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# PAPER AND THE ECONOMY OF KNOWLEDGE IN THE EARLY MODERN MEDITERRANEAN. FINANCE, SEMIOTICS, AND THE COMMUNICATION REVOLUTION Edited by José María Pérez Fernández and Gaetano Sabatini 

Articles by
Erik Aerts
Cátia Antunes
José Ramón Ayaso Martínez
Matteo Calcagni
Pietro Delcorno
Nelly Hanna
Chiara Marcheschi
Michael McKeon
José María Pérez Fernández
Natalie Roxburgh
Gaetano Sabatini
Renzo Sabbatini
Elvira Vilches
Review Articles
Rethinking Luigi Einaudi. About a Recent Book on Economic
Associationism in Liberal Italy
Paolo Pecorari, Andrea Cafarelli
Book Reviews

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People In Motion
Entangled Histories of Displacement across the Mediterranean [1492-1923]

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# The Journal of European Economic History 

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#### Abstract

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## Articles

> Paper and the Economy of Knowledge in the Early
> Modern Mediterranean. Finance, Semiotics, and the Communication Revolution

ed. by José María Pérez Fernández and Gaetano Sabatini

# Paper, Finance and Semiotics. The Symbolic Economy of Knowledge in the Early Modern Mediterranean 

José María Pérez Fernández<br>University of Granada<br>Gaetano Sabatini<br>ISEM-CNR

## I

"Value", Karl Marx claimed in his Critique of Political Economy, "converts every product into a social hieroglyphic". This proposition by one of the most influential political economists of the last couple of centuries stresses the socio-semiotic dimension of something as volatile and immaterial as value, which elsewhere he describes as a "mysterious" thing "abounding in metaphysical subtleties and theological niceties". Other than metaphysics, theology, and moral philosophy (Marxist or otherwise) the former statement also invites an examination of value through the lens of pragmatics, the discipline that studies how to do things with words. ${ }^{1}$ According to Marx, economic and material relations of production make up the fabric of history, a principle which can be coupled with the axiom that all human communities are based on linguistic exchanges. The latter is indeed a well-established idea with a long intellectual tradition behind it, from Aristotle, Cicero and Quintilian in Classical Antiquity, on to Lorenzo Valla and Juan Luis Vives in the European Renaissance, Emanuel Kant during the Enlightenment, and Jürgen Habermas in the twentieth century, to name

[^0]just a few. ${ }^{2}$ Well beyond the production and exchange of commodities, labour and value, and beyond natural language too, civilization and knowledge in general are sustained by the production and exchange of symbolic forms: early in the twentieth century the NeoKantian philosopher Ernst Cassirer elevated symbols to the status of functional units within the epistemological fabric of knowledge whose true nature is far from being a mere "reflection of a given existence". "The fundamental concepts of each science, the instruments with which it propounds its questions and formulates its solutions", he claimed, "are regarded no longer as passive images of something given but as symbols created by the intellect itself". Cassirer then adds that the first scientists who became aware of the symbolic character of their epistemological tools were mathematicians and physicists. ${ }^{3}$ There is a hint at both the symbolic dimension of knowledge and the importance of mathematics and geometry as the disciplines that occupy themselves with quantification and measurement in Galileo's famous claim that true philosophy (i.e. knowledge) is inscribed in the book of the universe with the language of mathematics, whose signifiers are triangles, circles and other geometrical figures. ${ }^{4}$ The fact that another of the founders of early modern science, the mathematician and astronomer Nicolaus Copernicus, was

[^1]also the author of treatises on monetary issues is just one of the several cases that demonstrate the interconnectedness among these different disciplines of knowledge and the practices associated with them. ${ }^{5}$ That currency, as the representational materialization of value, has not just social, scientific, and symbolic dimensions, but also aesthetic and emotional ones, is suggested by another famous dictum, this time penned by the American poet Wallace Stevens, who in his Adagia claimed that "money is a kind of poetry." ${ }^{6}$

These are ideas whose complexity and ramifications there is neither time nor space to discuss at this point, but they deserve to be briefly enlisted in the introduction that presents the essays of this special issue of The Journal of European Economic History because they constitute some of the coordinates that frame its contents. The overall chronological scope covered by our essays runs from the onset of the commercial revolution of the thirteenth century to the financial revolution led by countries like England and the Netherlands during the late seventeenth century - with a few incursions into the periods that preceded and came after these boundaries. All of them, in different degrees and fashions, approach some aspects related to the methods and the media, the symbolic systems and the documentary practices, used to generate value and manage the exchange of goods and information in geographical areas that go from the North of Europe to the Levant and the North of Africa.

Our special issue demonstrates that mercantile and financial practices relied on documentary genres, protocols and media like paper - the latter of which reached Europe at around the same time as the Hindu-Arabic numerical system. Many of them also demon-

[^2]strate that these eminently pragmatic methods and their handbooks were part of a larger intellectual context which occupied itself with the analogies that existed between language and finance, between signification and value. As mentioned above, this is a topic which has been approached from several different angles in a long tradition that goes from Aristotle to Marx, and which has more recently been addressed by twentieth-century French philosophers such as JeanJoseph Goux, Jean Braudillard and François Lyotard. ${ }^{7}$ In AngloAmerican academia Marc Shell recounted the parallel historical development of economics, linguistic theory, and semantics as they progressed on a path which led them away from nominal modes of signification on to the gradual independence of signs. ${ }^{8}$ The common thread that runs with variations throughout this scholarship views financial and economic systems as discourse - as opposed to economics as an exact science based on the application of abstract mathematical formulas upon empirical data provided by statistics. This has facilitated, for example, an interpretation of the intersection of the language and vocabulary that constitute these systems and their associated practices with those of disciplines like theology, political philosophy, literary history, and more recently cultural and translation studies. As some of our essays will prove, important forerunners of this overlap were also formulated in the middle ages and during early modernity. As mentioned above, Marx would eventually rehearse them in the opening chapters of his Capital.

The notion of value as discussed in a philosophical text like Aristotle's Nicomachean Ethics was applied in combination with practical skills in measurement and numeration as the commercial revolution of the thirteenth century took off alongside an equally emergent financial system. This was made possible thanks to a bureaucratic in-

[^3]frastructure generated by networks of merchants and their administrators, whose activities were in turn gradually legitimised by the authority of the early modern state, its legal framework, and its public officers. The lifeblood of these networks and their institutions was the flow of information that circulated throughout them, and which required archival, semiotic, and linguistic protocols for the elaboration of the paper-based documents that materialized all these exchanges. The methods and the instruments involved in finance and trade were inseparable from the general principles of semiotics and communication - and ultimately also regarded the epistemological symbolic systems suggested by Cassirer. This explains why value and its signifiers also affected other walks of individual and social life as they were examined and regulated by different disciplines of knowledge: the social unease that their metaphysical and mysterious nature provoked was thematised in prose fiction and in drama; poets used them as tropes; they cropped up in the visual arts and even became entangled within episodes of intellectual history like the scientific revolution.

## II

Few among the phenomena involved in historical shifts in communication and information management exemplify the overlap between science and the symbolic nature of financial operations and its documents like the Hindu-Arabic numerical system, which is the subject of the first essay in our collection. This essay by Erik Aerts, an experienced economic historian with excellent knowledge of archives in places as diverse as Italy and the Low Countries during our period, demonstrates that in certain parts of Europe the adoption of the Hindu-Arabic numerical system took some time to fully materialize, among other reasons due to the persistence of long-established habits and the combined weight of the tradition and the authority of Roman numerals, as opposed to what was perceived as a new-fangled working system used only by merchants, and not fit
for documents of great momentum generated by public institutions. The current ubiquity of the Hindu-Arabic numerical system does in fact bear an interesting comparison with the medium of paper: their universal use for a long period of time - centuries, in fact - once they had become firmly established, led to their perception as two inextricably linked entities and consequently the relevance of the shift from one medium and one symbolic system to another went largely unnoticed.

In spite of this, both paper as medium and the symbolic nature of the Hindu-Arabic numerical system frequently crop up in many different sorts of cultural expressions. Let me briefly add two relevant samples to those discussed in our special issue. Shakespeare used paper as both a trope and as one of the material agents that drove the plot in King Lear. ${ }^{9}$ His Henry $V$, on the other hand, opens with a series of images in which Shakespeare uses the representational potential of cyphers to convey the idea of actors that can also present heroic deeds upon a modest stage in the same way in which numbers and accounts can stand for enormous sums in a little space:

O pardon, since a crookèd figure may
Attest in little place a million
And let us, ciphers to this great account,
On your imaginary forces work. ${ }^{10}$
The ambiguity in Shakespeare's use of the noun account as both the plot of the play and the symbolic representation of the financial state of a particular business demonstrates the extent to which algebra and accounting practices had pervaded early modern English culture.

Natalie Roxburgh's article approaches in detail social perceptions of credit and money markets in England through a comparison of Shakespeare and Daniel Defoe. She uses some of their works to

[^4]illustrate different stages in the development of financial instruments and practices alongside the social and cultural forces they unleashed. Thus she brings to the attention of her readers how in Shakespeare's The Merchant of Venice the resolution of the case against the moneylender Shylock is dictated by the fact that the text recorded on the contract does mention the famous pound of flesh, but says nothing about blood. This confirms the constitutive role of linguistic and documentary protocols within the contractual culture that both materialised and lent legitimacy to lending practices. Roxburgh also addresses the dimensions of credit as trust, i.e. as an eminently social immaterial good, a question of opinion and the judgment of character. She traces the path that goes from the moral economy of the merchant classes and the banking sector in the age of Shakespeare, when England was going through an early phase of financial capitalism, to the cultural and economic practices that constitute the background to Daniel Defoe's work, when practices that had previously shocked and alarmed Elizabethan audiences were now thematised in Defoe's prose fiction and essays in versions which were not just far more sophisticated, but had already become socially acceptable.

Elvira Vilches' approach to doctrinal literature on accountancy and double entry bookkeeping in Early Modern Spain includes an examination of the nature and functions of the documentary genres involved. Her article proves that the language of credit and commerce was incorporated into general expressions of obligation and intimacy in Spanish Golden Age literature. For example, the logic and the methods of certain trade practices played an important role in the plot of one of the most relevant and influential novels in the Spanish picaresque canon, Mateo Alemán's Guzmán de Alfarache. Vilches stresses the fact that, other than the author of works of prose fiction, Alemán was "a businessman, a judge in audit cases, and a head accountant for the Exchequer" whose work puts to the test the validity of double entry bookkeeping as an index of trust and creditworthiness. For example, Guzmán de Alfarache weaves into its different episodes cases that put forth the deceptions of fictitious
exchange. The illusional and imaginary dimension of certain practices and documentary genres involved in financial exchange is also explored in Pérez Fernández's article through the work of Gerard Malynes, who declared that within the conventions and the circles among which credit circulates "things which be indeed, and things which are not indeed, but taken to be indeed, may produce all one effect." ${ }^{11}$ This was a complex working principle of bills of exchange which left a certain margin for fraud - as Alemán denounced in his picaresque novel. This potential for deception in documents that registered value and contractual obligations for its exchange stemmed from the constitutive function of the semiotic protocols that materialized them. These were based in turn upon the "forma dat esse rei" principle, which had its origins in Roman law and foregrounded the formats and the linguistic formulae which bestowed upon these documents the legal power to generate and exchange value, well over and above the actual wealth that would guarantee it as collateral. ${ }^{12}$ Pérez Fernández in fact uses the expression "the semiotic alchemy of credit and double entry bookkeeping", to describe the operations that turned linguistic protocols inscribed upon small pieces of paper into abstract value which could then be exchanged for hard cash or for material goods. Elvira Vilches also addresses similar ideas through the work of the calligrapher Pedro de Madariaga, who held that "those who cannot work with numbers and do paperwork will see their money dissolved into sand" whereas those "who are prudent and keep their books will transform everything into gold".

Pérez Fernández's essay analyses the distance between Luca Pacioli's Summa de arithmetica, geometria, proportioni et proportionalitá in

[^5]late fifteenth-century Italy, on the one hand and, Gerard Malynes' Lex Mercatoria in early seventeenth-century England on the other; Roxburgh traces the perception of credit in England between the seventeenth and the eighteenth centuries through Shakespeare and Defoe; and as we have just seen, Vilches focuses on seventeenth century Spanish literature. When read together, these three essays demonstrate that the semiotics of value, the language of accounting and of financial practices, were all part of a more comprehensive continuum that pervaded other realms, disciplines and genres such as natural philosophy, theology, prose fiction, drama, and even lyrical poetry. They did so over the course of several periods and also in different linguistic traditions, from the late fifteenth to the eighteenth centuries and in places as diverse as Italy, Spain, and England.

The importance of these semiotic protocols for the administration of trade and credit is manifest in the handbooks which proliferated all over Europe during the early phase of our period (usually called quaderni or libri di mercatura in Italian). Alongside basic practical skills in measurement and quantification, in geometry and algebra, these booklets also taught their readers about the materials and the tools required to record information, from paper and ink to scissors and pens. In his essay Erik Aerts stresses the importance of these modest but ever-present chapbooks when it came to the gradual adoption of the Hindu-Arabic numerical system in the Low Countries. It is also significant that many of the authors of these practical handbooks for accounting and mercantile skills were also calligraphers and authors of practical books for letter writing. They were, in short, conversant with all the materials, the instruments, and the methods employed for the proper registration, administration and communication of data and information, its algebraic and rhetorical protocols. ${ }^{13}$ They circulated first as manuscript quaderni

[^6]mostly for personal use, penned by merchants as they went about their business and annotated all the relevant information of the different places they passed through - including local taxes and measures, as well as routes, by land and by sea, inter alia. They also recorded instructions on the skills required for the administration and practice of trade for other members of the company and / or those of the next generation. When they transitioned on to print they became somewhat more sophisticated affairs published in small inexpensive formats which were meant to train young officers and clerks in the making. They stand on one extreme of a wider continuum on whose other end we can find ponderous folios with treatises on the arts of cosmography, astronomy, and algebra: between the covers of Luca Pacioli's Summa the reader could find texts on Euclidean geometry and algebra alongside practical advice for merchants not just on how they should efficiently keep their accounts, but also on how to organize the information recorded in their papers.

Other than the semiotic protocols of administrative papers, some essays within our special issue approach their hybrid nature. Their main function may have been to record commercial and financial information and perform operations in these areas, but they could also work as highly mobile bits of information for early modern news networks. The essay by Pérez, Ayaso and Marcheschi deals with cases of interlinguistic exchange not just of financial data, but also of other sort of information across the Mediterranean during the late fourteenth century. The Italian and Hebrew documents they survey are part of the Datini archive in Prato and constitute exceptional testimonies for the historical memory of the anti-Semitic pogroms that destroyed Hebrew communities, forced them to convert and change their identities, or in some cases displaced Jewish merchants away from the Iberian Peninsula. They illustrate the important role played by Catalan Jewish artisans and merchants in the stationery business, and also in the production and export of books across the Mediterranean. Even more relevant is the fact that they also bear witness to the emotional ordeals they had to undergo as they were forced into
conversion or exile. ${ }^{14}$ Some of these documents also prove that agents of the Datini company abroad regularly informed their bosses in Italy of current events that could affect their activities or provide new business opportunities in the regions where they were located in this case Barcelona during the pogroms. It is not a coincidence that value and credit as immaterial and highly mobile goods evolved simultaneously with news and information as intangible assets that could also be considered as commodities. In general terms, and beyond these particular cases, news and information were not just the lifeblood of financial capitalism, but also vital for early modern states and their imperial projects - although traditionally not enough attention has been paid to this phenomenon before the age of AngloDutch economic hegemony, two countries also closely related to the late seventeenth-century scientific and financial revolutions and usually considered as the first models of modern global economies. ${ }^{15}$

Cátia Antunes addresses a large corpus of notarial documents from archives in Amsterdam that date from this long period of Anglo-Dutch development and hegemony - in her own words, "a total of 17,654 contracts for the period between 1580 and 1776 ". Both Aerts and Antunes' articles illustrate relevant aspects of the shift in terms of financial clout and economic hegemony from the south to the north of Europe, which involved changes in symbolic systems,

[^7]documentary genres and archival practices. Antunes stresses the importance of a proper understanding of how these protocols worked as a preliminary step to use the statistics that her corpus yields for the collection of relevant information and further research. Well beyond the documents in her corpus she proposes the typological classification that emerges from it as a blueprint for all notarial contracts in general. Her article is a good example of a phenomenon stressed by Renzo Sabbatini in his article, to wit, the new instrumental function that administrative documents gain once these papers cease to circulate and become permanent part of an archive: they are transformed into the diegetic building blocks of historiography. As Antunes' statistics prove the use of bills of exchange grew more than any other sort of documentary genre during the chronological period covered by her database. This bears an interesting comparison with Gerard Malynes' Lex Mercatoria, a treatise that elevated the bill of exchange to the pinnacle of financial instruments and presented it as the spirit of trafficke in a bold metaphor that set its ontological status on a par with similar abstract concepts in well-established disciplines like natural philosophy and theology.

Pietro Delcorno's essay is the result of his experience as a researcher in several archives created by Italian Monti di Pietà. As it is well known, these financial institutions were created as a response to lending practices that were perceived as contrary to the Christian doctrine, and Delcorno also addresses what he calls the "paper ecosystem" that sustained them. To put it in Aristotelian terms, many of these documents could be described as the noumisma that equalized the value of the modest objects pawned by its customers with the hard cash that they obtained in exchange: what we would call microcredit today thus flowed from these banks thanks to the exchange of material commodities for currency. This was an exchange whose equivalence was registered in the documents that made it possible to reverse the operation whenever the borrower could redeem the valuable objects he or she had deposited in the bank in exchange for cash. Significantly these operations came under the symbolic supervision of religious images, ostentatiously
drawn on ledgers whose contents were thus legitimised with this iconic stamp of spiritual authority that other financial institutions lacked.

Matteo Calcagni's essay brings to the attention of his readers the Adami-Lami archive, which had lain absconded in a palazzo at the heart of Florence until fairly recently. This valuable repository of information - which Calcagni himself discovered and is currently in the process of classifying and cataloguing - documents important aspects of the economic history of Tuscany in the long seventeenth century which are leading to its reinterpretation. He traces the intense exchange of financial and commercial information across the Mediterranean, and the flow of paper that circulated around places as distant from each other as the economic hubs of London and the Low Countries, on the one hand, and trading centres in the Levant and the North of Africa, on the other. These papers also constitute further evidence of the hybrid and multifunctional nature of originally economic records, which also collected information of a rather diverse nature. They were the private and manuscript forerunners of the public newsletters published in print that would be set in circulation around the seventeenth century.

Michael McKeon's article also examines the circulation of information between the new centres of political, economic and cultural hegemony in England and the Low Countries and other locations in the larger Mediterranean. His essay exemplifies how commercial networks frequently contributed to generate news networks as they also overlapped with the so-called International Republic of Letters or even with the web of correspondents that became the communicative infrastructure for the scientific revolution. Beyond these, McKeon also examines their entanglement with millenarian movements. The picture that emerges is therefore that of a complex and diverse system woven by agents involved in different practices and trades, working in different linguistic, cultural, and religious backgrounds, and who were consequently members of heterogeneous interest groups. Like Calcagni's article, the documents that McKeon addresses also illustrate the coexistence and the transition from pri-
vate manuscript correspondence to public networks of printed pamphlets. ${ }^{16}$

Nelly Hanna's article gives us a brief glimpse into the documents on the African shores of the Mediterranean. Egyptian archives flaunt a considerable amount of cultural, religious and linguistic diversity and they document not just its exceptionally rich and long history, but also the media in which they are recorded, for they help trace the transition from papyrus on to paper around the ninth and tenth centuries. Hanna's essay, in short, is exceptional within the framework of our special issue because it frames our survey within a profound historical perspective, as it also widens the scope of the long intellectual history of accounting, financial, and archival practices from the Mediterranean Levant in the ninth and tenth century, on one extreme, to Britain and the Netherlands in the seventeenth centuries. Her essay opens many windows onto different phenomena and invites the readers to look into areas such as correspondence written by women, or the continuity in scriptural practices between late antiquity and the early Islamic world, which as mentioned above involves not just the switch from papyrus to paper, but also from the use of Demotic Greek to Arab, besides other languages like Aramaic, Coptic or Judeo-Arabic. She also puts forth a very early case of contractual documentary practices through the papers of an eighth-century village scribe in Upper Egypt, who composed contracts and fiscal deeds for the illiterate peasants and suggests that the abundant use of paper in Egypt even in rural areas by modest families of merchants during the eleventh century brings to the fore-

[^8]ground the somewhat understudied use of paper and administrative methods in the Arab world. ${ }^{17}$

Our special issue closes with what could be described as both a back-to-basics approach to the cultural history of paper and a firm proposal for fresh paths of research. Paper is the ubiquitous medium present in all the case studies addressed by our articles, and Renzo Sabbatini, arguably the most important authority in the history of paper in early modern Italy, suggests a series of methodological principles and thoughts for the future development of the discipline which involve micro-history, world and global history, as well as connected histories of paper. Sabbatini in fact invites us to turn the Paper in Motion work group and the research it has generated into a stepping-stone to take up new research into the history of paper. This is in fact the main aim of our special issue, in particular as regards the semiotic dimension of paper within media history, its role in the history of communication, in combination with financial and economic history. Furthermore, Sabbatini's article includes a call for new approaches to the human, subjective and emotional components in the history of paper, as he also takes stock of important secondary literature published so far, all of which provides the perfect framework for those wanting to make further progress in these fields.

## III

The electronic revolution in communication brought about by inventions like the telegraph and the telephone, with the accompanying dematerialization of the global financial economy that they contributed to accelerate, has been exacerbated more recently by its digitalization thanks to the incorporation of ever faster microprocessors to all sorts of electronic devices large and small. This is a de-

[^9]velopment which is still underway, and which runs parallel to the displacement of paper as the medium that has prevailed in administration and communication for around seven hundred years when it started to contribute, as a light and ubiquitous medium to the first wave of dematerialization of the economy and to speed up the pace of the global circulation of information and the spread of knowledge. The analogies and the contrasts between these two different media, and the way in which they contribute to define the periods during which they first emerged and eventually prevailed, are too many and too complex to be discussed here in detail. Unsurprisingly, however, as our special issue demonstrates, current concerns about the arcane practices of digital finance are not too different from the unease provoked by financial documents and the semiotic alchemy of paper credit developed from the early thirteenth century onwards.

There is an object that illustrates very well the transition from paper-based data storage and processing on to electronic media. Although no longer used, the computer punch card was for some time the material vehicle not just for the inscription of data and information, but also the cardboard interface between these codified contents and the electronic machine whose task was to process them. The combination of material design based on a combination of presences and absences on the cardboard - i.e. the holes punched and meaningfully arranged on it - were illegible for a human eye, as are the potentially infinite combinations of noughts and ones in digital archives. The microprocessor is now totally out of sight: it operates from behind digital screens in mysterious ways that evoke the metaphysical nature of value as Marx conceived it. Microprocessors, and lately, artificial intelligence, all lend themselves to the creation of poetic tropes as they also inspire not just wonder, but above all distrust and fear given their arcane electronic alchemy and the speed with which they operate: they have become the stuff of utopian dreams and dystopian nightmares that circulate in all sorts of fiction and have placed themselves at the centre of the political and cultural controversies. They are all part of the long history of communication,
of finance, and of the media they used. The fascination and the unease that they provoke on those of us who fail to grasp the nature and intent of their semiotic operations are not so different from the sixteenth-century complaints that the wealth of nations had all been reduced to gold and silver currency and, worst of all, to paper documents. ${ }^{18}$ Our special issue proposes a modest contribution to some episodes within this long history.

## IV

The essays collected here also invite a reinterpretation of aspects and episodes of economic history during the middle ages and early modernity that can stand in contrast with certain traditional accounts. Frequently univocal, focused on a narrow range of primary sources, and formulated within the framework of very rigid paradigms, economic historiography has traditionally contemplated the study of economic culture as a mere supplement generated from the margins of the discipline. It was viewed as a quaint narrative composed by experts in the humanities, certainly part of the discipline, but not at the core of its most important concerns and methods. It was therefore contemplated as unable to provide rigorous analysis and verifiable facts from empirical data based on the internal logic and the economic mechanisms of the industrial world. This was so because the main standpoints for this sort of historiography have long been built on methodological patterns that emanated from the ideologies of material, scientific and political progress during canonical periods like the nineteenth century, when economics began to emerge as an autonomous science. Within this framework the in-

[^10]dustrialization process of eighteenth-century England was conceived not as one of the alternative paths towards modernity leading on to a globalization of the economy that followed the Eurocentric capitalist model, but as the only possible path for progress in what we could describe as a quasi-deterministic and decisively Whig view of economic history. This turned Anglo-American industrial and financial capitalism not just into the hegemonic model for economic progress and the infrastructure for human development, but also as the epistemological blueprint that could be applied to the historiography of any other periods and locations. It thus became the normative model against which to measure and evaluate the degree of progress on the path to modernity that other regions around the world may have achieved. By narrowly focusing on some parameters and phenomena, this historiography established facile judgemental dichotomies between development and under-development, modernity and backwardness, progress and immobilism, dynamism and stasis.

The rejection of this interpretation of economic development calls for a re-evaluation of the material and conceptual tools of the economy of knowledge during the middle ages and early modernity which, instead of being endemically condemned to provide a narrow teleological picture, can reveal instead a diverse and dynamic series of phenomena and developments free from pre-established interpretative patterns. Consequently, the study of the forms of the economy in this period needs a revision that can take into consideration regional and chronological differences, assuming and evaluating parameters, sectors and fields of study which have been traditionally ignored. Breaking these rigid patterns for historical interpretation requires bringing to the foreground the underlying economic, cultural and social diversity, and the acknowledgement of the existence of a plurality of alternative paths and approaches. Only then can the discipline articulate a historical narrative that can do justice to such diversity - in terms of both its subject of study and its heuristic patterns - which can eventually render a more complex picture of an inherently interconnected world: not as a single river
inexorably flowing from its spring on to the ocean, as it were, but a complex fluvial system instead that can delineate a cultural map of global economies of knowledge.

As far as economic history is concerned, the essays in our special issue use methods that fully exploit the diversity and specificity of the object of study, pursuing the ultimate goal of restoring an image of the productive, commercial and financial activities of the medieval and modern age which are more relevant to historical reality. The main objective is, therefore, to observe the history of the symbolic economy of knowledge through the conceptual categories that are proper to it, without distorting them, without bending their genealogy to force it into the pre-established point of arrival but appreciating the matter in its concrete unfolding - in its becoming, as it were.

