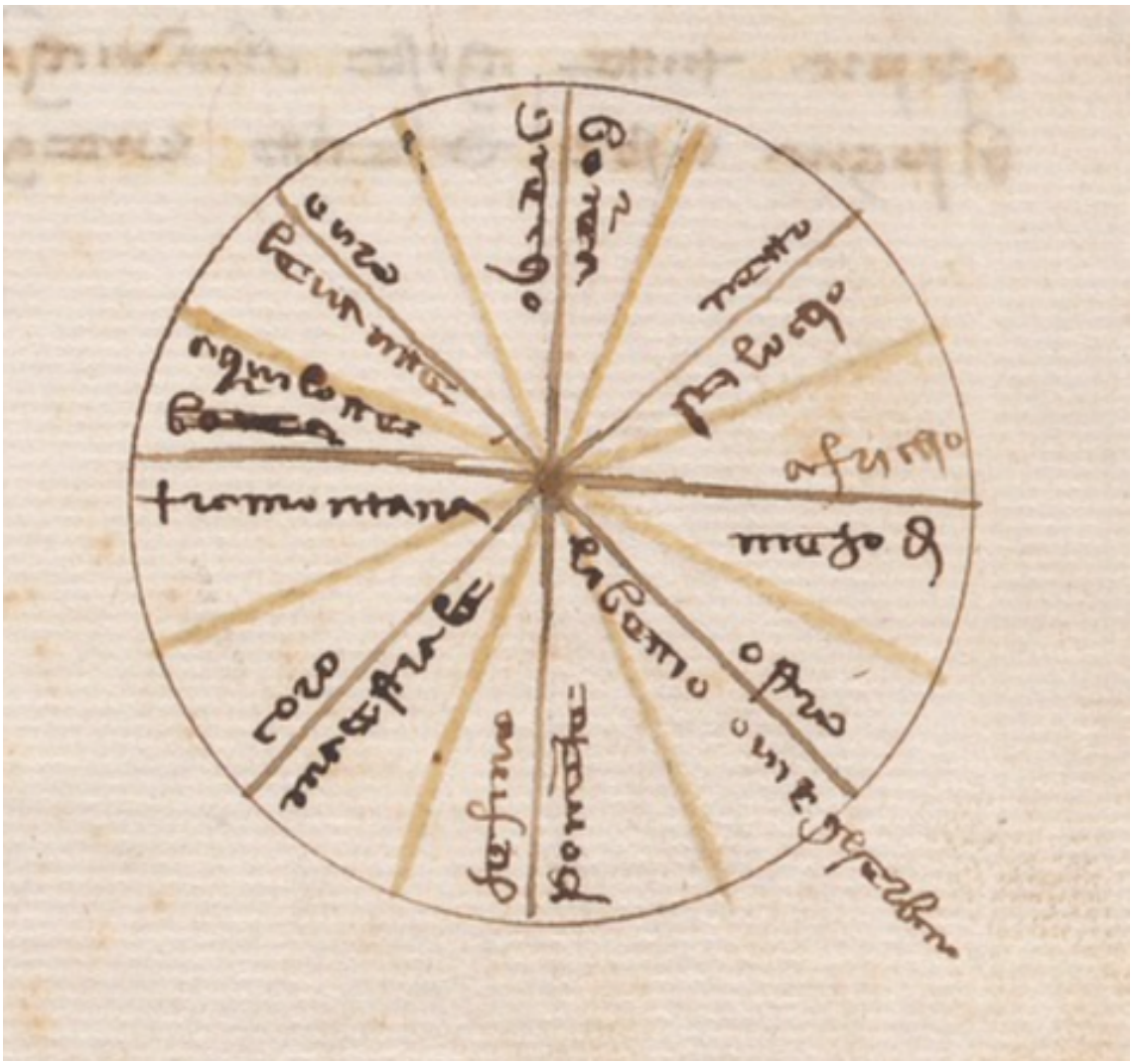

Figure 5.7 **The wind compass.**

The guide tells readers to tack when the wind is unfavourable, 'per non disavanzar della lor via'.[75] Readers are instructed to use the 'calamita', or magnetic compass, and the 'oriolo', a time-keeping device, probably an hour glass, to track direction and time spent on a particular course when travelling on a *pelago* out of sight of land.[76] Readers are then invited to use these directions, as if they were looking at a marine chart, to imagine *pelaghi* and other journeys: 'A maestral vèr tramontana a quarta, / Segondo che si vede in su la chartta.'[77]

La Sfera also acknowledged the limits to measurement. Divine love defies all measurement and is 'sempiterno', and 'altissimo e profondo'.[78] The heavenly spheres are presented in this same way, as eternal and unquantifiable: 'Perfetta più che algunna alttra figura / è lla figura isperica, la quale / Non ha principio o fine in sua misura / Questa è similitudine etternalee'.[79] Yet astrologers can still study the movements of the spheres through their proportional relationships to each other and by numerical measurement; 'misur' sanza bugia'.[80] *Inferno* is eternal, and yet the poem specifies that its diameter is 7,000 miles and its circumference, a necessity of geometry and the couplet, is 21,000 miles: 'suo diametro è sette mila miglia / E'l cerchio ventidue miglaia si piglia'.[81]

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[75] Beinecke, MS 1030, fo. 38r; Dati, *Sfera,* 13: 'So as not to drift from their course'.
[76] Beinecke, MS 1030, fo. 37v; Dati, *Sfera,* 13.
[77] Beinecke, MS 1030, fo. 47r; Dati, *Sfera,*19: 'To north by northwest according to that which one sees on the chart'.
[78] Beinecke, MS 1030, fo. 25v; Dati, *Sfera,* 5: 'Sempiternal', 'highest and deepest'.
[79] Beinecke, MS 1030, fo. 27v; Dati, *Sfera,* 6: 'The sphere is more perfect than any other figure, it has no beginning or end in its measure; this is eternal similitude'.
[80] Beinecke, MS 1030, fo. 26v; Dati, *Sfera,* 6: 'To measure without lying'.
[81] Dati, *Sfera,* 9; Beinecke MS 1030, fo. 32r: 'Its diameter is 7,000 miles and its circle grasps 21,000 miles'.

The terrestrial map charted in La Sfera is bounded by Gibraltar and Tana, as well as by the edges of the codex on which it was copied. While the Strait of Gibraltar is measured at 16 miles wide, *La Sfera* warned that neither for avarice nor for 'marviglia' should anyone 'passar più oltre' its western limit.[82] In the San Miniato del Sera *quaderno*, the folio on which these verses would have been copied has been lost, perhaps indicating how heavily it was used. To the east, the city of Tana lies at the end of the longest and the strangest voyage, where the river Tanai (the Don) marks the end of Asia.[83] The path of the poem's verses is blocked by the river that seals this limit from the fore edge to end of the folio. The material boundaries of the pages of the San Miniato del Sera *quaderno* reinforced the geographical limits that it sought to capture in this copy of *La Sfera*. Yet even at the edges of the measured world and at the limits of navigability, *La Sfera* helped its readers to understand and categorise distant places in terms of the familiar. All the cities in this copy of *La Sfera* were depicted in the architectural idiom of an Italian walled city. Tunis was drawn within a circuit of walls with a crowded skyline of towers (Figure 5.8). Tana was drawn as a tower, possibly a lighthouse, at the start of the poem (Figure 5.9), and as a walled town at its end (Figure 5.10). The lands that *La Sfera* described are all framed in the context of the biblical past and of divine cosmography.

[82] Dati, *Sfera,* 17: 'wonder', 'overstep'.
[83] Beinecke, MS 1030, fo. 48v; Dati, *Sfera,* 20.

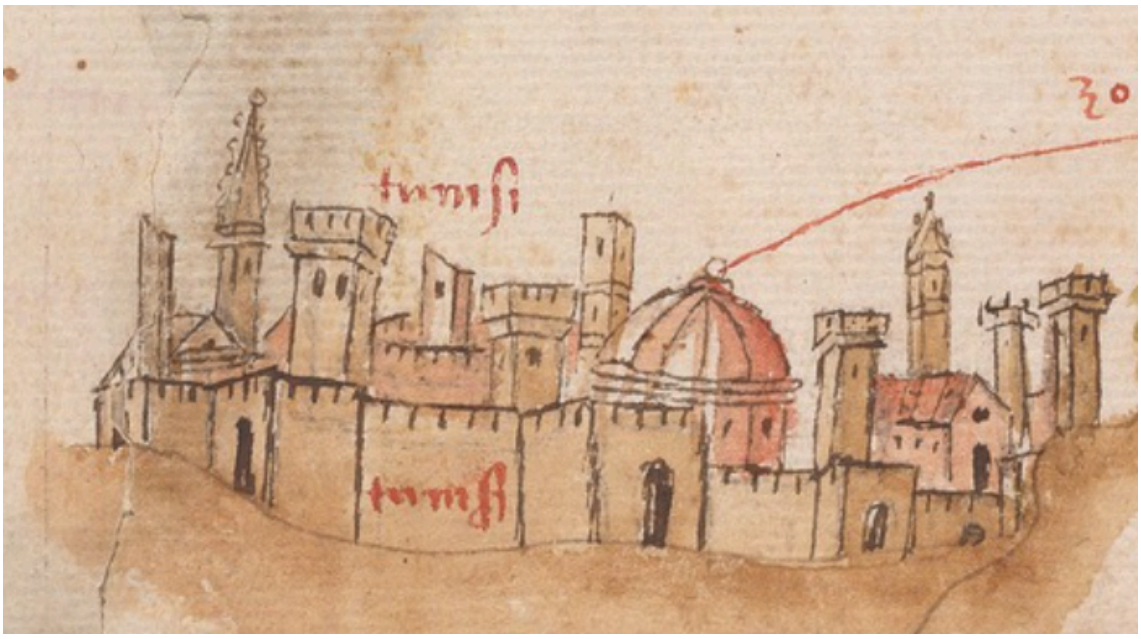

Figure 5.8 **The city of Tunis.**

Figure 5.9 **Tana as a tower.**

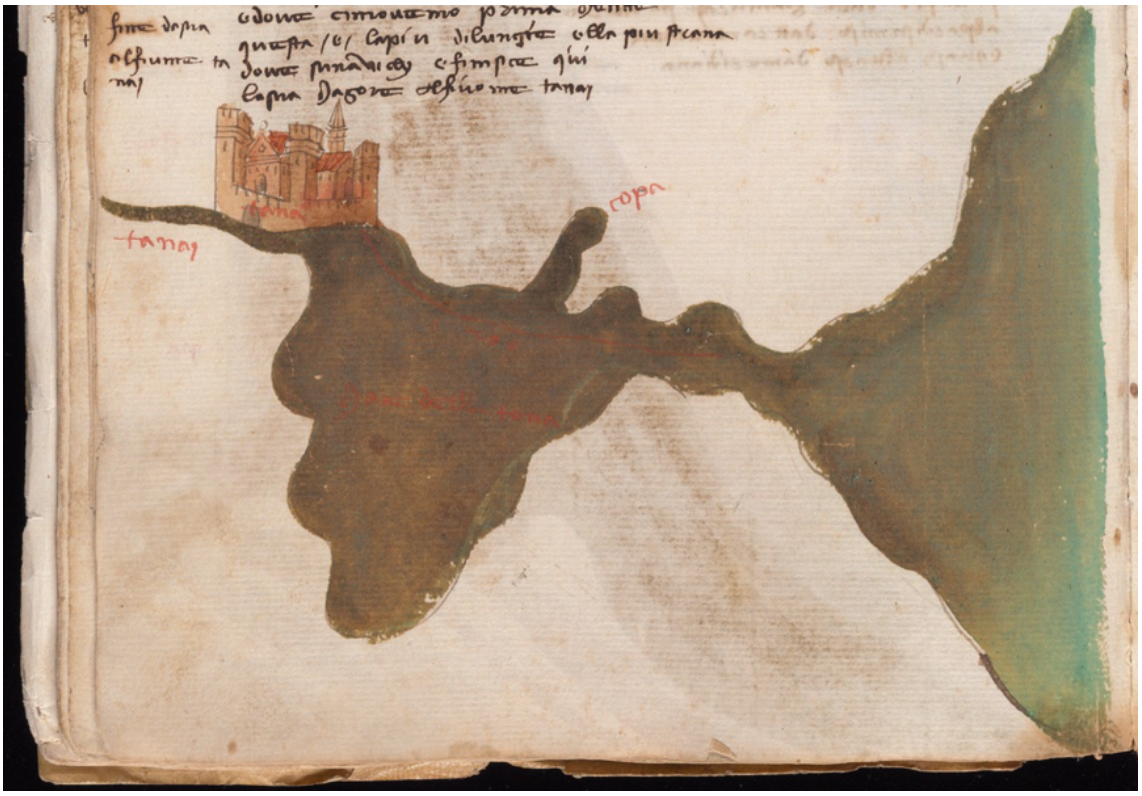

Figure 5.10 **The city of Tana.**

The selections made from a vernacular translation by Neri di Miniato del Sera from an Italian vernacular translation of the *Tresor* show how the geographical horizons charted in *La Sfera* were complemented by information that merchants gathered elsewhere. While much of this material directly complements the outline of the world written in *La Sfera,* especially its description of a 'mappamundi', in which the land is surrounded by sea and divided between Europe, Africa and Asia, some of the copyist's choices hint at the different emphases with which merchants imagined journeys and their geographical horizons.[84] The animals, real and fabled, that populated distant lands, from crocodiles, chameleons, and hippopotamuses to parrots, pelicans, and the solitary phoenix of Arabia, are were all selected and copied in this *quaderno*.[85] Dolphins were noted for their potential to act as a warning to mariners of approaching storms.[86] A warning of three sirens of classical tales who led ships to the rocks was also copied.[87] While both dolphins and sirens were thought of in the context of navigation, they seem to have been more an illustration of the beauty of the world and its creatures than of knowledge that would have been of direct practical use to merchants.

The first chapter that was copied from the *Tresor* shows a different horizon, far closer to the merchant and his network, in its discussion of where one ought to build a house. After having recommended 'buon terra', far from stagnant water that brings pestilence, a measured choice, proportionate to the status of its builder, it is advised that: 'il suo edificio non trapassi la dignitade'.[88] The final selection of chapters in which Latini had explained the rhetoric of an argument by 'differemento' and the government of cities

[84] Beinecke, MS 1030, fos. 63r-68r.
[85] Beinecke, MS 1030, fos. 52r, 56r, 57r, 60v.
[86] Beinecke, MS 1030, fo. 52r.
[87] Beinecke, MS 1030, fo. 52r.
[88] Beinecke, MS 1030, fo. 50r: 'Good land', 'its building does not overstep dignity'.

are a reminder of civic perspectives, between a merchant's house and the distant horizon of trade routes, that they would have shared with other townsmen or actively experienced as civic officeholders.[89]

La Sfera was a valued and engaging poem for a merchant copyist to have written out in his *quaderno*. Its verses could have functioned as a mnemonic, establishing a description of the horizons of trade in order that they could be remembered. *La Sfera* and its accompanying illustrations complemented a grounding in the geometry that merchants were taught, to offer a vantage point from which they could imagine the cosmos and the world's geography. Yet it was not a narrowly practical text. The landscape it depicted was one in which the horizons of trade and of the biblical past overlapped, in which trading cities and ancient ruins were prominent landmarks. Imagining new horizons would have been marvellous entertainment for a dutiful desk-bound merchant.

[89] Beinecke, MS 1030, fos. 68r-75v: 'difference'.

Sailing on Paper: 'Il libro del maestro dei porti'[90]

The final text copied into the Miniato del Sera *quaderno*, the book of the master of ports, is a portolan sailing guide which, alongside *La Sfera* and the *Tresor*, was another component that merchants could draw on to imagine their geographical horizons. At first, this text which describes the routes of costal cabotage and open sea *pelaghi* in the Mediterranean seems to have been a highly technical work, something that would seem more fitting in the library of Chaucer's Shipman than of Chaucer's Merchant.[91] This portolan is no exception. Yet it was a text that was just as suited to imagining travel. It would have been an important reference work for a merchant projecting and weighing the risks of sea voyages. That the merchant manuals written by Da Uzzano and Cotrugli contain elements of the information captured by portolan sailing guides reveals the perceived utility of these maps, even to merchants who did not travel themselves.[92] Moreover, this portolan can be read in the context of other ways of writing descriptions of the world, including Fazio Degli Uberti's *Dittamondo*.[93]

The portolan written out in the Miniato del Sera manuscript is a description of voyages along and across the coasts of the Mediterranean and the shores of the Black Sea. From the port of Cartagena in southern Spain, moving clockwise along the coast, it encompassed the major ports of Barcelona, Marseille, Genoa, Porto Pisano, Brindisi, Ancona, and Venice, as well as smaller havens in between.[94] From Venice, its coastal

[90] Beinecke, MS 1030, fo. 108r.
[91] E. R. G. Taylor, *The Haven-finding Art: A History of Navigation from Odysseus to Captain Cook* (London, 1956), 107.
[92] Uzzano, *Portolan*; Benedetto Cotrugli, *De Navigatione,* ed. P. Falchetta, in *Studi Veneziani* 57 (2009), 15-333.
[93] Fazio degli Uberti, *Il Dittamondo*, ed. V. Monti (Milan, 1826).
[94] Beinecke, MS 1030 fos. 81v-86v.

description continued through Greece, the island of Cephalonia and Constantinople to the Black Sea.[95] Having toured islands in the Black Sea, its description continued to the east of Constantinople to Rhodes, Acre, Jaffa, Damietta, and Alexandria, as far as North Africa, Tripoli and Tunis, to complete the circuit.[96] Finally, the portolan charted the islands of Ibiza, Mallorca, Menorca, Sardinia, Corsica, Sicily, Lampedusa, Crete, Milos, Cyprus, and Malta.[97] The horizons that it describes are those of maritime trade and of fine grained cabotage (Figure 5.11). The stretches of coastlines given the greatest attention, the routes between Barcelona and Genoa, Naples and Salerno, may have held the most potential value for this copyist.

The way in which the portolan was copied would have facilitated its use as a reference work. It is arranged in paragraphs grouped as journeys from major ports, for example, 'da Porto Pisano', whose names were picked out in red ink, along its route.[98] These paragraphs contained directions by the wind, compass, and distances for continuing a coastal journey oriented by smaller havens, mountains and headlands: 'da Porto Pisano a Piombino a miglia LX verso scirocco e mezzo di'.[99] They also offered directions and distances for open-sea crossings beyond sight of land, *pelagi*, from these ports of call: 'per grecho da Lampedusa alla Licata sono miglia CXXX'.[100] Sailing distances in miles along these routes were written in red ink, and they stood out from the body of the text. The way in which this portolan was written, so that it might be consulted with ease, had

[95] Beinecke MS 1030, fos. 86v-91r.
[96] Beinecke MS 1030, fos. 92v-97v
[97] Beinecke MS 1030, fos. 98r-108.
[98] Beinecke MS 1030, fo. 4v.
[99] Beinecke MS 1030, fo. 84v: 'From Porto Pisano to Piombino, 60 miles to South Southeast'.
[100] Beinecke MS 1030, fo. 104v: 'Northeast from Lampedusa to Licata the distance is 130 miles'.

the secondary effect of constructing the Mediterranean as a measured space, with its routes written to scale on paper.