It is necessary to make some clarifications in this regard. The first, and perhaps most important, is the need to leave behind the artificial separation of economics from the rest of knowledge, a split that appears even more artificial when applied to periods such as the middle ages and early modernity, when current boundaries among different disciplines of knowledge had not been clearly established, but overlapped and closely interacted with each other. Among these forms of knowledge, the economic science of the ancien régime, far from the epistemological autonomy that it would obtain only in the nineteenth century, was inextricably entangled with disciplines such as mathematics, law, theology and moral philosophy. Taken as a whole, they amounted to a complex and heterogeneous but nevertheless comprehensive world view - in other words, to culture in the most genuine sense of that term. It is therefore necessary to reverse the relation between economic theory and history as two aspects of the same discipline: the former must not inform the reconstruction of events, but rather historiographical research must provide the case studies and the heuristic patterns that can contribute to explain the emergence and development of abstract theoretical models.

By casting aside patterns based on Anglo-American ideas of
progress and the emergence of nineteenth-century capitalism, a historical account of economic knowledge, its agents, and its practices, will cease to be tied to a general framework articulated upon the values of mobility and immobility, and emerge instead as a complex universe, within which multiple growth factors germinate between the thirteenth and the eighteenth centuries, some of which turned into bearers of a variety of economic modernity that was much more diverse and much richer than originally thought. The experimentation of economic and commercial practices is, moreover, one of the themes that emerges with greater importance from the analysis of the economic culture of this period, bringing out a primacy of practice over theory, of concrete experience over ideology. In the various fields of economic action and thinking, the practical resolution of everyday and concrete problems seems in fact to be the precondition for the formulation of systems of ideas, not its consequence. When theory emerges it does so as the consequence of direct experience, as part of a world in which know-how precedes and therefore paves the way for theoretical systems.

## Acknowledgments

This special issue emerges out of a seminar held in Prato on January 27 and 28, 2022 which also marked the inauguration of a hybrid exhibition, held on site at the Archivio di Stato of this Tuscan city and also online (https:/ / www.paperinmotion.org/). This is one among several other events that the work group Paper in Motion has organized since its onset in 2019. These academic encounters have in turn generated a series of publications that have addressed different aspects of paper as a medium and its ramifications in realms as diverse as migratory movements, exile, the history of communication, alongside the history of commerce and finance. ${ }^{19}$ The current special

[^11]issue is therefore another step within a series of both joint and individual, short and long term, research projects that look into these topics.

We want to thank the members of the Paper in Motion work group, for providing with their generosity and enthusiasm an extremely fertile context conducive to innovative research. Thanks in particular to each and every one of the authors involved in this special issue for their willingness to pool their expertise into this joint effort, which would not have been made possible without them. We must also express our gratitude to the anonymous readers who have reviewed our essays, and have thus improved the quality of our results by steering them in the right direction.

Special thanks to the editors of The Journal of European Economic History for providing this privileged space for the publication of our essays, which do indeed examine important aspects of European economic and cultural history in a global context. Last but not least, we must thank the PIMo Cost Action in the person of its chair, Prof. Giovanni Tarantino: the vast community of scholars that he coordinates is a superb example of the way in which international collaboration among experts working in diverse fields can yield innovative research well beyond the confines of our respective disciplines. This special issue has been published with the financial support of the Department of English at the University of Granada.

[^12]
# Hindu-Arabic Numerals in Public and Private Accounts of The Southern Low Countries (1300-1800)* 

Erik Aerts<br>University of Leuven

## 1. The New Numerals in Public Versus Private Accounts

Recent scholarship has connected the advance of Hindu-Arabic numerals in European commercial practices with the spread of human capital and the social transmission of knowledge. Moreover, it has been convincingly argued that a direct link existed between the new numerals, the commercial revolution of the thirteenth century and the late medieval and early modern "little divergence" between Europe and the North Sea area (mainly England and the Low Countries). ${ }^{1}$ However, little is actually known about the diffusion of Hindu-Arabic numerals in the accounts of either the public administrations or private companies in the latter region. While there has been a substantial amount of research on the adoption of the new numeral forms in treatises and manuals,

[^13]much less attention has been paid to the spread of the numerals in common accounts, despite being the material testimonies par excellence of everyday counting, calculating and accounting. As is also the case in other countries, public accounts in the Low Countries have the reputation of being more conservative than their private counterparts since the main reason for their existence - personal justification by an officer to a controlling agent or institution - did not change much over the centuries. Private accounts, by contrast, were the written record of a company's performance in a highly competitive environment and therefore had to continually adapt to new techniques and better instruments as these emerged. ${ }^{2}$

This paper discusses the adoption of Hindu-Arabic numerals in public and private accounts in the southern Low Countries. I will argue that private accounts adopted Hindu-Arabic numerals in the course of the sixteenth century. Public accounts were not unfamiliar with these innovations but would not introduce the new numerals until the seventeenth and eighteenth centuries. The new numerals were introduced gradually and in different phases. I shall illustrate this thesis by making a distinction between three different contexts which will be dealt with in three different sections: public accounts of central, provincial and local governments; public accounts of town administrations; and private accounts of individuals. Two subsequent sections are devoted to the late introduction and the driving force behind the new practices. As such, this study intends to shed further light on the different nature of two familiar types of documents: public and private accounts. It is also hoped that the paper will contribute to a better insight into the so-called "paths of transmission" ${ }^{3}$ of technical knowledge in the past.

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## 2. The Adoption of Italian Examples in Different Phases

Although probably already known to scholars in Europe in the ninth century, Hindu-Arabic numerals spread at a very slow pace from south to north, moving along the extensive urban network of inland trade rather than the great maritime commercial routes. ${ }^{4}$ From the late thirteenth century, there is clear evidence that the new annotation started to be used in private commercial and financial circles in Italy as Tuscan merchant-bankers adopted the numerals in their business practices. ${ }^{5}$ The northwestern part of the European continent imitated the Italian example with a considerable delay. Some countries quickly came to adopt the new numerals in scholarly environments, but their circulation remained restricted to intellectual authors for a long time. In England, the new figures began to be used sporadically in some account books in the course of the fifteenth century. Around the same time, the numerals were also present in the great towns along the Rhine. ${ }^{6}$ In all of these cases, their use was anything but a common feature in a cultural environment that hesitated to fully embrace the new arithmetic practice. This is quite a contrast with Florence, where Hindu-Arabic numerals were already in widespread use for all kinds of calculations and where they were so well established that they had become an essential part of the com-

[^15]mercial mindset and day-to-day business. ${ }^{7}$
The few available examples clearly show that everywhere Italian influence was of vital importance for the introduction and assimilation of the Hindu-Arabic numerals. For England, Raffaele Danna has demonstrated a very early use of the new numerals, already in 14351436, to be in the account books of the port of Southampton. Indeed, in the late Middle Ages the large English port of Southampton welcomed Italian carracks and galleys with cargoes from every corner of the world. The first English firms to adopt the new numerals at the end of the fifteenth and the start of the sixteenth centuries were all active in international trade and familiar with Italian commercial techniques and practices. ${ }^{8}$ In the German area, on the other hand, one of the oldest traces of Hindu-Arabic numerals can be found in the bookkeeping of an important merchant of Nuremberg who had dealings with Venice at the end of the fourteenth century. His accounts were almost entirely kept in the new numerals. ${ }^{9}$ As we shall see below, Italian influence was also important for the diffusion of the new numerals in the southern Low Countries.

Scattered information seems to suggest that everywhere in Europe the Hindu-Arabic numerals were first used for pagination or foliation and to indicate the date, and only much later for stating amounts in money and in kind, or other quantities. ${ }^{10}$ This sequence was also followed in the Low Countries where the introduction of the Hindu-Arabic numerals took place gradually and in distinct phases: first appearing in pagination and to indicate the date, they were later also used to represent monetary amounts in non-official records, and finally for amounts of money in official documents. Even in this last stage, a distinction should be made between the appearance of the numerals in textual items illustrating and explaining

[^16]the amounts and the representation of the actual amounts themselves.

## 3. Central, Provincial and Local Public Administrations

The magnificent series of accounts of the recette générale des finances, or the office of the receiver-general of the southern Low Countries, provides a good sample for studying the spread of Hindu-Arabic numerals in the financial documents of central government. From its establishment in 1387, this institution served as the central state treasury for public finances. The senior officer, the receiver-general of all finances, was in principle responsible for all of the central government's financial operations at the highest level, as concerns both revenue and expenditure. As such, his accounts reflected the conventional wisdom of the time held by the senior and junior staff members of the central financial administration. A labour-intensive search of these voluminous registers reveals that the receiver-general did not allow use of the new numerals for the full statement of amounts in the official accounts until 1753. ${ }^{11}$

The appearance of the new numerals within provincial government can be followed in the equally impressive series of accounts of the receivers-general of East and West Flanders. Despite their title, these officials operated at a provincial level and managed the finances of a large part of the county of Flanders. The receiver-general for the western part of Flanders switched from Roman to Arabic numerals in 1697; his colleague responsible for the eastern part would follow him a few years later, in 1703. ${ }^{12}$

Demesne accounts offer a perfect test case to discover when local government agencies became so familiar with the new numerals that they dared to use them to express final monetary amounts in official documents. Extensive sampling of the series of accounts for the large

[^17]demesnes of Antwerp and Brussels shows that the Brussels receivers used the new numerals for the expression of the final amounts from $1778,{ }^{13}$ although one receiver introduced the numerals in his accounts for the years 1726-1730. ${ }^{14}$ However, his successors returned to the apparently much more familiar Roman characters. Their Antwerp colleagues followed on even later, in $1782,{ }^{15}$ just one decade before the official end of the ancien régime. At first sight, all these dates seem extremely late but, as we shall see in the next section on urban governments, such a delayed introduction was not at all exceptional for public administrations in the southern Low Countries.

## 4. Urban Administrations

The financial staff of the urban patchwork of large and small towns also launched the use of the new numerals in "safe mode", initially using them to denote days and years, in non-official documents, and to indicate page or folio numbers. When at a later stage the paymasters, receivers, stewards, treasurers and their subordinates finally became familiar with the new numerals to express amounts of money, they introduced them to the accompanying narrative text. It was well into the seventeenth century before the first urban governments also began using the new numerals to express amounts of money, on the right side of the page or folio, in the final version of their official accounts. Some examples can be given for a number of small towns: the town of Lier in the duchy of Brabant introduced Hindu-Arabic numerals after 1652; ${ }^{16}$ Diest, also situated in Brabant, between 1653 and 1662; ${ }^{17}$ Roulers (Roeselare) in the county of Flan-

[^18]ders in 1724; ${ }^{18}$ Aardenburg (in Zeeland Flanders) only after 1752; ${ }^{19}$ Aalst, on the border between the county of Flanders and the duchy of Brabant, somewhat later still, in $1756 .{ }^{20}$ In the official accounts of large( r ) towns, too, the folio numbering or dates in the texts for a long time provided the only traces of the more modern numerals. The town receivers of Leuven allowed the use of Hindu-Arabic numerals in their main accounts from 1686. ${ }^{21}$ Gent switched to using these numerals in its town accounts much later, in 1753-1754; ${ }^{22}$ Tournai (Doornik) did so in 1763-1764 ${ }^{23}$ and Bruges in 1764-1765. ${ }^{24}$

In all these cases, the numerals were first tested in dates, sometimes in a rather curious combination with Roman characters. ${ }^{25}$ This mixing of numeral formats is characteristic of all kinds of accounts throughout Europe. ${ }^{26}$ And as stated earlier, the new numerals first made their appearance in non-official records such as informal draft notes and all kinds of preparatory documents. Leuven town receivers or their clerks, for example, were already stating the amounts in their separate alphabetical files and indexes (Tafels) in this way several years or even decades before 1686, the year in which they

[^19]started using the new numerals in the official accounts. ${ }^{27}$ In Lier, the new numerals turned up in draft versions of the town accounts in the second half of the sixteenth century, long before they were used in the official and final versions. ${ }^{28}$ When they did finally make their way into the official accounts, they first appeared in the text narratives before being used to express the final monetary amounts a few decades later. ${ }^{29}$ This gradual adoption process is well documented for the accounts of the small town of Roulers (Roeselare) in West Flanders. Here, while accountants applied the new numerals to indicate years in 1549 at the latest, it would be centuries - 1713 - before they used them to express amounts in the textual items of the accounts, and a further decade for official amounts in the right margin of folios or pages. ${ }^{30}$

## 5. Private Individuals

Private individuals did not wait so long to put their faith in the new figures. Around 1500, Bruges broker Wouter Ameyde, at the current state of research the first native merchant to use double-entry bookkeeping in the Low Countries, was clearly familiar with Hindu-Arabic numerals, but did not use them to express final amounts in his journals, ledgers or other accounts. ${ }^{31}$ At roughly the same time, the bookkeeping of the Bruges company of Jacob Despars, which traded with Portugal, also began using the new numerals, although they

[^20]mainly appeared in the descriptive text of the accounts, and much less in the numerical totals, for which Roman characters were still used. ${ }^{32}$ The same pattern can be observed in most of the accounts of the famous della Faille company in Antwerp in the sixteenth century. Hindu-Arabic numerals appeared in the text narrative of the journal of the Florentine Affaitati in Antwerp in 1538, but Roman numerals were still used for the amounts in the right-hand columns. Some years later, in 1555, these Roman characters had disappeared from the company ledger. ${ }^{33}$ In fact, some private accounts from the sixteenth century show full use of Arabic numerals throughout, in all parts and details. ${ }^{34}$ The Antwerp cloth merchant Frans de Pape, for example, completely switched to Hindu-Arabic numerals around $1560 .{ }^{35}$ Other evidence suggests that these numerals had become quite common among merchants by the end of the sixteenth century. ${ }^{36}$

As suggested in the second section, Italian examples turned out to be of cardinal importance for the introduction of the new numerals and their subsequent diffusion among public administrations and private individuals in the southern Low Countries. It was definitely not a coincidence that the Hindu-Arabic numerals first appeared in accounts of the so-called mercantile groups whose members were active in international trade and had direct contacts with Italian merchants and financiers. Bruges broker and "hosteller" Wouter Ameyde was among the first to use the numerals in his accounts, albeit it cau-

[^21]tiously and not yet fully. Ameyde numbered many Italian merchants among his customers and it is highly likely that this Italian network acted as a source of inspiration, not only for the introduction of the new accounting system, but also for the novel numerals. ${ }^{37}$

## 6. Reasons for Delay

Pending the results of a more systematic and large-scale study, all these examples illustrate that, even for accounts of private individuals, many decades and even centuries separate the introduction of Hindu-Arabic numerals from their practical application. The reason for this considerable time lag has nothing to do with ignorance, but mainly with distrust and suspicion towards this new form of numeration coming from the East. For centuries, it appears that amounts in Roman characters offered greater legal certainty throughout Europe. ${ }^{38}$ This was even true in Italy, the country that had first welcomed the oriental innovation into its practice. Indeed, from 1299 both Florence and Venice took a number of measures to prevent the use of the numerals, and in 1348 the University of Padua demanded that all book lists should include Roman characters. ${ }^{39}$ In Germany, in 1494 reckoning masters in Frankfurt were forbidden from making use of the new numerals in the accounts of the city. ${ }^{40}$ Throughout the Holy Roman Empire, urban magistrates called the Roman characters "kaiserlich" (or "imperial", referring to the great tradition of the Roman Empire) and decreed that they were the only figures that could be used. ${ }^{41}$ People were genuinely afraid that amounts expressed in the new numerals could easily be falsified. ${ }^{42}$

[^22]As the new numerals were closely linked to Italian business affairs and accounting practices, it is very possible that tensions and difficulties between Italian financiers and native merchants or domestic administrations also had a negative influence on the spread of the new arithmetic culture among public administrations. ${ }^{43}$ Despite some periods of xenophobia, hostilities and even open conflict towards Italian residents in a number of countries such as England and the Low Countries, ${ }^{44}$ this sometimes troubled relationship did not prevent a series of other Italian innovations (double-entry bookkeeping, the bill of exchange, deposit and transfer banking) from being quite easily accepted. Perhaps the long time lag was needed to allow useful knowledge to leave the rather restricted scholarly area of mathematics and trickle down to practical application among accountants, architects, bankers, bookkeepers, cartographers, engineers, land surveyors, money-changers, and other professions?

The concern about easy arithmetic falsifications and the general context of distrust that enveloped the new numerals may explain why they were first used to display dates and to number pages in non-official documents such as preliminary records, or in the narrative items accompanying and explaining the amounts on the right side of each page or folio. Even when people used the numerals for their preliminary calculations, in preparatory documents or draft notes, and in the narrative sections of their accounts, they would

[^23]convert these figures into Roman characters for the final amounts in the official version of the accounts. Accounts from the southern Low Countries have left many traces of this deeply rooted mistrust. In some cases, specialist auditors from the Chambers of Accounts - the official central government audit offices - used the Hindu-Arabic numerals in their annotation while the accounting officers continued to work with the familiar Roman characters. ${ }^{45}$ The receivers-general of all finances clearly knew about these numerals and used them in their notes and correspondence with the Council of Finance, but they still preferred to wait many decades before giving them a place in their official accounts. ${ }^{46}$ They were not alone. The power of the Roman tradition was so firmly embedded in the urban financial administrations that during the second half of the seventeenth century the Antwerp town receivers carefully converted the Hindu-Arabic figures from the preparatory accounts into Roman numerals for the final grand account. ${ }^{47}$ This long-held view of the superiority of the Roman notation may explain why in the Bruges city accounts, even after the introduction of the Hindu-Arabic numerals, the summae or totals under the chapters as well as the closing balances at the end of the account continued to be presented in Roman characters. ${ }^{48} \mathrm{~A}$ similar practice can be observed in the accounts of the receivers-gen-

[^24]eral of all finances, ${ }^{49}$ the provincial receivers-general of the county of Flanders ${ }^{50}$ and the local demesne receivers of Antwerp and Brussels. ${ }^{51}$ Here too, the receivers expressed their subtotals and closing balance in Roman characters even when they had used the new numerals for the current amounts in their receipts and expenses. In Tournai, the town receivers preferred to follow the opposite path: they expressed the totals or summae and the summa summarum in Hindu-Arabic numerals many decades before they were willing to take the risk of writing down the amounts on the right side of the current line items in the same way. ${ }^{52}$

While distrust of the numerical innovation may have been the principal explanation for its late adoption by public institutions, another motive may have played a secondary role. Against a background of a duodecimal-vicesimal currency and the widespread and sophisticated use of handy calculating tools such as the abacus or counting board, the novelty of decimal Hindu-Arabic numerals was considered superfluous for a very long time. Already in the late fourteenth century, the officers of the Chambers of Accounts demonstrated "an excellent level" in the fine art of "throwing" tokens or chips (jetons) onto an abacus. In mastering arithmetic operations, they demonstrated their ability to avoid errors even when checking large series of amounts in major accounts. Staff of the chambers detected accounting errors with great precision and easily performed calculations such as the arithmetic mean and the rule of three. ${ }^{53}$ Calculating with an abacus and with tokens remained popular well into the seventeenth and even eighteenth centuries. All this time, finan-

[^25]cial and accounting experts in public administrations simply did not see any added value associated with the use of the new numerals. ${ }^{54}$ As suggested in the introductory section, public finance officers were not that interested in profit and loss, but rather in personally justifying public funds. Such a different aim required less sophisticated accounting procedures, tools and calculations.

## 7. The Driving Force Behind the New Practices

Based on current research, it is difficult to identify the individuals who were the prime movers behind the dissemination of HinduArabic numerals in public accounts. The little evidence available appears to support the hypothesis that lower-level financial staff, and even subordinate personnel such as clerks, introduced the new numerals into the accounts. For example, in the small Brabant town of Lier, Roman numerals were still used for monetary amounts in the official accounts in 1652, while Hindu-Arabic numerals appeared the next year. ${ }^{55}$ Both accounting years had the same receivers, but the different handwriting indicates that the accounts were prepared by different clerks. ${ }^{56}$ A similar observation can be made for the accounts of the provincial government of East Flanders where the re-ceiver-general Gilles Dons used Roman characters in 1702 and suddenly introduced Arabic numerals the year after. ${ }^{57}$ Here, too, the

[^26]handwriting in the two accounts of the same receiver is different and the two sets of accounts were presented to the Chamber of Accounts by different people. It is of course perfectly possible that the same receiver simply changed his mind from one day to the next, or more likely from one accounting year to the next, but it is more probable that his collaborators introduced the new numerals. After all, the receiver was in charge of the general financial management, leaving the painstaking daily keeping of the accounts to one of his subordinate collaborators. ${ }^{58}$ So it seems that these professional categories were at the forefront when it came to practical numeracy. From their position within the financial field, they were responsible for the slow but steady advance of technical, prescriptive knowledge in society.

The accounts provide no answer to the question of where and how these lower-ranked office workers in public financial administrations familiarized themselves with the new way of performing calculations. In a number of cases, clerks, greffiers and other lower staff members must have learned the art from a more experienced or senior colleague within the administration itself. This process of learning "on the job" was widespread and typical not only for the transmission of technical skills within craft guilds but also for the commercial and financial training of apprentices and junior employees in private companies. ${ }^{59}$ We know, for example, that the workplace was very important for the training of accountants in late medieval Tuscany. ${ }^{60}$ In Antwerp, such training was often arranged

[^27]by senior merchants during formal or less formal apprenticeships. Obviously, these orally based practical learning processes needed a more formal start in an institutional context, an infrastructure that had existed in Italian cities since the thirteenth century. In the socalled scuole d'abaco, pupils were trained not only in traditional reckoning techniques (such as the abacus), but also in the use of the Hindu-Arabic numerals. ${ }^{61}$ According to Florentine banker, diplomat and chronicler Giovanni Villani, in Florence between 1336 and 1338 no fewer than six such schools offered practical training courses to between 1,000 and 1,200 pupils. ${ }^{62}$ The arithmetic manuals (libri d'abaco) that circulated in these vernacular lay schools became more numerous throughout Europe as of the fifteenth century and became available in printed form in the last quarter of the century. ${ }^{63}$

In the southern Low Countries, there was a flourishing circulation of handbooks (artes literature) in manuscript form among urban citizens, supplemented from 1470 with professional and scientific literature marketed by a large number of printers and publishers. ${ }^{64}$ From the second quarter of the sixteenth century, Antwerp, the great commercial metropolis of western Europe, counted a large number of arithmetic schools within its walls. The usually well-informed Florentine merchant and historian Lodovico Guicciardini, who lived in the city, estimated their number at about $150 .{ }^{65}$ In these "distant de-

[^28]scendants" ${ }^{66}$ of the Italian prototypes, specialized schoolmasters, also called "cypher masters" (cyfermeesters) or "reckoning masters" (rekenmeesters), ${ }^{67}$ used printed treatises and manuals, which they sometimes wrote themselves. ${ }^{68}$

## 8. Conclusion

Hindu-Arabic numerals were quite common in private (company) accounts of the Low Countries before the end of the sixteenth century. By contrast, public accounts administered by central, provincial, local and urban governments only began to use the new numeral forms in the late seventeenth or even eighteenth centuries. A similar pattern can be seen elsewhere. In England the new numerals were present in some private accounts in the fifteenth century but only started to appear in public accounts in the course of the seventeenth and eighteenth centuries. ${ }^{69}$ If we assume that this divergent chronology can be considered a proxy for financial progress or even, to use bold words, "modernity" and "rationality", 70 we could conclude that public accounts were more conservative than their private equivalents. However, an important caveat is necessary here. The very long absence of the new numerals in public accounts does not imply a kind of intellectual blindness or a state of mental isolation, or even a resistance to any form of numerical or arithmetic innovation. It could also be an indication that the existing techniques and practices were satisfactory and adequately met all needs. In the case of public administrations, these expectations were less high and rig-

[^29]orous than with merchants or bankers who in their daily contacts with Italian colleagues felt the need to adapt sooner. As for the transmission of this practical knowledge, it took place both in an informal and a formal way, on the work floor with experienced senior colleagues and in special arithmetic schools with qualified reckoning masters.

One conclusion seems certain: the adoption of the new numerals in the accounts of the southern Low Countries did not occur suddenly or through a series of revolutionary external shocks, but represented, as so aptly observed by Richard Goldthwaite and Angela Orlandi for the financial documentation of Renaissance Florence, "nothing more than an internal dynamic, however slow, toward refinement", driven "by means of small, barely perceptible changes". ${ }^{.71}$ Their conclusion of a slow, endogenous process is confirmed by Paul Bertrand who, at least for the long thirteenth century, stressed the pragmatic and even spontaneous character of the introduction of new writing practices "in a more or less improvised way". ${ }^{72}$ Such statements substantiate the more general idea that commercial and financial innovative practices in general followed a cumulative path rather than a revolutionary trajectory. ${ }^{73}$

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# Mobilizing Objects and Money: Inventories of the Donations at the Origin of the Monti di Pietà* 

Pietro Delcorno<br>University of Bologna


#### Abstract

Monti di Pietà were first founded in the 1460s as public banks whose aim was to provide citizens with solidaristic credit. In this institution, the interplay between the objects pawned and the small money loans granted in exchange was vital and mediated by a wellorganized paper "ecosystem" of account books that served as written records and guarantees. In setting up the Monti, a specific type of paper inventory played a crucial role, namely the list of donations (either in money or in kind) made by different social actors. These actors' involvement (at times within choreographic ceremonies) was crucial to create consensus and gather the initial capital for a Monte. By focusing in particular on the rich documentation of the archive of the Monte di Pietà of Padua, this article highlights three key aspects of this type of inventory: how they traced the active involvement of several social groups in the city; how they recorded objects in transition from personal/household use value to financial value; how they served to build the memory of the "glorious" history of the institution.


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## 1. The Monti di Pietà and their documentation

Monti di Pietà were first founded in several Italian cities in the 1460s as a form of public bank whose aim was to provide citizens with "solidaristic" credit. ${ }^{1}$ At first, these institutions offered pawn loans at considerably lower rates than the loans offered on the market (i.e., by private banks / moneylenders). This choice to make credit more accessible to the less wealthy was in many cases also a strategy to weaken the social and economic position of Jewish bankers (and communities) in Italy. ${ }^{2}$ In its early phase, a key goal of the institution was to provide credit to those lower economic segments of society which practised modest artisanal and commercial activities. ${ }^{3}$ Pawn loans represented a simple and quick way of accessing small amounts of money by temporarily pawning objects that guaranteed the debtors' solvency. This policy intended to alleviate the conditions of the (vast and fluid) class of "conjunctural / working poor" in moments of temporary economic difficulty (e.g., due to illness, war, or

[^32]famine), preventing them from falling into misery or resorting to begging.

In the new institution, the interplay between the objects pawned and the small money loans granted in exchange was vital. In this operation, a well-organized system of account books served as written records and guarantees. The duty to carefully note down the Monti's every operation was entrenched in their public nature and in the ideal of their accountability as a civic bank that (allegedly) served the common good. Hence, in 1493, when depicting the key aspects of a Monte, Bernardino da Feltre, a passionate Franciscan preacher who energetically promoted this institution in dozens of Italian cities, underlined that "the Monte ought to have a register, provide receipts, and produce many written documents." ${ }^{4}$ His sermon was quite interesting, to present both the institution and its internal organization as divinely inspired, the preacher let God speak in the first person; in the text, it is God who gives a definition of what a Monte di Pietà is and how it has to function. In any case, Bernardino stated that the duty to write down and account for everything was as important as having an appropriate building to safeguard the objects and money. Consequently, the Monti di Pietà produced and conserved a massive amount of written material, reflecting its selffashioned status as a public institution whose actions had to be verifiable.

The recent Paper in Motion exhibition presented some of the documents produced by the Monte di Pietà of Bologna and the Monte dei Poveri of Naples. ${ }^{5}$ While providing just a glimpse of this "mountain of paper", the collective contribution to the exhibition catalogue underlined how the statutes determined that each Monte should keep a certain number of books, which ranged from one to seven,

[^33]for different purposes. Indeed, the variety of documents testifies that despite the similarity between the institutions, they were nevertheless distinct in their internal organization. ${ }^{6}$

In different forms and based on the organization of each local institution, the Monti's paper documentation recorded - with different degrees of detail - the objects pawned (with their description and evaluation), the clients, the amount of money that was granted, and whether or not the loan was returned. As such, paper, ink and books formed the irreplaceable material infrastructure that allowed the system to work. At the same time, by recording the institution's activities, these documents charted a peculiar map of the significant portion of society connected with a Monte. The heuristic value of this paper documentation has not escaped scholars' attention. ${ }^{7}$ However, a pivotal role could be played by a less investigated type of paper inventory, namely the list of donations (either in money or in kind) made by different social actors to set up the Monti. ${ }^{8}$ Their involvement (at times within well-planned and choreographic ceremonies) was crucial to gather the initial capital for, or to recapitalize, a Monte di Pietà, as well as to establish and strengthen the institution's civic identity.

## 2. Donations in kind: a form of support for the Monte's capital

Preachers often had a key or at least a very visible role in supporting

[^34]this process. ${ }^{9}$ They had the know-how (and the moral authority) to convince both the (civic) authorities and the population not only of the benefits of this institution, but also of its necessity. Their persuasion aimed to obtain very concrete results, since they asked the local community to provide the Monte with a location and a starting capital. We have only a few sermons pronounced on such occasions. Shedding light on this key aspect of the communication campaign in favour of the Monte is a paper manuscript recording the sermons preached by Bernardino da Feltre in Pavia, in 1493 (which underwent quite a complex transformation during the transcription process). ${ }^{10}$ On a day when - according to Bernardino's hagio-biography - a "solemn procession for the offering to the Monte di Pietà" ${ }^{11}$ due to open in the town was scheduled, Bernardino exhorted everyone to give good offerings and admonished that nothing was to be squandered, so as to keep those with "talons and beaks like birds of prey" that wanted to "eat" from the Monte at arm's length. ${ }^{12}$ Here the preacher introduced an anecdote about a collection of offerings made in Padua a few years before. He recalled how peasants from the contado (the area around the city) contributed to the capital of the Monte by bringing 300 sacks of wheat. ${ }^{13}$ Moved by their example, a

[^35]poor woman ("una poverina") gave two eggs, which was all that she had. ${ }^{14}$ The officers of the Monte accepted the gift, but when accounting for the donations received, they decided to give the eggs to the simpleton Piero matto ("Peter the Fool"). However, as soon as Piero heard that the eggs were an offering made to the Monte, he refused to take or eat them, saying: "May God forbid that Piero matto be the one who eats something belonging to the Monte..." ${ }^{15}$ The anecdote served to exhort the people of Pavia to do the same and follow the exemplary morality of Peter the Fool, so the preacher asked them to publicly and collectively swear to respect the donations made to the Monte.

Within the sermon, the story is just a brief exemplary tale, yet it shows that donations were made in kind too, as is confirmed by several other sources. This type of donation was then sold or auctioned to contribute to the Monte's capital. In this way, objects helped to set in motion the circularity between the cash (loans) and other objects (pawns) which characterized the daily life of the institution. A six-teenth-century Vita of Bernardino da Feltre, written on the basis of the diary of a friar who accompanied him for several years, says that the initial capital of the Monte di Pietà of Faenza combined public funds granted by the city government (a public investment in a sort of welfare system), money collected during the main feasts, and what was gained "by sending carts around, house by house, on weekdays, carts that came back always full of panni lini [linen sheets] and other things." ${ }^{16}$

[^36]This type of collection was sometimes organized as a sort of challenge, fostering emulation between social groups. Friar Michele d'Acqui, a contemporary of Bernardino, was a professional at promoting the Monte di Pietà by means of spectacular fundraising initiatives. ${ }^{17}$ In 1496, it was thanks to Friar Michele that the Monte di Pietà in Crema was able to finally take off. Its foundation had been decided in 1493, but it had never come to light. However, Friar Michele had its statutes approved by the city council and, most crucially, helped gather the capital. As part of this initiative, he first organized a general collection of offerings during the procession of the feast of the Corpus Domini. This choice of timing linked the Monte (which already used the image of the Man of Sorrows) with the powerful message of this feast, that is, the symbolic overlap between the body of Christ and society, based on the idea that the Eucharist represented (and created / strengthened) the unity of Christian society. ${ }^{18}$ Then, on the following days, each city district was asked to gather and present its offerings (both in cash and in kind) at the four gates of the city, in a sort of charitable competition between neighbourhoods. According to the description given by the chronicler Pietro da Terni, the winners were without a doubt the people of Porta Ripalta, who organized a majestic procession of pageant wagons, animals and banners. ${ }^{19}$ The parade included a spectacular machine "higher than the roof of the houses" (ogni tetto di case ascendeva), representing heaven (with a real woman and a real child at its top), which needed no fewer than 40 porters to carry it. Besides other religious scenes and symbols, there

[^37]were some quite inventive additions, such as a "artificial elephant" (un elefante fincto), with a tower and children dressed as soldiers on its back. ${ }^{20}$ Stranger still was the presence of a rider "on a most beautiful ostrich" (uno bellissimo struzzo) or a person acting as a minotaur. Yet, the wagon that concluded the show left no doubt as to the overall "political" message: "lastly, [someone impersonating] Vespasian came on a real triumphal chariot with a crowd of Jews, tied and chained, [...] and he pronounced many verses about the Monte and against the Jews." ${ }^{21}$ The anti-Jewish tone was entrenched in the spectacle, which concluded the fundraising that in those days - between donations in money and in kind - had provided the Monte with about 12,000 lire of capital. ${ }^{22}$

## 3. Inventories of donations in favour of the Monte of Padua

In most of the cases - such as those that I have mentioned - we get just a glimpse of the actual objects collected as contributions to the capital of a Monte. A remarkable exception is given by some detailed inventories of donations in favour of the Monte di Pietà of Padua, made on several occasions in its early phase, with the involvement, among others, of Bernardino da Feltre and Michele d'Acqui. In his rich analysis of the history of this Monte, Giovanni Silvano used these sources only in part, that is, to trace the formation and increase in the Monte's capital, without paying proper attention to the public rituals or the objects involved. ${ }^{23}$ Before looking at these lists, it is

[^38]worth considering that they have come down to us in three different formats.

The first document is an early account book of donations (made or promised) to the Monte: the Oblationes Monti Pietatis, promissiones et donationes. ${ }^{24}$ Its parchment cover depicts the Man of Sorrows emerging from the sepulchre, showing his wounds (the suffering body to which the poor were ideally connected). He is depicted on the top of the Monte, with some words, added at a later stage, that read: Primo zornal delle oblationi del S. Monte de Pietà di Padova, 1491 (fig. 1). The account book is composed of three paper quires that record, in chronological order (albeit patchily), the donations to the Monte from its foundation in 1491 to 1506, when the way of recording the contributions to the cavedal (capital) of the Monte changed. ${ }^{25}$ As also visible from the identical layout of the book cover, this book had a sibling in the Monte of Padua's initial accounts system, the Liber depositorum, which recorded bank deposits and loans (deposita et mutua) to the new institution. ${ }^{26}$

The earliest inventories of donations in the Primo zornal delle oblationi were copied - probably shortly after $1497^{27}$ - into a new document, where they are not only transcribed in good order but

[^39]Figure 1
Christ as the Man of Sorrows over the Monte


Parchment cover of the Primo zornal delle oblationi (1491-1506), Padua, ASPd, Monte di Pietà, b. 18 .
preceded by a laudatory narrative about the foundation of the Monte. ${ }^{28}$ Unfortunately, this document came down to us in a very poor condition of conservation (fig. 2); still, it is evidence of a conscious effort to create an ordered memory - even a sort of official narrative - about the origins of the institution, with special attention to the donations received and the social actors involved in the "heroic years" of the bank's foundation and consolidation.

Later on, the content of these early account books also became part of a paper monument built - or rather, printed - to celebrate the Monte di Pietà of Padua, namely the Thesaurus urbis Paduanae [...] vocatus Sanctus Mons Pietatis, published by Pietro Saviolo in 1682, a book whose value has strangely enough not yet been fully appreciated by scholars. ${ }^{29}$ Its full title is quite telling: "Treasure of the City of Padua which is called Mount of Piety, that is, the apostolic deposit of the Paduan goods [pecunia] collected by the civic fathers and gifted to the society of the poor so that the needy may be perpetually assisted" ${ }^{30}$ The iconography of its frontispiece, structured like a sin-gle-panel altarpiece, is even more impressive (fig. 3). ${ }^{31}$ Under a vigilant Lion of Venice (symbol of the dominant political power), the city is represented with the symbolic Monte di Pietà at the centre. In its core is the Imago pietatis, the veritable logo of the institution (as we have also seen in its account books): the Man of Sorrows, who

[^40]Figure 2
Narrative incipit of the inventory of donations (1491-1497) in Padua


ASPd, Monte di Pietà, b. 265, f. 1, fol. 1 r.

Figure 3
Frontispiece of Pietro Saviolo, Thesaurus urbis Paduanae (Padua 1682)


Copy held by the Archivio Generale Arcivescovile di Bologna (Reggio Emilia XVII 880).
shows his wounds, supported by two angels. ${ }^{32}$ Around this symbol, a solemn procession (with banners) takes place in front of the recognizable building of the local Monte, which still dominates the square beside the Cathedral of Padua today. ${ }^{33}$ The most striking detail of this image is the coins raining from the sky, sent by God through the angels as a response to the procession and to the intercession of a saintly friar (arguably Bernardino da Feltre, founder of the Paduan Monte, who had been proclaimed beatus in 1654). Equally interesting are the two allegorical figures on the altar-like structure that frames the main scene. On the left, an angelic woman, with a cornucopia in one hand, the other hand on her heart and a flame on her head, symbolizes Piety, following the description of the Iconologia (1593) of Cesare Ripa. ${ }^{34}$ Under her feet is an anthropomorphic beast, which may be interpreted as the risk of subversion/unrest in light of the wording: "Ne devastet subvenio" ("To avoid destruction, I help the poor"), a message coherent with one of the goals of the modern subventio pauperum. ${ }^{35}$ It might also be read in a religious perspective, since the works of mercy were often presented as an effective defence against any manifestation of divine wrath. ${ }^{36}$

[^41]On the right, Charity (or again, Piety) ${ }^{37}$ helps and supports two children (symbol of the most needy), while under her feet is the personification of usury, who wished to enslave the people and put them in chains - if I interpret the writing correctly: "Ne foeneretur propulso" ("To prevent usury, I drive it away").

In this book, we also find a rewriting of the abovementioned brief narrative about the foundation of the Monte di Pietà of Padua, which surprisingly sheds light also on the mysterious identity of Piero matto. ${ }^{38}$ The story details the role of a certain Petrus sapiens ("Peter the Wise"), a euphemistic nickname for a fool (someone "in insania veniens"), who was the son of a rich family of Brescia. He used to be seen running naked through Padua, even in winter, and was considered a fool by all. Yet, during the campaign for the Monte, he became one of most active people, collecting offerings for it all around the city. ${ }^{39}$ Such was the faithfulness with which he acted (a fame confirmed by the exemplum given by Bernardino in Pavia) that no one considered him a fool anymore. In this new role, many people (including Bernardino) trusted him as the right person to receive their offerings; indeed, this was also a way for the benefactors to be

[^42]assured of their anonymity, something - it is said - that was considered particularly virtuous, in compliance with the teaching of the Gospel (cf. Matthew 6:1-4). Hence, in Padua many of the offerings passed through the hands of a person who embodied the liminal figure of a saintly fool, and this is how he is memorialized in this document, where his name is capitalized - something that is not even done for Bernardino, the main hero of the story. ${ }^{40}$

Still, most of the 1682 publication is occupied by the transcription of the lists of donations and donors, which covers (again unevenly) the years 1491 to 1506 . For instance, in 1496, as a result of his Lenten preaching in the cathedral, on the Tuesday after Easter (April 5), Michele d'Acqui led a fundraising event in the main square, with a ceremony that involved different religious groups, trade guilds and individual citizens, all called to publicly manifest, on the Paduan civic "stage", their generosity and support for the local Monte di Pietà. The detailed inventory - made at the time, then copied and conserved, and finally printed almost two centuries later - opens with the preacher donating the significant amount of 621 lire, which evidently had been given to him during Lent. ${ }^{41}$ The second person listed is Petrus sapiens, who gave 391 lire; clearly, he continued to play a significant role well after 1491. Next, professional associations are mentioned, first of all universities: the collegium iuristarum and the collegium artistarum gave the same amount (620 lire), while the notaries offered 100 lire and the scolarum of the Collegio Pratense $32 .{ }^{42}$ Several organized social groups were also involved; for instance,

[^43]young nobles ( 352 lire) and different groups of women: unmarried girls (125), wives (486), widows (383) and handmaids (ancillę), who presented 24 lire (a small amount but coming from a lower segment of the working class). ${ }^{43}$ Many parishes and confraternities also contributed, as well as trade associations. For instance: the glass-makers offered 46 lire, blacksmiths 40 lire, ragmen (fratalea strazzarolorum) only 14 , jailers 40 , bakers 50 and so on. ${ }^{44}$ While considering and comparing the different types of support that the Monte received from different parishes and the different working categories (in that year, bakers and jailers together almost matched the donation made by notaries - something that one might not expect) is beyond the scope of this contribution, this type of source would allow us to draw a (social) map of the type of support the Monte received during its first few years of existence. Finally, specific citizens are also recorded as making monetary donations ("hec in pecunia numerata"), including four women who were teachers, for example, Venturina de Strata, who offered 24 lire. ${ }^{45}$ Altogether, these teachers collected (perhaps also from their students) 60 lire.

The second part of the list records donations of objects that would then be auctioned a few weeks later (on April 26 and 29). The register states that only the main gifts have been recorded (so, things like the poor woman's two eggs mentioned in Bernardino's sermon do not appear). Still, besides several jewels (such as a ruby set in gold, auctioned for 12 lire and 8 soldi), there are also some quite ordinary objects, as can be seen in the following excerpt (figure 4 and table 1). ${ }^{46}$

[^44]Figure 4
Inventory of donations made on April 5, 1496,
Primo zornal delle oblationi, Padua


ASPd, Monte di Pietà, b. 18, fol. 136 r.

Table 1

## Inventory of donations made on April 5, 1496,

 Primo zornal delle oblationi, Padua
## Cultelli 8

Schuffieta una velluti a puero
Schutellinus unus de peltro
Una bambasina alba
Una rassa morella sine manicis
Unum par manicarum beretinarum in modum retis
Unum par manicarum damaschini aurati lacerati Unum par manicarum de scimito nigro [...]

Una camisia ad homine portata
Una camisia ad homine nova sine collario
Tres fassie a pueris
Unum mantile novum brachiorum 6 grossum Due toballee novee

Six toballeoli novi et unus vetus [...]
Unum lenzoletum a cuna cum capitibus ut supra [i.e. aviculatis] [...]
Vigintisepte facioleti vari
Quatuor facioli serici, triti et maculati [...]
Una zorneta alba a puero
Unum cingulum prunacium (?) non fulcitum cum tres paternostris
Unus Virgilius impressus
Bona autem vendenda sunt, videlicet:
Unus cingulum aureum ad damaschinam [...]
Unus cultellus cum manico aniclato pauci valoris
Unus annulus aureus cum lapide simili alicorno, caratorum quindicim (?) [...]

Uncie tres corallorum variorum et minutorum
Carati novem gemmarum parvarum
Unus elmus antiquus
Camisie a donna sex subtiles nove

## Eight knives

A baby's velvet bonnet
A little pewter bowl
A white cotton wool [dress]
A dark purple woollen [dress] without sleeves
A pair of grey sleeves, woven like a web (?)
A pair of sleeves of broken golden damask
A pair of sleeves of black silk/velvet
A used men's shirt
A new men's shirt without collar
Three children's bands
A new thick cloak long six arms
Two new tablecloths
Six new napkins and one used [...]
A little sheet for a cradle with aviculatis trims [...]
Twenty-seven assorted handkerchiefs
Four silken handkerchiefs, worn out and stained
[...] A child's white overcoat
A purple belt not filled up, with three Pater nosters
A printed book of Virgil
Goods also to sell, that is:
A golden belt of damask [...]
A knife with an aniclato handle of little value
A ring of gold with a stone similar to unicorn's ivory, fifteen carats [...]

Three ounces of various small corals
Nine carats of small gems
An antique helmet
Six women's blouses, new and thin
Two women's blouses, in a thicker fabric
A little sheet for a cradle, with golden trims

Una vestis damaschini nigri a donna, oblata tempore fratris A women's dress of black damask, given at the time of Bernardini, que vendita fuit ut infra L. 47, s. 10 friar Bernardino, which was sold for 47 lire and 10 soldi
Una petia telle de lisino, brachiorum vigintiduorum, vendita A piece of fabric de lisino, twenty-two arms long, which ut infra L. 1047

ASPd, Monte di Pietà, b. 18, fol. 136rv.

It is a list of very concrete objects suggesting that different types of citizens decided, once again, to support the institution that had started to operate in Padua five years before. ${ }^{48}$ Since these objects were then sold, they speak of the circulation of material goods, some of which offer a glimpse into the "material culture of the middling class." ${ }^{49}$ All considered, the fundraising promoted by Michele d'Acqui (one assumes in strict cooperation with the lay officers of the Monte, who presided over the activity) gathered the considerable sum of roughly 5,500 lire, one of the highest registered in this account book. ${ }^{50}$

As is clear from this sample, clothes and fabrics take up a great deal of space in this type of list. For instance, on July 17, 1491, Bernardino da Feltre gave the Monte a precious dress ("unam investituram raxii cremexini cum cassis dalmascheni auri et brazalibus de restagno") offered by a widow, as well as a cloak ("unum mantile cum capitibus in aureo brachiorum quatuor vel circa"), and several belts - one white belt with red and white fringes and a fibula, with seven decorations made of gilded silver ("cum paxetis septem argenti auratis"), another reddish/ orange (leoninus) women's belt with a fibula and 11 silver decorations ("coloris leonini cum capite fiba longis et paxetis XI argenti non aureati"). ${ }^{51}$ Similarly, we find several

[^45]pairs of sleeves of different colours (with golden stripes, red images, or made of damask) but also more humble handkerchiefs of different dimensions. ${ }^{52}$ Among the donations, books are rare, yet we do not only find a copy of Virgil but also, on another occasion, a prayer book of parchment made in Paris ("officioulum quodam literarum Parisiensium membranis"), with an estimation of its value at 4 lire. ${ }^{53}$

It would be possible to continue to add objects, as there are hundreds of them, including some peculiar items (in our sample, things such as an "antique helmet" or a "little sheet for a cradle, with golden trims"). Leaving behind the "vertigo of the list", ${ }^{54}$ which is quite a temptation when looking at such rich inventories, the material goods mentioned should be enough to show how this type of source provides us with a precious vantage point to view the life of Paduan urban society. We can imagine piles of objects (at times even their shapes, materials and colours) and the organized movement of the various social groups and individuals who decided to take part in this collective enterprise. As historians, we can only speculate on the multiple reasons and feelings of the people who participated in this event. One can think that some gave generously, making a real sacrifice, while others gave just a small fraction of what was at their disposal. Some of the objects may have been superfluous to their previous owners, who gave them without a care, while other objects may not have been easily replaceable or their owners might have been profoundly attached to them. All of these things can be imagined behind these lists of objects. While these elements remain beyond the reach of historical research, the movement of goods for charity (rather, for a public credit institution) is instead very concrete. And while money (pecunia numerata) had a somewhat straight itinerary (from the hands of the donors to the bank capital), for donations in kind the dynamic was more complex, since once an object

[^46]was gifted to the Monte it needed to be auctioned to actually be of use. It needed the (second-hand) market to be effective, since only when it was sold would the donation achieve its worldly effect. In the abovementioned list, we find a dress of black damaschino that is registered as "given at the time of friar Bernardino", which means at least three years earlier, since the last time Bernardino da Feltre was in town was June $1494 .{ }^{55}$ We do not know why it was not auctioned at that time; yet, in 1496 it sold quite well: for almost 48 lire.

The last aspect I would like to underline is how at times this account book also recorded the scenographic elements of these public events. For instance, on Sunday May 6, 1492 it notes that the offering of 400 lire made by our Peter the Fool was presented "in curru triumphali cum virtutibus", that is, in a spectacular way, on a wagon decorated with symbolic figures that passed through the city. ${ }^{56} \mathrm{He}$ is also mentioned in 1495: a famous preacher, Bernardino de Busti, set up "a solemn scenography (apparatus)" in the main square to collect donations. Immediately after the Franciscan friar, who offered a "white candle" of the value of 113 lire, it is recorded that "Peter nicknamed the wise, with a huge procession of boys and girls" ("Petrus cognomenato sapiens cum grande apparatu puerorum utriusque sexus") presented an offering of 136 lire (followed by a list of objects). ${ }^{57} \mathrm{We}$ encounter the active involvement of children and teenagers in support of the foundation and life of the Monte in other places too, most famously in Savonarola's promotion of the Monte di Pietà in Florence. Moreover, on many occasions we are told that confraternities and parishes put their offerings on display in parades with banners with their saints' image. Indeed, this type of procession

[^47]and public display of (civic) charity is recorded by other sources and also captured in the image of 1682 in Saviolo's book. ${ }^{58}$ For instance, the parishioners of St Lorenzo arrived with their priests, following the vexillum crucis (and giving 40 lire). Yet, the solutions could be more inventive and picturesque still: on the same day, greengrocers (hortolani) brought 30 lire "embedded in a melon, with a golden coin on its top." ${ }^{59}$ A few days later, the offerings almost reached the heights of a religious play. The residents of the suburb of Santa Croce, especially the brick-makers (fornacerii) and sailors, arrived in a procession, with horses in front and behind people dressed up as the Three Kings, with a large crowd dressed as ethiopi (black people) and strangers, creating an explicit link between the Monte and the Nativity (presepe). ${ }^{60}$ It was not just show, since it resulted in a conspicuous donation of 222 lire.

It would be difficult to overestimate this type of donation, which arrived in different forms and with different choreographies. Indeed, in the accounts of the formation of the Monte's cavedal leading up to May 1, 1499, the first and by far most important entry is "the donations in cash [and] derived from the selling of the silver, wax, and things offered to the Monte". These amounted to 40,122 lire, $76 \%$ of the total capital ( 52,705 lire), to which one has to add the second entry, the income from wheat donations ( 3,320 lire). ${ }^{61}$

[^48]
## 4. Conclusion: bookkeeping and memory

Overall, based on the case of Padua, three aspects of this type of inventory of donations emerge. First, these lists trace the involvement of several actors in the city, both as private citizens and organized religious and social groups (in Italian, one would speak of the corpi intermedi of society): from parishes and confraternities to trade guilds. Second, these documents record the movement of objects in their transition from individual/household use value to a financial value. While at the moment of the donation the objects had a symbolic value (within a ritualized gesture, the donation publicly expressed the people's active support for the project of the Monte and the acknowledgment of its concrete value for the city), only when they were sold were they integrated into the Monte's actual capital. Third, these account books were more than practical bookkeeping tools. In the earliest phase at least, they also provide records of the social context that generated the cavedal del Monte, with its expected or unexpected heroes (acclaimed preachers, officers of the Monte, but also Piero matto), the crowds of people and social groups, as well as descriptions of the visual and spectacular organization of fundraising events.

Looking at this source more closely, it is less odd that in 1682, a two-century-old account book, safeguarded in the archive of the Monte of Padua, was published to celebrate the institution's "glorious" history. Paper had preserved not just strings of numbers, dates and names, but traces of a complex history. This history remains in part to be explored, particularly concerning the material goods (and material culture) it involved, which could be of great financial value or quite humble, mirroring the story of the pawns of the Monte. And it is not impossible to think that some of the people who gave small donations to the Monte - both personally or as a collective group may have been among its clients later on. There was no fixed divi-

[^49]sion of roles between benefactors and beneficiaries. Hence, their act of charity was also an investment in an institution that could support them in times of need. Documents such as the Primo zornal delle oblationi give us a concrete glimpse of this movement of material goods which was a collective investment in the life of the city, and opens the door to an in-depth study of the different social groups who supported the Monti.