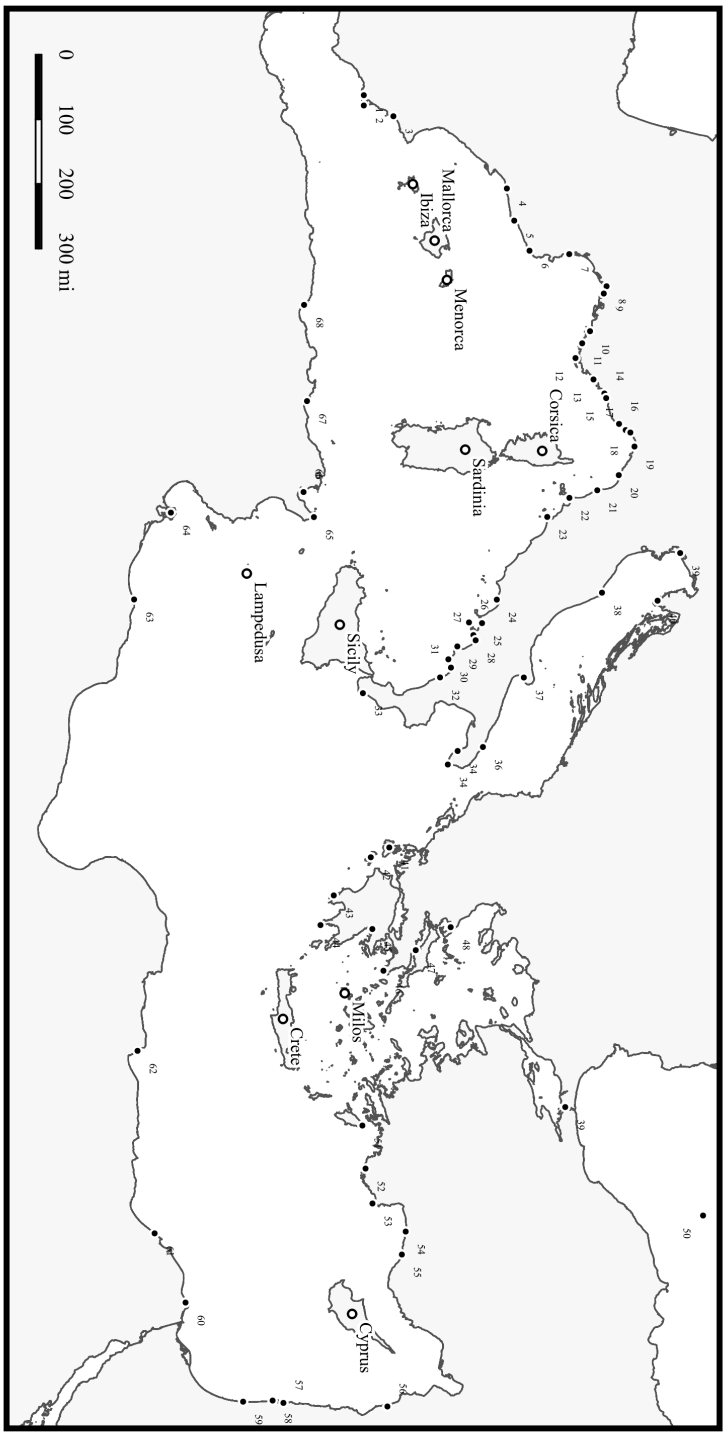

Figure 5.11. **Places described in the Miniato del Sera Portolan**

Table 5.1. **Places in the Miniato del Sera Portolan**

Miniato del Sera Portolan Toponyms			
	Toponym	**Modern Name**	**Folio**
1	Charttigine	Cartagena	81v
2	Chapo di Palla	Capo de Palos	81v
3	Chanterra	Alicante	81v
4	Terrachona	Tarragona	81v
5	Barzaluna	Barcelona	82r
6	Santa Felice	Sant Feliu de Guixios	82r
7	Rossini	Canet en Roussillon	82r
8	Monte Pesolano	Montpellier	82r
9	Aqua Mortta	Aigues Mortes	82r
10	Marsilia	Marseilles	82v
11	Bendormi	Bandol	82v
12	Isola di Era	Hyères	83r
13	Agano	Agay	83r
14	Nisa	Nice	83v
15	Monacho	Monaco	83v
16	Albinghana	Albenga	83v
17	Nolli	Noli	84r
18	Saona	Savona	84r
19	Genova	Genoa	84r
20	Portovenere	Porto Venere	84r
21	Porto Pisano	Porto Pisano	84v
22	Pombino	Piombino	84v
23	Monte Argentaro	Monte Argentaro	84v
24	Cheatta	Gaeta	85r
25	Napoli	Naples	85r
26	Chapri	Capri	85r
27	Amalfi	Amalfi	85r
28	Salerno	Salerno	85r
29	Chapo di Lichoia	Capo di Licosa	85r
30	Chapo di Palania	Capo di Palinuro	85r
31	Polichastro	Policastro	85r
32	schalea	Scalea	85r
33	Brussana	Bruzzana Zeffirio	85v
34	Chalipoli	Gallipoli	86r
35	Chapo Lequis	Santa Maria di Leuca	86r
36	Brandisio	Brindisi	86r
37	Santto Angiollo	Monte Sant'Angelo	86r
38	Anchona	Ancona	86v
39	Venegia	Venice	86v
40	Capo de Polla	Pula	86v
41	Cianfalonia	Cephalonia	87r
42	Sacintto	Zacinto	87r
43	Modon	Methoni	87v
44	Malia Mattapan	Matapan	88r
45	Napoli di Romania	Nauplia	88v
46	Chapo delle Cholonne	Kavo Kolones	89r
47	Isola di Negro Pontte	Negroponte	89r
48	Chapo di San Giorgio	Agios Georgios Nileias	89v
49	Chonstanttinopoli	Constantinople	90r

50	Isole del Mare Maggiore	Black Sea Islands	91r
51	Isolla di Roddi	Rhodes	92v
52	Chaccao	Kalkan	93r
53	Silidonie	Gelidonya	93r
54	Settalia	Side	93r
55	Candeloro	Alanya	93r
56	Marghotto	Marqab	93v
57	acchon dachri	Arce	93v
58	Chastello pelegrino	Atlit	94r
59	Giaffa	Jaffa	94r
60	Dammiatta	Damietta	94r
61	Alessandria	Alexandria	94r
62	Barda	Bardiyah	95v
63	Ttripoli di Barberia	Tripoli	95r
64	Isolla di Gerbe	Djerba	95r
65	Capo Bono	Cape Bon	96r
66	Tunizi di Barberia	Tunis	96r
67	Bona	Annaba	96v
68	Buggea	Béjaïa	97r

Miniato del Sera Portolan Islands		
Jevisa	Ibiza	98r
Maiolicha	Mallorca	98v
Minorcha	Menorca	99r
Sardigna	Sardinia	99v
Chorsicha	Corsica	101v
Cicilia	Sicily	102v
Lanpedosa	Lampedusa	104v
Gretti	Crete	104v
Millo	Milos	106r
Cipri	Cyprus	107r
Maltta	Malta	108r

While the distance and directions described in this portolan could have been a tool in planning or considering journeys, they could also have provided puzzles to entertain their readers. In the book of Michael of Rhodes, written and illustrated by a mariner in the Venetian fleet, portolan sailing guides can be found alongside problems of commercial mathematics, treatises on astrology and instructions in shipbuilding and rigging.[1] In one of these mathematical exercises, Michael of Rhodes explained the *marteloio* 'de navichar a mente'.[2] The *marteloio* was a mathematical dead reckoning technique by which a navigator could correct his course when forced by wind or tide to sail along different compass winds.[3] It was a practical tool of navigation on sea crossings beyond sight of land, and it was also a means of imagining a journey *a mente*.

The Miniato del Sera *quaderno*'s portolan described not only routes along coastlines and crossings from point to point across the open sea, but also the information required by a pilot who wished to orient a ship's safe approach into a harbour. Porto Pisano is described as a 'porto a catena', with a shallow depth of only five 'passi'; at night, sailors would need to guide themselves into the harbour using its lighthouse and the Monte Negro.[4] Genoa was described as a good port with a mole, and the headland to the west of the harbour was lit by the famous lighthouse above the 'chiesa chiamata San Benigno'.[5] As Michele Bacci has suggested, to navigate by these landmarks could mitigate both practical and spiritual risk, invoking the protection of sacred places, of

[1] A. M. Stahl, 'Michael of Rhodes and the Birth of the Mariner's Manual', *Journal of Early Modern History,* 14 (2010)*,* 152; A. M. Stahl, 'Michael of Rhodes: Mariner in Service to Venice', in O. Long, D. McGee, A. M. Stahl. F. Rossi, eds., *The Book of Michael of Rhodes: A Fifteenth Century Maritime Manuscript* (3 vols, Harvard, 2009), iii, 35.
[2] *Michael of Rhodes*, i, pp. 100, 131, 142: 'of navigating in the mind'.
[3] *Michael of Rhodes*, i, p. 142.
[4] Beinecke, MS 1030, fo. 84v: 'A port with a chain'.
[5] Beinecke, MS 1030 fo. 84r: 'Church called San Benigno'.

the hermits of Monte Negro or the monks of San Benigno.[6] A merchant reader picturing a ship making port using this portolan would have imagined a horizon of recognisable and sacred sites by which he could orient himself.

These pilotage elements of the Miniato del Sera portolan may have been determined by their copyists' interests and the geography of their investments. Michael of Rhodes's portolan devoted special attention to the approach to Venice, invoking the campanile of St Mark's and lantern of San Nicolò di Lido as practical and spiritual and landmarks, as well as describing the lagoon's tides.[7] The Miniato del Sera portolan's treatment of Venice is concise in comparison.[8] Although, unlike Michael of Rhodes, he was a merchant rather than a mariner, Da Uzzano, included in his manual of commerce not only an extensive portolan sailing guide but also precise instructions on how to have particular kinds of sail made to suit ships of different tonnages and lengths.[9]

In contrast to these portolans, when Cotrugli discussed the quality of the port of Genoa in his treatise on navigation, he focused on its founding myth, that Janus, a prince of Troy, had sailed to Genoa, already founded by King Janus, a grandson of Noah, because its site was protected by the sea and the mountains.[10] Cotrugli's text reproduced an inscription of 1312 on the south wall of the nave of the cathedral of San Lorenzo, which praised prince Janus's knowledge of astrology and sailing, two areas of knowledge that overlapped in cosmology in determining which places were most conducive to cities

[6] M. Bacci, 'On the Holy Topography of Sailors', in M. Bacci and M. Rohde (eds), *The Holy Portolano, The Sacred Geography of Navigation in the Middle Ages* (Berlin 2014), 8.
[7] *Michael of Rhodes*, i, 346-348.
[8] Beinecke, MS 1030, fo. 86v.
[9] Uzzano, *Compasso,* 279-281.
[10] Cotrugli, *Navigatione*, 104.

and trade and practical navigation.[11] This particular way of imagining journeys, navigation and geographical horizons could simultaneously invoke the identity of a contemporary centre of commerce, biblical history and the classical past.

Examples of late medieval Italian vernacular literature framed by imagined itineraries can place the Miniato del Sera portolan in a wider context, revealing why a merchant might have copied such a seemingly technical text. A note in Da Uzzano's *quaderno* records his loan of a book by 'Fazio Uberti' to Jacopo da Alamanno Salviati in January 1440.[12] This book may have been the *Dittamondo,* begun in 1345 by Fazio degli Uberti. It was a poem that described an imagined journey around the world, starting in Rome, before taking in Italy, Mediterranean Islands, Greece, the Black Sea, Scandinavia, Germany, France, England, North Africa, Cairo, and Babylon, and ending in Jerusalem.[13] It has been studied in connection with late medieval marine charts, but its proximity to portolan sailing guides has been overlooked.[14]

Parts of the journey that lend structure to the *Dittamondo* resemble the cabotage of portolan guides. In one section, the text moves from Gaeta through Naples, Puglia and Ancona to Ravenna and Venice.[15] In another, from Savona, through Albenga, Noli, Genoa, Lavagna, Vernazza, Corniglia and Carrara to Pisa, the *Dittamondo* notes that

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[11] C. E. Benes, *Urban Legends: Civic Identity and the Classical Past in Northern Italy, 1250-1350* (Pennsylvania, 2011), 81.
S. Gerevini, 'Written in Stone: Civic Memory and Monumental Writing in the Cathedral of San Lorenzo in Genoa' in A. Eastmond (ed), *Viewing Inscriptions in the Late Antique and Medieval World* (Cambridge, 2015), 212.
[12] Pisa, SNS-S, 2, fo. 182v.
[13] Uberti, *Dittamondo.*
[14] N. Bouloux, 'Carte marine et culture visuelle chez Giovanni Villani et Fazio Degli Uberti', in *Pour une histoire de l'espace au Moyen Âge. Textes et cartes* (Paris, 2014), 15.
[15] Uberti, *Dittamondo,* 199-205.

the ‘via del mar’ is ‘tutta buona’.[16] The journey of the *Dittamondo* also included *pelaghi*, open-sea crossings: ‘il Sardo, il Corso ed altre isole molte, Le qual vedria se farem quell peleggio’.[17] They sailed from Corsica, stopping at Bonifacio and in Sardinia before continuing to Sicily, the islands of Crete and the Cyclades, then the Black Sea, Tana, Constantinople and the Genoese colony at Pera.[18]

The itinerary that structures the *Dittamondo* made its content more memorable for its readers. Structuring a tale by imagined topography or a journey was a familiar mnemonic device in late medieval Italy.[19] At the start of this fictive journey, Fazio the traveller encountered Ptolemy, who is described as favoured by Mercury’s genius, holding a book. Here, Ptolemy seems to have personified commercial knowledge of the world, written and shared in books. Ptolemy offered to teach Fazio the traveller all that he knew: ‘del mondo il modo e la misura’.[20] He reminded Fazio that writers such as he were as valuable to the traveller as ‘il nocchier, che in suoi peleggi / conosce i tempi, e sa fuggir l’affanno’.[21] Imagined travel entailed reading and knowledge of other authors and texts.

Through this fictive journey, Fazio degli Uberti transmitted his accounts of the classical past, the recent history of Florence, knowledge of astrology, geography, cosmography and of the biblical past. After Ptolemy, Fazio the traveller encountered the classical

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[16] Uberti, *Dittamondo,* 218-222
[17] Uberti, *Dittamondo,* 33: ‘You will see Sardinia, Corsica and many other islands if we make that pelago’.
[18] Uberti, *Dittamondo,* 239-246, 298-305.
[19] M. J. Carruthers, *The Book of Memory: A Study of Memory in Medieval Culture* (Cambridge, 2009), 110.
[20] Uberti, *Dittamondo,* 15: ‘about the world, the way and measure’.
[21] Uberti, *Dittamondo,* 17: ‘as the navigator who knows the weather in his pelagi and how to avoid this threat’.

geographer Solinus, who became his guide for the rest of the journey. Solinus identified himself as Genoese, locating the city in classical and biblical history: 'Giano mio antico [...] che dopo Noè, Gli piacque il luogo dove i' mi nutrico'.[22] In the course of their journey, they debated the existence of the lands of Gog and Magog, of the Fortunate Isles, and the location of the terrestrial paradise.[23] On the road to Paris, Fazio switched languages between the Italian and French vernaculars: 'Dieu vous garde, fu il primo suo dire [...] appresso disse; En quelle part allez-vous? A Paris, rispos'io; et moi ancora [...]' and discussed whether nothing had been seen that so resembled the Hundred Years War as the conflict between 'Carthage et Romans'.[24] Merchants were familiar with operating in many languages and, as this fictive dialogue suggests, information was traded as readily as goods. In Africa, Solinus and Fazio the traveller met Pliny and discussed astrology with him.[25] At a greater distance from Italy, they described cotton plants, the 'alberi che fanno lana', the resting place of Noah's Ark on a mountain in Armenia, and the story of the Tower of Babel.[26] Merchant copyists or writers of portolans such as Da Uzzano and Neri di Miniato del Sera were aware of the potential for imagined journeys both to instruct and entertain their readers.

The Miniato del Sera portolan reveals a particular way of imagining geographical horizons. In it, the seas were a measured space, arranged by cabotage and crossed from point to point by a multiplicity of possible *pelagi*. Its readers could orient themselves in dangerous waters by landmarks that offered spiritual and practical protection. It was

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[22] Uberti, *Dittamondo,* 38: 'Giano my ancestor […] who after Noah, was pleased by the place where I nourished myself'.
[23] Uberti, *Dittamondo,* 25, 30, 35.
[24] Uberti, *Dittamondo,* 330, 331: 'The first thing that he said was "God keep you" [...] then he said; "Where are you going?", "To Paris" I replied; and I again [...]' 'Carthage and the Romans'.
[25] Uberti, *Dittamondo,* 363.
[26] Uberti, *Dittamondo,* 383, 489, 490: 'The trees that make wool'.

just as suited to planning imagined journeys, for profit or for entertainment, as it was to navigating in the mind and sailing on paper. The depth of its technical detail seems more easily placed in the context of maritime than merchant culture. Nonetheless, that it was copied in the Miniato del Sera *quaderno*, and the wider context of the use of imagined itineraries as a frame for late medieval Italian literature, shows portolans to have been formative texts for merchants.

Conclusion: 'Questi mari che sono da fare uomini industri'[27]

The seas bound together by Neri di Miniato del Sera in his *quaderno* were seas to be sailed by merchants and industrious men. Neri's selection reveals in microcosm the poems, encyclopaedias and portolans that informed the geographical horizons of merchants in late medieval Italy. They were texts that invited readers with a grounding in commercial mathematics and that expected a pragmatic knowledge of different markets. He copied practical texts that explained how mariners ought to trim their sails together with fantastical texts that told them to look out for sirens. Both were comfortably accommodated within the cultural horizons of late medieval merchants who read for entertainment and to be enlightened. They reflect the new kind of mercantile courage that John Larner described when he explained that merchants would brave unknown risks and yet wanted to quantify known risks as far as possible.[28]

Quaderni cannot be reduced to a single category or use. They were travelling books that were loaned between merchants, and in this case, at least, written with the stated aim of transmitting a particular way of imagining the world to a younger generation. Here was a guide to the seas that were to be the making of merchants and their industrious outlooks.

The extent of these seas mirrored the reach of late medieval trade networks, and their detail reflected the importance of cabotage. They were imagined as a measured and quantifiable space of commercial exchange. Yet these were also seas that were part of

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[27] Beinecke MS 1030, fo. 2r: 'these seas which are yet to be completed by industrious men'.
[28] J. Larner, *Culture and Society in Italy, 1290-1420* (London, 1971), 29.

a divinely ordered cosmography, in which fortunes depended as much on the influence of the planets as the guidance of the stars. Just as the limits of trade routes and of geographical knowledge were clearly written, the limitless and unquantifiable aspects of cosmography were also set out. The biblical past, the classical past and a merchant's individual eschatological future could all be overlaid on the topography of trade. To sail these seas entailed navigating by landmarks that were at once worldly and spiritual.

Having examined how merchants imagined their geographical horizons, an integral counterpart to their perceptions as a component of their cultural horizons, the chapter that follows will investigate an idea that was believed to travel more widely and at greater speed than any merchant ever could: the idea of *fama*.

6. Fama

Fama was an especially fraught idea for merchants in late medieval Italy. It was a generative idea on which their identity as merchants, their social status, and even the fates of the souls depended. A merchant's *fama* was fragile. Mercantile conceptions of *fama* were increasingly in conflict with rival value systems, particularly those that advocated a return to an imagined courtly past. While merchants aspired to a *buona fama* in their actions, they knew that *fama* could move so quickly that it would fly beyond their grasp. Just as merchants operated at fortune's mercy, they were at the mercy of *fama*.

> Meglio è all'uomo avere buona fama in questo mondo che avere un gran tesoro: e però procacciati di vivere in questo mondo dirittamente, acciò ch'acquisti buona fama, però che chi con buona fama muore, in questo mondo sempre vive. Puoi acquistare in questo mondo buona fama usando le virtù e partendo e scacciando da te i vizi.[1]

The cultural horizons of merchants converged in the aim of securing *buona fama.* In late medieval Italy, *fama* held overlapping meanings, signifying reputation, the circulation of news, and a kind of memory.[2] While a good reputation was something that everyone was seen as aspiring to in late medieval Italy, *fama* held a particular

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[1] Certaldo, *Costumi,* 13: 'It is better for a man to have a *buona fama* in this world than to have a great treasure and so strive to live honestly, so that in this way you may acquire a *buona fama*, for he who dies with a *buona fama* always lives in this world. You can purchase a *buona fama* through using the virtues and leaving and driving out the vices'.
[2] T. Fenster and D. L. Smail, *Fama, The Politics of Talk and Reputation in Medieval Europe* (London, 2003), 2.

resonance for merchants. In this world, as Da Certaldo explained in his treatise on merchant practice, establishing a good reputation was reckoned to have been of far greater worth than the value of material goods. At first glance, it seems that Da Certaldo was straightforwardly referring to the value to a merchant of a reputation for being trustworthy and a creditworthy counterparty. This would seem to align with modern notions of trust, which I will return to in the discussion of trust and *fama* that follows.

On closer inspection, for merchants in late medieval Italy, the idea of *buona fama* went further than this, extending into the circulation of information between merchants and into merchant spirituality. The display of piety was part of a merchant's wordly *fama*. Earning a *buona fama* in this world entailed behaviour that was seen as having the potential to save merchants' souls. Moreover, as San Bernardino of Siena preached in 1427, *fama* was perceived to be a measurable quality.[3] How a merchant kept their *quaderni*, whether their actions were seen to have been within the measured bounds of late medieval marketplace ethics, as well as their perceptions of value, time, and risk, whether worldly or spiritual, were all ways in which *buona fama* was gauged by their peers. *Fama* was where the internal frames of an individual merchant's cultural horzions met how a merchant was perceived.

The way in which *fama* was understood as part of the cultural horizons of late medieval merchants will be the subject of this chapter. It will begin by exploring how merchants could establish their *buona fama* and secure their reputations, or earn *mala fama* and lose their reputations. It will then chart the limits of mercantile *fama* by examining

[3] Bernardino da Siena, 'Il buon governo', in *Antologia delle prediche volgari, economia civile e cura pastorale nei sermoni di San Bernardino da Siena,* eds. F. Felice and M. Fochesato (Siena, 2010), 87.

gambling as a detailed example of activity in which mercantile *fama* came into conflict with the ideals of *cortesia*. *Fama* was not imagined as a static quality in late medieval Italy, but rather as something in motion and 'velocissima'.[4] To study a merchant's *fama* is also to study the circulation of information between merchants. The ways in which merchants thought about news travelling can be seen to have been overlaid on the ways in which they imagined their geographical horizons. Finally, this chapter will investigate how *fama* as reputation and as the circulation of information were joined in the idea of memorialisation.

> Lo guadagno che s'acquista con mala fama sì è da essere appellato danno.[5]

The idea of *buona fama* was always accompanied by its shadow, *mala fama* or infamy. Da Certaldo warned his readers that profit earned at the cost of *buona fama* should properly be reckoned as a loss. Merchants who kept fraudulent *quaderni,* whose actions were perceived to be false, or whose prices were seen as having been disproportionate, who seemed to waste time and to fail to assess risk could lose their reputations and even become infamous. How *fama* was lost merits as much attention as how it was established.

Fama and *infamia* held legal weight. The Genoese jurist Bartolomeo Bosco noted in his *consilia* that 'fama est homini magnus thesaurus, et infamia magna poena'.[6] In its legal sense, *fama* was reputation established by what was said by many people, and

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[4] Boccaccio, *Filostrato,* ed. V. Branca, in Boccaccio, *Tutte le* opere, ed. V. Branca, (9 vols, Milan, 1964-1998), ii, p. 126: 'very fast'.
[5] Certaldo, *Costumi,* 39: 'Profit earned together with a *mala fama* is properly called loss'.
[6] Bartolomeo Bosco, *Consilia*, (Loano, 1620), 150: '*Fama* is a man's great treasure, and infamy his great punishment'.

could be lost because of an individual's actions or a judgement against them. A merchant who lost his *buona fama* would lose the legal standing that this granted. He could be barred from holding certain civic offices.[7] A merchant in debt who fled the jurisdiction of a dispute could be depicted in the marketplace in a 'pittura infamante'.[8] Yet although the legal sense of *fama* and *infamia* overlapped with their wider range of meanings, they were not legal categories in any straightforward sense. *Fama* invoked a complex constellation of normative frameworks, not only legal and religious, but also ethical and commercial.