# Reinterpreting the Tuscan Economy in the Long Seventeenth Century: New Perspectives for Research from Two Rediscovered Archives* 

Matteo Calcagni<br>European University Institute

## 1. Introduction

The period beginning with the rule of Ferdinando II, in 1628, and ending with the death of Cosimo III, in 1723, has not benefited from the historiographic attention it deserves, at least in the last two decades. The lack of interest in this long period of Tuscan history, during which processes took place that delineated many of the fundamental characteristics of the economy and culture of the Medicean Grand Duchy, has distant origins and is rooted in an overall vision that identifies the seventeenth century, if not in decline, at any rate as the least significant period. Adding to the disinterest and encouraging the dismissive judgement of the Medicean seventeenth century is the incontrovertible fact of the dearth of writings on Tuscan history composed during that period. In fact, as is generally known, the first work dealing with seven-teenth-century Tuscan history was published by Riguccio Galluzzi in 1781. The work, commissioned by Grand Duke Pietro Leopoldo, was part of a complex ideological programme that aimed, through the reconstruction of the Medici government, to historically legitimize the continuity between the extinct ruling dynasty and the

[^50]Hapsburg-Lorraine dynasty, and ultimately to exalt the reformist process undertaken by the latter. ${ }^{1}$

Studies and research carried out between the 1980s and 1990s, as well as the possibility of consulting new archival sources, allow a new picture to be drawn that is profoundly different from the one offered by past historiography. In fact, in the seventeenth century, beneath the appearance of a long period of political immobilism, Medicean Tuscany experienced significant changes and economic vitality, albeit without any resounding turns or ruptures taking place. ${ }^{2}$ The Grand Dukes Ferdinando II and Cosimo III introduced innovations that altered the socio-economic structure of the Grand Duchy, effectively in reaction to the stimuli that came from great international events. Rather than immobility, therefore, the state of the Grand Duchy of Tuscany in the seventeenth century should be referred to as one of equilibrium, maintained through the art of politics and the intertwining of multiple forces, largely consisting of the extensive, multiform merchant class whose financial operators often assumed the role of economic and diplomatic mediators. ${ }^{3}$

At a glance, there were two phases in the Tuscan presence on the international scene. From the second half of the seventeenth century, the Grand Duchy of Tuscany was confronted with an entirely new international framework. With the Peace of the Pyrenees (1659), the last ramification of the Thirty Years' War (1618-1648) which concluded the conflict between France and Spain, Ferdinando II witnessed the entry into the Italian political scenario of two renewed powers, France and the Empire, whose aim was to undermine the faltering Spanish hegemony, while vying for supremacy over the peninsula. Louis XIV became involved in Italian dynamics through arms, on the occasion of the Messina revolts (in 1674 and 1678) and

[^51]the bombardment of Genoa (1684), but also through diplomacy, involving the Italian rulers in the Peace of Nijmegen (1678) and the Peace of Rijswijk (1679). For his part, the Holy Roman Emperor Leopold I of Habsburg (1658-1705) presented himself as the holder of a power that legitimized his claims over Italy. He painted himself as a sovereign to whom the local monarchs - feudal lords of the Empire - such as the Grand Dukes of Tuscany, had to provide aid in order to support the war expenses of the Habsburgs of Austria, to whom they were often bound by ties of kinship. In addition, the Grand Duchy of Tuscany was adversely affected by the decline of the papacy as one of the guarantors of the Italian balance within the European diplomatic system. ${ }^{4}$

The second phase straddled the seventeenth and eighteenth centuries and concluded with the end of Cosimo III's government. These were tumultuous decades, in which the international balance was profoundly shaken by the aggressive policy of Louis XIV, followed by the War of the Spanish Succession (1701-1714). During these years, the actions of the Grand Duchy of Tuscany were based on two pivotal issues: avoiding direct involvement in international conflicts and negotiating the maintenance of the political and economic stability of the Medicean state. In fact, from the second half of the seventeenth century, the Grand Duchy pursued a policy of strict neutrality, limiting its participation in battles in the Mediterranean to the major conflicts between the Venetian Republic and the Sublime Porte, namely, supporting the Serenissima during the War of Candia (1645-1669), the Morean War (1684-1689) and the Second Morean War (1714-1718). ${ }^{5}$ It was therefore during the rule of Cosimo III that the Grand Duchy of Tuscany once and for all became a peaceful state, willing to raise its stakes from blood to money.

[^52]
## 2. The Economy of the Grand Duchy of Tuscany in the Seventeenth Century

As Paolo Malanima suggested, the legacy that researchers can draw from economic studies on seventeenth-century Tuscany consists almost entirely of a long list of negative aspects: decay of the wool and silk industries in the main cities and irreversible stagnation in the countryside. However, in the last few decades, the literature has paid more attention to the crisis of the Florentine economy in the seventeenth century, progressively highlighting certain aspects of it such as the unstoppable decline of the wool industry as opposed to the substantial hold of the silk industry. ${ }^{6}$

In reality, the Tuscan economy during the rule of Ferdinando II was in many aspects very much alive. Its deterioration was not a vertical fall, but a process whose ins and outs largely await in-depth investigation. For example, one area to investigate is how the major Florentine families, often with longstanding merchant traditions, or other oligarchies of the most important cities of the grand duchy, reacted to the geopolitical changes of the seventeenth century. This could be done using the immense reserve of information contained in the extremely rich archival documentation now available to us and preserved in public and private institutions scattered throughout Tuscany. As a result, we could look closely at whether the wellknown "return to land ownership" was a one-way process or a simplistic interpretation of the complex diversification of investments by the Tuscan patrician mercantile class, without forgetting, for example, the Florentine aristocracy's ongoing investment of considerable capital in the wool and silk industries. ${ }^{7}$

In the decay of the two traditional Florentine manufactures, the wool industry certainly had it far worse. The history of the wool industry in Florence in the first half of the seventeenth century is a

[^53]story of continuous contraction of production levels, and archive documents abound with memoirs and reports on the causes of the crisis and potential remedies. By this time, Florentine woollen cloth was only circulating on Italian markets, particularly in southern Italy where Tuscan galleys carried pannilanas and returned to Livorno with bales of raw silk. The silk industry was quite different. A census taken in 1663, close to the end of the reign of Ferdinando II, informs us that more than a quarter of the working population was then employed in silk processing. ${ }^{8}$ Moreover, the substantial resilience of the silk industry was partly linked to the Florentine presence in European commerce at the height of the seventeenth century. ${ }^{9}$

Tuscan trade policy during the time of Cosimo III appeared anything but in decline. Also due to Cosimo III is the significant development of Livorno, which became a free port in 1676. The Medicean port experienced an upward trend during the late seventeenth century, during which it established itself as a major international trade hub. Naturally, Livorno also felt the positive effects of the stability of the Medici state, and from 1676 to 1737 the number of ships entering the port increased. ${ }^{10}$

An ambitious but unsuccessful attempt to attract capital to global trade under Medicean protection, as well as support for local manufactures, was the establishment of a large merchant company in Lisbon in 1674-1676 to trade with the West and East Indies and the other Portuguese colonies in Africa. Participation in the company was to be split equally between the Grand Duchy of Tuscany and Portugal, on the basis of a formal treaty between the two states. The idea for this partnership in all likelihood came about under the impulse of Lorenzo Ginori, consul of the Florentine nation in Lisbon,

[^54]and Vieri da Castiglione, Medici ambassador in Madrid, both leading exponents of the Florentine commercial community abroad. Its goal was evidently to give a more solid framework to the numerous initiatives in which the Tuscan capital was already engaged in the form of commercial limited partnerships (that is, società in accomandita) with branches in Lisbon, Cadiz and Seville. ${ }^{11}$

What is very interesting to note, however, is how, in the meticulous investigations on the Tuscan state's suitability to conclude the project requested by Cosimo III, the emphasis was placed on the possibility of ensuring the distribution of the surplus of Tuscan manufacturing production. The objective of the Medicean government was in fact not so much to offer the hypothetical company opportunities for earnings through the chartering of goods transported on its ships on behalf of third parties, or through the lucrative slave trade from West Africa to Brazil, but rather to give support to Tuscan industry, especially wool manufacturing. Having suffered from the arrival of English and Dutch wool products in the Mediterranean, it was believed that the industry could be revitalized through access to a protected market such as that of the Portuguese colonies. However, the failure of the Tuscan colonial project was decreed by the unanimously contrary opinions expressed by expert bankers like Francesco Tempi. Indeed, in his report written on September 29, 1676 for Ferrante Capponi, he asserted that by making such an investment "one would be sowing in a sterile country, because such are the Portuguese Indies", not to speak of the high risks connected to the excessive size of the enterprise, whose capital was to amount to 1,200,000 Spanish dollars. ${ }^{12}$ Hence, the Grand Duke's intentions to

[^55]set up an East India Company on the model of the Dutch one, or to establish trade relations with China by crossing Russia, were not followed up except through the autonomous initiative of Tuscan merchants who were often linked to the Tuscan sovereign through personal friendships. By the 1670s, the number of Tuscan trading companies operating outside Italy reached over 60, operating mainly in Amsterdam, Cadiz, Lyons, Lisbon, London, Madrid, Marseilles, Seville and Smyrna. ${ }^{13}$

The initiative of the Tuscan patriciate during the reign of Cosimo III was therefore characterized by widespread intervention in the main sectors of the economy, from manufacturing to mining. At the same time, trade and finance remained the pillars of the patrimonial foundations of the great merchant families. This intervention reveals how the Tuscan patriciate had not completely divested itself of mercantile activities to concentrate on massive land investments; instead, we can observe how a diversification of investments took place in order to limit the overall risk, often by setting up shell companies or directly intervening on international merchants. The study of new sources for economic history such as the Caccini Del Vernaccia and Adami-Lami archives will help redefine the physiognomy of the Tuscan merchant bourgeoisie at the turn of the eighteenth century.

## 3. Anatomy of a seventeenth-century speculator: Ugolino Del Vernaccia

Ninety years ago, textile industrialist Michelangelo Calamai made a donation to the Roncioniana Library in Prato: the copious archives of the Florentine Caccini and Vernaccia families that he had found abandoned in the basement of the eighteenth-century villa of the Cintoia farm estate in the Chianti countryside near Florence. The

[^56]news of this donation was given in 1932 in a very concise paragraph in the third issue of the "Archivio Storico Pratese" journal, which stated that "the archive is composed of documents ranging from the fourteenth century to the eighteenth century and has a remarkable collection of several thousand letters that can shed much light on the events and men of that time." But as immense as this documentary collection is, it is only a portion - albeit a large one - of the original. Indeed, in order to pursue his research on Galileo, Antonio Ricci Riccardi took many precious papers from the archive that, upon his death, was separated into two distinct collections, both of which are preserved in the State Archives of Florence. ${ }^{14}$

Returning to the papers kept at the Roncioniana Library in Prato, the material, including registers and filzas, consists of 1,029 units spanning from 1317 to 1895 , and about 124,000 letters written mainly between the seventeenth and nineteenth centuries. The oldest section of the archive concerns the documentation of the ancient Florentine Caccini family, who had an autonomous history until the beginning of the eighteenth century, when, in 1704, the last descendant of the Caccini family, Ortensia, married Giovan Vincenzo of Ugolino Del Vernaccia, thus leading to the union of their respective patrimonies and archives. However, the largest part belongs to the Del Vernaccia family whose flourishing silk production company had engaged in trade and foreign exchange since the sixteenth century.

The most prominent exponent of the lineage is Ugolino Del Vernaccia, outstanding in his enterprising spirit, business sense and, probably, good fortune too. Although little known today, we might call him a stealth merchant. Ugolino Del Vernaccia is remembered for his irreproachable moral conduct, which led him to hold public office in the Grand Duchy of Tuscany as a Pupilli magistrate (16791689), and as a member of the Deputation of the Nove (1681) and the Florentine Senate (1682); for his talent in business; but above all for

[^57]his legendary avarice. Such was his avarice that in his "Satire" (which circulated anonymously in manuscript form from 1685) the satirical poet Benedetto Manzini called him "filthy" owing to his habit of wearing worn-out and dirty clothes despite his immense wealth. ${ }^{15}$ Ugolino Del Vernaccia was born in 1612 in Florence and was the son of Piero Del Vernaccia and wealthy landowner Margherita of Simonetto Morelli. He and his two younger brothers, Francesco and Filippo, were orphaned at a very early age, following which, at the age of 18 , Ugolino all of a sudden withdrew a large sum from his brothers' trust fund to invest in some financial transactions. This information is known thanks to some court documents concerning a lawsuit brought against him by his younger brother Filippo, who wanted to redeem his portion of the inheritance and the salaries, which he had never received, for his work in his elder brother's company.

In those legal papers, Filippo Del Vernaccia admitted that his brother Ugolino was endowed with an out-of-the-ordinary business acumen that allowed him to trade, invest money and speculate in a wide range of activities: from textiles to agricultural commodities and goods from the Levant, without forgetting the considerable banking activity he began in 1640s in partnership with Senator Alamanno Arrighi. The results achieved from this incessant economic activity are attested to in more than 180 ledgers and registers. Also of considerable interest regarding the administrative side of the business are the "scartafacci di fiera", 117 scrapbooks in all, relating to Ugolino and his heirs and referring to the accounts of the four annual exchange fairs, held in particular in Piacenza and Novi Ligure. In the scrapbooks, Ugolino Del Vernaccia compiled the acceptance register, that is, the list of accepted bills of exchange, to which he added the list of prices from the exchange fairs of Antwerp, Ancona, Amsterdam, Barcelona, Bergamo, Bologna, Frankfurt, Florence, Lyon, Lucca, Mantua, Milan, Messina, Naples, Palermo, Rome,

[^58]Nuremberg, Seville and Venice. Exchange fairs were like a credit market, at which huge amounts of money were moved from one financial place to another. These transactions generated huge profits from the accrual of profitable investments. The purpose of these meetings was to pay and collect bills of exchange that expired on those days and to negotiate new ones expiring at subsequent fairs or in the most important European trading centres. ${ }^{16}$

The extraordinary and extremely vast economic-banking organization set up by Ugolino Del Vernaccia during his long life - he died in 1701, at the age of almost 90 - is above all documented by his correspondence of more than 88,000 letters that connected the Del Vernaccia company from Florence to northern Europe and the Mediterranean, from Lisbon to Smyrna, and from Hamburg to Tripoli in Libya (figure 1). ${ }^{17}$

The Del Vernaccia correspondence, whose letters often included printed price lists of various products traded on international markets, enables the reconstruction of connections formerly considered unusual, such as names of female merchants (Leonora Suares, wife of Sienese banker Marcello Agostini and lady-in-waiting to Anna de' Medici, Countess of Tyrol) or of hitherto completely overlooked traders, such as the merchant Vincenzo Baccelli, a prominent member of the Florentine merchant community in Rome. Obviously, the Del Vernaccia correspondence revolves around the subject of trade, but it also provides a fundamental, useful overview of the most relevant political events in the Mediterranean markets, such as the crises of the financial market controlled by the Genoese merchants:

> In reply to your most courteous letter of the twelfth of the current month regarding the accident that happened to the Spinola family of Genoa, because of which the Fair of Apparizione remains in disorder due to the many bills suspended without money for any marketplace at any price, it is furthermore estimated that the

[^59]Figure 1
The Ugolino Del Vernaccia network (1640s-1701)

money will be very bad because there are large dowries in that house as well as privileged credits, and we hope to God that everything will end well because more than one house of commerce is struggling to get into budget, touching all the marketplaces, but not for very large sums, apart from the Paulinis of Lyon for 3,000 scudi and the Aricis of Naples for a similar sum, and in the same Fair there were suspended drafts for 40,000 scudi, we shall see what will happen, the arrival of the English warship is a great inconvenience, although it is waiting with cash, as seems unquestionable, and that it will soon be seen with a Dutch convoy, and other vessels [...] ${ }^{18}$

[^60]A rough analysis of this immense collection of letters shows that the main nodes of Ugolino Del Vernaccia's network were the ports of Italy, such as Livorno, Venice, Genoa and Ancona, and the Low Countries, such as Amsterdam and Antwerp, but also cities specialized in silk and paper manufacturing, such as Lyon and Lucca, or centres of power such as Vienna, Rome and Naples, or two ports in southern Italy in which Tuscan merchants were always present during the early modern age, Palermo and Messina, where the free port was established in 1695 (figure 2). ${ }^{19}$

Figure 2
A focus on the correspondence of Ugolino del Vernaccia


[^61]If Francesco Datini's correspondence bears witness to the largest collection of letters produced by the mercantile world between the fourteenth and fifteenth centuries, and Simon Ruiz's copious correspondence perfectly embodies the figure of the sixteenth-century merchant-banker, Ugolino Del Vernaccia's personal correspondence represents one of the main sets of personal correspondence of the early modern era as well as one of the privileged sources for investigating the presence of Tuscan merchants in the global economic scenario of the long seventeenth century.

A question arises: was the figure of the patrician merchant embodied by Ugolino Del Vernaccia an isolated case or is he part of a broader and still little-explored historiographical framework? As much as he was a self-made man, Ugolino represented a new generation of Tuscan merchants who, in the seventeenth century, had learnt to diversify their investments to reduce the risks of famine or sudden financial meltdowns, a generation that knew how to manoeuvre liquidity, especially that which formed outside the monetary circuit, between bills of exchange, drafts and credit entries. Above all, figures such as Ugolino Del Vernaccia, speculator and merchant, represent seventeenth-century Tuscan society, which was widely mercantile and still scrambling to find commercial opportunities in all directions, even where it was known there was little chance of success. It was a Grand Duchy of Tuscany that was not resigned, for example, to having lost the Levant markets, as the documents discovered in the Adami-Lami archive in Florence testify.

## 4. The Ottoman route: the Adami Brothers

Hidden for centuries, the Adami-Lami archive was brought back to light in December 2014 in Florence's Palazzo Adami, after a lengthy restoration of the neo-Egyptian gallery where it had been left by the last heirs of the family at the beginning of the twentieth century. At the time of discovery, the papers were no longer in order, despite having to hand two late eighteenth-century inventories. Today, the Adami-Lami archive consists of more than 800 archival units, to-
talling hundreds of thousands of valuable documents written over three centuries, from 1650 to 1950, and collected between Empoli, Livorno, Florence and the Levant.

Most importantly, the Adami-Lami archive is an essential source for investigating Tuscan economic relations in the Eastern Mediterranean at the end of the seventeenth century, because it conserves the documentation of Francesco and Domenico Adami, who became first intermediaries and then merchants along the Levantine coast. The Adami brothers are the ones who left the greatest variety of documentation in the archival collection. These 30,000 or so papers for the first time attest to both the stable presence of Tuscan merchants in the Levant between the Morean War and the War of the Spanish Succession, and the interactions they had with English, French and Arab merchants across the Mediterranean.

The Adami's experience in Ottoman Syria is evidenced by a vast and multifarious collection, ranging from scrapbooks, letter-books, ship registers and warehouse inventories to, among others, economic documents such as insurance policies, bills of lading, invoices, price lists of goods and, above all, incoming and outgoing letters. The correspondence of the Adami brothers consists of approximately 6,000 letters in at least five idioms, written by more than 300 correspondents from various commercial and political centres such as Aleppo, Livorno, Sidon, Paris, Lebanon, Tripoli, Jerusalem, Venice and Marseille. In addition, the correspondence gives an informative overview of the events in specific countries and the political news in specific harbours. Particular examples of the information exchanged between the Adami brothers and their interlocutors at the end of the seventeenth century were the risks of navigation caused by piracy and wars in the Mediterranean. The Adami correspondence also provides the names of major English, French, Jewish and Arab traders, as well as information on the development of the textile market and the circulation of Peruvian silver currency in the Levant at the turn of the eighteenth century. ${ }^{20}$
${ }^{20}$ AAL, 272, Conti, [lettere] e ricevute riferiti à fu sigg. Francesco Adami nel tempo della sua

Francesco Adami was born in Empoli in 1654, the eldest son of Antonio Adami, an ambitious wine merchant and salt contractor in Livorno. In 1674 Francesco trained at the Terriesi Bank in London. However, his real experience as an economic emigrant began in 1686, when he left Livorno for Venice. From 1689, Francesco Adami worked for the Levant Company as a scribe and factor until 1699 when he founded his firm Adami \& Gras, a small trading house in Acre, where he died of the plague in 1702. Domenico Adami was born in Empoli in 1655 and had a different working experience from his elder brother. He completed his traineeship in the Guadagni trading firm in Livorno in 1695, then joined his brother in Palestine in 1698 to seek his fortune. His quest for business opportunities led him to work for Jean Chaloub, an Arab merchant in Ramla, and to learn Arabic and methods for negotiating with local merchants. Then, Domenico moved to Aleppo in 1699 to found his own company, Adami \& Niccodemi, together with Livornese merchant Pietro Niccodemi, a partnership that remained active from 1706 to 1709. When the partnership came to an end in 1709, Domenico continued to serve as a broker in Aleppo, until a French privateer plundered the ship on which he had loaded many of his goods. Domenico then moved to France for four years to follow the trial resulting from this action of piracy. Between 1710 and the end of 1713, Domenico worked mainly as a freelance broker in the port of Toulon, near Marseille, and in Paris from where he tried to manage his business. At almost 60 years of age he returned to Aleppo where he sought work as a scribe and broker, but he was no longer able to get a foothold in either the local or Mediterranean markets. This last survivalist period in Syria had a tragic ending: Domenico Adami decided to take his own life by shooting himself in the bazaar in Aleppo on March 10, 1715.

The Adami papers are a rare case, both because of the completeness of the sources, consisting of economic documents and a sub-

[^62]stantial amount of mercantile correspondence, and because it allows us to understand the day-to-day dimensions of Mediterranean trade. The papers open up a number of potential historiographical questions, such as the relationship between Livorno, essential port for maritime traffic, and Levantine trade - indeed, in the first half of the seventeenth century, over 3,000 vessels arrived in Livorno from ports in the Levant - and hence lead to a reconsideration of economic encounters in the early modern Mediterranean. The Adami brothers, like other small Italian economic operators, had emigrated to the Ottoman Empire in the hope of becoming the interlocutors of choice for the merchants based in the great ports of the Western Mediterranean. While the failures of their ventures allow us to deduce the large and still underestimated presence of many small Italian commercial operators in the eastern ports in the early eighteenth century, the Adami's experience also leads us to think about the fluidity of the economic, political and social relations entertained by European merchants with the composite local society of Ottoman Syria.

## 5. Conclusion

Coinciding with the proliferation of the banking and commercial activities of Tuscan merchants in the main business centres during the late seventeenth century, and with the consequent establishment of Deputazioni in which Cosimo III involved great merchants as well as "uomini nuovi" to work together to find new business opportunities for the Grand Duchy of Tuscany, is a noticeable change in the character and content of the documentation of entire archival fonds. Correspondence, ledgers, bills of exchange and lading bills reveal how, in the unstable international economic scenario of the seventeenth century, Tuscan traders, large or small, moved from Lisbon to Aleppo. Likewise, entire troves of business papers, found in family archives following the dissolution of limited partnerships, allow us to reconstruct new commercial networks. This is a crucial point: it has often been stated that in the seventeenth century, the Tuscan pa-
triciate gradually disappeared from the European economic scene because it disinvested its capital due to the fragile international situation, diverting its resources towards local land investment and thus gradually towards gentry status in the so-called "defection of the bourgeoisie" theorized by Fernand Braudel. But if Ugolino Del Vernaccia was personally involved in the management of his enterprise, and like him many other Tuscan patricians, such as Pierantonio Guadagni, Antonino Quaratesi and Marcello Biringucci, all present with their own firms in the port of Livorno, many others, especially the Grand Duchy's largest taxpayers, heirs of the great merchant families, such as Francesco and Benedetto Tempi, Bartolomeo and Filippo Corsini, Folco Rinuccini or Pier Antonio Gerini, disappeared from the records not because they took refuge in their estates, but because they frequently resorted to limited partnerships, an old corporate vehicle that allowed ample availability of capital with limited risks, only committing the partners to the sum of capital entrusted to the general partner. Limited partnerships were conceived of to marginalize the capitalists' risks, thus playing a strategic role in merging old and new wealth in the seventeenth-century Tuscan economic system. The investments made by the Tuscan patriciates in the main European mercantile markets through the accomandite, which covered almost all of the main economic sectors in the seventeenth century, reflected the strategy of Cosimo III and Francesco Feroni, a great merchant as well as Depositary General of the Grand Duchy of Tuscany, to establish Tuscan trading houses at the nerve centres of international trade routes. ${ }^{21}$

What has been described was a small universe of trade relations

[^63]and both financial and political alliances, which certainly remains to be carefully investigated and thoroughly understood. The mercantile activities of diametrically opposed subjects such as Ugolino Del Vernaccia and the Adami brothers become inextricably linked with those of a still unspecified number of transnational economic operators and cultural mediators (or figures who often assumed both roles) and paint a less stereotypical image of what the Tuscan economy was like during the rule of Ferdinando II and Cosimo III. To fully understand the formal and informal networks of Tuscan merchants and patricians in a global economy such as that of the late seventeenth and early eighteenth centuries, it will be essential to interweave the papers in public archival fonds with the as yet littleknown papers in private mercantile archives, kept in the private hands of libraries or families.

# Accounting for Finance and Affect in Early Modern Spain 

Elvira Vilches<br>Romance Studies, Duke University

The ubiquitous presence of monetary calculation, financial instruments and business methods across cultural and literary fields in early modern Spain suggest that matters of exchange and the principles of the arts of commerce penetrated all areas of society. These financial practices moulded the pervasiveness of credit and obligation in those episodes of human life involving truth and trust. ${ }^{1}$ But these pillars of trade and monetary exchange also framed sentiments and feelings of obligation and intimacy. ${ }^{2}$ In this article I look at the calculation techniques and financial data converging in the books of account supporting the double-entry bookkeeping method (hereinafter, DEB). I argue that the pervasiveness of credit and obligation in episodes of human life interlocked mercantile practice and affects to such an extent that DEB and banking became commonplace scenarios for obligation and intimacy in fiction and drama.

I contend that this synergy sheds light on how financial practices and paper technologies influenced social relations; on which

[^64]technologies and skills mattered more; and on how the cultural field wrestled with what and who put value in motion and why. An effective way to look at this is by exploring together distinctive segments of print culture. The segments I will look at are didactic manuals teaching commercial arithmetic, and literary works. For the purpose of this essay, in the literary sphere, I focus on two picaresque novels: Mateo Alemán's Guzmán de Alfarache $(1599,1604)$ and Alonso de Castillo Solórzano's La niña de los embustes, Teresa de Manzanares (1632). I examine the ways these authors place business tools and outlooks at the heart of human relations to test the polysemy and ambiguities of credit. The prominence of ledgers, ink and paper, and other financial instruments, also surfaces in Tirso de Molina's play Celos con celos se curan (1635). Interestingly, this aristocratic romantic comedy makes a compelling illustration of the generative power of the figure zero as a gesture towards the speculative frenzy going on in credit contracts in Spain during this time.

My argument explores the entanglement of the axiomatic and the affective. I suggest that the actual exchange of DEB and financial speculation was integrated with exchange as a subtle metaphor for social and intimate relations. First, this figurative dimension enriches the practical and tacit knowledge that authors, readers and audiences had of these money and credit techniques. Second, the figurative was considered a conceptual tool to experiment with the elusive nature of value and the influence of the virtual nature of economic abstraction on trust, creditworthiness and devotion. Lastly, these concerns show that literary genres are a form of inquiry, examining what the arts of commerce knew about the world, and what was amiss in the idealized economic space that these skills constructed. I focus on the techniques of calculation before considering how these writers examined them through their characters and their conflicts.

## Accuracy, Diligence and Balance

Valencian merchant and arithmetician Miguel Gerónimo de Santa Cruz encouraged the young to excel in commercial arithmetic to get ahead in life. As the author of the best-selling manual Dorado Contador: arithmética especulativa y práctica (Valencia, 1609), he envisioned good computers and bookkeepers producing paperwork and entering data at the counting house of prominent merchants. ${ }^{3}$ At the escritorio de mercaderes agents, clerks and apprentices kept this paper machine running, rendering the particulars of exchange into multiple records through a regime of classifying and codifying payments, costs, assets and liabilities. They all had to be skilled in the laws and procedures of exchange as well as in paper handling and administrative archiving. ${ }^{4}$

This profusion of paperwork involved a sophisticated system of accounts, journals and ledgers, in the form of cuenta y razón or bookkeeping, and especially the method known as debe y ha de haber, libro de caxa y manual or uso de mercaderes, all of which translate into dou-ble-entry bookkeeping (DEB). ${ }^{5}$ The complexities of commercial transactions in an economy dominated by credit made good bookkeeping essential. Without any knowledge of accounting principles or a fixed habit of applying them, business owners could easily find themselves lost in a sea of credits and debits, unaware of impending financial weakness. Manuals on penmanship, legal procedure and archiving, such as Pedro Maradiaga's Libro subtilísimo intitulado honra de escribanos (Valencia, 1565), and bookkeeping, such as Bartolomé Salvador de Solórzano's Libro de caxa y manual de cuentas (Madrid,

[^65]1590), advised businesspeople and their employees to organize data in the taxonomic categories of debits and credits. ${ }^{6}$

DEB or caxa y manual represented the conceptual crucible inside which goods and transactions could be broken down and put back together in terms of commensurable units of quantitative as well as exchange value. The ledger and the calculation techniques from which it emerged not only show that commodification was a fundamentally representational act, but also how its logic of endless numerical relations conveyed persuasive ways of thinking, speaking and writing. These conventions promised to bring the confusion of exchange into manageable order. They also demonstrated that the arts of calculation and paper technologies made the artifice of the market into a terrain of orderly economic relations.

The author of Tratado de Cuentas (Salamanca, 1522), lawyer Diego del Castillo, anchors clarity, precision and certainty in the systematic arrangement of things, words and numbers. ${ }^{7}$ Similarly, the author of the manual on DEB, Libro de caxa (Madrid, 1590), merchant Bartolomé Salvador de Solórzano, suggests that numbers are the conceptual basis of a transparent language of exact words and certain facts. The conceptual basis of DEB is balance: assets must equal liabilities. This notion is represented visually as a symmetry that appears on facing sections of the ledger. Figures signalling a balance evoke justice in the sense of correlation between two numbers that can be justified by comparing them and checking the addition resulting in the total at the bottom of the page. ${ }^{8}$

Step by step, Salvador de Solórzano describes the procedures that Max Weber would later synthesize. ${ }^{9}$ The arithmetic and data writing

[^66]components suggest the endless routine of compiling real-time transactions in waste books, which are then assembled and calculated in the manual book or journal, before everything is entered in the caxa or ledger. The different steps revolve around calculating a balance which he describes using the Italian name hazer abanço. It helps the owner of the books to ascertain his capital and use the ledger to create a summary of accounts to estimate profits and losses. ${ }^{10}$

Master calligrapher teaching in Valencia, Pedro de Madariaga, wrote a didactic dialogue about the DEB method in 1565. In their conversation, Petronio and Velgara agree that the pen is the most useful instrument of trade. They claim that those who cannot work with numbers or do paperwork will see their money dissolved into sand. But those who are prudent and keep their books will transform everything into gold. Velgara praises Pedro Luis de Torregrosa, a successful Valencian merchant, who excelled in DEB and arithmetic, and became rich by trading in Italy. ${ }^{11}$ Torregrosa, Velgara comments, was famous for his expertise, prudence, creditworthiness and generosity. Only by constantly turning to up-to-date ledgers could entrepreneurs gain an accurate understanding of the financial health of their businesses. Good bookkeeping could alert merchants and business agents to potential difficulties and to the advantage of setting a right course by limiting the extent of their operations, pressing debtors for payments or cutting expenses. When ledgers are neglected, everything falls into utter confusion. Velgara tells the story of a Genoese merchant who failed to keep his ledgers in order, only for his widow to discover the true, alarming state of his finances. ${ }^{12}$

Bartolomé Salvador de Solórzano recommends that the flow of daily transactions be recorded first in a rough book and then organized chronologically in the journal (diario or manual). Good penmanship should be used, detailing the particulars of each

[^67]transaction, including buyers, sellers, debtors and creditors, along with the value of each operation, indicating the qualitative and quantitative information pertaining to the merchandise, specifying currencies and units of account, and explaining the credit contracts involved in a similar manner. This writing template for organizing data in the taxonomic categories of debits and credits allowed amended data to be stored instead of being deleted. Data could be carried forward and reassembled. This meant deletions were stored as movements, the information on which distilled as data categorized first in the chronological order of the transactions (in the libro manual or journal), and then by type of transaction, specific account or commodity (in the libro de caxa or libro mayor - ledger). ${ }^{13}$

Salvador de Solórzano understood DEB as the international language of commerce which had been perfected through the experiences of many traders, rather than from the expertise of one person. In Spain, the use of DEB by bankers and merchants goes back to the fourteenth and fifteenth centuries, first in Aragon and later in Castile. In 1538, the Consulado de Burgos (merchants' guild) was the first institution to demand the use of the debe $y$ ha de haber (DEB) method. Soon the state followed. The royal pragmatics of 1549 and 1552 required all banks, merchants and other businessmen, including foreigners doing business in Spain, to use this system of accounting and write their books in Spanish. ${ }^{14}$

## Writers, Readers and Audiences

The accounting form is strongly associated with books of memory: the blank books that urban professionals, from notaries to royal of-

[^68]ficials, merchants, academics and individuals, used to record ordinary transactions along with historical and personal events. ${ }^{15}$ Heads of the family, women, stewards and farmers all kept books of account in diverse formats to record transactions as they occurred, listing receipts and disbursements as well as acknowledgements of debts. ${ }^{16}$ These techniques were normalized in religious texts, plays set in political, urban and religious contexts, and fiction. ${ }^{17}$ Writers used the accounting form as a powerful trope and narrative device to explore how individuals grasped the generative power of money by intertwining the factual and the affective-imaginative.

On the stage and page, characters pursued their own fictions about abstract value, blending the axiomatic with multiple, figurative interconnections. Through these lenses, authors, readers and audiences saw that money is the most abstract element in human life, transforming the world into an arithmetic problem. ${ }^{18}$ Sociologists and economists have argued with Max Weber, Werner Sombart and Joseph Schumpeter that the process of abstraction inherent in reckoning and accounting is key to articulating concepts like capital, profit and depreciation. ${ }^{19}$ The same logic applies to the cultural formations that assimilate monetary calculation and its methods into the private sphere, wherein a twofold process of valuation and accounting registers social relations and affects in financial terms. ${ }^{20}$

Then the social life of money and its techniques become the ground upon which to explore how financial abstractions could generate a world of make-believe and why economic agents disguised the fact that they were the makers of their own illusion. Subse-

[^69]quently, through these questions, money matters were examined as a problem of thought. These questions ran against the grain of the didactic commercial texts and the objective taxonomies organizing exchange. Creative works were part of these conversations about the reach of finance, profit-making and calculation rationale.

Writers inquired into what the arts of commerce knew about the world by imagining characters who manifested the ubiquitous presence of credit instruments, money contracts and business tools. They shaped a kaleidoscopic terrain of the interrelated reactions and reflections that made economic knowledge a social practice. The characters Guzmán, Teresa and Sirena see that the promissory logic of financial wealth is the essential tool to increase abstract value and chances of social mobility. They also illustrate the ways that the taxonomies of exchange reached a general audience, to reveal the increasing commercial scaffolding of economic life. For these characters, the tools of calculation are subject to passions and affects, and the basic pillars of trust and creditworthiness.

Bankers, investors and creditors relied on personal trust and economies of obligation as a hedge against risk and misfortune. ${ }^{21}$ Confidence was among a person's principal assets. It conveyed one's capacity to relate to others in every aspect of life. For Portuguese merchant Duarte Gómez Solís, these skills built the twin pillars of trust and truth that sustained genuine trade. He saw merchants as people of reasoning and reckoning who upheld their reputation through bookkeeping. He argued that credit is the foundation of trade and truth. Credit is the confidence that leads a person to either sell commodities for a written promise to pay at a certain date, or to entrust another with a certain amount of capital. ${ }^{22}$

Reputation is equally vague and relies on a promissory logic that

[^70]demands continuous performance. Confidence is a leap of faith. To give credit is to believe in what you cannot see, in promises and expectations, while concern remains over the fine line separating reality and illusion. ${ }^{23}$ This epistemic question about the abstraction of value also raises doubts as to how finance spurs the follies of the imagination to the point of undermining its own mechanisms of trust. Another dimension of this argument offers an even wider interpretation of the promises and perils of credit as the means to calibrate personal obligations and the affects that stem from them such as venality, desire and jealousy.

## Credit and the Suspension of Disbelief

The novel by Mateo Alemán, businessman, judge in audit cases and a head accountant for the Exchequer, puts DEB, as a foundation of trust and creditworthiness, to the test. ${ }^{24}$ Readers are drawn into a long series of confidence games involving multiple forms of credit, as Guzmán puts his performative acts together to construct a creditworthy person, in the form of a gentleman or businessman. Guzmán's mastery consists in making the other characters believe in his own schemes. This dynamic of deception is meaningful for at least three reasons. The ups and downs of Guzmán's fortune explore the risks posed by the boundless profusion of ink and paper as the porous foundation of fictitious exchange. The novel appeals to a readership with extensive familiarity with credit instruments - credit sales (mohatras), financial contracts (cambios), as well as mortgage loans (censos) - books of account and business documentation, by setting out to mock the very promissory logic that underscores exchange.

In Milan, Guzmán joins forces with Aguilera, the bookkeeper of

[^71]an important merchant, to plan a scheme to get some easy money. Posing as a nobleman who has come to Milan to buy gifts for his bride, Guzmán places a deposit of 3,000 escudos in gold and silver coins with the merchant for temporary safekeeping. Later, Guzmán has Aguilera make a key for the merchant's master safe and take Guzmán's money along with the merchant's ledger and journal.

Guzmán leafs through the books, checking all the entries from the last eight weeks. He finds a space in the journal and the ledger where Aguilera puts down sums, adding ten coins of a different denomination - 10 doblones de a diez - that the bookkeeper is to have written and deposited in the safe. Despite this last-minute addition, Aguilera's longhand does not raise any suspicion.

Guzmán and Aguilera exploit the probative capacity of books of account, knowing that if they raise doubts about the creditworthiness of the merchant, the authorities will grant a request for a formal investigation. The next day, Guzmán returns to the shop to request the money he has never deposited. The merchant is caught off guard. Playing the role of the affronted nobleman, Guzmán demands to know the truth from Aguilera, the merchant's servant, and from the ledger, and show the bystanders and everyone in the shop who is creditworthy and who is telling the truth. ${ }^{25}$

Merchant and accountant Bartolomé Salvador de Solórzano writes that the most valuable advantage of DEB is to demonstrate how capital is employed and profits are generated. It supports an effective administration which, by balancing the accounts, allows records to be inspected so that fraud can be kept at bay. The ledger and journal are essential to facilitate the addition of all the amounts. He adds that through this method, proprietors can learn what charges are pending, what payments they should receive, how much they owe and how much capital they actually have. As an experienced merchant in Seville, Panama and Peru, Salvador de Solórzano notices the need to employ skilful and honest bookkeepers to man-

[^72]age the assembly line of paperwork and the avalanche of calculations resulting from diverse ventures until all the data is put together in the company books. ${ }^{26}$

Max Weber reaches a similar conclusion when he explores calculation as the basis of the spirit of capitalism in Protestant societies. He stresses the repetitive nature of the DEB method and contends that debits and credits convey the conceptualization of financial expectation and its realization. ${ }^{27}$ Merchant Duarte Gómez Solis suggests that when merchants govern themselves and their affairs wisely, credit provides the lifeblood of trade and that when this nexus of confidence, reputation and prudence fails, so does exchange. ${ }^{28}$

Guzmán suggests that individual necessity, rather than reason and prudence, can easily undermine these trust mechanisms. In hindsight, he contends that the perils of credit lie in actualizing the anticipation of its promise by spending what is borrowed carefreely and taking great delight in acquiring what takes one's fancy until everything collapses. The foolish who build their castles on the sand, soon realize how fast they fall down. ${ }^{29}$ In his itinerary through the social strata, Guzmán embodies the promise of future value through cycles of accumulation and loss of fictitious capital driven by the continuous flow of exchange and re-exchange. ${ }^{30}$ His expertise in finance disrupts the creditworthiness and diligence of the paperwork that produces capitalism to instead highlight the artifice of the virtual reality of economic abstractions, as well as the risks of getting caught up in its mirage.

[^73]
## Intimacy and Jealousy

In the sequel of female picaresque novels by Alonso de Castillo Solórzano, Teresa de Manzanares stands out for telling a deeply contemporary story in which her business acumen interlaces labour, social and sexual freedom, and marriage. Teresa reads and writes, does embroidery and sewing. She is a prosperous hair stylist famous for her sophisticated styles, fashionable wigs and natural looking hairpieces for bald men. She makes money and increases her savings by buying shares from larger financiers who negotiate public debt. ${ }^{31}$ She keeps her ready money in accounts and uses bills of exchange to transfer funds especially when travelling. Whether love is a genuine feeling of longing, or an obliging relationship understood in terms of profit and debt, is a matter of reflection. Teresa looks at intimacy through the lenses of economic rationality as she recounts her trades and the stories of her customers. She registers goods, services and different kinds of social interactions as being consubstantial to money, providing the frame for an interpolated ballad about unrequited love. Her scorned lover complains that Teresa prefers an effeminate young boy to a grown man like him. The poet finds the figure zero useful as a compelling analogy especially when it conveys the difficulty of balancing the columns of his "love" ledger.

The imagery of arithmetic and DEB is evocative and compelling. Like a zero, the foppish young boy stands alone unable to generate value. The manly poet, by contrast, captures its generative power. Just like Teresa, whose habits of mind are driven by quantification, abstraction and calculation, the lover co-opts these habits of speech and mind to register his feelings of rejection. The lover asks his ladylove to multiply her affection by at least 100 times, but all is in vain. In the enterprise of love, the ballad says, many feelings and passions are invested and spent. Reckoning is necessary especially when no receipts remain. The lover keeps a ledger of love to figure out his

[^74]feelings through the steps of calculation and balance. Readers are drawn to observe how he ascertains his capital by estimating profits and losses. This task is impossible: the debit column remains blank while the credit side shows all the feelings spent. Then the unrequited lover is left with a thorny question about how long this contract of love can last. ${ }^{32}$

If Teresa travels through Spain circulating all sorts of commodities and accruing financial value, Sirena, the leading lady in Tirso's play, is a savvy financial player. Sirena assimilates love-making to money-making and wonders whether love is an arithmetical question as well, for she sees banking and jealousy in similar terms. In the aristocratic setting of the play, the passion for gain is a serious pastime for Sirena. She may imagine that money and love work in similar ways but what remains striking is her expertise in creating money and speculating with future expectations.

Sirena's love- and money-making follow the process of abstraction through which precious metals are assayed to make them into a trusting monetary substance whose value is defined in a recognizable unit of account. ${ }^{33}$ In parallel, she ponders how it is possible to measure the excellence of love, which unit of account she should use to reckon its worth, and what financial transactions can create and increase its value. Sirena realizes that zeros and jealousy or celos work in similar ways. The figure zero embodies the march of compound interest, turning units into tens, hundreds, thousands and millions. Just like zeros, jealousy has no value on its own, yet they can both generate a boundless expansion of value and endearment that is greater than themselves. The underside of the promissory logic of fictitious capital is that the constant expansion of future value becomes conceptually elusive. ${ }^{34}$ By unlocking value from the

[^75]concrete basis of economic value, jealousy becomes a promise of intense love built on a porous foundation of transient feelings. ${ }^{35}$

Sirena banks on words and deception to lure other beaus while treating her fiancé, César, with disdain. She believes that with each plot she devises, the value of her love account increases. The audience see how actively she engages in quantification, abstraction and calculation, as they follow her thinking process and imaginative business strategies. Sirena's speculative ploy merges the promise of bigger love dividends with the distorting effect of mistaking the delusional for the substantial. Interestingly, César is aware of Sirena's deluded grand scheme. He notices that she revels in the large figures that keep accumulating in her love account, and that he cannot surmise, let alone calculate, the long line of zeros that Sirena keeps adding. Sirena is sensitive to César's limited financial skills and is willing to cancel her love account. She is willing to start a new one that would realize the value of true feelings. But César quickly turns away from the techniques of money and credit to the economy of the household as the foundation of genuine value, leading to their marriage. The convention of a happy ending does not cancel the ability to work with numbers or the tacit knowledge of banking that the actors and audience have shared.

## Normalizing Iberian Capitalism

In seventeenth-century Spanish society matters of exchange reached out everywhere and to everyone. The currency of monetary metaphors and the financial transactions circulating between authors and audiences suggest that everyone did their best to use money to their own advantage and that profit and loss intersected business and cultural registers to such an extent that both didactic business manuals and literary works taught, depicted and normalized the tools and discourses of money. ${ }^{36}$

[^76]Commercial arithmetic manuals deployed an assemblage of techniques and methods that rationalized Iberian capitalism as a matrix of equations and writing forms which interlaced economic rationality with moral codes. This blend of calculation techniques, credit instruments and sets of account books made skills, expertise and creditworthiness inextricable from each other. The literary works, on the other hand, showed how this epistemic knowledge and its distinctive assemblage of credit instruments and books encountered overlapping layers of feelings and affects. This twofold process blends objects, practices and linguistic elements with business tools and ways of thinking belonging to the public and private spheres of exchange.

Money allows for the incompatible to equate. ${ }^{37}$ But the compromising objectivity that makes money into the perfect means of economic calculation is also the source of endless series of commensurations that reach beyond the transformation of money into capital. ${ }^{38}$ This cognitive process of abstraction, quantification and calculation entwines the axiomatic and the intimate. ${ }^{39}$ The juxtaposition of intimacy and speculation illustrates a process of equation, association, contiguity and relation through which we construct our own fictions about money, while we dismiss and obscure our own intervention. ${ }^{40}$ Alemán, Castillo Solórzano and Tirso, along with their readers and audiences, understood that promises of credit remain as long as numbers and facts interlock with such mechanisms of trust as expertise and creditworthiness. They also perceived that the mystification of finance eclipses the possibilities that interfere with the self-perpetuating accumulation of value. They all knew what to do and say about money.

[^77]Assemblages build contingent relations among the parts, so that they can all be extracted from the whole and inserted into a different assemblage where new interactions emerge. These interactions see the social world through an extensive network of configurations. Rather than following a single path or resolving itself into a single form, capitalism can be conceived of as an aggregate of particular assemblages, from the material to the cultural, seen through different logics governing production, circulation and the boundaries between the public and the private. For economic historian Kenneth Lipartito, these aspects illuminate a wider understanding of capitalism, interlocking and combining different forms of capital and an array of histories and drawing together various forms of governance, localized practices, forms of knowledge and epistemic communities. ${ }^{41}$

Thinking in assemblages reveals the interconnections between networks of objects and people in a more tangible way. In this essay I have used three interconnected case studies to explore how expertise in exchange, calculation and accounting assemble and connect segments of print culture that are typically not studied together. I have argued that the culture of exchange and calculation was not unique to mercantile circles. By distinguishing between different kinds and meanings of money and credit, an interdependent logic is seen in which the cultural, the affective and the economic forge new connections among different practices, synthesizing them into a coherent whole. This unifying view sees money at once as a unitary fact - a mere medium of exchange - and as a relational construct that operates through complex dynamics of inscription, transcription, interpretation and conversion.

All these aspects exemplify our ability to grasp money as an icon representing a complex mixture of interconnected signs, whose meaning emerges from intricate, networked relations entwining the

[^78]rational and the affective-imaginative. This process consists of a set of skills that, beyond the specifics of handling money, includes the capacity to forge and discern complex networks of meaning and connections. In the end, we create our own fictions about money, constructing its fictitious nature by blending the axiomatic with multiple affective and figurative interconnections. However, we totally dismiss and obscure our own intervention in this process. ${ }^{42}$

Such familiarity implies the equally important but contradictory effect of masking our own awareness in order to simply observe the quality of money as mere abstraction. Indeed, its most tangible form is its capacity to convert an infinite variety of other things into money. In early modern Spain, this know-how about matters of money and credit blended the axiomatic with multiple affective and figurative appreciations. The question of whether a moral economy and a profit economy can coexist asks us to consider the economy as an institutionalized process that goes beyond markets and trade. In this specific historical context, the questions that are also important to consider are how the profit economy is understood and naturalized, and to what extent this process provides a sphere of ideas enabling an understanding of elements of circulation and the political economy.

Iberian merchants and arithmeticians writing textbooks on the techniques of money and credit taught multiple applications of the arts of commerce and disseminated the techniques and skills to systematize and smooth the operation of exchange. Their heuristic approach aligns the taxonomies of paperwork, accounts and accounting books with the importance of rules, method and skill in order to provide a moral compass. The three case studies considered in this essay reveal a multi-layered understanding that goes beyond what the audience and reader may have learned about the rules, regulations and the paper technologies governing exchange.

Characteristics such as ambiguity, duplicity, deviance and subversion may seem unique to literary discourse. However, a closer

[^79]look reveals that they are fundamental features of social exchange. The technical authors included observations about the accelerated pace of exchange, and their years of experience in commerce and bookkeeping. They also sympathized with the reader's fear of being overwhelmed by a series of long calculations and the intricate method of bookkeeping. When these techniques and concerns are filtered through figurative language and literary discourse, what stands out is the work done to give fiction and make-believe a permanent function or efficacy in testing the social creation and organization of monetary knowledge and practice. Compared to the actual exchange unfolding at banking benches and in counting houses, business documentation provides an idealized economic space, where books of accounts remain the silent business partner that accepts and reifies any sort of transaction. The literary characters in this essay show that the conventions for recording and laying out how capital has been employed and the ensuing profits can open a door into a parallel reality. Guzmán, Teresa and Sirena seem to suggest that the matrix of numerical relations generated by mathematicians and entrepreneurs speaks of mechanisms of trust and make-believe peculiar to fiction. They show that the power of the imagination veils the perils of credit, the delusional facts of speculation and the blurred line between reality and illusion. This dynamic of clarification and confusion puts to the test both the value of the written media enabling exchange and the risks posed by the porous foundation of fictitious exchange. Merchants, bookkeepers, agents and authorities all committed their financial data to the threefold book structure of DEB. This method made it possible to overwrite and amend existing data, which could be stored rather than deleted, and conceived of each correction and deletion as a movement in an intricate mosaic of transactions.

# The Spirit of Trafficke: Paper, Semiotics and Finance 

José María Pérez Fernández<br>University of Granada


#### Abstract

This essay will provide a necessarily brief and preliminary survey of certain phenomena involved in the early modern dematerialization of economic exchanges through an approach to Gerard Malynes' Lex Mercatoria (1622). A comprehensive treatise on international maritime law, trade practices, accounting methods, and above all an essay on financial instruments, Malynes' work constitutes an excellent case study for the way in which these relatively new phenomena were accounted for in the early seventeenth century, when many of the methods and practices that were originally conceived and developed many years before in the Italian Peninsula had already become global. My essay will focus on how Malynes built not just upon long-standing and well-established practices, but also upon a doctrinal tradition represented by authors such as Luca Pacioli, and how he turned to concepts from other disciplines and practices to make sense of paper-based semiotic artefacts like the bill of exchange, whose power to convey a significant amount of value on a "small peece of paper of some two fingers broad" he described as "the Spirit or Facultie of the Soule of Trafficke and Commerce". As he explained their nature and function, Malynes resorted to the vocabularies of disciplines like rhetoric, theology, and natural philosophy - including geometry, anatomy and what today we would call anthropology - to legitimise these financial semiotic artefacts and explain their performative power. The result was a combination of pre-existing discourse on money and finance with new ways of accounting for ever more sophisticated and innovative practices which situated them as part of a universal epistemology for the codification and administration of information and knowledge in finance and trade.