They way in which *fama* mattered to merchants, whose business and their afterlives depended on it, was distinctive. Their *fama* was judged in different ways from other groups in society. Mercantile *fama* was caught between the aspirations of those who wished to improve their status through commerce and the condescension of nobles who reacted against the blurring of social distinctions that sudden profits could bring. Merchants themselves operated across all these echelons of society. The boundaries of mercantile *fama* can be brought into sharp focus by exploring the conflict between 'cortesia' and mercantile *fama* at a time when upward social mobility of successful merchants was perceived to have unbalanced the social order of cities in late medieval Italy.[9]

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[7] For example, the Pisan officials tasked with measuring goods at the port of Caligari in Sardinia: *Breve Del Porto di Cagliari 1318*, in *Statuti Inediti della Città di Pisa, Dal XII al XIV Secolo*, ed. F. Bonaini (3 vols, Florence, 1854), ii, p. 1093.
[8] S. Y. Edgerton, *Pictures and Punishment: Art, and Criminal Prosecution during the Florentine Renaissance* (London, 1985), 15.
[9] The tension between contemporary social ethics and an imagined past governed instead by 'cortesia' in late medieval Florence has been explored by Kristina Olson: K. M. Olson, *Courtesy Lost: Dante, Boccaccio and the Literature of History* (Toronto, 2014), 182.

A merchant's *fama* was at once a matter of individual repute and the perceived reputation of a merchant's family, company, or city. *Quaderni* were both business records and family records. Companies were imagined as fictive legal persons in late medieval law.[10] This made the conflation of individual and corporate *fama* more extensive. The Genoese Maona of Chios is a rich example of a company whose members adopted the name of one of Genoa's most prominent merchant families, Giustiniani.[11] The reputation of a merchant's city influenced their *fama.* Boccaccio's tale of Erminio Grimaldi, reputedly the wealthiest man not only in Genoa but also in Italy, who was rebuked for his greed by the courteous and courtly knight Guglielmo Borsiere, shows this connection between a city's *fama* and the *fama* of its citizens and families. The Grimaldi family, at the heart of Genoese politics,[12] with extensive landholdings in Monaco,[13] were known not only for their commercial wealth, but were notorious for their involvement in piracy.[14] When Boccaccio explained that everyone knew Erminio Grimaldi by the name Erminio Avarice, he also drew attention to Genoa's infamy as a crucible of greed.[15] The different trading privileges accorded to citizens of different cities in diverse places further complicated the interaction of *fama* with civic identity. At times, merchants' claims that they were from a given city entitled them to trade on the most favourable terms. For example, in Barcelona in 1396, the Milanese merchant Lanfranco Serranieri declared himself to be a Venetian, in order to avoid expulsion as a 'Lombard'.[16] Approaching *fama* from the perspective of families,

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[10] G. Sicard, *The Origins of Corporations: The Mills of Toulouse in the Middle Ages,* tr. M. Landry, ed. W. N. Goetzman (Yale, 2015), 212.
[11] R. Cessi, 'Studi sulle "Maone" Medioevali', *ASI*, 77/1 (Florence, 1919), 27.
[12] G. Petti Balbi, *Simon Boccanegra e la Genova del '300* (Genoa, 1991), 21.
[13] P. Guglielmotti, 'Genoa and Liguria', in C. E. Benes ed., *A Companion to Medieval Genoa* (Leiden, 2018), 67.
[14] Benvenuto da Imola, *Commentary on Inferno* 16, DDP.
[15] Boccaccio, *Decameron*, I:8, pp. 109-112; K. M. Olson, *Courtesy Lost, Dante, Boccaccio and the Literature of History* (Toronto, 2014), 28.
[16] P. Mainoni, *Mercanti lombardi tra Barcellona e Valenza nel basso medioevo* (Bologna, 1982), 19.

companies and civic identities, as well as an individual's reputation, will make it possible to write a more nuanced account of merchant identity.

A merchant's reputation was not simply self-fashioned, it was also forged in the crucible of gossip, rumour, and news. Two kinds of information circulated through *fama,* rumours or information about the merchant and his reputation, and news or the information that was essential to the fortunes of the marketplace. In his *Derivationes*, Uguccione da Pisa personifies *Fama* as a courier of news from distant places: 'discurrendo rumores de nobis portat per diversas terras etiam nobis ignorantibus'.[17] Virgil had depicted winged *fama* in flight as faster than any other evil in its transmission of information,[18] whereas in Ovid's *Metamorphoses*, the bronze house of *fama* amplified every whisper, negating the effects of physical distance and creating a middle place through which news circulated.[19] Boccaccio drew on both these depictions to gloss Dante's treatment of *fama* in *Inferno* in 1373.[20] He defined *fama* as 'quello ragionare che lontano si fa', and as something that extends itself 'spandendosi'.[21] His terms *ragionare* and *spandere* invoked the imagery of merchant accounting and the circulation of money. *Ragionare* meant to reason, but also to calculate, a way of thinking. 'Spandere' was the verb Dante chose when he described Florence's wings spreading its name across Heaven and Hell, invoking both the 'ali' of the oars of

[17] Uguccione da Pisa*, Derivationes,* eds. E. Cecchini, G. Arbizzoni, S. Lanciotti, G. Nonni, M. G. Sassi, A. Tontini (2 vols, Florence, 2004), i, 414: 'He carries rumours about us running through different countries, even if we are unaware'.
[18] Virgil, *Aeneid*, IV, ll. 173-179, in Virgil, *Aeneid: Books 1-6,* tr. by F. J. Miller and G. P. Goold (Harvard, 1999), 434.
[19] Ovid, *Metamorphoses*, XII, ll. 39-66, in Virgil, *Aeneid: Books 1-6,* tr. by H. R. Fairclough and G. P. Goold (Harvard, 1984), 182-184.
[20] Boccaccio, *Esposizioni sopra la Commedia di Dante,* ed. G. Padoan, in Boccaccio, *Tutte le opere,* ed. V. Branca, Vol. VI, *Esposizioni sopra la Comedia di Dante* (6 vols, Milan, 1965), vi, p. 128.
[21] Boccaccio, *Esposizioni*, 120: 'that accounting which is reckoned from afar' 'circulating itself'

Ulysses' ship and perhaps the wings of Virgil's personification of *fama*.[22] It was also used by Dante, assuming the voice of Folco of Marseille, a troubadour poet and son of a Genoese merchant,[23] to describe the circulation of florins: 'produce e spande il maladetto fiore'.[24] Whereas merchants believed that they were able to control their *fama* as reputation, *fama* as the circulation of information was thought of as flying beyond their grasp. Merchants imagined themselves as having been at the mercy of this kind of *fama*, just as they operated at fortune's mercy.

Merchants in late medieval Italy knew the value of timely information.[25] Edwin Hunt has calculated that the Peruzzi company spent 1,000 lire between 1335 and 1341 on sending correspondence,[26] 203 lire of which was used to charter a single ship to send a particularly urgent message to Rhodes concerning the resumption of war between England and France.[27] In Venice by the end of the fifteenth century networks of information with commercial origins underpinned political power and by the sixteenth century communication was theorised as a contest field of political action.[28] Their contemporaries saw them as having been disproportionately engaged in the circulation of news, yet the practice was general. The letters exchanged by merchants describing

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[22] Dante, *Inferno,* XXVI, l. 125, p. 404: 'to circulate', 'wings'.
[23] M. Picone, 'Folco of Marseilles', tr. R. Treasure, in R. Lansing ed., *The Dante Encyclopaedia* (New York, 2010), 403.
[24] Dante, *Paradiso*, IX, l. 130, p. 194: 'produces and circulates the accursed flower'.
[25] A topic investigated in: P. Sardella, *Nouvelles et spéculations à Venise au début du XVIe siècle.* (Paris, 1948); 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* (Rome, 1994), 99-109; 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* (Göttingen, 2014), 27-59.
[26] E. S. Hunt, *The Medieval Super-Companies: A Study of the Peruzzi Company of Florence* (Cambridge, 1994), 84, 203, 204.
[27] A. Sapori, *La crisi delle compagnie mercantili dei Bardi e dei Peruzzi* (Florence, 1926), 66; A. Sapori*, Libri Di Commercio dei Peruzzi* (Milan, 1934), 181.
[28] Élisabeth Crouzet-Pavan, 'Les mots de Venise, Sur le contrôle du langage dans une Cité-État italienne', in, *La circulation,* 205-218; F. De Vivo, *Information and Communication in Venice, Rethinking Early Modern Politics* (Oxford, 2007), 1, 2, 16.

the reputation of their counterparties, while trading news and the latest market prices, seemed to defy the limits of distance in much the same way as Ovid's house of *fama*. Virgil, Ovid, Uguccione da Pisa and Boccaccio had each warned that all information was transmitted by *fama*, regardless of its accuracy. Merchants, too, were aware of the risk that inaccurate news presented to their profits and their reputations.

In astrology, Mercury, which as we have seen was associated with merchants, also had a special connection to *fama*.[29] Mercury could represent the care merchants took to project a good reputation. In Dante's *Paradiso*, the heaven of Mercury is home to the 'buoni spiriti che son stati attivi / perchè onore e *fama* li succeda'.[30] Francesco da Buti, a Pisan notary and chair of Latin at the University of Pisa, confirmed this association of Mercury with the desire for *fama* in his widely diffused vernacular commentary on Dante, derived from a series of lectures that he gave in Pisa in 1385.[31] Incidentally, these lectures have been seen as an attempt to broadcast Pisa's civic *fama*.[32] Moreover, in its perceived role as the amplifier of the effects of other stars and planets, Mercury also invoked *fama* as the circulation of information, an essential part of the smooth operation of late medieval commerce.[33] Approaching *fama* as a system in which information circulated can further complicate our understanding of merchant culture and identity.

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[29] A connection already noted by Jacob Burkhardt; J. Burckhardt, *The Civilisation of the Renaissance in Italy* [1860] (Oxford, 1945), 88.
[30] Dante, *Paradiso,* VI, ll. 113-114, p. 128: 'the good spirits who were active so that honour and fame followed them'.
[31] Francesco da Buti, *Commentary on Paradiso 6*, DDP; C. T. Terry 'Reading Aristotle Through Dante: The Case of "Meteorologica" in Francesco da Buti's *Commento*', *Medium Ævum,* 86/2 (2017), 350.
[32] M. M. Donato, '"Cose morali, e anche appartenenti secondo è luoghi": per lo studio della pittura politica nel tardo medioevo Toscano', in *Le forme della propaganda politica nel Due e nel Trecento* (Rome, 1994), 88.
[33] Boccaccio, *Genealogy of the Pagan Gods*, ed. tr. J. Solomon (2. Vols Harvard, 2011), i, II:7, pp. 205, 209, 221.

All these understandings of *fama* in late medieval Italy were intimately associated with memory. Through memorialisation and remembrance, the influence of *fama* circulated across the horizon of the afterlife. In Dante's *Purgatorio*, Manfredi requests that Dante remind his daughter Costanza of the ability of the living to speed the journeys of the dead; 'chè qui per quei di là molto s'avanza'.[34] When facing the horizon of the afterlife, an investment in *fama* was seen as investment that could last into eternity. The *fama* of a merchant's soul was both private and public. Giordano da Pisa had preached that through confession of sin, it was possible to recover *fama*, and that mortal sin was 'infame di ragione divina'.[35] This seems to have been an area in which the legal resonances of *fama* and *infamia* influenced the nature of confession and penitence.[36] According to Da Pisa, in a sermon that described how our senses inaccurately measure both the mundane delights of the body, which are overestimated, and the lasting delights of the soul, which are underestimated, three examples of lasting delights were honour, '*fama*, ch' è nome sparto', and wisdom.[37] Temporal *fama* or *infamia* could shape the fate of a merchant's soul in the afterlife.

Conversely, *fama* also offered a mechanism by which departed merchants could live on in the world through memory. It is in this sense that Da Certaldo described *buona fama* as a means of always living in the world as well as in the afterlife.

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[34] Dante, *Purgatorio*, III, l. 145, p. 50: 'For here much is gained through the intercession of the living'.
[35] C. Iannella, *Giordano da Pisa, prediche inedite dal MS Laurenziano, acquisti e doni 290* (Pisa, 1997), 211: 'infamia for divine reasons'.
[36] The influence of a changing legal context on confession in the thirteenth century has been studied by Alexander Murray: A. Murray, *Conscience and Authority in the Medieval Church* (Oxford, 2015), 15.
[37] Giordano da Pisa, *Quaresimale Fiorentino 1305-1306,* ed. C. Delcorno (Florence, 1974), 396; '*fama*, which is diffused name [reputation]'.

> [...]acciò ch'acquisti *buona fama*, però che chi con *buona fama* muore, in questo mondo sempre vive [...][38]

Memory acted as a bridge across the horizon of the afterlife which the soul's *fama* could cross in either direction. It is significant that *fama* was often compared to 'tesoro' in late medieval Italy. As we have seen, both Da Certaldo in his merchant manual, and Bartolomeo Bosco in his legal *consilia*, made this connection. In late medieval Italian, 'far tesoro' meant to remember, as it does in Italian today. The poet Matteo Frescobaldi from the Florentine banking family described prudence as the guide to '*fama* eterna', which he presented in similar terms as the 'miglior tesoro'.[39] The Franciscan Bernardino da Siena, in a sermon on the restitution of illicit profit, preached that 'la *buona fama* è meglio che la molta ricchezza', and that it was lost 'infamandolo' just as the 'tesoro dell'anima' was lost 'dannandolo'.[40] Memory appears to have been held to be the most valuable kind of *fama* among merchants in late medieval Italy. *Fama* was integral to memorialisation.

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[38] Certaldo, *Costumi,* 13: 'so that I might acquire *buona fama*, for he who dies with a *buona fama* always lives in this world'.
[39] Matteo Frescobaldi, in N. Sapegno, *Poeti Minori del Trecento* (Milan, 1952), 31: 'eternal *fama*', 'best treasure'.
[40] San Bernardino da Siena*, Le prediche Volgari,* ed. C. Cannarozzi (2 vols, Pistoia, 1934), i, pp. 301, 328: '*buona fama* is better than great riches', 'by making it infamous', 'treasure of the soul', 'by damning it'.

Reassembling *Fama*

Before turning to how *fama* was won and lost by merchants in late medieval Italy, the ways in which historians have approached *fama* merit attention. The idea of *fama* in medieval Italy is neither a new nor a neglected area of study. Using different kinds of sources, *fama* has been studied from the perspectives of legal history, literary history, the history of orality and spoken culture, performativity and ritual in history, and art history. However, these approaches to *fama* have tended to be pursued in isolation from one another. For merchants in late medieval Italy, *fama*, in all its meanings, would have encompassed the range of material covered by all these different methodologies.

Fama has been most widely studied as a legal status, which could apply to obligations, things, or people.[41] It is this kind of *fama* that Cédric Quertier has investigated through the records of bankruptcy cases examined by the Florentine *Mercanzia* commercial court, which held jurisdiction over Florentine merchants in Pisa.[42] Yet *fama* was more than just a legal status, and becomes all the more intriguing once we move beyond the courts. Merchants judged their own *fama* in the court of their individual consciences.[43] That in medieval canon law confession was defined as a 'forum internum', that is as a personal equivalent to a public law court, underlines the inseparability of internal and

[41] T. Fenster and D. L. Smail, *Fama: The Politics of Talk and Reputation in Medieval Europe* (London, 2003), 3.
[42] C. Quertier '«Meglio è l'uomo avere *buona fama* in questo mondo che avere un gran tesoro, » Quelques éléments sur les procès pour faillite devant le tribunal de la Mercanzia florentine, 1389-1395', *Hypothèses* 16/1 (2013), 94.
[43] The idea of conscience in late medieval France has been investigated by Elizabeth Brown: E. A. R. Brown, 'Moral Imperatives and Conundrums of Conscience: Reflections on Philip the Fair of France', *Speculum,* 87 (2012), 1-36.

external judgement.[44] To approach *fama* from the perspective of legal status alone overlooks the rich complexity of this idea.

Fama has not only been approached from the perspective of late medieval law, but also in studies of late medieval literature. As early as 1860, Jacob Burckhardt saw Dante as the first of a series of writers who strove for 'intellectual glory' and fame.[45] Philip Hardie, tracing the echoes of classical *fama* in medieval texts, examined how the idea of *fama* in literature created a 'permeable' boundary between the living and the dead.[46] Justin Steinberg has combined legal and literary approaches to *fama* in his reading of Boccaccio's tales.[47] Gervase Rosser has shown how Dante created a new space in which *fama* as worldly fame was discussed, responding to older Augustinian notions that those who put their trust in the estimation of others in the world were fools.[48]

Fama was not only a written phenomenon. *Fama* was derived from the verb *fari,* to 'speak'.[49] As Chris Wickham emphasised in his study of *fama* in twelfth-century Chianti, it was part of a spoken culture that can be distorted by an exclusive focus on texts as sources.[50] Elsewhere, Wickham argued that *fama* was shaped by actors who were aware that 'public words' could have tangible and enduring effects.[51] Late

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[44] A. Murray, 'Confession Before 1215', *Transactions of the Royal Historical Society,* 3 (1993), 51: 'an internal court'.
[45] J. Burckhardt, *The Civilisation of the Renaissance in Italy* [1860] (Oxford, 1945), 88.
[46] P. Hardie, *Rumour and Renown, Representations of Fama in Western Literature* (Cambridge, 2012), 98.
[47] J. Steinberg, 'Mimesis on Trial: Legal and Literary Verisimilitude in Boccaccio's *Decameron*', *Representations,* 139/1 (2017), 122; M. Vallerani, 'Il giudice e le sue fonti. Note su inquisitio e *fama* nel *Tractatus de Maleficiis* di Alberto da Gandino', *Rechtsgeschichte: Zeitschrift des Max Planck-Instituts für europäische Rechtsgeschichte*, 14 (2009), 50.
[48] G. Rosser, *Dante, The Invention of Celebrity* (Oxford, 2021), 9, 12.
[49] Hardie, *Rumour*, 3.
[50] C. Wickham, 'Gossip and Resistance among the Medieval Peasantry', *Past and Present,* 160 (1998), 17.
[51] C. Wickham, '*Fama* and the Law in Twelfth-Century Tuscany', in Fenster and Smail, *Fama*, 25.

medieval merchant manuals warned their readers to watch their words so as to avoid creating unjust *fama*: 'ti guarda di non infamare il tuo vicino, ché dare a uno mala fama è de' grandi peccati che sieno'.[52] *Fama*, as a product of speech and writing, was at once difficult and important for merchants to control. Slander and libel were areas of professional concern.

A merchant's *fama* was not only written and spoken but was also performed. Ian Forrest has described how witnesses were invoked and expected gestures were made by merchants as a means of making an agreement more trustworthy.[53] These rituals of *fama* were relevant to written and unwritten agreements. Late medieval commercial law specified that for contracts to be valid, they must be dressed, drawn up in the correct form, and agreed to in the presence of witnesses. As Cino da Pistoia noted, 'nudum est illud pactum quod est inefficax ad agendum'.[54] An improperly dressed contract could also be treated as a 'naked' contract: 'improprie vestiuntur in illis quatuor modis, re, consensu, literis, verbis' and 'pacta contra bonos mores non valent'.[55] Dressing the contract, as a component of *fama*, can be further explored through literary sources.

Images as well as words could create or remove *buona fama*. The 'pitture infamanti', whose traces today survive only in documents and drawings, were painted in public places to depict those accused of fraud or treason, or bankrupts who had fled the

[52] Certaldo, *Costumi,* 26: 'Be careful not to defame your neighbour, because giving someone a *mala fama* is one of the greatest sins which there can be'.
[53] I. Forrest, *Trustworthy Men: How Inequality and Faith Made the Medieval Church* (Princeton, 2018), 48-50.
[54] Cino da Pistoia, *Lectura in Codicem*, *II:3, De Pactis* (Frankfurt, 1578), 50: 'that contract is naked and therefore it is is not an effective cause for action'.
[55] Cino da Pistoia, *Lecutra*, 51.

jurisdiction.[56] Gherardo Ortalli, while arguing that 'pitture infamanti' were superseded by other practices at the end of the fourteenth century,[57] noted the significance of the position of 'pitture infamanti' in places such as markets, and suggested that they made late medieval members of mercantile and financial circles all the more keenly aware of the need to maintain *buona fama*.[58] Samuel Edgerton investigated their use in Florence as a means of removing *fama* from citizens who were in contempt of court and beyond the reach of city's justice.[59] Giuliano Milani, studying the late medieval iconography of the man with the 'borsa al collo', has shown how painted images in late medieval Italy could not only teach, remind and affect their viewers, but could also change the *fama* of an individual or a group.[60]

The images that could shape *fama* interacted with writing and poems in late medieval Italy. Gianni Guastella has traced the personification of *fama* through late medieval texts and images.[61] Maria Monica Donato has shown how the inscriptions that accompanied individual 'pitture infamanti' and civic art were indispensable to one another and how these images could become public documents against which there was no appeal.[62] For merchants in late medieval Italy, *fama* was written, spoken, performed, and seen.

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[56] Donato, 'Cose', 492.
[57] G. Ortalli, 'Pittura Infamante Practices, Genres and Connections', in C. Berhmann (ed), *Images of Shame* (Berlin 2016), 42.
[58] G. Ortalli, *" [...] pingatur in Palatio [...]" La pittura infamante nei secoli XIII-XVI* (Rome, 1979), 16, 158.
[59] S. Y. Edgerton, *Pictures and Punishment: Art and Criminal Prosecution during the Florentine Renaissance* (London, 1985), 15.
[60] G. Milani, *L'uomo con la borsa al collo, genealogia e uso di un'immagine medievale* (Rome, 2017), 16: 'with a bag around his neck'.
[61] G. Guastella, *Word of Mouth, Fama and its Personifications in Art and Literature from Ancient Rome to the Middle Ages* (Oxford, 2017), 185.
[62] Donato, 'Cose', 501, 505, 506.

Fama has often been approached as a branch of trust, and the idea of trust has received considerable attention in the fields of economics, economic history, and sociology. A degree of trust is seen as essential for markets to function. Markets have been seen as processes through which it is possible to discover who to trust and that generate trust over time.[63] Trust in the late Middle Ages has often been studied only as a component of narratives of progress towards a modern economic system. The replacement of personal trust by impersonal legal mechanisms of contract enforcement is supposedly a defining feature of economic development in late medieval Europe.[64] Generalised trust set the stage for economic development by lowering transaction costs.[65] Douglass North saw the 'sedentary merchants' of late medieval Europe interacting with the challenges of generalised trust in their use of factors to carry out business elsewhere, and the 'transformation of uncertainty into risk', through developments in accounting, merchant law and insurance.[66]

Theories of generalised trust should be applied to late medieval history with caution. Edward Banfield's study of a village in rural southern Italy is still cited in New Institutional Economics as a demonstration of the difficulty of achieving economic growth without trust beyond the limits of the family. Doubting that 'non-Western cultures', except for Japan, could sustain a modern economy, he argued that economic

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[63] G. S. Choi and V. H. Storr, 'The Market as a Process for the Discovery of Whom Not to Trust', *Journal of Institutional Economics,* 18 (2022), 479.
[64] The role of trust in late medieval economic development is a contested yet often narrowly explored. For example, see the debate between Avner Greif on the one hand and Jeremy Edwards and Sheilagh Ogilvie on the other; J. Edwards and S. Ogilvie, 'Contract Enforcement, Institutions, and Social Capital: The Maghribi Traders Reappraised', *The Economic History Review*, 65/2 (2012), 421–444; A. Greif, 'The Maghribi Traders: a Reappraisal?', *The Economic History Review*, 65/2 (2012), 445–469.
[65] K. J. Arrow, 'Gifts and Exchanges', *Philosophy and Public Affairs,* 1/4 (1972), 346; D. C. North, 'Institutions', *Journal of Economic Perspectives,* 5/1 (1991), 100.
[66] North, 'Institutions', 105-107; J. Graafland, 'Contingencies in the Relationship between Economic Freedom and Human Development: The Role of Generalized Trust', *Journal of Institutional Economics*, 16/3 (2020), 275.

growth was specific to a particular cultural path. He even suggested that the arrival of Protestant missionaries might change attitudes to trust in morality sufficiently to allow the economy of rural southern Italy to develop.[67] Banfield's study shows how theories of generalised trust can perpetuate assumptions that current geographies of wealth correlate with the landscape of late medieval economies and can seek to measure 'trustworthiness' by normative cultural standards.

Historians, too, have treated trust as an implicitly moral concept, the decision to trust a party to an exchange entailing the 'reciprocal judgement' of their moral character.[68] Richard Trexler, focusing on Renaissance Florence, has argued that notions of financial credit and moral credit were inextricable from one another.[69] As Forrest has argued, secular and religious concepts of trust were often merged.[70] However, it could be argued that the extent of trust that counterparties required of each other in their transactions had its limits, even at a time when legal enforcement mechanisms for contracts were far weaker than they are now. Merchants did not need to endorse or underwrite the moral character of all their counterparties. The risk entailed in transactions in which the trustworthiness of the participants was unclear could be priced in.

Trust is a historically contingent idea which must be historicised. The sociologist Niklas Luhmann saw trust as a historically contingent response to the problem of complexity.[71]

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[67] E. C. Banfield, *The Moral Basis of a Backward Society* (Chicago, 1958), 8, 171.
[68] Davis, *Morality*, 156.
[69] R. C. Trexler, *Dependence in Context in Renaissance Florence* (New York, 1994), 6.
[70] Forrest, *Trustworthy,* 28.
[71] N. Luhmann, *Trust and Power* [1973], tr. H. Davis, J. Raffan and K. Rooney (Oxford, 1979), 93.

For individuals, trust is an expectation of how future events will unfold.[72] Such an expectation is grounded in an individual's past experience and reliant on a constantly shifting cultural horizon of the experiences that are familiar to an individual, either directly or indirectly.[73] Luhmann is not alone in having suggested that trust ought to be historicised. Bernard Williams thought that the specificity of different kinds of trust was contingent on the particular 'historically shaped' types of society in which they were applied.[74] Charles Tilly has argued that trust is a 'historical product', and that it should be studied as such.[75] Forrest has investigated the 'cultural specificity' of late medieval trust and has called for further research in this area.[76] As Gervase Rosser, studying confraternities in late medieval England, has argued, trust was valued, perceived to have been scarce, and compatible with inequalities of social status and wealth.[77] An economic context in which physical coinage was scarce and credit underpinned exchange, as well as a relative lack of legal protections for counterparties made trust all the more valuable.[78] An aspect of membership of a confraternity was a conscious investment in developing 'relationships of trust'.[79]

The trust encompassed in *fama* was not the same trust that modern theories seek to describe. The lens of conflict between personal trust and the regulation of exchange by

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[72] Luhmann, *Trust*, 10.
[73] Luhmann, *Trust*, 20; N. Luhmann, 'Familiarity, Confidence, Trust: Problems and Alternatives', in D. Gambetta, *Trust, Making and Breaking Cooperative Relations* (Oxford, 1988), 95.
[74] B. Williams, 'Formal Structures and Social Reality', in D. Gambetta, *Trust, Making and Breaking Cooperative Relations* (Oxford, 1988), 13.
[75] C. Tilly, *Trust and Rule* (Cambridge, 2009), 26.
[76] I. Forrest, *Trustworthy Men, How Inequality and Faith Made the Medieval Church* (Princeton, 2018), 13, 380 at n. 92; I. Forrest and A. Haour, 'Trust in Long-Distance Relationships, 1000–1600 Ce', *Past and Present*, 238/13 (2018), 212.
[77] G. Rosser, *The Art of Solidarity in the Middle Ages: Guilds in England 1250-1550* (Oxford, 2015), 152. 184.
[78] Rosser, *Solidarity,* 159-160.
[79] Rosser, *Solidarity,* 176.

impersonal courts presents us with a false dichotomy. *Fama* was not limited to the transactions that merchants made. It was entangled with all aspects of their interior and exterior lives. It encompassed their faith, the ethics of their traffic, questions of conscience and their identity as merchants. Understandings of *fama* among merchants in late medieval Italy were just as complex as the efforts to define trust in modern scholarship. The ways in which medieval merchants understood *fama* deserve to be studied on their own terms. The study *fama* offers another approach, adjacent to the study of trust, that emphasises the need to historicise the concept of trust. *Fama*, as a historicised concept, can better account for the complexity of late medieval merchant culture than a reductive application of modern theories of trust and economic development to a late medieval testing ground.

Fama as Reputation

When the Venetian merchant Marco Arian was dying of plague in 1348 he commissioned a well-head to be decorated with both his merchant's mark and his family coat of arms.[80] It was placed in Campo S. Raffaele in 1349 and is still to be found there.[81] It commemorated his good name as a merchant of Venice. A merchant's *fama*, understood as their commercial reputation, was written into their *quaderni* and could even be enciphered into a single symbol, a merchant's mark of exactly this type. These marks were more often written in ink than carved in stone and writing was at once a means of securing and displaying a *buona fama.* Yet even *fama* as a merchant's reputation was never strictly limited to rigour of how merchants accounted for material profit and loss. It was entangled with wider anxieties over the ethics of the perceived fallen state of commerce in late medieval Italy and with fears that merchants had abandoned the ethics for their art. *Buona fama* was earned by following virtue, avoiding vice, and keeping within the ethical bounds of measure. *Mala fama* could be earned when merchants engaged in disproportionate commerce by usurious lending, charging unjust prices, or committing fraud, and when they were seen to be slothful, failed to assess risk or fled their creditors. The *fama* of other merchants, by necessity, had to be gauged from outward appearances. Even a merchant's own *buona fama* might not be deserved and could be called into question by their own conscience.

[80] R. C. Mueller, 'Merchants and Their Merchandise, Identity and Identification in Medieval Italy', in *Venezia nel tardo medioevo, econmia e soicetà* (Rome, 2012), 406.
[81] W. Dorigo, *Venezia romanica, la formazione della città medioevale fino all'età gotica* (2 vols, Venice, 2003), i, p. 498.

The material form of merchant writing could display a merchant's identity and project their *fama*. Merchant marks were emblems used by merchants, often derived from the combination of their initials with a cross or a representation of Mount Calvary. They were similar to the marks used by notaries, and they have received the most attention as a means by which merchants signed letters.[82] The *quaderno* kept by the Pisan merchant and cathedral works administrator Grasso contains loose material bearing these merchant marks A letter of 12 December 1377 records a payment of 92 gold florins and 56 soldi received by Berso Jacopo di Narducci at the mouth of the Arno on Grasso's behalf (Figure 6.1). It bears Berso's merchant mark on the reverse, alongside his name (Figure 6.2). This mark would have immediately identified Grasso's correspondent and would have conferred Berso's trustworthiness to the letter's content. On bills of exchange, merchant marks were directly linked to a merchant's creditworthiness.

[82] E. Cecchi Aste, *Di mio nome e segno, "marche" di mercanti nel carteggio Datini, secc. XIV-XV* (Prato, 2010), 5; Merchant marks from the Datini Archive are reproduced in: F. Melis, *Aspetti della vita economica medievale: studi nell'Archivio Datini di Prato* (Florence, 1962), pl. 27-62.

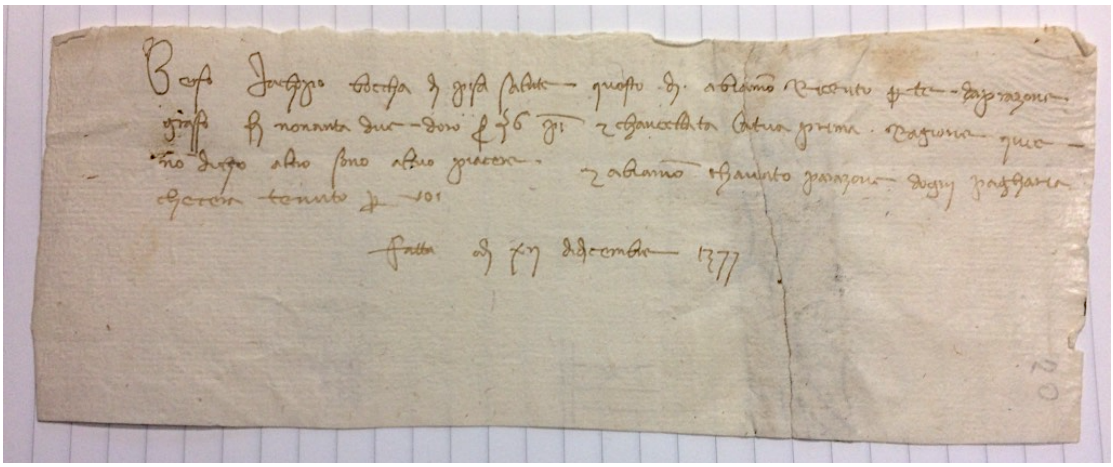

Figure 6.1 **Berso Jacopo di Narduccio's reciept.**

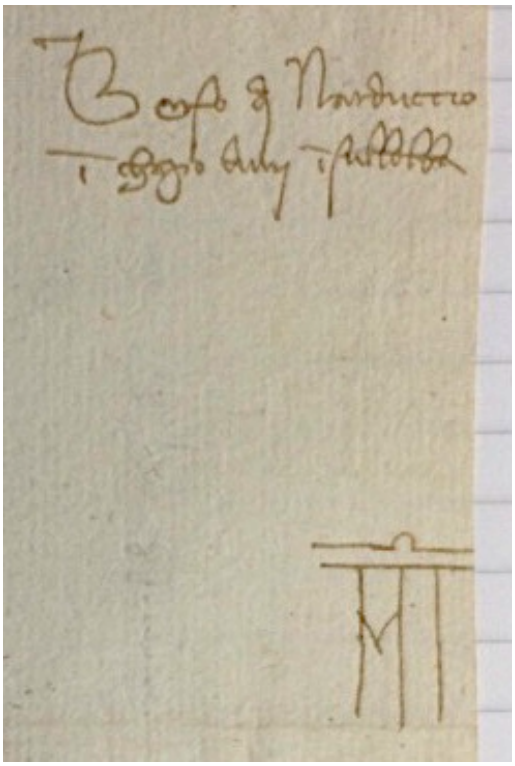

Figure 6.2 **Berso Jacopo di Narduccio's merchant mark.**

Merchant marks underwrote not only credit but also the quality and accurate measurement of goods. This can be seen in the frescoes that Ambrogio Lorenzetti painted for the Sala dei Nove in Siena's Palazzo Pubblico between 1337 and 1339. When they were painted, the Sala dei Nove was the seat of the nine merchant officials who governed Siena and the frescoes have been interpreted as showing, among other things, the flourishing '*negotium'* and economy that a self-governing republic could foster.[83] In the allegory of the effects of good government in Siena's countryside, two distinct merchant marks can be seen on bales of goods crossing a carefully maintained bridge (Figure 6.3). The richly dressed figure riding in the opposite direction seems to pause in conversation with the man who is leading marked bales, perhaps showing merchants exchanging news and offering an ideal image of Siena's trade. In contrast, in the allegory of effects of bad government, the bridge lies in ruins and devices on the shields of marauding soldiers have replaced the merchant marks (Figure 6.4). In these frescoes, a good commercial reputation seems to have been just as important as the security of trade routes and the quality of transport infrastructure in supporting the city's economy.

[83] Q. Skinner, 'Ambrogio Lorenzetti's Buon Governo frescoes: Two Old Questions, Two New Answers', *Journal of the Warburg and Courtauld Institutes,* 62 (1999), 8, 14: 'business'.

Figure 6.3 **Lorenzetti, merchant marks, the effects of good government, Siena.**

Figure 6.4 **Lorenzetti, soldiers, the effects of bad government, Siena.**

Merchants knew that their *fama* could confer additional value to goods that were branded with merchant marks. On 10 June 1383, at the Broletto Nuovo market in Milan, Pietro Preda sold the rights to use his trademarks, as recorded in the copybooks of the Art of Fustian, which he sold for 100 florins to Petrolo Tanizo (Figure 6.5).[84] These trademarks, with which Pietro Preda had marked the textiles that he sold, were reproduced in the notarial contract recording the exchange. The considerable value that was attributed to the use of these trademarks would seem to reflect the *buona fama* that Preda had maintained over his career as a supplier of textiles of high quality and as a trustworthy counterparty. In 1395 in Venice five trademarks that were used to sell fustians were granted to Andrea Graziani, a Cremonese merchant, by Pietro Sasso, who had been born in Cremona but who had become a Venetian citizen.[85] The transfer was registered with the local office of the *Mercanzia*. Merchant marks were guilds and the *fama* that they conferred was itself a tradeable commodity in late medieval Italy.

[84] R. S. Lopez and I. W. Raymond, *Medieval Trade in the Mediterranean World* [1955], (New York, 2001), 124-125.
[85] Mueller, 'identification', 408; C. Sabbioneta Almansi, *Marchi ed insegne insegne degli antichi mercanti cremonesi, 1395-1626* (Cremona, 2003), 51.

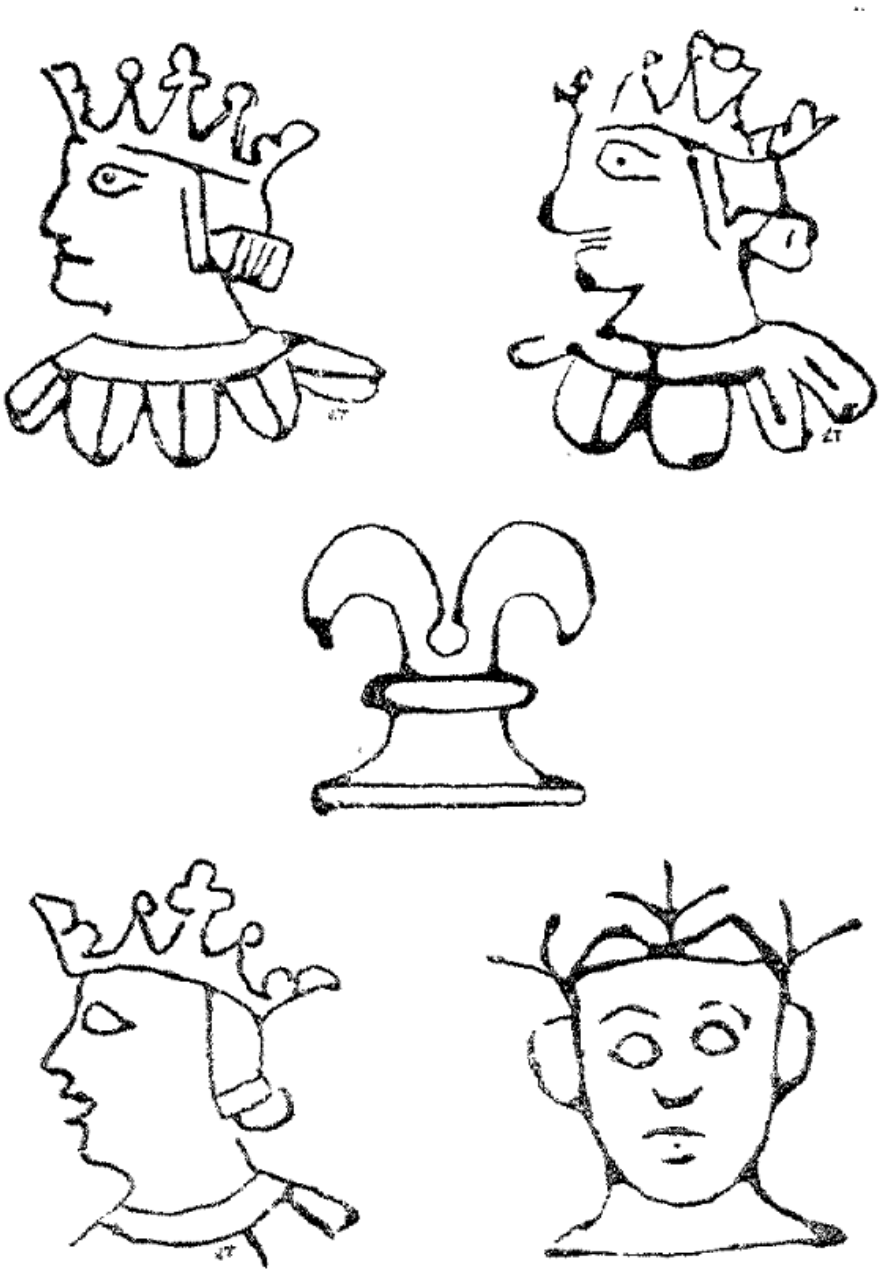

Figure 6.5 **Ser Pietro Preda's trademarks.**

The ability of *fama* to change the market value of a material object seems to have been particularly acute where luxury goods were concerned. A fifteenth-century Italian translation of Petrarch's *De remediis* contained a discussion of the value of precious stones between personifications of Joy and Reason. In response to Joy's delight in gems, Reason cautioned that their value was unstable and depended only on the '*fama* che danno loro i mercantanti' and on the opinions of 'uomini ricchi e matti'.[86] When prices were shaped by a merchant's *fama*, the value of the goods being exchanged were equally susceptible to changes in *fama* or fashion. Da Uzzano's merchant manual concluded with a section that described how merchants could recognise precious stones by their colour and by their appearance when ground, or when they were ground, mixed with water and heated.[87] Merchants themselves were meant to be better trained to appraise the goods than others, at once improving their *fama* and limiting their reliance on the *fama* of their counterparties.

The drawing of merchant marks on the covers of *quaderni* has received less attention than the use of merchant marks in other contexts. Among the *quaderni* that are preserved in Pisa, Vanni di Bonagiunta di Stefano's 1326 *quaderno* listing his property (Figure 6.6),[88] Petro and Nino Lancia's 1408 *quaderno* recording their property in Pisa and Sicily (Figure 6.7),[89] the Salviati Company's book of Creditors and Debtors 1404-1410,[90] as well as the 1451 *quaderno* kept by William Cantelowe for the Salviati Company in London, all bear merchant marks on their limp-vellum bindings (Figure

[86] Giovani da San Miniato, *De' rimedi dell'una e dell'altra fortuna di Francesco Petrarca volgarizzati nel buon secolo della lingua*, ed C. Stolfi (2 vols, Bologna, 1867), i, p. 175: 'the *fama* that is given to them by merchants', 'men who are rich and mad'.
[87] Uzzano, *Pratica,* 282-284.
[88] OSC, 2050.
[89] ASPi, Alliata, 773.
[90] SNS-S, I, 209.

6.8).[91] They have also been found on a few of the less formal *quaderni*, kept from shorter periods of time, in the Datini archive in Prato.[92]

[91] SNS-S, I, 393 has been edited by Megan Tiddeman: M. Tiddeman, 'Money Talks: Anglo-Norman, Italian and English Language Contact in Medieval Merchant Documents, c1200-c1450', (PhD Thesis, University of Aberystwyth, 2016), 428-496.
[92] J. Hayez, 'Prefazione', in Cecchi Aste, *Segno*, xxviiii.