## Introduction: from Pacioli to Malynes, from Venice to London

This essay will outline a blueprint for a first approach to a series of concepts employed in early modern attempts to rationalise and legitimise practices and instruments in trade and finance. It will identify and situate the most relevant milestones in a road map of sorts for further critical research into the subject, and will do so by examining two primary sources: Luca Pacioli's Italian Somma di arithmetica, geometria, proporzioni e proporzionalità (Venice: Paganinus de Paganinis, 1494, ISTC il00315000) and Gerald Malynes's English Consuetudo, vel Lex Mercatoria (London: Adam Islip, 1622). ${ }^{1}$ It will trace the path that goes between these two different treatises, published in two different cities - Venice and London - and periods the late fifteenth and early seventeenth centuries. By contemplating them as representative moments and locations within the long cultural histories of accounting methods and of credit I seek to show how these authors resorted to the discourses of apparently unrelated disciplines such as philosophy and theology to account for the innovative methods in the administration of information and data management which were required for the generation, codification and circulation of value and credit in the conduct of international trade. I will include an approach to the semiotic nature of the documents involved in these processes, and to the fundamental role of paper as their material medium. These commercial and financial practices were established upon three epistemological principles, which they shared with the legal framework and the contractual culture within which they emerged: (1) consuetudo or custom, (2) semiotics, and (3) authority. My essay will look into different aspects of these three components through a survey of the vocabulary employed to describe and eventually to legitimise the generation, representation, and exchange of financial value. ${ }^{2}$

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## From fantasia to script and cypher: the semiotic alchemy of double-entry bookkeeping

As is well known, Luca Pacioli was not just an expert mathematician and the editor of a Latin version of Euclid's Elements: he also compiled what we might call the first systematic and comprehensive treatise on double-entry bookkeeping - a well-established method whose practice had in fact long preceded him. In his Summa he established what he considered the three main pillars for the conduct of trade ("tre cose massime sono opportune a chi vuole con debita diligenza mercantare", Pacioli, 198v):

1. Cash (or an equivalent) and credit (qua trustworthiness): "la pecunia numerata e ogni altra faculta sostanziale" and "lo credito fedelmente seruato".
2. Good bookkeeping and mathematics: the merchant must be "buon ragionere: e pronto computista".
3. The merchant must also exercise method and system in recording transactions, which for Pacioli means using double-entry bookkeeping: - "con bello ordine tutte le sue facende debitamente disponga", which is impossible to achieve "senza debito ordine di scritture".
[^81]Credit here is an eminently immaterial or virtual value. It is social in the first place in terms of personal reputation and credibility ("la fede del buon mercatante"). Cash is also social and consensual, like credit, but it also has a semiotic dimension which must perforce be inscribed in some sort of material medium. In the case of currency, this was traditionally metallic, and then gradually evolved towards paper money. The value of credit, as we shall see, can also materialize on paper documents, after it has undergone a translation of sorts from merely immaterial mutual trust onto its contractual inscription in a text that legally binds all parties under the relevant authorities. The semiotic nature of documents involved in trade and finance is inseparably coupled with skills in number and quantification, which is why a good merchant must also master the signifiers that record data and figures upon his documents. The third leg in this complex practice requires method and system in the administration of the data recorded on the books and the bills, in terms of natural language, figures, and other paralinguistic methods such as tables and different systems for the mis-en-page of the information in question. In other words, the method and system materialized not just in terms of the semantic content of the language and the quantification expressed through figures, but also in the way all this information is represented and arranged on books and bills ("debito ordine di scritture"). This semiotic and graphic codification and circulation of information and value materialized in three principal types of documentary genres, the memoriale (memorandum), the giornale (journal), and the quaderno grande (ledger). ${ }^{3}$ The vocabulary employed by Pacioli to instruct his readers on how to go about recording and arranging the information within these books is very

[^82]revealing, and as we shall see, its underlying foundations in philosophy and theology give it an air of what we might describe as the semiotic alchemy of double-entry bookkeeping. ${ }^{4}$

This is a method that goes from basic processes of cognition and memory - what we might call the pre-semiotic mental imaging of all this data before it is turned into figures and script inscribed within the system of documentary genres that constitutes the material and symbolic infrastructure of double entry bookkeeping. Accounts, says Pacioli, are nothing but the result of a process that transforms the merchant's fantasia through proper order ("debito ordine") into data and information about the state of his business ("la notitia de tutte sue facende"). ${ }^{5}$ But beyond the registration of mere information, profit and loss also emerge from these documents, their graphic design, and the data they cross-reference. Thus, the merchant's mental images are materialized in scripture, and their semiotic administration yields a general picture or account that represents the state of business at a given moment, both as a whole as well as in the minute details that articulate it. ${ }^{6}$ This is a diegetic process that Pacioli expresses with the infinitive narrare.

Capital thus emerges from the cypher that rises from these sign

[^83]systems. In the traditional account of the German sociologist Werner Sombart, modern capitalism resulted from the combination of three practices and institutions: the authority projected by the law (conducted by the state-sanctioned judiciary system, and a human infrastructure of bureaucrats, lawyers, and notaries), accountancy (conducted by expert mathematicians with sophisticated skills in all the methods involved in figures and quantification), and credit (i.e. the generation and communication of value, conducted by financial agents). In other words, and following Werner Sombart's reading, the rise of capitalism resulted from the combined action of (a) cypher in the paper-based documentary genres in finance and banking, alongside a credit entity, (b) the contractual-legal culture, and the legal entities that enforced it, and finally, (c) accounting techniques, measurement, and quantification, alongside the diegetic arrangements of the different signifiers used to represent data. To put it in blunt terms, without paper as a medium, and without the symbolic systems devised by merchants and by financiers, capitalism as we know it would not have been possible. ${ }^{7}$ This tendency evolved and intensified as capitalism developed a series of ever more complex and sophisticated methods and practices, as demonstrated by Mary Poovey and her work on systems for the mediation of value during the eighteenth and the nineteenth centuries in Britain. Her research lists a series of literary genres alongside genres employed for mediating value in the credit economy. She distinguishes two types of genres (other than literary ones) which mediated value: (a) monetary genres (i.e. gold and silver coins, paper money, and forms of credit paper), and (b) various ways of writing about the market, credit, and

[^84]price (e.g. shipping lists, prices, and economic theory). She then holds that all these different genres "were not consistently differentiated from each other" during her period. ${ }^{8}$

## Credit and the law: finance and contractual culture

The practice of law and its associated contractual culture had already attracted the attention of intellectuals before Pacioli. In 1420 Jean Gerson's De contractibus explained how the contract wove and legitimised civic life by creating a fiduciary framework for human communities in which mutual trust in all sorts of social and commercial exchanges is established by means of a series of documents and practices regulated by positive law and sanctioned by the authority of the state. ${ }^{9}$ Several decades after Gerson, Pacioli also inscribed the methods and practices of the law within his Summa, more specifically in a section that he titles De casibus societatis, (Pacioli, 150r 158 v ), and confirms the importance of written records (scripto) to materialize these legally binding agreements well beyond the virtual and hence potentially more volatile method of mere faith and witness (fede, testimonio). ${ }^{10}$ Both Gerson and Pacioli therefore confirm

[^85]the importance of the principles of consuetudo, i.e. custom, and consensus, and how they are inextricably attached to script and to a set of documentary genres. In combination with immaterial social trust (credit) they all contribute to create the contractual framework that sustained the practice of trade and finance. Paper emerges here as a textual and semiotic material space, an information arena that records the transactions (through figures, tables, graphics, and other symbolic systems) taking place in the actual physical world of the merchant. As we shall see one of the most sophisticated documentary genres used to generate and communicate financial value is the bill of exchange. ${ }^{11}$

## Finance and pragmatics: documents as speech acts

Like natural language and in general any sort of symbolic system, the efficiency of financial documents relies on their consensual nature and their performative power - hence their relation to disciplines like rhetoric and semiotics. If we think of these documents in terms of speech acts, we can divide the nature of their communicative functions into three different types: (a) locutionary (i.e. the semantic content of the documents), (b) illocutionary (i.e. the intention of the codifiers of the documents) and (c) perlocutionary (i.e. the ac-

[^86]tual speech act that they perform, the consequences they have in the real world, or what they bind their recipients to perform within their contractual-legal framework). The language, the paralinguistic, and the iconic information that these documents codify tend in fact to have a much greater impact than common everyday linguistic utterances. This is something that financial documents have in common with certain varieties of administrative and legal discourse employed in official records, whose wording on certain occasions tends to be of enormous momentum - for example a marriage certificate, a death sentence, or the papers that regularize a previously illegal immigrant.

Although Pacioli and Malynes did not have the vocabulary which expresses the concepts used today in disciplines like linguistics, pragmatics, or semiotics to account for this function of documents, they did acknowledge the nature of the power that turned them into fundamental instruments for the codification and communication of value in finance and trade. Malynes sets the bill of exchange as the sort of documentary genre that lies at the core of such practices. ${ }^{12}$ Malynes also stresses the modesty of the materials employed for the codification of a bill of exchange in comparison with the far-reaching effect it can potentially have when it is turned into a significant carrier of value. From the moment in which this "small peece of paper of some two fingers broad" is inscribed and activated as a bill of exchange by virtue of the austere but efficient linguistic formulae inscribed on it, it becomes a powerful signifier that "doth carrie with it a Command". He also stresses the need for linguistic protocols to perform the function expected from the document, and

[^87]the fact that their efficiency grows in inverse proportion to their length: "the fewer words the more formall", where formall means, according to the OED "according to recognized forms, or to the rules of art or law" (OED, formal, adj. 3). He also emphasises that, unlike most similar documents, bills of exchange are not enforced or regulated by law, but rather by mere consuetudo and faith among merchants ("not subiect to any prescription by Law or otherwise; but merely subsisting of a reuerend Custome vsed and solemnized concerning the same"). Nor does it use any other legitimising protocols, such as witnesses or seals. The paucity of the Bill of Exchange, which intensifies the illocutionary and perlocutionary powers of the document qua speech act, is then complemented by the "letter of aduice", which expresses in some more detail the locutionary aspect (i.e. the semantic content) of the speech act which is the Bill of Exchange as defined by Malynes.

In his chapter 12, Malynes addresses what he calls Bille Obligatorie and its use to convey information and value among merchants. ${ }^{13}$ He again stresses the role of faith in their administration and their consensual nature, alongside the manner in which they are registered in a manuscript document: ("of his owne hand writing, or made by his seruant, and by him subscribed, without any seale or witnesse thereunto"). ${ }^{14}$ The bill obligatory is therefore a de facto contractual document whose power does not emanate from the authority of the state, but from the combination of its semiotic protocols with the consensus and the mutual trust of those involved in its exchange and circulation. When describing the virtues and power

[^88]of these documents Malynes proclaims that they are as good as money. ${ }^{15}$

## Imaginary money: finance and the power of fiction

One of the most striking statements in Malynes' work, which at the same time reveals his awareness of the rhetorical and prag-matic-i.e., the semiotic-nature of these documents, and of the immaterial consensual ground upon which they are founded, comes in page 99 of chapter 12, which is a wonderful acknowledgement of the perlocutionary power of fiction to generate credit value and trade:
> "And herein we see and may obserue, That things which be indeed, and things which are not indeed, but taken to be indeed, may produce all one effect; and euerie man is enabled with his owne meanes and credit, to augment commerce." ${ }^{16}$

In the case of documents like these, their semiotic-consensual nature, and the perlocutionary power that they display is such that their relation to truth - to a referent outside its semiotic representation and the social circles throughout which they circulate - is irrelevant. Their socio-semiotic and relational nature follows paths which run parallel to credit, in both personal and financial terms, and they do generate their perlocutionary effects without an actual referent. In other words, value here has no materiality other than the paper documents that record it in combination with the entirely virtual social-semiotic networks that bring it into existence and sustain

[^89]it. Throughout all these different records and paper bills there circulates what Malynes calls the spirit of trafficke: exchange itself, the most immaterial of all these values, which results from the complex conglomerate of signifiers, protocols, and the information they register in each of these documents. The fictional nature of these papers and the immaterial value which they codify also appear in revealing terms through expressions like imaginary money:
"The Denomination of moneys, which wee call Imaginarie, is because there is not any peculiar or proper money to be found in Specie, wherevpon the Exchanges are grounded, as it was in times past in many places, where some moneys were the cause to ground the price of Exchange vpon" (Lex Mercatoria, 1622, p. 386$)^{17}$

## From cognition to representation: arithmetic and prosopopeia

There is another striking passage that evinces Malynes' remarkable combination of the abstractions of philosophy and theology with their practical application in arithmetic, geometry, and rhetoric. This leads him to an account of the birth of cognition and language in theological, social, and anthropological terms, and of the techniques developed by individuals and human communities for their materialization. The concepts employed here include Naturall Mother Wit, Vox literata \& articulata, Logicke, Rhetoricke, Arithmetic and Geometrie. Malynes uses them to take his readers on a tour that goes from certain potential capacities bestowed by God upon Creation to their development into instruments that implement the semiotic and inherently communicative nature of human communities. Naturall

[^90]Mother Wit stands as an allegory of sorts for a creative natural power which applies the forma dat esse rei principle. This was a principle of scholasticism, also applied to Roman law (in solemnibus forma dat esse rei), that expresses how the formal aspects of an act are in the first place constitutive of it, but then also endow it with perlocutionary power. In other words, solemn acts are valid only if they follow formal procedures, or semiotic protocols. ${ }^{18}$ Malynes is in fact invoking principles which are very similar to those formulated by Pacioli: here the allegorized voice of Geometry proposes the unit as "the fountaine of numbers, whereby measures are described", system and order are then formulated in the noun forma, and finally its com-municative-linguistic expression is what Malynes describes as "vox literata $\mathcal{E}$ articulata, debito modo pronunciata". This leads him to conclude with his definition of arithmetic as "the originall and ground of all the seuen liberall Sciences or Arts, without which, non of them can subsist." ${ }^{19}$

[^91]Naturall Mother Wit is described as a method, or an epistemology of sorts, which uses Prosopopeia to embody and quantify (that is, to represent) "all substantiall things vnder the cope of Heauen". It does so through "her ingenious obseruation of number, weight, and measure" (Lex Mercatoria, p. 491). As he does with other important concepts in this passage, Malynes uses the term prosopopeia in a rather idiosyncratic manner. This noun in particular is remarkably rich and complex within this context, and a first approach to its multiple and subtle dimensions can be first summed up in the different definitions given by the $O E D$, all of which coincide in its representational function, i.e. its standing as a signifier for an absent or imaginary referent. ${ }^{20}$

Comparing Malynes's passage with Pacioli's equivalent on the concept of quantity may help us trace the philosophical and theological pedigrees of this concept. "Quantity", says Pacioli in his dedication to the Duke of Urbino, "is so noble and excellent that many philosophers considered it equal to substance and coeternal to it", and then concludes that "this is why they established that nothing can exist without it in the nature of things." ${ }^{21}$ The theological roots of this concept are in the Biblical Book of Wisdom: "Thy Almighty hand [...] made the world of matter without form [but] thou hast ordered all things in measure and number and weight." ${ }^{22}$ This biblical reference also resonates in Malynes when he proclaims that "in things created and ingendred the Elements are numbered, proportionated, and weighed. ${ }^{23}$ But there is also a pre-Christian compo-

[^92]nent in the genealogy of this idea, which is present above all in the work of Euclid - Pacioli's direct source. As is well known, Pythagoreanism, Plato, Aristotle, and Neoplatonism also ascribe a constitutive role to the ideas of quantity and unity.

God's fiat in creating the cosmos and then regulating it by number, weight, and measure finds an analogy in the performative power of symbols within human societies and institutions, as expressed by Malynes through the phrase "forma dat esse rei". Note also that Malynes puts a special emphasis on arithmetic as the foundation of all seven liberal arts: "yonder commeth Arithmeticke, which is the originall and ground of all the seuen liberall Sciences or Arts, without which, non of them can subsist." This is so, among other reasons, because all things created are measured: "in things created and ingendred the Elements are numbered, proportionated, and weighed". In other words, Natural Wit used this power, closely related to "number, weight, and measure" to go a step beyond itself, i.e. beyond nature into art, and thus become the foundation of all disciplines, starting with the formal, representational, and communicative methods of speech and script, and then onwards onto a series of other gradually sophisticated arts - a term that covers both the epistemological principles of different disciplines of knowledge and the methods that regulate their application for the conduct of different practices. One of the main ideas that Malynes is trying to convey here is that the principles which constitute the foundation of trade and its complex financial, documentary, and accounting devices, are shared with the liberal arts. This is of course an implicit way of legitimising this particular practice or art - i.e. the ars mercatoria - by ultimately establishing it upon the epistemology that emanates from Nature and eventually from God's plan for Creation. This is proven by the fact that numbers and measures are in fact universal: Malynes says they have also been found in the natives of America.

## Conclusion: paper and the spirit of trafficke

The third part of the Lex Mercatoria focuses on bills of exchange, or bills of credit, arguably the most semiotically sophisticated and arcane of all financial instruments. These are the terms Malynes uses to present the topic to his readers:

> "Having (in the First and Second Part of this Booke) intreated of the Bodie and Soule of Trafficke, namely, Commodities and Moneys. Let us now handle the predominant part of the course of Trafficke, which is the Exchange for moneys, by Bils of Exchanges for forrain parts, compared to the Spirit or Facultie of the Soule. For as monays do infuse life to commodities by the meanes of Equalitie and Equitie, preuenting aduantage betweene Buyers and Sellers: so Exchange for moneys by Bills of Exchanges (being seated euerie where) corroborate the Vitall Spirit of Trafficke, directing and controlling (by iust proportions) the prices and values of commodies and money, as shall be declared." 24

Malynes presents money here as Publica Mensura and stresses the nature of value as a relational abstract concept - closely connected, for example, to the concept of imaginary money, as mentioned above. I would also like to stress the inherently international dimension of exchange, as noted here by Malynes: "euen as money is Publica Mensura, or the publike measures within the Realme betweene man and man: so is Exchange for moneys, the publike measure betweene vs and forraine countries" (ibid.). The fact that this international value is relational, and not grounded upon a common specific standard leads Malynes to term the different sort of currencies that make up this transnational system as imaginaries. ${ }^{25}$ However, as Malynes acknowledges, there are factors that affect value other than this ideal perfect equivalence, such as time and distance,

[^93]supply and demand, as well as the fact that value, once a merely instrumental concept within the quantification and exchange of credit and trade, used to bridge the gap in time and distance between different systems and locations, has now been commodified and become, as it were, an end in itself too. In other words, the spirit of trafficke has become a commodity itself - just like money (the soul), and goods (the body). Malynes emphasises that this sort of exchange is the international counterpart to common national public measures, i.e. national currencies. The marginal note to this paragraph which summarizes for his readers the contents of this section in fact describes exchange as "the publike measure of nations" (p. 383). As they do today, international credit and financial markets already defied the limits of political national sovereignty: this explains the unease provoked when a relational abstract concept like exchange value is turned into a transnational commodity whose own value fluctuates with market forces such as supply and demand, or the combination of time and distance. To make things worse, the only and alarmingly flimsy way in which this value materializes is through a combination of paper and semiotics: "This exchange is properly made by Bills, when money is deliuered simply here in England, and Bills receiued for the same, to haue the payment thereof in some other countrey beyond the Seas." ${ }^{26}$ In his attempt to make sense of the subtleties of this process, Malynes searches for a series of analogies and the use of vocabulary and concepts taken from a revealing diversity of well-established disciplines:
> "Many men cannot well discerne the distinction of the Spirit in sundrie matters, because man (consisting of Bodie and Soule (that) which ${ }^{27}$ belongeth to the Spirit) is comprised vnder the name Soule: but if they be willing to vnderstand the necessarie distinction hereof, reason in the Theoricke Part, will demonstrate the same in the Practicke Part of this discourse of Exchanges. Saint Paul in the later end of his second Epistle to

[^94]the Thessalonians, wished a sanctification to their spirits and soules, and their bodies vntill the day of Iudgement. For albeit the Spirit of man, is rightly termed to bee the Facultie of the Soule; yet the parts of the Soule concerning Vnderstanding and Will, haue their proper relation; for that part called Vnderstanding, is seated chiefly in the Soule, as Will is in the Spirit, both to be accompanied with Knowledge. [...] The Phylosophers haue made this distinction by their Chimicall obseruation: and such as place the Soule in the bloud (dispersed through all the veynes of the bodie) do also place the Will of man in the spirit, residing in the hearth of man, which the Anatomists desmonstrateth to be a little concauitie, where the drops of the vitall bloud are placed in the heart, which are seared vp, and the place is shrunke in bodies which haue been poisoned. [...] To make application of this comparison betweene the Soule and Spirit, we shall find by the following discourse, that euen as the Spirit of man is predominant ouer the Soule and Bodie in all the actions thereof, which by the bloud are quickened and preserued, euen so is the exchange for moneys by Bills of Exchanges, ouerruling the course of commodities and moneys in all places where the action of money is felt or seene, directing the same (by some due proportions) accordingly." 28

Malynes resorts to this kind of vocabulary from the realms of theology and early modern medical science because he lacks any other sort of specialized vocabulary fit to explain what was a relatively new phenomenon, and arguably because he was also trying to legitimise the use of these documentary genres. ${ }^{29}$ This is why he traced the origins and epistemological roots and explained the nature and function of these financial instruments as the result of a series of processes that were analogous to the way in which God had

[^95]designed creation in general, and mankind in particular. There is no space in this essay to go into this in much detail, but with the promise of a longer and hopefully more exhaustive interpretation of this aspect of Malynes's text, let me just briefly conclude by stressing that Pacioli's Summa, and above all the Lex Mercatoria, are founded upon a combination of references drawn from Scripture, from Neoplatonic and Aristotelian philosophy, as well as from geometry and arithmetic. Pacioli and Malynes's attempt to legitimise and explain these financial instruments weaves into the fabric of their texts different threads and layers that include echoes from classical and humanist psychology, as well as late medieval and early modern medical science, and evoke ideas that can be found in Augustine, Petrarch, or Marsilio Ficino, and which involve concepts such as the soul, understanding and will, the ways in which they relate to cognitive processes, and their means of symbolic representation, i.e. their semiotic configuration and inherently communicative nature. In fact, Malynes suggests that knowledge is to the understanding and the will in human psychology what information is to money (i.e. Soul) and to bills of exchange (i.e. Spirit).

# Commerce and Exile: Traces of Jewish Diasporas in the Datini Papers 

José María Pérez Fernández, José Ramón Ayaso Martínez<br>University of Granada<br>Chiara Marcheschi<br>State Archive, Prato


#### Abstract

This essay proposes a preliminary approach to some documents in Italian and Hebrew at the Datini archive. Illustrative cases of what we might call the archaeology of paper, Arnau del Vilar's two manuscript bills and Abram Desforn's letter had lain ensconced in Prato for more than 600 years, and they re-emerge now as fragmentary memories of the exile and loss of these two Jewish converts from Barcelona. They are primary sources for the individual biographies of these victims of the pogroms that spread throughout the Iberian Peninsula towards the end of the fourteenth century, and they document some of the books and objects they managed to take with them into exile. As such they constitute evidence of the forced displacement undergone by different communities in the long history of the Mediterranean. Beyond this, they also illustrate the traces they left behind in commercial archives, as well as their use of trade networks and their administrative-logistic protocols to escape persecution and salvage their property. These papers materialize, in short, the intersection of disciplines like economic history, diaspora studies and semiotics.


## Introduction

After the conquest by King James I of Aragon (1213-1276) of the Kingdoms of Majorca and Valencia, and the subsequent partition of the Kingdom of Murcia between Ferdinand IV of Castile and James II of Aragon early in the $14^{\text {th }}$ century, the Aragonese crown set about its expansion across the Mediterranean. Portugal, the
other Peninsular kingdom which had ceased to share a frontier with al-Andalus, also launched its own Atlantic expeditions along the Western African coast. Only the Castilian crown maintained direct contact with Muslim territories: the Nasrid Kingdom of Granada and the Marinid Sultanate on the North of Africa, with which it competed for the control of the Strait of Gibraltar.

This situation generated - to use the phrase coined by Mario del Treppo - a common Mediterranean market under the aegis of the Aragonese Crown and articulated upon the ports of Barcelona, Valencia and Palma in Majorca. ${ }^{1}$ These shipping and commercial hubs wove a network of routes towards Italy, the North of Africa, the Levant, the Kingdom of Granada and the Atlantic African coast. The Aragonese authorities tried to maintain control over these areas of influence, but they could not stop Genoese and Tuscan merchants to continue with their activities within them. The best known and most profusely documented case is that of Francesco di Marco Datini, whose records have been preserved in the documents at the Archivio di Stato di Prato. ${ }^{2}$

The Datini papers in Prato include a small group of documents in Arabic, Hebrew and Judeo-Arabic, which were first identified and registered by Fausto Lasinio in 1880 and Mikel de Epalza in 1964, but never published until fairly recently. Given the limitations of space for the current special issue of the JEEH, our essay proposes a necessarily brief and introductory approach to the Hebrew documents, their historical context and the individuals mentioned in them. We shall provide an account of their contents and a preliminary interpretation of their relevance, with a view to providing a

[^96]more detailed analysis, alongside their transcription and translation in a future publication.

These documents were for the first time displayed for the general public and made available for the academic community in two simultaneous exhibitions organized by the PIMo Paper in Motion Work Group in January of 2022. They were also first published in print and online in the accompanying catalogue. ${ }^{3}$ One of these exhibitions was held on-site at the Archivio di Stato in Prato and consisted exclusively of documents from the Datini Archive. The other was a virtual exhibition which sampled documents from archives in different countries written in several of the languages spoken in the late medieval and early modern Mediterranean as well as the North of Europe. Taken as a whole, all these documents bear witness to the multicultural and multilingual mosaic that was the region during this period. They constitute excellent examples of the diverse commercial, personal and intellectual exchanges that they contributed to materialize, as they also illustrate the range of documentary genres and the semiotic protocols employed with these purposes.

They also remind us that documents which were part of the protocols involved in the practices of trade and finance, and whose primary function was therefore of a legal-contractual nature, can become sources of information about practices and phenomena of a rather different sort. They do bear witness not just to the circulation of material goods and financial value, but they also register information about events that could potentially affect the conduct of business. ${ }^{4}$ This is why commercial correspondence frequently comes through as a hybrid genre, where information about shipments, payments, loans, re-

[^97]ceipts, and about the agents who handled them, appears alongside news about relevant current events in the places where the authors of these documents were based. To put it shortly, this sort of commercial correspondence created some of the first international news networks for the private use of the merchants and their companies, who were fully aware of the fact that information was an intangible but also a potentially valuable commodity. This is what turns these documents into important pieces for a reconstruction of the human and social cartography of the Mediterranean during this period, thus contributing to a better understanding of the entanglement among the different persons involved, phenomena, and practices of a very heterogeneous nature. In our case these papers help us trace the predicament of members of ethnic and religious minorities who suffered persecution, and they open a window for the direct contemplation of the emotional distress caused by their exile and dispossession.

The fact that many of these merchants and the agents who worked for them had to travel and settle abroad in distant trading posts turned them into experts in foreign languages. Since they had to engage with their associates and their suppliers among the local populations, one of their most important functions consisted in recording and exchanging written information in languages other than their own. The international networks and branches of the Datini Company, its factors, and its partners, all bear witness to these practices: they established administrative offices and trading posts not just in the Italian Peninsula, but also in Avignon, Barcelona, Valencia and Majorca, and also traded with distant places in the rest of Europe and the Levant. The colourful linguistic and cultural mosaic that was the late medieval Mediterranean frequently materializes in the documents preserved in the Prato archives, such as the Quaderno di Balle compiled between 1396 and 1397 by the Datini Company of Majorca. This notebook registers receipts in different hands, which were penned by Catalans, Tuscans, and Jews, each of them using their respective languages. ${ }^{5}$ For example, on 30 October

[^98]1397, one Magaluf, a Jew in commercial relations with the Datini Company, declared in Hebrew to have received 100 lire. Next to this text, one of the officers of the Datini Company in Majorca, Niccolò Manzuoli, penned a brief translation into Italian that summarised the significance of the original note. This document also confirms that the Datini company had a team of clerks, some of whom were employed in their capacity as translators of texts in different languages. In turn, it also explains the presence in the company's archives of documents entirely in Hebrew like those that we address in our essay, which also confirm that papers originally conceived with an exclusively economic and financial function can contain information of great interest for other disciplines too.