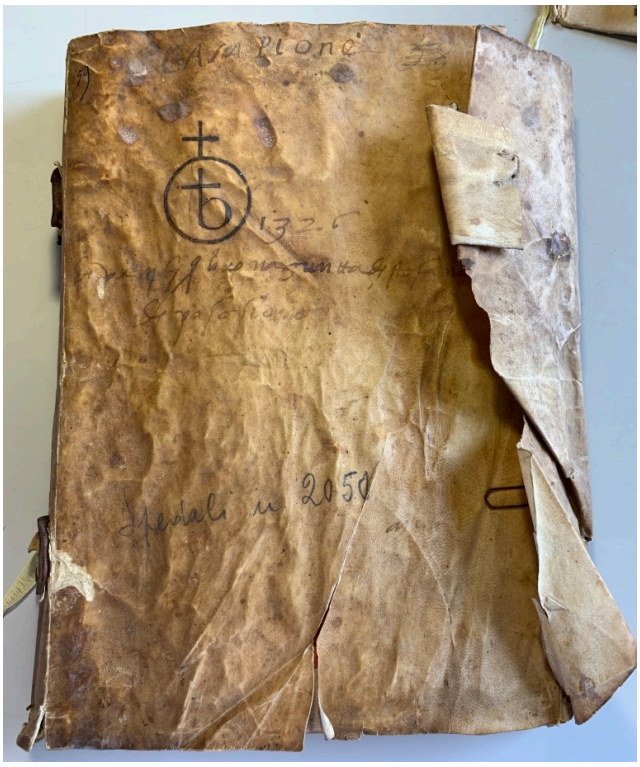

Figure 6.6 **Vanni di Ser Bonagiunta di Stefano's merchant mark.**

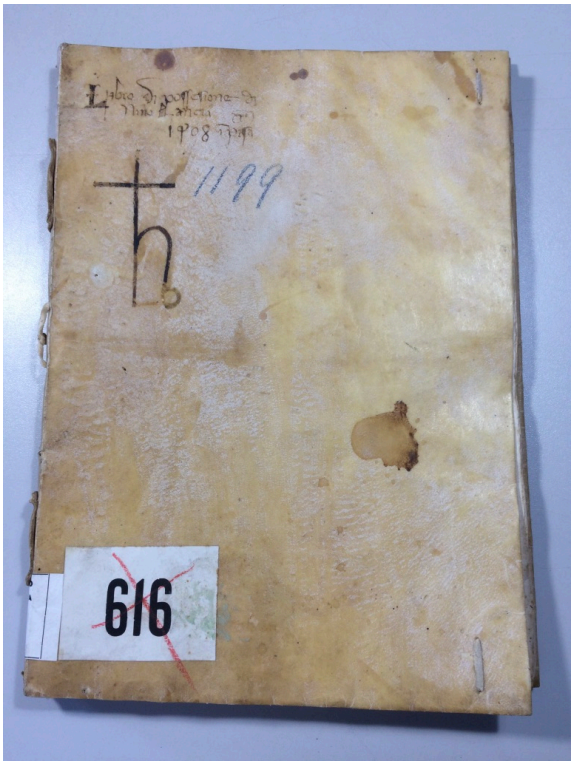

Figure 6.7 **Nino Lancia's merchant mark.**

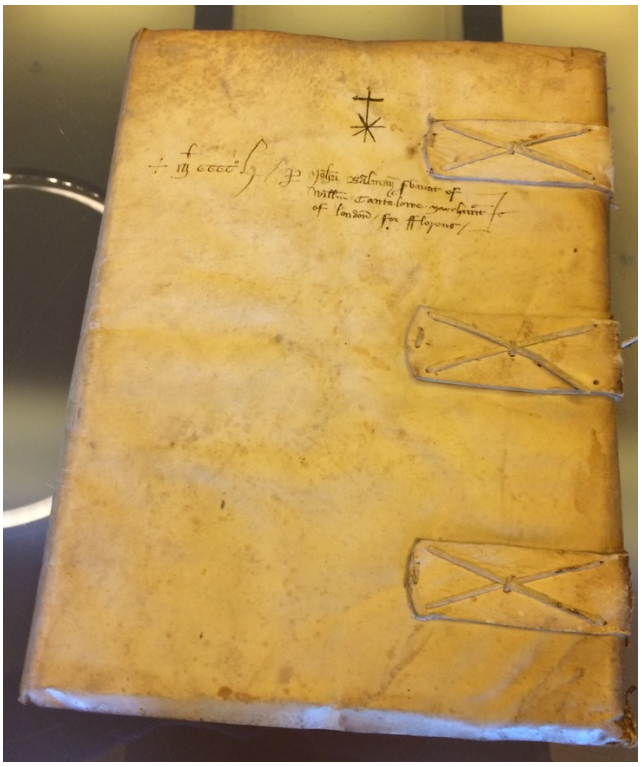

Figure 6.8 **A merchant mark on John Balmayn's *quaderno*.**

The covers of *quaderni* were an ideal medium on which *fama* was displayed. Merchants were expected to be seen with their *quaderni* and at times they also travelled with them. Cotrugli thought that any merchant should keep at least three cross-referenced *quaderni*.[93] Moreover, the *fama* represented by merchant marks depended on the content of these *quaderni*. Rigorous accounting practice could provide the foundation of the *buona fama* proclaimed by merchant marks. By registering and reviewing investments and transactions in sets of cross-referenced *quaderni*, merchants limited their exposure to risk and avoided placing their trust in the naked truth of exchanges that were not described by properly written contracts or recorded in well-kept accounts.

Entering investments in *quaderni* was an expected part of merchant practice, which fostered *buona fama*. *Quaderni* would have been inspected by a merchant's counterparties when relevant entries were made. Some transactions were cross-referenced in *quaderni* kept by different merchants, who even wrote in each other's books. On 29 December 1372, the Pisan merchant Miliadusso Balduccione recorded receipt of a rent for land in grain paid by Mericho di Pardino: 'che non sia scritto qui, o li lo scritto di mia mano in del suo libretto'.[94] Cotrugli's merchant manual recommended that its readers have a desk on the first floor, for 'li forestieri che vengono a contare teco', with a bench large enough to seat the visitors and to go through *quaderni* with them.[95] Richard Goldthwaite has found references to similar office spaces in inventories from Florence.[96]

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[93] Cotrugli, *Mercatura,* 83.
[94] OD, 1312 fo. 188r: 'which is not written here, I wrote it in my hand in his little book'.
[95] Cotrugli, *Mercatura,* 159.
[96] R. A. Goldthwaite, 'The Florentine Palace as Domestic Architecture', *The American Historical Review*, 77/4 (1972), 994.

Quaderni projected a merchant's *fama* and, as such, held a privileged status as proof in legal proceedings. Maura Fortunati, studying the fourteenth-century jurist Baldo degli Ubaldi's *Consilia*, has shown how a merchant's reputation was seen to make their *quaderni* more credible.[97] The reverse was also true: well-kept *quaderni* supported a merchant's legal *fama*. Degli Ubaldi distinguished between three kinds of written documents: public documents, which had full legal standing as proof; solemn documents, which were given their full legal standing as proof by the presence of witnesses; and private documents, which did not offer proof of the same quality. He further explained that private documents could gain the quality of a public document if they were faithfully kept according to established practice or 'consuetudo'.[98] In turn, the way in which merchants wrote, made and kept their books could make them *fide digna persona*.[99] In fact, Degli Ubaldi even argued that agreements recorded in an infamous merchant's books should still hold legal weight, as long as their infamy had not been publicly known when these entries were made.[100]

Yet *buona fama* was seen to be more important than accuracy in accounting alone. Cotrugli recounted the story of a stranger in Florence, who seemed trustworthy, and who asked Cosimo de Medici for 300 ducats, which the stranger had falsely claimed to have deposited with the Medici bank. Cosimo knew that this stranger's balance was not recorded in his well-kept *quaderni*. Cosimo, 'volendo in nula parte non ledere nen maculare la *fama* della sua vera integrità', paid out the ducats to the stranger as he

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[97] M. Fortunati, *Scrittura e prova, i libri di commercio nel diritto medievale e moderno* (Rome, 1996), 36.
[98] Fortunati, *Scrittura,* 31.
[99] Fortunati, *Scrittura,* 35; Baldo degli Ubaldi, *In tres libros codicis commentaria* (Lyon, 1544), 93v.
[100] Fortunati, *Scrittura,* 36; Baldo degli Ubaldi, *Prima super digesto veteri* (Lyon, 1540), 46v.

recognised that maintaining his *fama* was more valuable than the sum in question.[101] Cotrugli drew an explicit moral from this example: 'mostrò quanto più deve essere servata et culta la integrità et la fede de lo mercante che lo denaro'.[102] Cotrugli's account portrayed Cosimo as neither credulous nor haphazard in his accounting. Cosimo was still shown by Cotrugli has having attached greater importance to his own *buona fama* and his bank's reputation for being creditworthy than to exposing fraud committed by a stranger whose dishonesty could reflect badly on the business.

All these ways in which *buona fama* could be written and kept in *quaderni* can be traced in one of Giovanni Sercambi's *novelle*, which hinged on the connection between writing and merchant identity.[103] This tale offered its readers an idealised version of a contemporary merchant partnership, set in an imagined past when Charlemagne ruled. Two Lucchese merchants, Cinello and Giabbino, founded a company together.[104] Cinello stayed in Lucca, and Giabbino set out for Spain by sea from Pisa to buy silk for the company. The galley on which Giabbino was travelling was captured by Moorish pirates and they enslaved him. From his desk in Lucca, Cinello invested the company's remaining capital wisely. Although he heard no precise news of Giabbino's fate, he faithfully kept the company's books and rigorously set half its profits aside for his absent business partner. He kept a second set of clothes cut from cloth as rich as his own, ready for Giabbino to wear. He had two identical houses built and equally well furnished, one for him and one for Giabbino.

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[101] Cotrugli, *Mercatura,* 137: 'not wanting to damage or stain the fama of his true integrity in any way'.
[102] Cotrugli, *Mercatura,* 137: 'it shows much more a merchant's integrity and faith should be served than money alone'.
[103] A tale noted in passing in T. Simpson, 'For What It's Worth: Merchant Writing and Merchant Identity in the Realm of Money' (PhD thesis, University of Chicago, 1998), 55.
[104] Giovanni Sercambi, *Il novelliere,* ed. L. Rossi (3 vols, Salerno, 1974), iii, pp. 52-59.

After many years, Giabbino was freed by Christian merchants. He returned to Lucca by way of Aragon, Genoa, and Pisa in search of Cinello. When Giabbino and Cinello were reunited, 40 years had passed, and they did not recognise one another. To verify Giabbino's identity, Cinello had him recite the terms of their partnership contract: 'noi mettemmo per uno V cento lire, e volendo io andare in Ispagna a comprare seta con VIII cento lire'.[105] He then asked him where the company's *bottega* had been in Lucca. Finally, he showed him the company's first *quaderno* and had Cinello identify their respective scripts in its entries. Giabbino noted that while he could not recognise Cinello's appearance, 'la léttora' would not have changed.[106] With Giabbino's identity confirmed by Cinello, they opened the company's chest and divided the society's profits between them, each taking four bags of 1,000 florins.[107]

In this tale, the *buona fama* of both individual merchants is secured by their well-kept books. Their distinctive scripts and joint entries fused their personal reputations and *fama* with that of their company. Their individual *fama* depended on their keeping to the terms of their contract, as recorded in the company's first *quaderno* and remembered by Giabbino, and on their abiding by the proportionate and measured division of profit according to the partnership's initial capital, in this case two equal shares. Other markers of a merchant's creditworthiness and reputation, their clothes and their houses, proclaimed the success of their partnership, which depended on its accounting. In imagining an idealised commercial past for the city, Sercambi's tale, and

[105] Sercambi, *Novelliere*, iii, p. 56: 'We invested 500 lire each, and I plan to go to Spain to buy silk with 800 lire'.
[106] Sercambi, *Novelliere*, iii, p. 56: 'the script'.
[107] Sercambi, *Novelliere*, iii, p. 57.

its fictional merchants, were contributing to the *buona fama* of Lucca and its merchants in late medieval Italy. By writing this story, Sercambi claimed the truth of the virtues bestowed on Lucchese merchants in his fiction. It was also a tale that defined the *fama* of Christian merchants against a Moorish and pagan other.

The tale of Cinello and Giabbino was told in between parts of two of Nicolò Soldanieri's *cansonette*, which explore ideas of instability and of *fama*. Sercambi wove these *cansonette* into his *novelle* as further entertainment requested by the imagined audience of the travelling company. The tale is preceded by verses that question the stability of personal identity over the course of a lifetime: 'Io fui ieri uno e un altro son oggi [...]'.[108] This stability was not defined by trivial changes in a person's name, but rather seems to have depended on their actions and the constancy of their ethics: 'Non dica ch'io sia Pier, se ier fui Martino, / [...] ma per diversi passi / meno la vita mia al dí sessaio [...]'.[109] While Sercambi did not copy Soldanieri's poem in full, a later verse used the example of great authors to argue that writing was a means of preserving *fama*: 'Fama di te tu dèi lassar nel mondo / e ben che non si iscriva [...]'.[110] After they heard the tale of Cinello and Giabbino, the travelling company were entertained by one of Soldanieri's *cansonette.* This *cansonetta* contrasted the stability of a person's good name, their *fama* as worldly reputation, with the volatility of material wealth, which neither changes a person's soul, nor in truth belongs to them, but only to Fortune: 'L'animo tuo non menimi né cresca / in perder per acquisto / di cosa che ci dia il mondo o toglia; / [...] e nome non mutare / di ricco over di povero, per oro: / ché ricco altrui

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[108] Sercambi, *Novelliere*, iii, p. 51: 'I was one yesterday and I am another today'.
[109] Sercambi, *Novelliere*, iii, p. 52: 'I do not mean that I am Pier and that yesterday I was Martin [...] but rather that my life leads to the day of reckoning by different steps'.
[110] D. C. De Gaspari, 'L'edizione critica delle canzoni di Niccolò Soldanieri', (PhD Thesis Florence, 2016), 161: 'You must leave your *fama* unless it is written'.

fa ben ch'è proprio suo, / né l'oro, ch'è di fortuna, e non è tuo'.[111] The value of a merchant's *buona fama* far exceeded that of a chest filled with florins. It could be written on the pages of his *quaderni* in a medium that was more permanent than his fortune, name or appearance.

The association of accurate accounting with *buona fama* extended beyond the worldly reputations of merchants and into merchant spirituality, as the example of usury and *fama* will reveal. Usury, understood as lending at excessive rates of interest, was seen as one of the surest routes to obtaining *mala fama* among merchants. According to Da Certaldo, usury not only wasted a merchant's honour, risking his material wealth, but it also endangered his soul: 'L'usura; e come guasta l'avere e l'onore del mondo, così guasta l'anima e 'l corpo'.[112]

The process by which a reputation as a usurer could change a merchant's legal standing was clearly set out in late medieval statutes. In Pisa, either four witnesses in cases involving notaries, or six witnesses in cases concerning debts, were sufficient in law for someone to be described as a usurer through his reputation: *per publicam famam*.[113] In Florence, the bishop's constitutions threatened manifest usurers with the prospect of the denial of their right to Christian burial.[114] Da Certaldo's merchant manual warned

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[111] Sercambi, *Novelliere*, iii, pp. 58-59; D. C. De Gaspari, 'L'edizione critica delle canzoni di Niccolò Soldanieri', (PhD Thesis Florence, 2016), 54-76: 'Your soul neither diminishes nor grows / in loss by acquisition / of things that the world gives to us or takes / [...] and a name doesn't change / for rich or poor or for gold: / for wealth which is truly ours does good to others, / and it is not like gold which belongs to Fortune, and is not yours'.

[112] Certaldo, *Costumi*, 66: 'Usury, just as it wastes having worldly things and worldly honour, so it wastes the soul and the body'.

[113] *Statuti inediti della città di Pisa dal XII al XIV Secolo*, ed. F. Bonaini (3 vols, Florence, 1854-1870), ii, pp. 77, 184.

[114] R. C. Trexler, 'Death and Testament in the Episcopal Constitutions of Florence', in R. C. Trexler, *Church and Community 1200-1600*, *Studies in the History of Florence and New Spain* (Rome, 1987), 287.

that usury took away not only honour and *buona fama* in this world, but that it would also take away a lender's soul in the afterlife. His warning drew a comparison between the moment of judgement and the closing of *quaderni* of accounts: 'al da sezzo in questo mondo [...] al da sezzo, al fare de la ragione'.[115]

Late medieval Italian literature, both that written by merchants or circulated among them, can be used to investigate the connection between *quaderni*, worldly *fama* and eschatology. The writer and poet Franco Sacchetti had first-hand experience of commerce and had joined the *Arte dei Cambiatori* in Florence in 1351.[116] The 128th Tale of his *Trecentonovelle,* set in early fourteenth-century Florence, describes the death of a member of the Pazzi family who, although 'ben veramente gentiluomo', an expert in hunting, riding and other courteous pursuits, had loaned money at usurious rates of interest.[117] He had also been a friend and faithful servant of the city's bishop, Antonio dell'Orso. When he died, the bishop refused his burial on consecrated ground until 'i libri suoi non gli sono appresentati', so that they could be audited and restitution made for his usurious lending.[118] The dead man's friends and relatives came to Bishop Antonio to appeal for him to be buried, 'per non oscurare la sua *fama*'.[119] Antonio asked them to bring his books, and promised to read them with as much generosity as possible. Through the bishop's prudence and the virtue of 'santo Giovanni Boccadoro', the deceased was buried on consecrated ground.[120]

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[115] Certaldo, *Costumi*, 66: 'On the last page of this world [...] on the last page, at the balancing of accounts'.
[116] M. Zaccarello, 'Franco Sacchetti, un fiorentino di Dalmazia nel secolo XIV', Adriatico/*Jadran,* 1/2, (2010), 60.
[117] Sacchetti, *Novelle*, 290: 'well and truly a gentleman'.
[118] Sacchetti, *Novelle*, 290: 'his books are made ready'.
[119] Sacchetti, *Novelle*, 291: 'so as not to darken his fama'.
[120] Sacchetti, *Novelle*, 291.

The man's burial in the tale was not as miraculous as it might initially appear. Trexler did not read Sacchetti's tale as one of bribery, and yet Sacchetti implied that the deceased's friends and relatives had bribed Antonio to secure his burial.[121] His choice of the 'santo Giovanni Boccadoro' as intercessor is telling. At first glance, a straightforward rendering of Giovanni Boccadoro would be John Chrysostom, who was associated with avarice in late medieval Italy.[122] St John the Baptist was stamped on gold florins minted in Florence. In Sixth Tale of the First Day of the *Decameron*, Giovanni Boccaccio recounts the story of an inquisitor, a Franciscan, whose ambition was not the suppression of heresy but rather the acquisition of florins.[123] Here, the unction of St John Golden-mouth is described as a remedy for the 'pistilenziose avarizie de' cherici, e spezialmente de' frati minori, che denari non osan toccare', and Boccaccio noted his surprise that this medicine had been overlooked in Galen's works.[124] Sacchetti confirmed that greed rather than mercy had secured the burial of the unnamed Pazzi lender, writing that the bishop's reply would have been elegant had it not been motivated by avarice.[125]

Sacchetti's tale shows how *fama* as a merchant's reputation was at once a practical and a spiritual concern. In both late medieval marketplaces and late medieval eschatology, *buona fama* was calculated when books were audited. An individual's *fama* also

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[121] Trexler, 'Testament', 277, at n. 106.
[122] Boccaccio, *Decameron*, I:6, i, p. 96, at n. 10.
[123] Boccaccio, *Decameron*, I:6, i, pp. 95-99.
J. L. Smarr, 'The tale of the inquisitor (I.6)', in E. B. Weaver, *The Decameron First Day in Perspective* (Toronto, 2016), 151.
[124] Boccaccio, *Decameron*, I:6, i, 97-98: 'pestilential avarice of clerics, and especially of Franciscans, who are not permitted to touch money'.
[125] Sacchetti, *Novelle*, 291.

influenced the reputations of the families, companies, and cities to which they belonged. Even though the dead usurer is never named, Sacchetti presents the Pazzi family and the city of Florence as more greedy than courteous or pious. While sermons and manuals of merchant practice emphasised the incalculable value of *buona fama,* this tale reveals that the idea of buying *buona fama* was not inconceivable, even if it was unlikely to have been effective.

A merchant's *fama* depended on his perceived attitude to time. In his manual of the art of trade, Cotrugli urged his merchants not only to record their transactions in their books, but also to pay on time. Through timely payment, one could acquire 'fama et credito', he said, repeating the proverb that 'lo bon pagatore l'è signore de la borsa del compagno'.[126] Conversely, failing to pay creditors on time and then leaving the relevant jurisdiction with unpaid debt meant that merchants could be portrayed in *pitture infamanti,* as a warning that their credit and reputation had been exhausted. According to the Florentine statutes of the Capitano del Popolo from 1321, 'mercatores' who were not repaying their debts and who fled could be painted on the wall of the Bargello.[127] These *pitture infamanti* made a merchant's *mala fama* prominently visible to other merchants in the centre of Florence, while at the same time defending the city's *buona fama* for enforcing the terms of contracts within its jurisdiction.

Fama was also a mechanism by which the boundaries of social status were policed in late medieval Italy. Sacchetti wrote that he had been inspired to write his

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[126] Cotrugli, *Mercatura*, 66: '*fama* and credit', 'The good payer is the lord of the purse of his business partner'.
[127] *Statuti della Repubblica Fiorentina* ed. R. Caggese (2. vols, Florence, 1994), i, p. 115: 'merchants'; A. Yunn, 'The Bargello: A New History of the First Communal Palace of Florence, 1255-1346', (PhD Thesis, New York University, 2016), 231.

Trecentonovelle as a source of comfort to its readers, who were living in a time of 'pestilenziale infermità'.[128] Part of his concern was to investigate the volatility of social status in Florence, with some swiftly elevated by commercial profits and others brought to a poor and unhappy state, in the wake of current epidemics.[129] One of Sacchetti's *novelle* revolved around an artisan, an 'uomo di picciolo affare', who, hearing of the painter Giotto's *fama*, asked him to paint his arms on a shield without even telling Giotto his name, let alone describing his heraldry.[130] Giotto decided to devise new and fitting arms for the artisan. He drew the outlines of a helmet, a neckplate, gauntlets, iron gloves, a cuirass, greaves, a sword, a knife, and a lance on the shield, and gave it to one of his apprentices to paint. When the artisan saw the finished shield, he refused to pay. Giotto replied that he had painted exactly what he had been asked to paint, noting that the artisan was hardly a Bardi, the noble Florentine banking family, for whom just saying 'paint my arms' would have been enough.[131] The artisan then complained to the *Grascia*, a court governed by eight Florentine merchant and artisan officials, which regulated Florence's markets, weights, and measures.[132] In the court, Giotto eloquently counter-claimed for payment he was owed for the shield, and the court ruled in his favour. At the end of his tale, Sacchetti offered readers his own judgement: 'Così costui, non misurandosi, fu misurato: ché ogni tristo vuol fare armi e vuol far casate'.[133]

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[128] Sacchetti, *Novelle*, 3: 'pestilential infirmity'.
[129] Sacchetti, *Novelle*, 3.
[130] Sacchetti, *Novelle*, 137: 'a man of little renown / a man of small ventures'.
[131] Sacchetti, *Novelle*, 138.
[132] Sacchetti, *Novelle*, 3; *Lo Statuto in volgare della Magistratura della Grascia (a. 1379),* ed. M. C. Vigni, *ASI*, 129/1 (1971), 24. 51, 60.
[133] Sacchetti, *Novelle*, 139: 'Thus he who failed to measure himself was measured: any wretched man wants to claim their own arms and start their own lineage'.

It is a tale that invited its readers to measure worldly *fama*. A coat of arms was the mark not of a merchant but of an aristocrat. Although the Bardi were famed for their merchant company, their status as merchants who came from established nobility was far less controversial than that of the kind of merchant who had improved his original fortunes and had risen from a status that would have been comparable to that of an artisan. That the artisan was described as a man of 'picciolo affare' would have provoked unfavourable comparison to the men of 'grande affare' in Florence, such as the Bardi.[134] Giotto's decision to paint weapons on the shield would have resonated with the successful Florentine knights who earned their living as merchants, equipped themselves with weapons and armour, but for whom knighthood was a 'social model'.[135] Where Giotto is shown deftly navigating the commercial courts to enforce his contract, the artisan's argument, evidence and fama were not enough to persuade the *Grascia.* The artisan responded angrily to Giotto's trick, asking to be refunded. This stands in contrast to the ideal of the merchant that Cotrugli would later set out, according to which he should strive to invest, spend, lend, and receive money without emotion. Moreover, Cotrugli warned merchants not to lend to nobles, priests, friars, scholars, doctors, and men at arms, because they were not accustomed to managing money dispassionately.[136]

The discussion of *fama, misura,* and the anxieties that surrounded social status and professional identity in Sacchetti's *novella* revolves around the commissioning of a painting by an artisan from a famous master. This was not a wholly implausible

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[134] Sacchetti, *Novelle*, 4.
[135] C. Lansing, *The Florentine Magnates, Lineage and Faction in a Medieval Commune* (Princeton, 1991), 155.
[136] Cotrugli, *Mercatura,* 64.

scenario. Samuel Cohn, studying Arezzo, Assisi, Florence, Perugia, Pisa, and Siena in the years after 1348, has noted that sacred paintings were commissioned by artisans: butchers, cobblers, bakers, blacksmiths and even an *ortolanus*, either a gardener or a greengrocer, in their wills.[137] These small commissions, as Sacchetti implied, were not on the same scale as the projects funded by great merchants. The scenes from the life of St Francis painted by Giotto for the Bardi Chapel at Santa Croce mark the other end of this scale.[138] Yet even individual merchants who were not members of great merchant companies left considerable sums in commissions for paintings. In Florence in 1348, Turinus, son of Baldese, left 1,000 lire for a painting of Old Testament history to be designed by Jacopo Passavanti.[139] The bequest was made invoking 'the honour of God, the Virgin and the entire celestial court' in the same style as the introductory dedications that merchants wrote at the start of their *quaderni*.[140] Commissioning art was a means by which merchants could memorialise their *fama,* while displaying their professional identities and social status.

Fama, understood as worldly reputation, was bound up with merchant writing, the idea of measure, or proportionate conduct and their attitudes to time. *Fama* was the process through which merchant reputations were established and judged. Usury, understood as lending at disproportionately high rates of interest, the practice where these three threats to *fama* converged, was the most visible path to infamy.

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[137] S. K. Cohn, *The Cult of Remembrance and the Black Death: Six Renaissance Cities in Central Italy* (Baltimore, 1992), 245.
[138] J. Gardner, *Giotto and His Publics: Three Paradigms of Patronage (Harvard, 2011),* 121-122.
[139] Cohn, *Remembrance,* 22.
[140] Cohn, *Remembrance,* 22.

Gambling: Mercantile *Fama* and *Cortesia*

After usury, gambling was seen as the next greatest threat to a merchant's *fama*. Merchants were meant to tread a straight and narrow path between their trust in God and their control of and accountability for their own affairs. Gambling was an activity that visibly displaced the misplacing of trust in the hands of fortune rather than in the hands of God. It also lay beyond all senses of accountability and any hope of control. It performed an exaggerated version of the sudden profit and loss that was seen as having been a defining feature of the merchant's profession in late medieval Italy. Gambling was proscribed by the contracts that founded commercial partnerships, condemned in merchant manuals, decried in late medieval sermons, and seen as a source of material and spiritual ruin, whether through blasphemy, or bankruptcy, and ultimately leading to despair.

Yet gambling was also an activity that lay between different kinds of reputation. The merchant ideal of avoiding gambling was complicated by tensions between these different kinds of reputation. In courtly contexts, gambling provided an opportunity to display 'largesse' and 'conspicuous consumption', and, as such, was seen as an expression of the *cortesia* vaunted by those merchants who aspired to noble status.[141] In this context, gambling was not an expression of avarice but rather of its opposites, liberality, magnanimity, and magnificence.[142] Bernardo di Cino de Nobili is a notable

[141] M. G. A. Vale*, The Princely Court: Medieval Courts and Culture in North-west Europe, 1270-138*0 (Oxford, 2001), 177, 297.
[142] Brunetto Latini, *Tresor*, eds. G. Beltrami, P. Squillacioti, P. Torri and S. Vatteroni (Turin 2007), 394.

example of a merchant who pursued *cortesia* through gaming.[143] Conversely, members of Florentine noble families who wished to be seen as good merchants, moving in both commercial and courtly spheres, for example members of the Peruzzi and the Pitti families of Florence, accounted for their gambling as a business expense or an investment.[144] The place of gambling in merchant culture in late medieval Italy traces the boundary between mercantile *fama* and courtly *cortesia*.

Lodovico Zdekauer found the greatest fascination for gambling in late medieval Italy among the wealthiest Florentine merchants.[145] He cited Bernardo di Cino de Nobili as one of them,[146] and argued that their familiarity with calculating probabilities and weighing future returns when managing their investments drove this interest in games of fortune.[147] Approaching the problem from the other direction, Johan Huizinga saw investing as an activity that straddled the 'hazy border' between the competitive enjoyment of games and serious efforts to predict future trends in the hope of securing profit.[148] Merchants even gambled by proxy, just as they invested through factors in different cities. More recently, Thomas Simpson, in his detailed study of the memoirs of the Florentine merchant Buonaccorso Pitti, has suggested that gambling among late medieval Italian merchants restaged the volatility, risks and rewards of late medieval

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[143] I am extremely grateful to Dillian Gordon for bringing Bernardo di Cino de Nobili to my attention: D. Gordon, 'The Fourteenth-Century Altars and Chapels and their Altarpieces in the Camaldolese Monastery of Santa Maria Degli Angeli in Florence: The Saving of Souls "More Laudabili"', *Zeitschrift für Kunstgeschichte*, 76/3 (2013), 289-314; D. Gordon, 'The Nobili altarpiece from S. Maria degli Angeli, Florence', *Burlington Magazine,* 162 (2020), 14-25.
[144] C. Klapisch-Zuber, *Retour à la cité, les magnats de Florence, 1340-1440* (Paris, 2006), 428.
S. L. Peruzzi, *Storia del commercio e dei banchieri di Firenze in tutto il mondo conosciuto dal 1200 al 1345* (Florence, 1868), 370.
[145] L. Zdekauer, 'Il giuoco in Italia nei secoli XIII e XIV e specialmente in Firenze', *ASI,* 18/154 (1886), 72.
[146] Zdekauer, 'Giuoco', 73.
[147] Zdekauer, 'Giuoco', 63.
[148] J. Huizinga, *Homo Ludens, A Study of the Play-Element in Culture*, tr. R. F. C. Hull (London, 1949), 54.

markets in microcosm.[149] Merchants who forewent the gambling tables still gambled on the weather, the value of their goods and even on men's lives as a day to day part of their profession.

The contracts founding companies recorded in merchant *quaderni* expressly forbade gambling. The Florentine merchant Pepo degli Albizzi formed a company with his brother Lando and Paolo di Meo in 1353, recording a copy of their contract in his *quaderno*.[150] The company was to invest in the wool and textile trade in Florence, Flanders, and England. It recorded capital contributed by each of the partners and the proportionate division of profits, four per cent of which were to be given to God's poor prior to their division, or losses. The contract went on to stipulate that none of the partners, 'per onestà et per dare buono asempro', would go into a tavern in Florence nor gamble nor commission anyone to gamble on their behalf in Florence or elsewhere for the lifetime of the company.[151] Merely being seen near gambling was sufficient for the *buona fama* of their company, which was imagined as a fictive legal person, to be harmed.

A 1455 partnership agreement for the Medici bank in Bruges contained similar provisions.[152] It appointed Angiolo Tani as a new partner to run the company for four years, and it stipulated that the company was to be styled 'Piero di Cosimo de' Medici, Gierozzo de Pigli e Compagni'.[153] The company was to use the Medici merchant mark

[149] Simpson, 'Writing', 107.
[150] Simpson, 'Writing', 213.
[151] Simpson, 'Writing', 56, 216: 'For honesty and to give a good example'.
[152] *Correspondance de la filiale de Bruges des Medici,* ed. A. Grunzweig, 53-63.
[153] *Correspondance,* ed. Grunzweig, 56.

or ‘segnino’, which was recorded in the contract.[154] Tani was required to engage in honest and legitimate trade.[155] As a condition of the contract, he promised not to gamble, either directly or by proxy, with dice or cards for the life of the company.[156] Should he gamble, he would have to pay a 100 groat fine, any winnings would be forfeited to the company, his losses would be his own, and he would be expelled from the company.[157]

These contractual conditions were a sign of gambling’s popularity among merchants. Gambling was also accounted for as an investment or a business expense. The books of the Peruzzi company recorded gambling losses as expenses.[158] Tommaso Peruzzi, Arnoldo Peruzzi’s brother, repaid 35 gold florins worth of gambling expenses in 1311 and gambling expenses were also incurred by Zanobi di Tano di Bancho Raugi on his journey from London to Florence in 1339.[159] In Paris, Bernardo di Cino de Nobili, an example to whom I will return, invested in gambling by proxy.[160]

Gambling was seen as especially unsuitable for merchants. Latini’s vernacular *Tesoretto* had already associated ‘zara’ with an avaricious and usurious merchant, who saved and spent, without ‘freno’, who earned a ‘mal fiorino’, by observing ‘mala misura’, and using false weights, who had no fear of sin, fraud, or blasphemy, who

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[154] R. S. Lopez and I. W. Raymond, *Medieval Trade in the Mediterranean World* [1955], (New York, 2001), 206; R. De Roover, ‘The Medici Bank Organization and Management’, *The Journal of Economic History*, 6/1 (1946), 31.
[155] Raymond and Lopez, *Documents*, 207.
[156] *Correspondance,* ed. Grunzweig, 58.
[157] Raymond and Lopez, *Documents*, 208.
[158] Simpson, ‘Writing’, 100, at n. 9.
[159] A. Sapori, *I libri di commercio* (Milan, 1934), 113-114.
[160] Simpson, ‘Writing’, 119.

failed to observe holy days and who was an 'esempro di malfare'.[161] Pegolotti wrote that, for a true merchant, usury and games of fortune were forbidden.[162] Cotrugli considered gambling to be a mortal sin in itself, and he argued that games of fortune were incompatible with mercantile honesty.[163] Giovanni Morelli instructed merchants to avoid gambling above all other pastimes and to ensure that their sons did not gamble either. Seemingly out of concern that a merchant's *fama* would be damaged by mere association, he warned that merchants should have nothing at all to do with anyone who gambled.[164]

Investing without regard to risk was called gambling and condemned. Ser Lapo Mazzei, wrote to Simone d'Andrea, manager of the Datini company in Barcelona where his son Piero was a factor, to tell him that the 'savio mercatante' should not feel responsible for losses incurred through no fault of their own, whereas losses from unsecured investments or overly risky investments in which money was 'giucato a zara' were blameworthy. Mazzei asked d'Andrea to tell his son to be good, loyal and timely, 'sanza giuco e sanza cattiviere'.[165] According to Cotrugli, the investment of profits in stable assets distinguished the merchant from the mere 'homo de gioco di fortuna'.[166]

Condemnations of gambling in merchant manuals were reinforced in the sermons that merchants in late medieval Italy would have heard. Gambling was depicted as an

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[161] Brunetto Latini, *Tesoretto*, in Brunetto Latini, *Poesie* ed. S. Carrai (Turin 2016), 145-148: 'games of chance', 'restraint', 'wicked coin', 'bad measure', 'an example of malpractice'.
[162] Francesco Pegolotti, *La Pratica della Mercatura,* ed. A. Evans, (Harvard, 1936), 20.
[163] Cotrugli, *Mercatura,* 1.
[164] Lapo Mazzei, *Lettere di un notaro a un mercante del secolo XIV: con altre lettere e documenti*, ed. C. Guasi (2 vols, Florence, 1880), ii, 261; Translated in: Lopez and Raymond, *Documents,* 423.
[165] Lapo Mazzei, *Lettere*, ii, p. 236: 'without gambling and without wickedness'.
[166] Cotrugli, *Mercatura*, 158.

expression of avarice and San Bernardino da Siena preached that: 'non è altra el giucare se none per avarizia'.[167] Gambling, as an exchange in which profit was someone else's loss, unlike virtuous investing, was comparable to theft.[168] Gamblers were untrustworthy.[169] In this sense, weighted dice were seen to have been a kind of false weight or measure, of fortune.[170] Gambling was sinful because it was a 'perdimento del tempo', and time, as something which could be spent to secure salvation, was the most valuable commodity of all.[171] San Bernardino directly asked his audience: 'Tu, giucatore, quanto tempo ài perduto? [...] ài perduto quaranta anni che non ài potuto in borsa o speso bene'.[172] Here, he elided years and florins by posing the question of how a gambler's money-pouch might have been more profitably filled with time. The time period of 40 years was a familiar unit of indulgences in late medieval Italy, reinforcing San Bernardino's suggestion that time which could have secured salvation was the opportunity cost of gambling.[173] Giordano da Pisa had already preached that to waste time was a sin and that eschatological investing was a far wiser strategy than gambling with a soul's fate: 'tempo vale e è utile a guadagnare il maggior bene che sia cioè vita eterna [...] Il peccato mortale toglie il tempo [...] Vedi come è prezioso il tempo! Or lo giuco a zara!'.[174]

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[167] San Bernardino da Siena, *Prediche,* i, p. 426: 'gambling is nothing other than the product of avarice'.
[168] San Bernardino, *Prediche,* i, p. 426.
[169] San Bernardino, *Prediche,* i, p. 427.
[170] San Bernardino, *Prediche,* i, p. 430.
[171] San Bernardino, *Prediche,* i, p. 429: 'a waste of time'.
[172] San Bernardino, *Prediche,* i, p. 430: 'you gambler have lost 40 years which you could have saved in your money-pouch or spent well'.
[173]B. Schimmelpfennig, 'Römische Ablaßfälschungen aus der Mitte der 14. Jharhunderts', in Monumenta Germaniae Historica Schriften, *Fälschungen im Mittelalter* (6 vols, Hanover,1988), v, 642.
[174] Giordano da Pisa, *Quaresimale Fiorentino 1305-1306,* ed. C. Delcorno (Florence, 1974), 330: 'Time is precious and useful in earning the greatest good, that is eternal life [...] mortal sin takes away time [...] see how precious time is! Now you are gambling with it!'.

San Bernardino da Siena compared gambling to usury insofar as it allowed disproportionately great profits to be made from small sums of money in short periods: 'Quale è maggiore usura che è quella del giucare? Alcuna volta in un dì, cor uno fiorino, ne vincerà cento. Quale usuraio s'assomiglia a questo? Niuno'.[175] Yet he saw the profits of gambling as 'più cattivi' than the profits of usury.[176] Where usury imperilled the material and spiritual *fama* of the lender, gambling, whether directly or by proxy, tarnished the material and spiritual *fama* of others: 'lo scandalo dei buoni'.[177] This applied not only to individuals but also to companies, and to the reputations of cities.

Gambling was sinful in that it led the sinner to greater sins. Gambling was a familiar context for blasphemy against God, the Saints, and the Virgin Mary.[178] Here, too, gambling acted as a way in which a merchant could lose his *fama.* This uncomfortable proximity between gambling and merchant practice can be seen in the story of a Florentine gambler who blasphemously attacked an image of the Madonna in a church near the marketplace in Naples. A fresco of the Virgin Mary, the *Madonna della Faccia Tagliata*, painted for the church of S. Eligio in Naples was accompanied by an inscription of 1414 that recounted his tale. This gambler, having lost money at cards, blasphemed loudly, entered the church, and stabbed the image of the Virgin with a dagger.[179] The fresco began miraculously to bleed. The gambler fled, returning to Florence. Letters from Naples arrived before him, recounting his blasphemous crime.[180]

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[175] San Bernardino, *Prediche,* i, p. 427: 'What is a greater usury than that of gambling? Sometimes in a day, with one florin one can win one hundred florins. What usurer resembles this [could make so much profit, so quickly]? None'.
[176] San Bernardino, *Prediche,* i, p. 439: 'more evil'.
[177] San Bernardino, *Prediche,* i, p. 440: 'the scandal of the good'.
[178] San Bernardino, *Prediche,* i, p. 427.
[179] Zdekauer, 'Giuoco', 69; G. Vico, *La mente* (Milan, 1854), 86; G. A. Summonte, *Historia della città e regno di Napoli* (10 vols, Naples, 1748), iii, p. 80; C. Gregorio, *Il giuoco di fortuna* (Modona, 1703), 59-62.
[180] Summonte, *Napoli*, 80.

After having been arrested and falsely accused of murder, he confessed his true crime of sacrilege to the authorities and was justly punished.[181] It is a narrative that mirrors the use of *pitture infamanti* to pursue infamous debtors who fled beyond the jurisdiction of their creditors.

Gambling was seen to provoke not only 'ira', irrational anger, but also 'disperazione' that could lead to suicide.[182] This desperation was the opposite of the hope of salvation in which merchants and others were meant to trust. In Giotto's Arena Chapel frescoes in Padua, Hope, on the south wall, and Despair, on the north wall, were positioned opposite one another, on either side of the Last Judgement on the west wall (Figure 6.9, Figure 6.10).

[181] C. Gregorio, *Il giuco di fortuna* (Modona, 1703), 61.
[182] San Bernardino, *Prediche,* 431: 'wrath', 'despair'.

Figure 6.9 **Giotto's *Desperatio* in the Arena Chapel, Padua.**

Figure 6.10 **Giotto's *Spes* in the Arena Chapel, Padua.**

Where Hope's open hands reach up towards salvation and the crown offered by an angel, which seems to hover above the painted frame that surrounds her, Despair is shown as a hanged suicide, fallen below the painted frame, hands clenched and a demon reaching down to claim her soul. The text that accompanied these inscriptions defined Despair as a heart without Hope. Readers of this inscription were told not to despair but rather to remember that hope would lead them to salvation.[183] Hope was described as escaping from the prison of worldly things and flying up to be saved.[184]

The despair of gamblers who were not favoured by fortune held up a mirror to merchant practice. Merchants who fixed their gaze downwards on to the material world, and who would not look up to see spiritual goods and the rewards of salvation, were at risk of despair. The shame at the loss of *fama* and the desperation that could stem from debt was associated with suicide. The poet and jurist Cino da Pistoia thought that suicide prompted by debt was often an affliction of Florentines.[185] At the end of the 13th canto of Dante's *Inferno*, Virgil asked the name of the soul of a suicide who had been metamorphosised into a shrub. This soul, a Florentine, replied, without losing anonymity:

> I' fui de la città che nel Batista
>
> mutò 'l primo padrone, [...]
>
> Io fei gibetto a me de le mie case.[186]

Two fourteenth-century commentaries, the *Ottimo Commento* and the *Anonimo Selmiano*, identified him as having been Rucco de' Mozzi, a failed Florentine banker

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[183] G. Ammannati, *Pinxit industria docte mentis* (Pisa, 2017), 94.
[184] Ammannati, *Pinxit,* 88.
[185] A. Murray, *Suicide in the Middle Ages, The Violent against Themselves* (Oxford, 1998), 89.
[186] Dante, *Inferno,* XIII, ll. 143-144, 151, pp. 172-174: 'I was of that city which changed its first patron to the Baptist [...] I made a gibbet of my houses'.

who hanged himself when his company failed.[187] Giovanni Villani's chronicle records the Mozzi as a family 'di piccolo cominciamento', whose rapid advancement stemmed from their success as merchants to the papacy.[188] Although it does not seem possible to resolve the question of this soul's identity,[189] that it was thought by late medieval readers to have been Rucco de' Mozzi reveals the connection of suicide and despair with the volatile fortunes that merchants could make.