These documents were produced during a remarkably tragic moment in the history of Judaism in the Iberian Peninsula, i.e. the years that followed the pogroms of 1391, which first originated in Seville and soon spread to other cities like Toledo and Burgos in Castile, Valencia and Barcelona on the Eastern seaboard of the Kingdom of Aragon, and then reached as far as Majorca, in the Balearic Islands. The widespread slaughter of 1391 signalled a momentous turning point in the life of Hispanic Jews, since it constitutes the first major step in the long process of the destruction of Peninsular Judaism which culminated in 1492 with the Edict of Expulsion of Isabel and Ferdinand. After 1391 the geography of Hispanic Jewish communities was forever altered. Some of the most important among them simply vanished, or could never return to their previous location and situation - e.g. those in Seville, Toledo, Burgos, Valencia or Barcelona. The pattern of Jewish settlements was profoundly affected after these communities fled cities that came under royal jurisdiction (ciudades realengas) and sought to concentrate in smaller cities instead, which were under the jurisdiction of

[^99]local aristocrats or religious authorities. By the end of the $15^{\text {th }}$ century a significant percentage of the remaining Jewish population had migrated away from the coastal regions and its urban centres Barcelona, Valencia, Palma - to settle instead around the valley of the river Ebro in the interior of the kingdom of Aragon. As we shall see, the Hebrew documents preserved at the Datini gain a significant relevance within this historical context.

## Arnau del Vilar

"I, the undersigned, acknowledge before Antonio di Guccio, that I am under obligation to deliver on time two hundred and seventeen florins to Francesco di Marco or to Manno di Albizzo in Pisa, thirty days after the arrival of the shipment, which consists of many books. If (God forbid!) I fail to deliver such sum after these thirty days, the aforementioned merchants will take a percentage on my account over the course of the subsequent month. If I cannot be there in two months, they will be then at liberty to sell the books to pay for these amounts. And this was in the month of October, on the tenth day of the year one thousand and three hundred and ninetythree of the computation that we use here in Barcelona. And so that in their power they can use it as proof, and of their right, I have signed my name here, Arnau del Vilar. ${ }^{6}$
The first of these documents, translated above, is a promissory note, or a bill of debt, written in Hebrew for Antonio di Guccio by a person who signs his name as Arnau del Vilar. ${ }^{7}$ He undertakes to

[^100]pay 217 gold florins (a rather hefty sum for the time) to Francesco di Marco Datini or to Manno degli Albizzi thirty days after the arrival of the goods - "many books" - in Pisa, which he is shipping through the mediation of di Guccio, Datini's correspondent in Barcelona. If the payment is not made on time by the drawer of this bill (i.e. Arnau del Vilar), then the payees (i.e. Datini or degli Albizzi), can charge an interest consisting in an unspecified percentage of the total amount of the debt for a maximum period of a month after the first due date. The document also establishes that if Arnau del Vilar failed to pay these amounts within this two-month period, the payees would be free to sell the books to redeem his debt. The document was signed in Barcelona on 10 October 1393, and the verso shows a manuscript note by one of Datini's clerks that records its receipt, most probably in Italy, on 21 November 1393.

Another document in Italian confirms this shipment as it also provides more relevant clues. ${ }^{8}$ It is a letter from Antonio di Guccio and Matteo di Miniato, sent to Francesco di Marco Datini and Manno degli Albizzi \& Co., from Barcelona to Pisa on October 10 ${ }^{\text {th }}$, 1393 - just a week after the Hebrew document signed by Arnau del Vilar. The text of the letter confirms the name of the consignee of the said shipment as Arnau del Vilar, described as a Catalan man from Barcelona, of about 40 years of age, who, they add for further detail, is broad-backed and suffers from gout. It also informs that his two bales of fur are sent on the ship of one Sancho Díaz de Basurto and that they contain "many Judaic books". It finally confirms that they are to be delivered to Arnau once he pays 217 gold florins within 30 days of their arrival, on pain of interest to be collected by issuing a letter of exchange. ${ }^{9}$

[^101]A brief receipt in Hebrew documents that Arnau del Vilar had not just sent his books to Pisa via Antonio di Guccio in Barcelona, but that he had himself left for Italy too, and that once in Pisa he managed to pay for the cost of the shipment and therefore recovered his 'many Judaic books'. In contrast with the document that he had signed in Barcelona a few weeks before, in which he had used Christian dates, in Pisa Arnau felt apparently more at ease using the Jewish computation system for the date on a legal document: "I acknowledge receipt from Albizzo, merchant in Pisa, of all the books that belong to me, which were sent to him by Antonio di Guccio... In Pisa, in the month of January, the last day, in the year 5154 of our computation" (i.e., 31 January 1394). ${ }^{10}$ The fact that the books appear to have been concealed inside the bales of fur mentioned in Guccio and Miniato's letter also suggests that Arnau might have done so to avoid their detection by the Catalan authorities as they left Barcelona - and / or also just to protect the volumes from the humidity that used to affect such shipments.

The historical circumstances that form the background to this document and its author suggest that Arnau del Vilar must have been one of the Jews who were forced to convert after the series of pogroms that had recently been unleashed upon his community. The riots were particularly violent in Barcelona, where its once prosperous Hebrew community would never recover from the terrible blow it suffered. To cut what must have been a very long and distressing story short, we can tentatively conclude that Arnau used the financial and commercial networks of Francesco di Marco Datini to send

[^102]his books - and himself as well, either simultaneously or soon after his books - away from his native Barcelona towards exile in Pisa.

Unfortunately, the Datini documents do not identify the nature of the books nor their content. There are a couple of hypotheses. One of them suggests that they may have been Hebrew books for personal or private use that Arnau del Vilar had managed to save from destruction. We do know that the mobs destroyed everything they found on their path. Account books and other administrative documents belonging to Jewish bankers were particularly singled out for destruction. ${ }^{11}$ In general, however, the destruction affected any sort of document or book penned in Hebrew, from religious texts to scientific literature, administrative papers and private correspondence, among many others. A great number of remaining fragments from the Hebrew books and documents destroyed in 1391 have in fact been preserved in Girona - this is a group of documents which Mauro Perani has dubbed the "Girona Geniza". ${ }^{12}$ After the pogroms these broken papers were sold in bulk to stationers who used them to reinforce book covers and bindings: they are particularly abundant in the tomes of the notarial protocols now preserved in the provincial archive of Girona.

Hebrew books produced in Catalonia were usually exported for sale in Italy, where they were decorated to suit the local taste. Barcelona in particular was an important hub for the production of books in general - Hebrew and otherwise. ${ }^{13}$ This suggests another hypothesis, i.e. that alongside the "many Judaic books" that Arnaut

[^103]del Vilar shipped to Italy, some others may have been written in Latin script and that none - or at least only some of them - were for personal use, but merely meant for trade. Catalan documents frequently record Jewish artisans as llibreters and lligadors, i.e. as notebook makers, binders, booksellers and also trading in paper - i.e. as stationers. Their presence in this trade was such that Pope Benedict XIII issued a bull in May of 1415 banning Jews from binding works which mentioned the names of Christ and the Virgin Mary - which amounted to a quasi-blanket ban on book production, since most paratexts included references to Christian figures even if the volumes were not of a religious nature. This ban stood in place until 1418, when Alphonse the Magnanimous removed most of the edicts that severely limited the rights of Jews in the Kingdom of Aragon, first, and then those of Catalonia, Valencia and Majorca. ${ }^{14}$ Between 1961 and 1963 Marudell Marimón published a comprehensive record of documents on Jews and converts involved in the book production and trade in Barcelona between the late $14^{\text {th }}$ and the early $15^{\text {th }}$ centuries. Arnau del Vilar is not mentioned in any of them. ${ }^{15}$


#### Abstract

Abram Desforn In contrast with the indirect traces provided by Arnau del Vilar's papers, the other Datini document in Hebrew evinces a more explicit story of exile and dispossession after the pogroms of Barcelona in 1391. It is signed by a person whose original Jewish name was Abram Desforn and became Raymond Ballester Desforn after his conversion. ${ }^{16}$ The document is addressed to an Italian person of au-


[^104]thority, requesting his mediation for the restitution of some goods that Abram's nephew - Joan Roure (olim Samuel Desforn) - had left under the custody of Italian merchants and their agents a few years before. He appears to suggest that one of them, Niccolò del Ammannatto, is retaining the goods without having a legal right to do so. Abram confirms that his nephew is still in Italy and ready to intervene in order to speed up the process.

The document illustrates the enormous difficulties encountered by the Jewish communities affected by the slaughter of 1391 when it came to their return to normalcy, in particular as regards the recent converts and their attempts to recover the goods that had been stolen from them. In 1882 Isidore Loeb published a list with the names of converts who were reclaiming their spoiled goods from the local authorities: Raymond Ballester Desforn and his nephew Joan Roure are among them. ${ }^{17}$ The difficulties to recover these goods were not exclusive to Barcelona. As would happen a century later after the promulgation of the Edict of Expulsion of 1492, many would take advantage of the tragic predicament of Hispanic Jews. This behaviour also extended to Italy: as the document suggests some Italian merchants who engaged in business with Catalan Jews saw their situation as an opportunity to take possession of the goods that had been put under their custody.

The wording and the tone of Abram Desforn's letter is rather different from Arnau del Vilar's formal administrative style. This is a mostly personal letter which records a keen plea formulated in

[^105]rather despairing terms. Abram describes himself as "stripped and naked" and addresses a powerful personage (probably Falduccio di Lombardo) whose assistance he earnestly and most insistently begs for the restitution of his property. ${ }^{18}$ These possessions include several different goods and artefacts inside a coffer and a caratello (i.e., a wooden cask or container) which, as mentioned above, had been deposited by Abram's nephew with Niccolò del Ammannatto in Pisa some four years earlier. ${ }^{19} \mathrm{He}$ requests the restitution of this property through the mediation of another unidentified person whose name appears to be Johan, Joan, or Giovanni Shefardi. The second part of the letter suggests that some other goods had been deposited with the addressee a few years before, and Abram expresses his gratitude to him for not having sold it without his prior consent. The verso of the document bears the names of the two Italian correspondents of the Datini company in Barcelona who also intervened in the shipment of Arnau del Vilar's 'many Judaic books' to Pisa, i.e., Matteo di Miniato and Antonio di Guccio.

Desforn provides a short inventory of the goods which he is trying to recover through the administrators of his addressee with a view to having them delivered to Francesco di Prato (i.e., Francesco Datini). These goods include, inter alia, coral, saffron, a copy of the Sefer Ha'ibbur (a treatise on the calendar by Abraham Ibn Ezra), a Hebrew book of law (Sefer Dinin) bound in wooden boards covered in red leather, and a megillah (i.e., a scroll with the Book of Esther) with a wooden yad (a pointer used by the reader to follow the text during the reading of the Torah). The language he uses suggests that Abram Desforn must have been a well-educated person, who was

[^106]not just conversant with Scripture and rabbinic literature but had also copied in his own hand a manuscript of Abraham Ibn Ezra's treatise on the calendar. This is rather unusual because it was a task which called for skills in calligraphy as well as good knowledge of the subject. A mitzvá did establish that all adult Jews should copy a sefer torah. De facto, however, not even the most prominent families within Jewish communities did so: most of them hired a professional copyist instead and then had their son pen just the final words on the scroll. We should add that the books listed in this brief inventory might not have necessarily been personal belongings, but goods meant for trade, as were the saffron and the coral also listed in the document. Coral in particular was a highly profitable luxury item which was frequently traded by Jewish merchants either as a raw product or as a manufactured object - e.g. as buttons, or other sorts of ornaments. Marudell i Marimón published in 1956 and 1957 a series of contractual documents that prove that the extraction of coral, its manufacture and commerce were common activities among Catalan Jews, in particular those who plied their trade in Barcelona. ${ }^{20}$ This lucrative business did in fact help the Jews of the Catalan capital confront both the restrictions imposed by the authorities and the competition from Christian merchants and bankers during the $14^{\text {th }}$ century and afterwards. ${ }^{21}$

## Administrative Papers, Semiotics and Diaspora Studies: from the Desforn of Barcelona to the Bolognese Sforno?

One of the few remaining testimonies by a direct witness of the

[^107]pogroms in Barcelona reports that the riots started at three pm on August $5^{\text {th }} 1391$ and that the pillage and slaughter continued for five days until August $10^{\text {th }} .22$ Some Jews managed to find refuge in the Castell Nou (i.e. the New Castle), which had been built upon one of the originally Roman gates in the ancient wall of the city: our two Desforns may have been among them. When the authorities forced them to leave this precinct the only option for those who wanted to stay alive was conversion and after their baptism they took the names of their godfathers: Abram Desforn and two other Jews (Samuel Alietzer and Isaac Mahir) took the name of a respected lawyer, Raimundo Ballester. ${ }^{23}$ Many of those who had converted while still in the Peninsula left their Christian names behind and recovered their Jewish identity once they had fled into the relative safety of exile.

The pogroms of 1391 triggered an important first phase in the long history of the diaspora of Hispanic Jews all over the Mediterranean, which specially affected those who had so far lived in territories belonging to the Aragonese crown such as Valencia, Majorca and Catalonia. In fact, the rabbis of the first generation of Jews expelled in 1492 still remembered in Egypt what they called the "diaspora of the Catalans." It is obvious that Catalan Jews were just one among the several groups of Hispanic Hebrew exiles who arrived in Egypt after 1391, but their number and importance must have been so great that all the diaspora generated after 1391 is referred to as the "exile of the Catalans." ${ }^{24}$ Chiara Ravera and Anna Rich-Abad mention the case of magister Benedictus de Ologar, a physician from

[^108]Barcelona, who first converted and whose presence is subsequently documented in the Island of Chios in 1404. ${ }^{25}$ Members of the Hebrew communities in Valencia and Majorca had abundant contacts in the North of Africa, which thus became their most frequent destination after their diaspora: one of them was the famous Talmudist Isaac ben Sheshet Perfet, who although born in Barcelona, was in Valencia at the time of the slaughter. Like so many others, he was first forced to convert and ended up by leaving the Iberian Peninsula and settling in Algiers, where he died in 1408.

Members of the Desforn family appear in documents as early as the thirteenth century. ${ }^{26}$ Although theirs was not one of the few great families who had historically run the institutions in the aljama of Barcelona, some of its members had been prominent administrative officers within the council which governed their community and as such their names and signatures feature as witnesses in important documents. The Desforn therefore enjoyed a certain prestige in Barcelona and were involved in international finance and trade which reached as far as the Eastern Mediterranean. As such, they must have been well educated in Hebrew and the great texts of the Jewish tradition - as proved by Abram's letter. This document was very obviously written in haste and under great distress: there are omissions, words that have been crossed out, and others which have been added between the lines on a second redaction. There are frequent repetitions of Abram's keen plea, and of the names of the people involved alongside detailed references to the brief inventory of objects that he was trying to identify and recuperate. In his own words, Abram had no material possessions other than those he had sent to Italy four years before, when he resorted to the commercial and administrative networks of the Datini company and its agents.

[^109]From the contents of the letter we also learn that Desforn had previously, and repeatedly, sent a certain number of letters - at least three of them - in his attempt to locate first and then recuperate his property by its delivery to Francesco di Marco Datini, whose reputation, he emphasises, is that of an honourable and respectable person who can be trusted.

In his account of the steps that Desforn has taken to ship his goods first and then try to secure their recovery, he also describes the protocols that were used for the documents involved in this sort of practice - also exemplified by Arnau del Vilar's more formal papers. One of them is his indirect reference to one of the norms that regulate the conduct of these processes, which establishes that goods belonging to other people could not be delivered unless there was a document written by the recognizable hand of someone who is authorized to do so. ${ }^{27}$

Merchants and bankers kept samples of authorized personal signatures and hands in each of their different branches to authenticate the documents that they exchanged, which frequently carried significant performative power, either because they were formal contracts, bills of credit (which could codify a certain amount of monetary value), or any other sort of document that empowered its carrier to conduct business of great consequence for the parties involved. They were of course not as sophisticated as those we employ today, when we have electronic certificates, block chain authentication, and biometric security protocols, but still, complex international commercial and financial networks such as those of Francesco Datini and his partners also required authentication protocols to perform the administrative and contractual functions that were vital for the effective conduct of business. These protocols were indispensable to secure the exchanges of goods, financial value, information

[^110]and in general legally binding documents of all sorts. ${ }^{28}$ As seen above with di Guccio's document, these protocols could simply consist in a physical description of the person who was empowered to collect the goods, frequently in combination with his presentation of a letter in one of the company's authenticated hands. ${ }^{29}$

This letter in Italian and Arnau's two documents in Hebrew confirm that the protocols employed for the safe exchange of information recorded in such papers wove the communicative-semiotic networks that generated and sustained not just commercial and financial traffic, but also cultural exchanges of many different sorts. This included facilitating means of escape for members of persecuted minorities - or at least for those who could afford the cost of using them.

Like Arnau del Vilar's documents, Abram Desforn's letter tells a story of deprivation and exile, confirmed by his presence and that of his nephew in the list of Jewish converts who demanded the restitution of the goods that had been taken from them. It would appear, therefore, that Abram and Samuel must have recovered at least some of their property in Barcelona sometime around 1392 or maybe later, and that they succeeded in having it sent to Italy, which is why the former was now pleading with the merchant of Prato to get it back. This letter proves that Abram's situation was rather more desperate than that of Arnau del Vilar, who at least managed to recover his many books and possibly find refuge in Italy, as proven by the receipt in Hebrew that bears his signature.

[^111]We do not know what may have become of Abram Desforn beyond what his own letter tells us, but although there is no direct primary source that can prove this, it is not illogical to think that once in Italy, his nephew Joan Roure may have finally decided to settle there and recover his Jewish identity as Samuel Desforn. In fact, Maria Giuseppina Muzzarelli documented the presence in Bologna of a Jewish immigrant from Barcelona in 1407 whose name was Samuel Sforno. ${ }^{30}$ This Samuel Sforno could very well be Abram Desforn's nephew, who, as the letter says, was already in Pisa just a few years before. If this is the case, then Samuel Desforn and his uncle Abram Desforn provide the connection between the previous Iberian generations of this family, and those who followed their forced exile in Italy. This particular diaspora would then mark a founding moment for a prosperous family of newly naturalized Italian Jewish bankers, some of whose members would gain a certain prominence, like Obadiah Sforno (ca. 1470-1550), physician, philosopher and prolific exegete of Scripture, who had Johannes Reuchlin among his students in Rome.

Our research on these diasporas and personal connections is still a work in progress, with new documents currently under investigation, but the existing primary sources prove that the intersection of commercial administrative papers, their semiotic protocols, and the personal information registered in them constitute fundamental building blocks for the reconstruction of important episodes in both economic history and diaspora studies.

[^112]
# Messianic Expectations and Paper-Based Networks: The Role of the Merchant 

Michael McKeon<br>Rutgers University - New Brunswick

From 1665 to 1667, the coming of Sabbatai Sevi in the Levant created an upheaval that was unprecedented in the history of messianic movements. "Over a period of several weeks, an immense outbreak of Sabbatian prophecies by ordinary Jews of all classes occurred [...] The particulars of this outbreak were almost unique in Jewish history up to that time." ${ }^{1}$ What's crucial here is not that his followers gathered and marched in greater numbers than those of earlier prophets (although they may have), but that the story of his appearance, professions, progress, supporters, triumphs, and misfortunes spread farther, wider, and more rapidly than ever before. Sabbatai appeared in the first age of publicity. The category "news" had come into being to name, for the first time, what people valued rather than what they disdained. Information had begun to circulate for its own sake, through increasingly complex and overlapping networks, and with the ease of virtual communication independent of actual mouths and ears. By the middle of the seventeenth century, northern Europe especially had become what might be called a print culture, and print put much of this paper in motion; but it was by no means the only factor. Gathering information - intellectual, political, religious, social, scientific, commercial, and merely incidental - across national and cultural

[^113]boundaries had become an open-ended ambition that would define the modern world. And the undiscriminating nature of this process of accumulation is reflected in the permeable boundaries of the discourses that are sampled and collected, which soon will be more sharply delimited.

In the following essay I'll document that over the course of a few years, news of Sabbatai spread throughout the Mediterranean through Jerusalem, Turkey, Egypt, Syria, Spain, Greece, and Italy and was relayed northward in Europe to Austria, France, Hungary, England, and Holland through a medley of paper media: letters, newsletters, newspapers, broadsides, pamphlets, and the like. These papers were borne by a variety of travellers who voyaged abroad for a variety of reasons, but the majority of them were likely to be merchants. In the later seventeenth century, merchants were an important medium for all sorts of news between different countries. And in the case of the Sabbatian movement, their mercantile interests were necessarily engaged, as we shall see, by its millenarian expectations. My evidence will be drawn from communications that were received by or available to English people. Sabbatai's most exhaustive historian, Gershom Scholem, had relatively little recourse to, or knowledge of, the English interchange of Sabbatian news. This gap has been filled more recently by scholars like Brandon Marriott, and although I draw on much of this material, I bring to it a more limited and particular focus. ${ }^{2}$

Information about the Sabbatian movement was generated by a number of diverse and overlapping sources that cut across each other, sometimes contributing to an already-existing network of in-

[^114]formation whose nexus is one or two correspondents known to several others, sometimes as a single thread, laying the ground for what will become a new patchwork of notice and report. This is how Sabbatai's career became a "network of information." That paper now begins to circulate with velocity is central to the creation of information networks like this one. But in this modern sense, both terms are only emergent at this time, and historians differ in their readiness to apply them to early modern conceptual and material exchange. The idea of a trade network is a case in point. The most comprehensive historian of cross-cultural commerce makes clear the shifting and variable condition of trade networks in the early modern period: they "could complement each other, work together and assist each other or they could compete. Competing did not automatically mean destroying each other. There were 'complementary enemies' and forms of unpeaceful coexistence which were destined to last." But "all networks, even the most solid, sooner or later encountered difficulty or misfortune. ${ }^{3}$ More recently, it's been argued that the scope of trade networks - the notion itself goes without saying - needs to be expanded. The focus on Atlantic trade networks, at least, has become limiting and parochial. This kind of "regional viewpoint separates northern Europe and its Atlantic colonies from the rest of the world whereas a focus on networks across a broader geographical area shows that the rest of the world was not only connected to Europe, but played an important role in shaping it as well." ${ }^{4}$ And a historian of Mediterranean commerce writes, with instructive circumspection: "'Network' is a useful heuristic device when not used generically, because it serves to identify the particular channels through which individuals, money, commodities, and information circulated." ${ }^{5}$

[^115]Compared to the scope and depth of these historical projects my own concern is sharply limited both in time and in the geography of its sources. I'm interested in discovering what and how English people learned about the Sabbatian movement as it transpired near its apogee and until Sabbatai's apostasy, how much of this information came to them through the writings of merchants, and whether information networks, however fugitive, can be seen to coalesce at this moment in the circulation of news and commodities. ${ }^{6}$

## Political Intelligence

The English Post Office was established in 1660 with the primary purpose of controlling the flow of domestic and foreign information. Control of foreign intelligence was exercised largely by the secretaries of state, among other ways through the dissemination of news in the official state newspaper, the London Gazette. However, supervision of the post gave the secretaries two-way access to information through the interception, opening, reading, and counterfeiting of letters. After Charles II was restored, Joseph Williamson was appointed under-secretary of state and was the principal figure to exercise this office of supervision, and he relied on a number of aides to this end, among them Henry Oldenburg, a German master of European languages who had arrived in England during Oliver Cromwell's Protectorate as agent for the state of Bremen. Oldenburg was highly serviceable to Williamson at gathering and sifting political intelligence, although he ran afoul of the system he served when he was briefly confined in the Tower for sending abroad letters that were critical of England's blunders in its war with the Dutch and that were intercepted, probably by Williamson himself. ${ }^{7}$ Oldenburg had

[^116]gained access to the network of correspondents developed by Samuel Hartlib, who according to John Dury, the Scottish Calvinist, deserved to "bee sette uppe as a conduit pipe of things communicable." Known to posterity as an educational reformer, Hartlib exchanged over 4,000 letters with a multitude of both celebrated and obscure literati on an expansive range of topics that took in much more than the one he's known for. ${ }^{8}$ One of these was Sabbatai Sevi. Likely influenced by Sabbatian rumours, Hartlib and John Worthington exchanged views in 1662 on the "news of the Jews' fasting and humiliations" and its implication that "the redemption of Israel is drawing near." ${ }^{9}$

English affairs of state generated an enormous number of miscellaneous papers that were received by the secretaries of state and later came to rest in the Public Record Office and itemized in hundreds of volumes in the Calendars of State Papers (CSP). Williamson's disingenuous letter to Oldenburg when he was imprisoned in the Tower is in CSP Domestic. ${ }^{10}$ So is one from Oldenburg to Williamson about Sabbatai Sevi. In that letter Oldenburg thanks Williamson "for the care of my two letters. One of them from Amsterdam expresses some doubt of ye news concerning ye Jewish kings being turn'd Turk." ${ }^{11}$ Oldenburg wasn't a state official, but diplomatic correspondences showed an interest in all manner of local affairs that had an impact, however transitory, on people of the region, among those affairs the fortunes of Sabbatai. ${ }^{12}$ By then Oldenburg

[^117]had turned to account Hartlib's connections, first in a scatter-shot fashion, but soon after when he became, like Hartlib, an original member of the Royal Society of London for the Improving of Natural Knowledge.

## Natural Knowledge

As one of the two first secretaries of the Society, Oldenburg augmented his already-voluminous network of correspondence to acquire as much information as he could about nature, casting his nets far and wide on the understanding that to discover the uniformity of nature it was necessary to sample the variety of its productions in all climates and geographies. The result was a vast correspondence that fills 13 volumes and was to form the basis of the first scientific institution in the world. ${ }^{13}$ This survey had been called for by Francis Bacon in his utopian narrative the New Atlantis (1627). There he gives a "relation of the true state of Salomons House," which observes that " $[t]$ he end of our foundation is the knowledge of causes, and secret motions of things; and the enlarging of the bounds of humane empire, to the effecting of all things possible" (35). The twelve "Fellowes" of the house who "Sayle into Forraine Countries" and "bring us the books, and abstracts, and patterns of experiments of all other parts wee call Merchants of Light." Other fellows in Salomons House then examine this material and test its properties and applications (45). ${ }^{14}$ In The Great Instauration (1620), Bacon had spoken metaphorically of the pursuit of knowledge in terms of sailing around the "terrestrial globe" and making "a coasting voyage along the shores of the arts and sciences received" ("The Plan of the Work"). The famous title page of that work pictures a fully-rigged ship sailing between the Pillars of Hercules, above the prophetic leg-

[^118]end (Daniel 12:4): "Multi pertransibunt \& augebitur scientia": "Many will pass through and knowledge will be increased." ${ }^{15}$ But these terms also aptly express the search for natural knowledge in metonymic terms, because the ambition of the new philosophy, as it was called, was to travel abroad in order to discover natural species not yet known to English people in their little island off the coast of the great European continent.