That Dante chose to leave him anonymous is significant. His infamy in the poem was a civic and not an individual infamy. Referring to Florence as the city of the Baptist invoked the city's coin, the florin; 'la lega suggellata del Batista'.[190] Mention of the change of the city's first patron, Mars and his martial values, to John the Baptist, the patron of the city and its currency, emphasised its new commercial vulnerability to the despair. The gibbet that the anonymous suicide made of his houses invoked the many houses of Florence as much as it did the Mozzi family palaces to the south of the Rubaconte bridge across the Arno.[191] As a word derived from old French, *gibetto* has been interpreted as a reference to the languages learned by Florentine merchants during the time they spent abroad as factors.[192] For merchant readers, these verses were a reminder that focusing on material profit alone could lead to despair and suicide. It would also harm the reputation of their cities.

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[187] L'ottimo commento, *Commentary on Inferno 13*, DDP; Anonimo Selmiano, *Commentary on Inferno 13*, DDP.
[188] Giovanni Villani, *Nuova Cronica,* ed. G. Porta (Parma, 1991), 16, 392: 'of small beginnings'.
[189] G. Masi, 'Fra savi e mercanti suicide del tempo di Dante', *Il Giornale Dantesco* 39/9 (1938), 236.
[190] Dante, *Inferno*, XXX, l. 74, p. 468: 'the alloy sealed with the Baptist'.
[191] Giovanni Villani, *Nuova Cronica,* ed. G. Porta (Parma, 1991), 392.
[192] Masi, 'Suicide', 214.

However, the relationship between mercantile *fama* and gambling was more complex than it first appears from its widespread condemnation. Gambling was popular among merchants, and Cotrugli noted that many of merchants he knew were experts at chess, tables, cards, and dice.[193] Gambling was a path by which merchants could obtain a reputation for *cortesia,* virtuous behaviour that was a marker of nobility. It was an activity that gave them the opportunity to display generosity and, when the stakes were high enough, a lack of care for material wealth, refuting charges of greed.

Cortesia was a contested term in late medieval Italy.[194] Whereas it had once been understood as the practice of the customs of virtuous courts, and as a kind of honesty, it was increasingly equated with *larghezza*, the virtuous mean between prodigality and avarice. In late medieval Italy, conflict over the meaning of *cortesia* can be read as a reaction to the increasing lack of clarity in the social distinction between impoverished nobles and newly wealthy merchant families.[195] In Florence, the rhetoric of the *popolo* holding the excesses of the magnates in check, which emerged at the end of the 13th-century, encouraged the emergence of new definitions of nobility not as ancient wealth but rather as status that could be earned through virtuous behaviour.[196] It is in this light that Dante criticised the 'miseri volgari' who fooled themselves into thinking that *cortesia* and *larghezza* were one and the same, and that, as we have seen, Da Certaldo redefined courtesy as measure; 'cortesia non è altro se non misura.'[197] Gambling, as an

[193] Cotrugli, *Mercatura,* 126.
[194] K. Olson, *Courtesy Lost: Dante, Boccaccio, and the Literature of History* (Toronto, 2014).
[195] G. Salvemini, *Magnati e popolani in Firenze dal 1280 al 1295*, (Milan 1966), 22.
[196] T. Barolini, 'Dante and Wealth, Between Aristotle and Cortesia: From the Moral Canzoni Le Dolci Rime and Poscia Ch'Amor to Inferno 6 and 7', *Medioevo Letterario d'Italia*, 15/15 (2018), 35.
[197] Dante, *Convivio*, II, X, ll. 7-8, p. 292: 'wretched unlettered people'; Certaldo, *Costumi*, 13.

expression of *cortesia*, lay at the conjunction of these definitions as part of courtly culture and an opportunity to display largesse.

His fellow Florentine merchant Bounaccorso Pitti praised Bernardo di Cino de Nobili as 'il più cortese e il più largho giucatore che mai si viddi' in the memoirs of his travels 'a cercare la ventura', which he wrote in his *quaderno*.[198] The partnership they formed in Paris together in 1380, so that Di Cino de Nobili could name Pitti as his proxy in gambling with Wenceslaus of Bohemia, the Duke of Brabant and other nobles in Brussels deserves close attention.[199] Their venture was organised as a company in which Di Cino de Nobili provided the capital, 2,000 gold francs, and Pitti contributed his 'poco senno' as a gambler.[200] The gambling in Brussels took place together with jousts, tournaments, and dances. Pitti suffered great losses by betting 300 florins or more on single throws of the dice. He wrote about having duped himself into thinking that 'gran poste' would bring 'gran vantaggio', even though this was something that 'la ragione non vuole'.[201] After the game, Pitti accepted an invitation to dance with a young girl who tried to console him: ' [...] lombardo, non ti caglia perché tu abbia perduto, che Idio t'aiuterà bene'.[202] The Duke of Brabant saw this and, admiring Pitti's bravura in the face of fortune, gave him 500 gold francs, telling him that he should return them if he made back his losses in another year. In Paris, Pitti returned the 500 francs, which the Duke of Brabant had given him 'con nome di prestanza', to Di Cino de Nobili to

[198] Buonaccorso Pitti, *Cronica,* in Branca, *Mercanti Scrittori*, 403, 365: 'the most courteous and generous gambler who had ever been seen', 'in search of fortune'.
[199] Thomas Simpson has studied Buonaccorso Pitti's in depth: Simpson, 'Writing'.
[200] Pitti, *Cronica*, 381: 'limited skill'.
[201] Pitti, *Cronica*, 381: 'large bets', 'great gains', 'that reason would not allow'.
[202] Pitti, *Cronica*, 381: 'Lombard [a term used to describe Italians and merchants] do not concern yourself because you lost, God will help you'.

settle his liability for a quarter of their losses, which encompassed all the original 2,000 gold francs invested.[203]

While for Di Cino de Nobili, investment was structured as a commercial partnership with Pitti, Pitti was not constrained by commercial 'ragione' in his attitude to risk when he gambled. His acceptance of his losses and courteous participation in the dances that followed won him a reputation for *cortesia*. That Pitti recorded the Duke's gift of 500 gold francs as having been called a loan is significant. Although it allowed Pitti to meet his liability for their losses, it was not the same kind of loan as the ones he went on to raise in 1407, including from Di Cino de Nobili's son Bartolo, in 1407, to cover his losses when he gambled for the first time in eight years, having been required to as part of a diplomatic mission to free two Florentine ambassadors.[204] The Duke's 500 gold francs were a visible display of his largesse and the reward for Pitti's defiance of fortune. Even when gambling entailed significant financial loss, it could still earn a merchant a reputation for *cortesia*.

Cortesia was a valuable attribute for merchants whose trade depended on noble clients. As well as having been a famous gambler, Bernardo di Cino de Nobili was a merchant who was active in Florence and Paris as a financier and trader in precious stones. On at least one occasion, he insured a shipment of cloth for the Datini company.[205] He married Piera degli Albizzi, from the wealthy Florentine merchant family. He pursued a noble status through his connections to the French court of Charles V, and he

[203] Pitti, *Cronica*, 381: 'calling it a loan'.
[204] Pitti, *Cronica*, 441.
[205] D. Gordon, 'The Nobili e from S. Maria degli Angeli, Florence', *Burlington Magazine*, 162, (2020), 16.

eventually earned the right to add 'de Nobili' to his name and to use the fleur-de-lis in his arms.[206] Di Cino de Nobili's ties to the French court and the *cortesia* that he displayed when gambling also furthered his business connections. When he was made bankrupt in 1390, his family arms and the social standing of his descendants were not jeopardised.[207]

Condemnations of gambling held up a mirror to merchant practice, presenting an uncomfortably close re-enactment of unethical investing. A gambler was imagined as the corrupted inverse image of a merchant who invested within the bounds of measure, who did not falsify weights and measures, who acted according to virtue, who had *buona fama,* who neither wasted time nor sought to control fortune, and who contributed to the common good of their city. Unlike the perfect merchant, gamblers did not use reason to limit their risk and exposure to fortune. Although gamblers who cheated were able to tamper with the scales in which their own material fortune was weighed, the scales of eschatological justice were impervious to their dishonest interference.

Nonetheless, gambling's condemnation is a sign of its popularity among merchants in late medieval Italy. This popularity went beyond the glamour that was associated with gambling as a venture in which fortune had a free hand, as emerges from Pitti's memoirs. Gambling stood at the boundary between mercantile *fama* and noble *cortesia,* and it was one way in which merchants could cultivate profitable ties to late medieval courts, or even, for merchants who did not come from aristocratic families, to cross this

[206] Gordon, 'Nobili altarpiece', 15.
[207] Gordon, 'Nobili altarpiece', 25.

threshold and to acquire noble status. The example of Di Cino de Nobili, the Florentine merchant and most courteous gambler, reveals how gambling traced the limits and particularity of mercantile *fama*.

The advice of merchant manuals against being seen with gamblers, and the Duke of Brabant's admiration for Pitti's display of composure after accepting heavy gambling losses, approach *fama* from two different perspectives. Both examples show that a merchant's *fama* depended on the perspective in which it was seen. Before finally addressing *fama* as memory in merchant spirituality, I will investigate *fama* as the circulation of information.

Fama and Circulation

> La fama velocissima, la quale
> il falso e 'l vero ugualmente rapporta,
> era volata con prestissime ale [...][208]

Fama was always in motion. A merchant's *fama* was shaped by the swift current of news, the movement of goods, ships, merchants, books, and letters. This information flowed across seas, markets, and desks, and it ebbed when letters were copied or stored in the pages of *quaderni*. Reputations were continually remade by this commercial circulation. Yet, as would have been known to merchant readers of Boccaccio's *Filostrato*, a work popular enough to be stocked 'ready-made' by the *cartolaio* Giovanni di Michele Baldini in Florence, *fama*'s accuracy did not always match its speed.[209] Timely, accurate news offered an advantage over their competitors for as long as it was not common knowledge. Delaying the flow of commercial information could grant temporary respite to failing companies and creditors. The experience gained from travel improved a merchant's *fama*. *Fama* moved between markets and across the boundary of the afterlife. The circulation of *fama* between this world and the next will set the stage for the investigation of *fama* and memorialisation.

Fama moved through observation and conversations, which were both reported in merchant letters. Merchants ran partnerships from their desks with companies in

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[208] Boccaccio, *Filostrato,* ed. V. Branca, in Boccaccio, *Opere*, ii, 126: 'Very fast *fama,* which reports true and false alike, flew on the fastest wings'.
[209] R. Daniels, *Boccaccio and the Book, Production and Reading in Italy 1340-1520* (London, 2009), 22.

different cities through regular correspondence. Merchant letters moved at greater speeds and with greater regularity from the second half of the fourteenth century. In 1357, seventeen Florentine merchant companies founded the *scarsella dei mercanti fiorentini*, a regular commercial courier service.[210] Merchants paid by the distance that each of their letters would cover.[211] Couriers could cover more than 37 miles in a day.[212] By the early fifteenth century, two *scarselle fiorentine* connecting the city with Pisa, Bruges and Barcelona were complemented by the *scarsella lucchese,* connecting Lucca, Pisa, and Bruges, and two *scarselle catalane* from Barcelona to Bruges and to Pisa and Florence.[213] In 1420, a courier from Florence could be expected to reach Bruges in 22 days.[214] The *fama* transmitted by merchant letters flew on the fastest of wings.

Fama's speed did not necessarily equate to its accuracy. Merchants were warned against spreading false rumours. The Venetian *quaderno* the *Zibaldone da Canal* contained an advice poem, 'Li amaistramenti de Sallamon'.[215] Its memorable rhymed verses described how to maintain *cortesia* in speech: 'Ve no contar *novella* che sia ria, / a dir lo mal è gran villania / e blaxemar certo non è cortexia né bona uxança [...] E varda, se tu non sis bon dicitore, / non esser gran favellatore; / fio, quanto tu pòi, fuçi remore, non ge stare'. [216] Defaming another person or merchant was not only discourteous but also sinful. Jacopo Passavanti's penitential manual noted that it was

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[210] Spufford, *Power and Profit,* 25
[211] Melis, *I trasporti e le comunicazioni nel medioevo* (Florence, 1984), 189.
[212] Spufford, *Power and Profit*, 27.
[213] Spufford, *Power and Profit*, 25.
[214] Spufford, *Power and Profit*, 27.
[215] *Zibaldone,* 101-108.
[216] *Zibaldone,* 102-103: 'Do not tell tales which are evil, to speak ill is a great crime and blasphemy is certainly not courtesy nor good practice [...] And see that you are not a great teller of tales, if you are not a good speaker, boy, when you can flee rumours and do not involve yourself in them'.

possible to sin by harming others in their person, their possessions, their status or their *fama*.[217] Merchants also knew the value of secrecy and of delaying *fama*'s flight. Cotrugli counselled readers of his manual of the art of trade not to *disfamare* a doubtful creditor, because this would ruin them.[218] Instead, they should give them the help and credit they needed to return to profit and they should 'rimeterlo a cavalo': after all, a debtor's credit was their salvation.[219]

The 15,000 letters preserved in the archives of the Datini company are an especially rich vein of material that can be quarried to study *fama* as circulation.[220] A letter written on 23 May 1393 by Piero Benintendi, the head of the Datini Company's branch in Genoa, to Francesco di Marco Datini shows the sheer volume of correspondence.[221] Piero wrote that he had that day received three letters, sent from Francesco in Prato on 12, 15, and 17 May. His letter followed up on one he had sent two days earlier, and he expected Datini's reply to already be on its way. An annotation on the letter recorded that Datini sent a reply as soon as he received it.

> Io sono pure tenuto di dirvi quello ch'i' odo dire. A me è stato detto da più persone sicché Franciescho di Marcho vuole perdere il nome del magiore merchatante di Firenze per esser chambiatore, ché non è niuno che no faccia chontratti usurai, or io n'ò ischusato che voi volete esser più merchatante che mai e che se facieste bancho no' llo fareste per fare usura ed e' mi rispondono 'e

[217] Passavanti, *Lo specchio della vera penitenza (Florence, 1725),* 171.
[218] Cotrugli, *Mercatura*, 64.
[219] Cotrugli, *Mercatura*, 64: 'put them back on their feet'.
[220] Raymond and Lopez, *Documents,* 378.
[221] Raymond and Lopez, *Documents,* 400-403; *Lettere di Piero Benintendi mercante del trecento,* ed. R. Piattoli (Genoa, 1932), 127-31.

> no' si dirà chosí pe' llo mondo, anzi si dirà 'egl'è chaorsino' ed io rispondo loro 'e' nollo farebbe per essere chaorsino, ché ciò che qui l'à lascierá a poveri e l'atro dicie 'no' pensare che sia ma' più tenuto quello grande merchatante chom'egli era, né chi' sì buona fama [...][222]

On 30 August 1398, Domenico di Cambio wrote a letter from Florence to Datini, his business partner of more than ten years, in Prato. After explaining that he had had letters from Avignon copied and re-sent on paper, and having described grain purchases in Castelfiorentino that seemed to him have been a good investment, Di Cambio ended his letter by telling Datini the reaction in Florence to his decision to open a company bank to handle their letters of exchange. The bank was founded in partnership with Bartolomeo Cambioni, another merchant from Prato, and it traded under Datini's name, using his merchant mark.[223] In these reported discussions, the status of being a great merchant was contrasted with that of being merely a banker, or worse still, a usurer. The town of Cahors and its inhabitants were synonymous with usury,[224] and the violence it entailed against the laws of nature and good commercial practice.[225] The

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[222] Domenico di Cambio to Francesco di Marco Datini, 30 August 1398, FD, Carteggio ricevuto dal fondaco proveniente da Firenze, 337.15, Busta 227, Inserito 15, Codice 3412, http://datini.archiviodistato.prato.it/la-ricerca/scheda/ASPO00005643/domenico-cambio-datini-francesco-marco-459?index=91&pageName=archivio&startPage=80&query=&jsonVal=%7B%22jsonVal%22%3A%7B%22query%22%3A%22DOMENICO+DI+CAMBIO+a+DATINI+FRANCESCO+DI+MARCO%22%2C%22startDate%22%3A1398%2C%22endDate%22%3A%22%22%2C%22fieldDate%22%3A%22dataNormal%22%7D%7D&orderBy=&orderType=asc (09/05/23), consulted online: 'I have to tell you that which I have to say. Many people have told me, that Francesco di Marco wants to lose the title of the greatest merchant of Florence to be a banker, that is a nobody and who writes usurious contracts, I explained again that you want to be more of a merchant than ever, and that if you started a bank you would not do so to facilitate usury. They reply that they will say this in the world, that he is a Cahorsin and I reply to them that you would not do this to be a Cahorsin and that you will leave your riches to the poor, and the other said that he did not think that you would ever be held to be that great merchant that you were held to have been when you had a good *fama*'.
[223] I. Origo, *The Merchant of Prato* (London, 1957), 149.
[224] Francesco da Buti, *Commentary on Inferno 11*, DDP.
[225] Boccaccio, *Commentary on Inferno 11*, DDP.

anonymous interlocutors did not appear to have been convinced by Di Cambio's defence of Datini, emphasising his charity and his enduring desire to maintain his *fama* as a great merchant. Di Cambio seemed to think the profits that could be made by the expansion into finance were not worth the potential harm to the *fama* of Datini and the Datini Company.

Di Cambio's letter shows the care merchants took to track the circulation of their *fama* and to try to shape its course. The *fama* debated in this letter was not only the *fama* of commercial reputation but also the spiritual *infamia* that stained the souls of usurers. Di Cambio's concern seems to have been prudent. The Datini bank was unwound after Cambioni died in an epidemic in 1400.[226] Cambioni's will indicated three *quaderni* of accounts for his executors to review in accordance with their consciences. His will also contained two specific restitutions of 20 florins to Ricordato and of 12 florins to Paolo Bertini, which he had gained from them 'non licitamente', as well as a general bequest of 50 florins for uncertain and illicit cases to be distributed to the hospital or to worthy young girls, or otherwise as his executors saw fit.[227] Further letters sent to Datini, two by his friend and notary Ser Lapo Mazzei, describe a dispute over restitutions to Ricordato, which was resolved in August 1402.[228]

While letters could transmit a merchant's *fama*, meetings in person were thought to be a more effective medium than correspondence. In 1447, Cotrugli wrote to a colleague,

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[226] I. Origo, *The Merchant of Prato* (London, 1957), 149.
[227] Ser Lapo Mazzei, *Lettere di un notaro a un mercante del secolo XIV,* ed. C. Guasti, (2 vols, Florence, 1880), i, 262.
[228] Ser Lapo Mazzei, *Lettere,* i, pp. 287, 311, 11.

the Florentine merchant Francesco Neroni, lamenting the fact that Neroni had not replied to his recent letters:

> Chon voi ò guadagnato e imparato, vorrei e vivere e morire chon voi, e Dio 'l sa che molto desidero di distrarmi per venire a visitarvi un pocho: bisognaria rifreschar l'amizizia chontaminata per le male lingue. Idio ve salvi [...] Benedetto di Chotruglio in Raguxia.[229]

Cotrugli believed that his friendship with Neroni had been contaminated by the talk of evil tongues and that by visiting him he might be able to restore their friendship. Da Certaldo went further still when he warned his readers that their *fama* could be contaminated by association with those who had the *fama* of being traitors, heretics, forgers of money, violent, gluttons, slanderers, sodomites, and others whose vices had gained them *mala fama*.[230]

A merchant's *fama* was aways in motion. It was carried by conversations and letters and swift speeds. While merchants attempted to control *fama* circulation, they were aware that *fama's* speed made it too swift for them to grasp. *Fama* was able to circulate between merchants in late medieval Italian cities. More than this, *fama* circulated across the horizon of the living and the dead. Merchants devoted considerable attention to how their *fama* would outlast them; to *fama* as memory and memorialisation.

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[229] ASFi, *Corporazioni religiose soppresse dal governo francese,* 78, 322, fo. 32; Edited in: L. Boschetto, 'Tra Firenze e Napoli. Nuove testimonianze sul mercante-umanista Benedetto Cotrugli e sul suo "Libro dell'arte di mercatura"', *ASI,* 163/4 (2005), 714-715: 'I have profited and learned with you, I want to live and die with you, and God knows that I greatly desire to tear myself away to come and visit you for a little while: it is necessary to renew a friendship contaminated by evil tongues. God save you [...] Benedetto Cotrugli in Ragusa [Dubrovnik]'.
[230] Certaldo, *Costumi,* 14.

Fama and Memory

Fortuna e Invidia te ritrovi vana
Si, che i posterior legan tue carte
E la tua fama resti integra e sana.[231]

Merchants in late medieval Italy thought of keeping a *quaderno* as an act of memorialisation, a defence against time. Serafino of Urbino, lawyer to the then cardinal Gabriele Condulmer and future Pope Eugenius IV, wrote these verses to D'Ancona, the merchant, a humanist writer and poet around the year 1423. While Serafino wrote these lines to praise Ciriaco's literary skill, they reveal how bound books were seen to outlast turns of fortune and the envy of contemporaries, carrying a merchant's *fama* into the future.

In the later fifteenth century, Friar Luca Pacioli's famous *Summa de arithmetica geometria proportioni et proportionalità* encouraged his readers who aspired to be merchants to diligently record their business every day in uniform accounts: 'tenere la pena in carta'.[232] Immediately after, Pacioli cited Virgil's advice to Dante the pilgrim in the *Inferno* that he should avoid sloth, lest his soul should leave no worldly *fama* behind him in the afterlife:

Omai convien che tu così ti spoltre,
disse'l maestro, 'ché, seggendo in piuma,

[231] Francesco Scalamonti, *The Life of Cyriac of Ancona,* in *Cyriac of Ancona, Life and Early Travels,* eds. trs. C. Mitchell, E. W. Bodnar, C. Foss (Harvard, 2015), 40: 'May you find fortune and envy to be vain so that future generations will bind your papers and your fame will stall whole and sound'.
[232] Luca Pacioli, *Treatise* ed. tr. J. B. Geijsbeek (Colorado, 1914), 36.

in fama non si vien, né sotto coltre;

sanza la qual chi sua vita consuma,

cotal vestigio in terra di sé lascia

qual fummo in aere e in acqua la schiumma.[233]

Dante had explored the resonances of *cortesia* and mercantile *fama* in the 16th cantos of his *Inferno, Purgatorio* and *Paradiso.* A vertical reading of these *cantos* can shed light on how merchant readers of Dante understood *fama* as memory. In *Inferno* XVI, Dante the pilgrim met three Florentines, Guido Guerra, Tegghiaio Aldobrandi and Jacopo Rusticucci, who asked for news of Florence. Virgil asked Dante the pilgrim to treat them with courtesy; 'a costor si vuol essere cortese'.[234] Rusticucci asked Dante to answer them for the sake of their *fama*, despite their tormented appearance and the eternal infamy of their place in Hell; 'la fama nostra il tuo animo pieghi'.[235] In particular, he wished to know if courtesy and valour still dwelled in Florence:

[...] e la fama tua dopo te luca,

cortesia e valor di se dimora

nella nostra città sì come sole

o se del tutto se n'è gita fora [...][236]

[233] Dante, *Inferno,* XXIV, ll. 46-51, p. 364: '"From now on you will have to cast off sloth in this way," said my master, "for one does not gain fame sitting down on cushions, or while under coverlets; and whoever consumes his life without fame leaves a mark of himself on Earth like smoke in the air or foam in water"'.
[234] Dante, *Inferno*, XVI, l. 15, p. 246: 'to these we must show courtesy'.
[235] Dante, *Inferno,* XVI, l. 31, p. 248: 'may our *fama* bend your soul'.
[236] Dante, *Inferno,* XVI, ll. 66-69, p. 248: '[...] and may your fame shine after you, tell us if courtesy and valour dwell in our city as they did, or if they are quite gone from it […]'.

Dante the pilgrim told them that pride and disregard for measure had replaced courtesy and valour because of the sudden profits that could be made in commerce and the new people whom these profits had elevated:

> La gente nova e i sùbiti guadagni
> orgoglio e dismisura han generate,
> Fiorenza, in te, sì che tu già ten piangi.[237]

Here, the lost *fama* of Florence's courtesy is contrasted with the city's present infamy for failing to abide by the ethical bounds of measure. In *Purgatorio* XVI, Dante the pilgrim encountered the soul of the penitent courtier Marco Lombardo. In this canto, Heaven itself is described as a court, although a court quite unlike any court of Dante's time; 'fuor del modern' uso'.[238] Marco explained to Dante that:

> Lombardo fui, e fu' chiamato Marco:
> del mondo seppi, e quel valore amai
> al quale ha or ciascun disteso l'arco.[239]

The value Marco had aimed at in life was very different from the material value that Dante saw as having been the target of commerce. Here the *fama* of Florence's commercial society circulated across the horizon of the afterlife in both directions. Dante the pilgrim told Marco that the world was bereft of all virtue and Marco described lost virtue to Dante. In Francesco da Buti's commentary on this canto, Marco was glossed as having been a Venetian who was *cortesissimo*, having earned a great deal of

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[237] Dante, *Inferno*, XVI, ll. 73-75, p. 208: 'The new people and the sudden profits have generated in you Florence, pride and dismeasure, so that already you weep for it'.
[238] Dante, *Purgatorio*, XVI, l. 42, p. 210.
[239] Dante, *Purgatorio*, XVI, ll. 46-48, p. 210: 'I was Lombard and was called Marco. I knew the world and loved that worth at which all have now unbent the bow'.

wealth and yet having given a great deal in charity.[240] The *fama* of Marco's charity was transmitted by Dante and his commentators to urge merchants in late medieval Italy to recover the standards of a lost courtly ideal. In Paradiso XVI, Dante's ancestor Cacciaguida lamented the decline of Florence. He presented the city as having been entirely consumed by commerce: 'tal fatto è fiorentino, e cambia e merca'.[241] Commerce had exposed Florentines to turns of Fortune, whose ceaseless action was like that of waves rising and falling on the tide:

> E come 'l volger del ciel della luna
> cuopre e discuopre i liti sanza posa,
> così fa di Fiorenza la Fortuna:
> per che non dee parer mirabil cosa
> ciò ch'io dirò delli alti Fiorentini
> onde è la fama nel tempo nascosa.[242]

It is not coincidental that, as we have seen, fortune's realm lay below the lunar sphere and that material wealth was conceived as having been at her mercy. Fortune was able to obscure *fama* built on shifting foundations.

Merchants sought to create *fama* that would endure by keeping *quaderni,* through their charitable bequests and in the art that they commissioned. Di Cino de Nobili, the merchant and courteous gambler, was made bankrupt in 1390.[243] His material *fama* and

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[240] Francesco da Buti, *Commentary on Purgatorio 16,* DDP.
[241] Dante, *Paradiso*, XVI, l. 61, p. 230: 'one turned Florentine that traffics and trades'.
[242] Dante, *Paradiso*, XVI, ll. 82-87, p. 232: 'And as the revolution of the moon's heaven covers and uncovers the shores without pause, so fortune does with Florence. It should not therefore seem a marvelous thing that I have to tell of the great Florentines whose fame is hid by time'.
[243] J. Hayez, 'S'observer, coopérer, se fréquenter ou rester avec les siens: les interactions entre marchands florentins et pisans dans les correspondances Datini vers 1400', *Mélanges de l'école française de Rome, moyen âge*, 129/1 (2017), 85–99.

creditworthiness were ruined by this turn of fortune. Six years later, Datini's firm was instructed to sell an altar cloth he had ordered for Charles VI of France.[244] Nonetheless, Di Cino de Nobili had already been able to invest his profits in the spiritual goods that sermons taught were beyond the reach of fortune and might preserve his *fama*. After the death of his wife, Piera, in 1387, he endowed a family chapel dedicated to St James and John the Baptist at the monastery of Santa Maria degli Angeli in Florence. He commissioned an altarpiece for this chapel, that was painted by Agnolo Gaddi and Lorenzo Monaco in 1387-1388 which has been reconstructed by Dillian Gordon (Figure 6.11). It was decorated with the arms that had been granted to him by Charles V of France. One of the panels of the altarpiece showed him praying with his sons (Figure 6.12). Another panel showed his wife praying with her daughters (Figure 6.13). It seems to have been a very personal commission. He took an active interest in the work to complete the chapel and visited it on 8 June 1387, on his way to France for business.[245] Masses were to be said at the monastery every day for Di Cino de Nobili as well as every month for his parents and wife. Merchants who were wealthy could commission dedicated works of art and masses that would preserve the *fama* of their souls and the souls of their families. Their display of piety could only benefit their material *fama* and behaviour that might secure a good *fama* in the world was also likely to strengthen the case for their salvation in the afterlife.

[244] Gordon, 'altarpeice', 25.
[245] G. R. Bent, 'Santa Maria Degli Angeli and the Arts: Patronage, Production and Practice in a Trecento Florentine Monastery', PhD. Dissertation (Stanford University, 1993), 657.

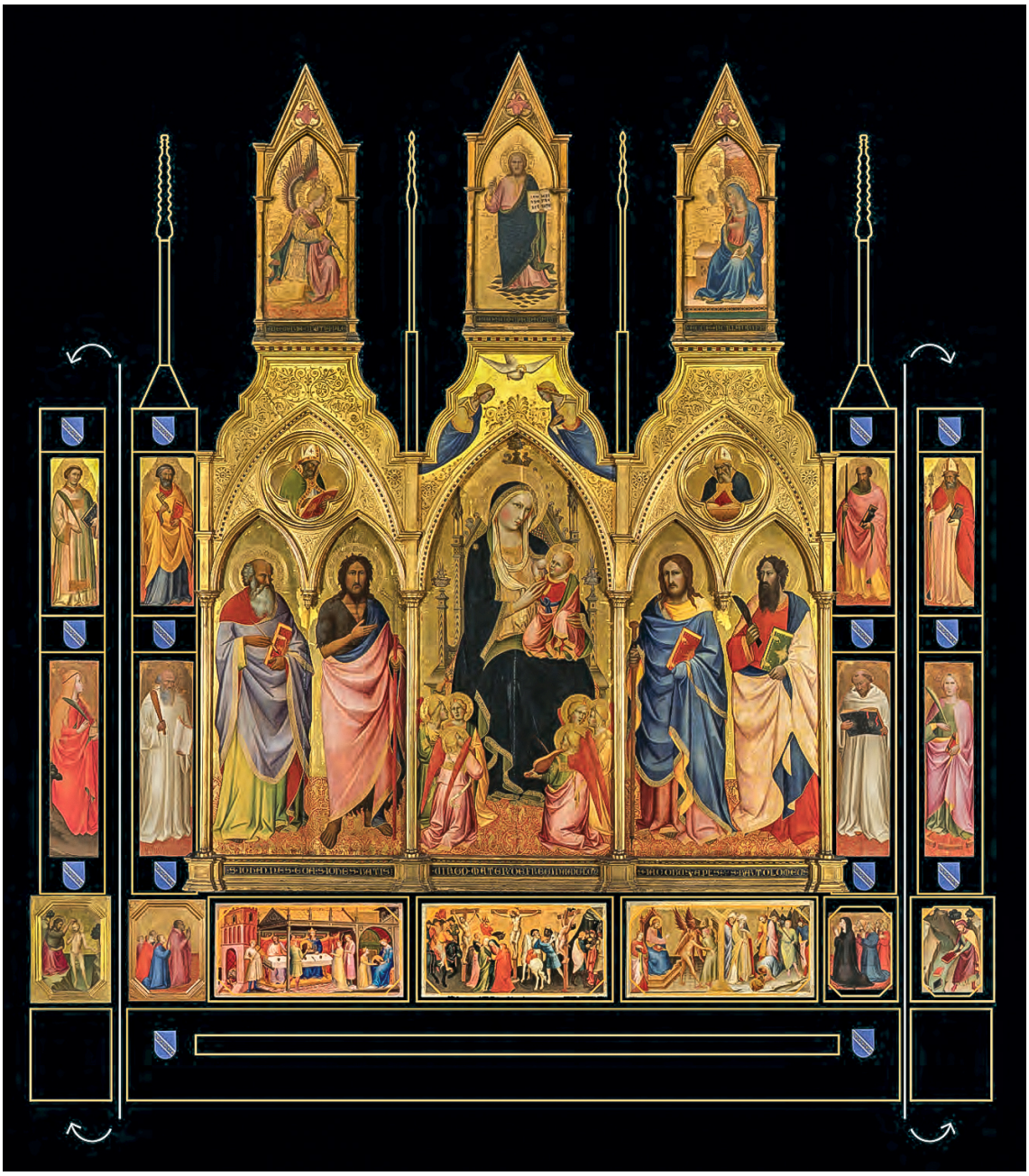

Figure 6.11 **A Reconstruction of the Nobili Altarpiece.**

Figure 6.12 **Bernardo di Cino and his sons.**

Figure 6.13 **Piera delgi Albizzi and her daughters.**

The memorialisation of *buona fama* through works of art was also a phenomenon in which larger numbers of merchants could participate through confraternities. The Venetian silk weavers guild, the *tessitori dell'arte di seta,* counted extremely rich merchants and far less wealthy artisans among its members in the fourteenth century.[246] The confraternity commissioned a painting of the Madonna and Child that projected the guild's *fama* (Figure 6.14). Mary was painted wearing a rich blue and gold fabric that appears to be damask silk. The painting was decorated with three 'TS' merchant mark cyphers, which seemed to capture the confraternity's *fama* in all its senses, as reputation, as circulation and as memory in a single symbol. However, for the most this kind of memorialsiation seems to have only become more pronounced at the end of the fifteenth century and the *tessitori dell'arte di seta* were an unusually wealthy Venetian confraternity.[247] Through individual or collective memorialisation, a merchant's *fama* circulated across the boundary of the afterlife so that it might be preserved.

[246] L. Molà, 'L'industira della seta in Italia nel Rinascimento', in S. Rauch, *Le Mariegole delle arti dei tessitori di seta: I veluderi (1347-1474) e I samitari* (Venice, 2009), xliv.
[247] P. Humfrey and R. MacKenney, 'The Venetian Trade Guilds as Patrons of Art in the Renaissance', *Burlington Magazine*, 128/998 (1986), 318.

Figure 6.14 **The Venetian silk weaver guild's *Madonna dell'Umilità*.**

Conclusion: 'May your fame shine after you'.[248]

Fama was the culmination of the cultural horizons of merchants in late medieval Italy. For merchants, *fama*'s meanings, as reputation, as the circulation of information, and as the memory in the world that merchants left behind, were inseparable. These three kinds of *fama* were in constant motion. They overlapped at the point where anxieties over the social mobility, in either direction, over the ethics of merchant practice, and over the challenges merchants faced when they considered the fates of their souls, all met. As a historicised concept, *fama* offers an approach, adjacent to the study of trust, that aims to use a definition of the concept that is closer to currency of late medieval merchant culture than those offered by modern paradigms of trust alone.

Usury and gambling are examples that show how *fama* invoked different layers of judgement. A merchant who was condemned as a usurer would be excluded from networks of exchange and from the community of the church, in this life and the afterlife. Their *infamia* would be displayed in conversations, letters, literature, and paintings. Yet merchants were also asked to consider the motivations and ethics of their trade in their own consciences. Merchants knew their books were subject to the oversight of a constant divine audit. A usurer who managed to hide this infamy from others and was able to silence their own conscience would still be a manifest usurer in the eyes of God. Merchants could use gambling as an accelerated path to material wealth and elevated social status. Yet by surrendering control and accountability to

[248] Dante, *Inferno,* XVI, l. 66, p. 248; '"e se la fama tua dopo te luca"'.

fortune, rather than their skill as merchants and to God, they risked abandoning their professional identity and, if fortune turned against them, ignominy, and despair.

Where an individual merchant's cultural horizons describe their subjective experience, *fama* shows how they were perceived by others and how merchants sought to shape those perceptions. Merchants kept their books, acted with *ragione,* abided by the bounds of measure, contemplated eschatological time, and thought about how Earthly geography interacted with the past in distinctive ways that betrayed their concern for how they would be remembered. Merchants could hope that their good *fama* in the world would shine brightly after they had left it, just as they hoped that their wordly *fama* would accrue benefits from their evident piety in their lives on earth.

Conclusion: Merchants and Their Cultural Horizons in Late Medieval Northern Italy

The ways in which merchants in late medieval Northern Italy thought were framed by their cultural horizons. Their horizons were the culmination of a merchant's education, reading, and experience. They were a frame in which they categorised and assimilated new knowledge. At every encounter with new ideas, their cultural horizons shifted, and the acquisition of new knowledge was reframed. Drawing on the techniques of their profession, merchants approached problems with *ragione*. They understood problems by calculating them, and imagined them with measure to set them in order. They applied their *ragione* to questions that ranged across the affinity between the material and the spiritual. Thinking with their cultural horizons was also a way in which merchants oriented themselves. The idea of the horizon was bound up with a sense of time and place. Merchants perceived time and imagined landscapes, Earthly, purgatorial, and eternal, through their cultural lenses. This orientation was at once an inner process, in which a merchant interrogated their conscience, and an outer one, in which merchants were judged by the values they displayed. *Fama,* a merchant's remembered reputation, that took shape as it circulated, was its product. Cultural horizons were the making of a merchant.

Merchants conjured, surveyed, and reshaped these horizons on the paper leaves of their *quaderni,* blank, ready-bound, portable paper books, a flourishing medium in late medieval Italy. Merchants kept their accounts in *quaderni.* They were a record of commerce that was subject to audit and review. Yet *quaderni* were a versatile medium. They acted as a kind of library bound within a single codex and selected by their authors. They were used as a store of memories, tales, remedies, and prayers. They

served as talismans and as a means of contemplating the afterlife. They were written with a characteristically mercantile sense of the affinity between the material and the spiritual. They were kept in the expectation that they were subject to continual divine audit. Merchants believed that their books would be closed at the moment of the particular judgement of their souls. The qualities of this medium, the dimensions, bindings, and familiar layouts of *quaderni*, influenced how they were used. Merchants kept their *quaderni* as sets of books rather than as single volumes. They were cross-referenced to each other and the *quaderni* that other merchants kept. This aspect of *quaderni* lent a degree of uniformity to the outlook of late medieval merchants. While Tuscan *quaderni* have received the most attention, these books were kept by merchants across Italy, and this medium was transmitted along their trade routes to markets as far afield from Florence as Southampton. With a *quaderno* in hand, merchants could survey the world on paper from their desks.

> La contingenza, che fuor del *quaderno*
> de la vostra materia non si stende,
> tutta è dipinta nel cospetto eterno[1]

Quaderni were not held to have been a boundless medium. In *Paradiso,* Cacciaguida told the pilgrim Dante that there were more things in heaven and Earth than could be accounted for within an Earthly *quaderno*. The use of the term *materia* implied not only subject matter but also the four elements, as if they were the four paper quires of a *quaderno*.[2] Although merchants used their *quaderni* to calculate contingent scenarios,

[1] Dante, *Paradiso*, XVII, ll. 37-39, p. 344: 'Contingency, which extends no further than the *quaderno* of your matter, is all painted in the eternal gaze'.
[2] C. S. Singleton, *Paradiso Commentary* [1975] (Princeton, 1991), p. 291.

they knew that material wealth was at the mercy of fortune. The cultural horizons of late medieval merchants, too, were imagined as having extended up to a boundary or limit beyond which it was impossible to see. Merchants measured the topography of *Inferno* and calculated time in Purgatory in proportion to time on Earth. Nonetheless, they recognised that eternity, spiritual goods, and divine love were incalculable and unquantifiable. Some ideas lay beyond the scope of a merchant's cultural horizons. These horizons were not exclusive and did not prevent merchants from turning to other ways of thinking in different contexts. As Jacques Le Goff suggested, for merchants, there were other horizons still that were not those of their profession.[3]

Investigating late medieval merchants through their cultural horizons can help to reassess the enduring myths that have cast these merchants as heralds of a modern rationality. While the ways in which late medieval merchants thought about their investments transformed how they imagined their fates, worldly and eternal, it does not follow that they were the pioneers of modern capitalism whom they have been depicted to be. The perfection of the merchant's art was not measured by profit alone. How a merchant made his profit was important. Merchants were meant to take into account an affinity between the material and the spiritual in all their transactions. Their profits ought to have been proportionate, and were expected to serve the common good of their cities. Of course, in practice, merchants rarely lived up to these ideals, but the extent to which they were preoccupied by them is still significant. Their experience was even more remote from modern ideals of heroic merchants bravely founding new worlds. Merchants rationalised the purchase and sale of slaves, their wealth, and their status

[3] J. Le Goff, 'Au moyen âge: temps de l'église et temps du marchand [1960]', in J. Le Goff, *Un autre moyen âge* (Paris, 1999), 60.

through their *ragione* and in their *quaderni*. Viewing merchants through the historicised lens of their *fama,* rather than turning late medieval markets into a testing ground for modern models of trust or measuring European progress along a predestined path to economic development, restores the complexity of the ways in which merchants thought about one another and examined their own consciences.

The study of cultural horizons also serves to clarify the definition of the merchant. The particular ways in which merchants thought were a recognisable quality in late medieval northern Italy. Their bearing, books and learning were distinctive. These attributes were not restricted to a single social rank, nor were they always limited to men. Aspiring merchants actively sought to align their cultural horizons with those that were expected of the perfect merchant, the late medieval ideal of a master of the art of trade. The sudden gain and losses that merchants could make were highly visible. The volatility of late medieval markets accentuated the anxiety that this instability provoked. We can detect attempts to police the boundaries of social status in conflicts over rival understandings of measure and *fama*. The intensity and frequency of these conflicts suggest that these anxieties were provoked when the speed with which wealth circulated outpaced established frameworks of ethical and social conduct. Defining merchants by their cultural horizons encompasses the breadth and complexity of merchant culture, suggesting new lines of inquiry. Cultural horizons offer an approach that could equally be applied to other subjects of cultural history.

In 1427, Giovanni da San Miniato, then prior of the monastery of S. Maria degli Angeli in Florence, translated Petrarch's 1357 work, *De remediis utriusque fortunae,* into the vernacular. His translation was popular. It was the kind of text that circulated in the

medium of *quaderni* and was read by merchants through the frame of the cultural horizons that it simultaneously reshaped. Readers of Petrarch's *Remedies* were offered advice that would bring them to a safe port through fortune's storm.[4] The advice was given as if, in the reader's conscience, there were a ceaseless internal dialogue between different ways of thinking. Reason was interrogated in turn by Joy and Sorrow, Hope and Fear. To be a merchant in late medieval Italy was to continually review choices and decisions according to a mercantile *ragione.* Merchants were left wondering if they had deceived themselves.

> Ragione: Io penso che la nave della mercatanzia, la quale tu aspettavi, sia giunta a porto; hai scampato pericolo, hai edificato la casa, hai arato il campo [...] hai messe [...] nuova mercatanzia in mare. Hai prestato a buon guadagno la tua pecunia, in sicuro luogo l'arca tua è piena [...] Hai molto favore nella repubblica, lo quale tu hai procacciato con piacevolezze et industria; la via t' è fatta a venire in grande ricchezza ed onori. Or se' tu ben felice! [...] s'io non sono ingannato [...][5]

[4] Giovanni Da Saminiato, *De' rimedi dell'una e dell'altra fortuna di Francesco Petrarca volgarizzati nel buon secolo della lingua*, ed. C. Stolfi (2 vols, Bologna, 1867), i, pp. 54, 326.
[5] Da Saminiato, *Rimedi,* i, p. 327: 'Reason: I think that the ship of my commerce, which you have been waiting for, has reached its port; you have escaped danger, you have built your house, you have cultivated your garden [...] you have put [...] new goods to sea. You have lent your capital to good profit, your ark is full and lies secure in a safe place [...] you have won great favour in the republic which you have procured with agreeable industry; the path is set for you to reach great riches and honours. Now you are truly happy! [...] as long as I am not deceived [...]'.

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