Inquisitive minds like Oldenburg's thought it possible to pinpoint all but the actual physical entity of those species through the virtual expeditions of letters. Along the way he forwarded to another fellow of the Royal Society, the celebrated chemist Robert Boyle, several passages from A New Letter Concerning the Jewes (1666) citing prodigies and miracles and the prophet Elijah in anticipation of Sabbatai's advent. ${ }^{16}$ The nature of this letter suggests that the modern boundary between the material and the spiritual wasn't in place in the seventeenth century, when "the scientific revolution" was gaining ascendancy. In 1657, Oldenburg had sought the opinion of the Amsterdam rabbi Menasseh ben Israel on the prophesied coming of the Messiah. Nine years later he asked Spinoza the opinion of the "Amsterdam Jews": "You will tell your friend what you hear of this matter." ${ }^{17}$ If Oldenburg sounds credulous, perhaps we need to distinguish macro-eschatology from micro-epistemology: for his scepticism inclines him to credit only "trustworthy" news from Constantinople, where messianic activity seems to be centred.

## Natural Experiments and Commercial Merchandise

On the testimony of Thomas Sprat, the first historian of the Royal

[^119]Society, the virtual network undertaken by Oldenburg went hand in hand with the actual enterprise of English people in all stations and walks of life: "All Places and Corners are now busie and warm about this Work: and we find many noble Rarities to be every Day given in not only by the Hands of learned and profes'd Philosophers, but from the Shops of Mechanicks; from the Voyages of Merchants; from the Ploughs of Husbandmen; from the Sports, the Fishponds, the parks, [and] the Gardens of Gentlemen." ${ }^{18}$ Of these the most important are the merchants. Sprat echoes, at the same time that Sabbatai's fortunes were unfolding, Bacon's utopian anticipation of a global empire of knowledge. The Society "will be able, to settle a constant Intelligence, throughout all civil Nations [and] overcome the Mysteries of all the Works of Nature" (64). Sprat's vision extends across the Mediterranean and beyond: "This their Care of an universal Intelligence is befriended by Nature itself, in the Situation of England: For, lying so as it does, in the Passage between the Northern Parts of the World and the Southern; its Ports being open to all Coasts, and its Ships spreading their Sails in all Seas; it is thereby necessarily made, not only Mistress of the Ocean, but the most proper Seat for the Advancement of Knowledge, "for" the same Proportion of Discoveries above others in the intellectual Globe, as they have done in the Material" (86). "[I]n foreign and remote Affairs, their Intentions and their Advantages do far exceed all others. For these, they have begun to settle a Correspondence through all Countries; and have taken such Order, that in short Time there will scarce a Ship come up the Thames, that does not make some return of Experiments, as well as of Merchandize" (86).

What Sprat means by "experiments" is in this context circulating papers, questionnaires formulated so as to elicit information about the countries merchants visit in their primary pursuit of "merchandize," and Sprat is eloquent, if hyperbolic, in describing "the noble

[^120]and inquisitive Genius of our Merchants" in this enterprise (88): "Of our chief and most wealthy Merchants and Citizens, very many have assisted it [the Society] with their Presence; and thereby have added the industrious, punctual, and active Genius of Men of Traffick, to the quiet, sedentary, and reserv'd Temper of Men of Learning. They have contributed their Labours; they have help'd their Correspondence; they have employ'd their Factors Abroad to answer their Inquiries; they have laid out in all Countries for Observations; they have bestow'd many considerable Gifts on their Treasury and Repository" (129-30). In formulating the "Queries and Directions they have given abroad," the Society requires "some of their Fellows, to examine all Treatises and Descriptions of the Natural and Artificial Productions of those Countries, in which they would be inform'd. At the same Time, they employ others to discourse with the Seamen, Travellers, Tradesmen, and Merchants, who are likely to give them the best Light. Out of this united Intelligence from Men and Books, they compose a Body of Questions, concerning all the observable Things of those Places. These Papers being produc'd in their weekly Assemblies, [...] then the Fellows themselves are wont to undertake their Distribution into all Quarters, according as they have the Convenience of Correspondence" (155-56). "They have collected, and sent abroad Inquiries for the East Indies, for China, for St. Helena, for Teneriff, or any high mountain, for Guinea, For Barbary, and Morocco, for Spain, and Portugal, for Turky, for France, for Italy, for Germany, for Hungary, for Transylvania, for Poland, and Sweden, for Iceland, and Greenland, they have given Directions for Seamen in general" (156-57). In short, the boundary between commercial and new philosophical exploration was readily crossed.

## A Clearing House for Ideologies

Oldenburg's words make clear that the line between Christian and Jewish futurity was also not easily drawn. 1666, the number of the beast in the Book of Revelation, was a year of expectation among
millenarian Christians. With its approach both faiths read signs of the times all about them, and both entertained the highest eschatological expectations. This conjunction had in fact been accommodated in theological speculation. Scholem has discussed "the doubling of the figure of the Messiah, its split into a Messiah of the House of David and one of the House of Joseph." ${ }^{19}$ The doubling expedient acknowledged real ties but occasioned debate, and it was in any case unavailable to those common people on the ground who were caught up in the turbulent moment of Sabbatai's emergence. A sceptical report from Haarlem found that "[i]t is strange, that not onely the Jews here, but some hundreds that own the name of Christians among us, think themselves concerned in it." ${ }^{20}$ This concern might be aroused from opposed perspectives.

Traditional antisemitism prophesied that the second coming of Christ would be preceded by the conversion of the Jews, a belief that gained epic proportions under the stimulus of Sabbatian news and rumour. One author was persuaded by his friends to publish the news he'd heard that in 1650 "a great Councel of Jews" had assembled in Hungary "because they do conceive it to be a preparative and hopeful sign of the Jew Conversion. ${ }^{21}$ An astrologer, in cautious anticipation of the second coming, inquired: "Are the Jewes marching toward Jerusalem or no? Let them take sober advice, the time is not yet." ${ }^{22}$ In conversation with a royalist mathematician during Cromwell's Protectorate, the royalist diarist John Evelyn learned of his "strong apprehensions of some extraordinary events to happen the following yeare [1656], from the calculation of coincidence with the diluvian [of the biblical Flood] period; and added that it might possibly be to convert the Jews by our Saviour's visible appearance,

[^121]or to judge the world" in his second coming. ${ }^{23}$ Evelyn, an original member of the Royal Society, dispassionately records this information from a source whose scientific and royalist principles seem compatible with his millenarianism. Fourteen years later, Evelyn looked back on Sabbatai's moment from the seemingly settled ground of Stuart kingship and Anglican episcopacy to judge it an emanation from "the Heads of Phanatical Enthusiasts who Dreamed of a Fift Monarchy." ${ }^{24}$ A tract of 1659 assured its readers that in five years "the despised and dispersed Jewes" would be ready for conversion, "and that by means of English Divines." ${ }^{25}$ And in reference to an unnamed prophet, a letter from Smyrna dated Nov. 27, 1665 remarks: "And God alone knows whether he may be a means of the Conversion of that stiff-necked Generation." ${ }^{26}$ Most bizarre, the millenarian Welsh prophet Arise (Rhys) Evans brought out another's tract in which was heralded the assembly of an army of 144,000 Jews, "twelve thousand of every Tribe," "under the Ban[n]er of King Charles," who "is Gods chosen vessel to deliver us all." ${ }^{27}$ But on reflection, this meeting of royalist and Puritan sentiments, like the meeting of scientific and millenarian and Jewish and Christian sentiments, is bizarre given the modern conviction of their polarity. The Sabbatian network of papers, in motion before they come to rest, offers a less tidy view of convictions at the moment of their intersection. In effect, Sabbatai provided a sort of clearing house for ideologies, mediating between beliefs that, however distinct, shared enough to possess a certain fungibility.

[^122]But the antisemitic anticipation that the Jews would convert to Christianity wasn't the only view of them that the expectation of the last things precipitated out of Christian eschatologists. Even preceding the Interregnum hotbed of 1649-1660, when the lapse of absolutist rule encouraged some English people to pursue their beliefs as far as they might go, ${ }^{28}$ there had grown among millenarian sectarians a philosemitic identification of their own divine election with that of the chosen people of the Old Testament. Among some, Sabbatai, in part because of his and his prophet Nathan of Gaza's contorted bodily possessions, became known as the Jewish Quaker. ${ }^{29}$ The philosemitic identification of many sectarians even encouraged the hope among their sympathizers that the long-awaited conversion would proceed in the opposite direction. ${ }^{30}$ This was the hope of Petrus Serrarius among others, a figure to whom I'll return. Encouraged by the theological doubling expedient, Serrarius "wove the two religious traditions together in a manner that led him down the path of universalism," persuaded that "the approaching end of history would be accompanied by a period of universal peace for all people." ${ }^{31}$ A decidedly unsympathetic tract countered the optimistic hope for a counter-conversion with dismay and apprehension: "considering the fantastical opinions and heresies reigning in this Nation, instead of our converting them to Christianity, they rather may pervert and turn us to Judaism." ${ }^{32}$

Both the hopes and the fears were fed not only by the self-conception of radical Puritans as the Old Testament chosen, but also by news that the ten tribes of Israel, dispersed for centuries, were now

[^123]converging on the holy lands. ${ }^{33}$ In 1665, several tracts from Scotland told the story that a ship, cast up in Aberdeen by a storm, was manned by a crew that spoke "broken Hebrew" and rigged in blue (or white) silken threads with satin sails on which was inscribed: "THESE ARE OF THE TEN TRIBES OF ISRAEL, which was to discover them to be Jews: Their Food on board was onely Rice and Honey." They bear with them news of more than one and a half million Jews in Arabia engaged in triumphant battle with the Turks. The anachronism - or perhaps the fulfilment of Old Testament type in antitype - entailed in these reports is evident in the notice that "[ $t$ ]hey give Liberty of Conscience to all," a phrase of early modern provenance. ${ }^{34}$ The vision of the ten lost tribes in particular captured the imagination of English people, and it was widely debated whether the ten tribes were actually the natives of America. ${ }^{35}$ Speculation on the movement of the tribes continued with the approach of the year of the beast 1666. George Wither, poet and prophet over the past forty years of upheaval, was by now circumspect about the "Letters and Reports much credited concerning an Army of Israelites repairing toward the Ancient Habitation of their Forefathers," and he awaited "better evidence." ${ }^{36}$ A year later, the title-page of a tract announced its candid expectations: A Brief Relation Of several Remarkable Passages of the Jewes, In their Journey out of Persia, and Tartaria toward Jerusalem. [...] Printed in the second Month, and hoped-for Year of Israels Restoration, 1666 (1666). In New England John Davenporte understood these journeys to be the fulfillment of Daniel 12.4. Increase Mather's punctual sermons, he wrote in 1667, were "preached in a time when constant reports from sundry places and hands gave out

[^124]to the world that the Israelites were upon their journey, from sundry Forreign parts in great multitudes." "W.G"'s following preface testified that "not only Protestants, but Papists, Jews, Turks, Mahometans, and other Idolaters do expect some great Revolution of Affairs, as Travellers that have been among them do relate." ${ }^{37}$

## The Mixed Perspective of the Merchant Community

The conjunction of merchandise and experiments that Sprat reports accords with the more mundane truth that along with commodities merchants bore news, and they were bound to have a wide variety of attitudes toward the information they encountered and passed on. The perspective of Christian merchants on the Sabbatian movement was influenced principally by two factors, one antisemitic, one pragmatic. The antisemitic axiom that Jews are motivated by an amoral lust for money and an ambition to drain it from Christian communities was as powerful in early modern England as elsewhere. The merchant Richard Baker reviled "the blood-sucking Jews" as the "Horseleeches of every Commonwealth." ${ }^{38}$ This prejudice drew strength, however, not only from the Christian assignment to Jews of usury, a sinful and useful practice, but also, more subtly, from the importance of especially Sephardic Jewish commercial routes throughout the Mediterranean. ${ }^{39}$ The cited sources document in ample detail that the movement of papers between merchants included not only bills of exchange and paper currency, which was be-

[^125]ginning to displace coins and specie, but also manuscript newsletters, which circulated from Turkey in the south to Amsterdam in the north and whose nodal points were Smyrna and Leghorn. For English traders in the Levant, the desire to infiltrate and capitalize on the routes of Jewish merchants was complicated by concern that the Sabbatian movement might compromise the crucial Jewish role in maintaining the flow of commercial activity. Newsletters from Smyrna to Leghorn reported Sabbatai's capitulation to the Turkish sultan, perhaps even his apostasy, in various terms but with a common emphasis: "and tis well if [his devotees] so escape, but twill bee some tyme before [they] can regaine their C[redit] which is noe small Detriment to trade." "[T]hose people will suddenly returne againe to theire sences, \& Trade will reuiuve, for'tis not to bee expressed how farr they were gone in delusion." "Here is now greate hopes trade will suddenly much amend the Jewes returneing very eagerly again to their callings." "[T]hay now begin to Selle and promise to follow Tradeing as before, which they had totally Neglected, diuers haueinge sould their houses and Jewells to bee in a readynesse for the Jerusalem voyage." ${ }^{40}$

This concern was not limited, however, either to merchants or to their newsletters. In fact George Wither, no merchant, looked to the mercantile community itself to allay his scepticism about reports that they who "call themselves Israelites" are "now repairing to possess the inheritance of their Forefathers": "For, we have yet received no Letters, that I hear of, from any of our Merchants or Factors trading in or near those parts." ${ }^{41}$ Albeit concluding with a non sequitur, Oldenburg reported that "the Jews at Amsterdam as well, as in other places, doe resigne their houses, resolved to repaire for Palestina with the first conveniency. It may be, they will doe so for want of Trade in Holland." ${ }^{42}$ A New Letter Concerning the Jewes, already cited,

[^126]reported that in Constantinople, "the most part of the Jews here meddle no more with Trading, but prepare to go for Jerusalem" (1). In Smyrna, "our Trade has been of late much obstructed in these parts, all the Jews being in a kinde of distraction upon the arrival of Sabadai." ${ }^{43}$ At Jerusalem, the followers of Sabbatai's prophet Nathan abstain "not onely from all Vanity, but from Merchandizing and Trading; and especially from Exchange (which Nature terms to be meer Usury) [...] this change of heart [...] is not only so in Judea, but also at Legorn and Venice." ${ }^{44}$ Meanwhile, letters are received in Leghorn from the Jews of Alexandria "to send them no more Business, they will have no further thoughts of it, but of higher Matters. ${ }^{\prime 45}$ News of Sabbatai even made its way to merchants as far removed from the Mediterranean as India: "All the Jewes of Holland are going for Jerusalem they saying they haue a King there." ${ }^{46}$ And Nathanael Homes surveyed the current state of affairs, as well as the paper media that sustain it, with the anticipant eloquence of the last things: "As for the present year 1665 (within five days now expiring) I have not medled with the occurrences thereof; because of them, Mens Pockets are full of Letters; their Hands full of Gazetts; their Eares full of Reports and Tidings; and their Eyes sufficiently perceive that the Jewes cease Trading, pack up, and are Marching." ${ }^{47}$

By this point, readers may be experiencing misgivings that the repetition of phrases and formulations in these several writings detracts from their documentary value because it reveals that the sources overlap. But the standard of value in this inquiry is not objective confirmation by independent testimonies, but the thickness of a palimpsest that has been written over from different directions

[^127]to form a "network" of, precisely, overlapping sources - in other words, the evidence of papers in circulation.

If any single figure can be said to have been at the centre of this network, it was the indefatigably optimistic Petrus Serrarius. Born into a wealthy Walloon merchant family and baptized Pierre Serrurier in the French church on London's Threadneedle Street, Serrarius abandoned his orthodox Calvinism sometime before settling in Amsterdam, and he remained committed to millenarian theology for the rest of his life. Serrarius became acquainted with Spinoza in Amsterdam, and after his excommunication by the Jewish community Serrarius aided Spinoza in establishing ties with Amsterdam millenarians as well as with English intellectuals like Oldenburg. Many of the far-flung notices of Sabbatai's movements were written or mediated by Serrarius, who published on millenarian topics in French, Dutch, Latin, and English. Nothing suggests more concretely his geographical centrality to the foregoing threads of information that compose the web of Sabbatai's publicity than the following passage from a letter he wrote to Oldenburg from Amsterdam in July 1667: "As for the Jews their hope revives more and more. Those of Vienna having sent an Expres to Adrianopolis, do writ, that their Man doth affirm, to have spoken with Sabithai Sebi and found him, not turned Turck, but a Jew as ever in the same hope and expectation as before. Yea, from Smyrna by way of Marcelles [Marseilles] we have, that at Constantinople the Jews return to their fasting and praying as before: and so doe some here likewise." Of Jesus Christ he adds: "Many will allow him a kingdom in heavon, but not on Earth. This, they conceive, is and wil remain, their fashion: but other was the Expectation of the Saints at all times." ${ }^{48}$

Sabbatai's time marks as well as any the moment when modern communication networks came into being through the intersection and overlapping of papers that bore information in sufficient quantity to draw attention to itself as such. My subject has been not only

[^128]the Sabbatian network, but also the way it was constituted by several other networks of major, long-term historical significance, whose coalescence was contemporary with the evanescent flowering of the Sabbatian phenomenon. Some of these networks have emerged explicitly in the course of this discussion: the collection and surveillance of political intelligence by the modern state; the ambition to assess what's constant in nature by surveying and comparing its multitude of variations; and the virtual tracings of actual exchange circuits whose repetition over time invited the label of "trade route." The value of focusing on the moment when networks of information coalesce, before the movement of papers solidifies into the stasis of informational categories, may be that we glimpse their component kinds as they bleed together, distinct but inseparable from each other. In any case, this is what I've suggested regarding the political interests of royalists and Puritans; the religious interests - I use the term advisedly - of Jews and Christians; and the mercantile, new philosophical, and millenarian expectations of those whom we've learned to separate out into the categories of commerce, science, and superstition. From the elevated vantage point of an informed historiography, perhaps this diversity can be concentrated into a categorial distinction between the material and the spiritual whose modern trajectory has been toward separation.

In his utopian community of knowledge production and consumption, Francis Bacon called those who collect information from around the world and convey it to Atlantis "merchants of light." Actual merchants would be unlikely to recognize their practical exertions in this metaphor, but it reminds us that the networks of information that spring up during the Enlightenment are virtual spaces of enlightenment.

The pieces of paper that compose these networks are themselves virtualizations of talk whose insubstantiality enables communication beyond the scope of actual speech. Contemporaries knew this. Is not writing, asked Martin Billingsley, "the very mouth whereby a man familiarly conferreth with his friend, though the distance of thousand of miles be betwixt them?" William Fulwood called a letter
"nothing else but a declaration, by Writing of the minds of such as bee absent, one of them to another, even as though they were present." ${ }^{49}$ Perhaps it was living in an emergent print culture that gave people enough distance from their accustomed practice to see that the effect print was having on writing was akin to the more evident effect writing had had on speech. One by-product of this recognition was the conceptualization of oral communication as a distinct medium, as "orality" or oral culture. ${ }^{50}$

The case for what was not only gained but lost by the technologies of writing and print has in our own time been made most eloquently by Walter Benjamin. "The art of storytelling is reaching its end," Benjamin writes, "because the epic side of truth, wisdom, is dying out." "Every morning brings us the news of the globe, and yet we are poor in noteworthy stories," for "storytelling is always the art of repeating stories." A new form of communication confronts storytelling. "This new form of communication is information. Information "lays claim to prompt verifiability." "If the art of storytelling has become rare, the dissemination of information has had a decisive share in this state of affairs." ${ }^{51}$

The art of storytelling can be felt to give way to writing and print over the longue durée of the early modern period; Sabbatai Sevi's moment captures that process as it were in a single instant. From the perspective of the longue durée, Benjamin writes that "the resident tiller of the soil" and "the trading seaman" are the "archaic representatives" of the storyteller. Three centuries earlier, Sprat had similarly invoked ""the ploughs of husbandmen" and "the voyages of merchants," but for him these represent not an immemorial and van-

[^129]ishing archaism but the forward-looking gleaners of nature's rarities. Benjamin sees these things from a great height, which allows him to evoke the feeling of a before and an after. Sprat writes in the midst of an ongoing process. The subject of this essay, also written from the middle of things, is the information conveyed by the merchants of the Levant, whose truth both solicits verification and reiterates the wisdom of the ages. The following passage captures this doubleness: "those people the Jewes, according to certaine and credible information, are at this time assembling themselves together into one body from out of all countreys, wherinto they have been driven with a resolution to regaine the holy land once more." ${ }^{52}$

[^130]
# People and Paper in Ninthto Eleventh-Century Egypt 

Nelly Hanna<br>American University in Cairo

Medieval Egypt is at the heart of two major collections. First, the Papyrus archive which contains about 350,000 to 400,000 multilingual written texts dating from Pharaonic times to the medieval period, around 50,000 of which are in Arabic. The papyrus collection also includes numerous deeds written on paper, since the switch from papyrus to paper took place around the ninth to tenth century. After that date, only paper was used. Second, the Geniza archive of the Jewish community of Fustat, consisting of about 350,000 to 400,000 papers dating roughly from the seventh to the thirteenth and fourteenth centuries, mostly in Judeo-Arabic and Arabic. Together, they total more than 750,000 papers covering a timespan of about a millennium ${ }^{1}$ and reveal a continuum from late antique writings in Demotic or Greek to deeds in Arabic after the Arab conquest of Egypt in 642. Combining these two archives, and

[^131]going beyond religious or linguistic communities, gives us a broad geographical perspective of the place of the written word in Egyptian society and helps to position the archives in a historical framework. The sheer number of these texts invites us to consider the wider picture that might explain their creation. Clearly, explanations such as the appearance of the printing press, associated with a surge in written texts in European history, do not fit the bill here. The introduction of the printing press in the nineteenth century was certainly an important development, but we need to think of other explanations in the present context. ${ }^{2}$

Various reasons can be put forward to explain the number of written texts contained in these archives. Firstly, technical innovations like the invention and spread of paper in the eighth and ninth centuries, gradually replacing the more expensive papyrus, have been cited as a factor behind the ninth-century explosion of written texts associated with the "golden age" of the Abbasid Empire. ${ }^{3}$ Secondly, extensive writing has been associated with empires themselves, including the Abbasid Empire (750-1258), which needed written texts to run its bureaucratic machine and to keep its provinces under control. Both these factors may have played a role in the number of written texts. However, these archives predate the Islamic empires (whether Umayyad, Abbasid or Fatimid) as well as the academic texts of eighth- and ninth-century Islamic scholars by several centuries. The bulk of the texts in the Papyrus and Geniza archives come neither from the offices of imperial chanceries which employed professional writers nor from religious or monastic establishments. Although the Papyrus and Geniza archives contain deeds that had originally come from chanceries, these papers were recycled

[^132]and used for other purposes. They attest to the fact that the written word was not limited to administrative officials or scholars but was diffused well beyond imperial and religious institutions.

The following pages address the question of how a premodern society could create this amount of written texts. The focus is on social rather than institutional factors, on the people who made use of the written word, and how and why they did so. In other words, the social and cultural aspects of writing are brought to the fore. The paper pays attention to the period from the ninth to the eleventh century, which was particularly rich in archival papers, with special reference to deeds and letters that are datable and are part of personal or family archives, providing a better focus on the written word at a given moment in time. At the same time, it shows the many common traits shared by these two archives and by the deeds of these three centuries and the deeds of earlier periods.

Finally, the geographical aspect of the two archives allows interesting comparisons, given the fact that the Geniza archive essentially deals with an urban population mainly centred in Fustat whereas on the whole, the Papyrus collection deals with a provincial and rural population, with a significant portion of the papers hailing from specific regions like al-Fayum, an oasis about 100 kilometres away from Fustat. This difference in location reflects a difference in socioeconomic standing. The people living in provincial and rural areas were often more modest than the traders and merchants living in Fustat who have been brought to light in studies on the Geniza archives. The papers left by these people from the provinces are particularly significant because they indicate that writing was not the sole prerogative of urban centres; and that between the ninth and eleventh centuries written texts were used among a more modest, provincial or rural sector of Egyptian society. By including rural and provincial populations, we therefore get a broader view of the way in which the society of this time made use of the written word.
S.D. Goitein's work has shown that the majority of papers in the Geniza archive deal with business matters. This confirms the significance of writing in the context of a commercial society. The impor-
tant family archives mentioned below, in both of the two collections, deal with commercial or economic matters. The Jewish merchants had wide networks extending eastwards and westwards, to India and North Africa, an indication of the importance of international trade, especially in the eleventh century, and the prosperity it brought to those who were involved it in. Letters written to partners, lists of goods, instructions to employees, problems with transport, litigation regarding money matters, all of these things formed part of the lives of these people. Family archives, such as those of the Ibn Awkal family, active between the 980s and 1076, contain a large number of deeds and letters which cover four generations. This successful merchant had an extensive commercial network extending to Palestine, Iraq and North Africa. His complex international network can explain why he employed secretaries and scribes to help him manage it. ${ }^{4} \mathrm{He}$, like numerous other long-distance merchants, enjoyed both wealth and a high social status, he had slaves in his household, and stood at the top of the business hierarchy in terms of wealth and status.

The letters and deeds dealing with business matters were neither limited to merchants in international trade nor to persons active in Fustat, the main commercial centre of Egypt. Papers in the Papyrus archive of the same period indicate that various sorts of business, at times large, at times small, were recorded on paper not only in provincial towns in Egypt, but also in rural areas.

The Papyrus archive, for instance, contains a large number of papers relating to the town of Fayum, an important textile centre with a significant production and trade in cloth. The archive of a

[^133]ninth-century family of cloth traders, the Banu Abdul Munim / Abu Hurayra family, studied by Yusuf Raghib, contains a large number of papers covering some four generations. This family archive can be used to compare the scope of the activities of a merchant in international trade residing in Fustat to that of a trader in a provincial town. The activities and geographical sphere of the Banu Abdul Munim / Abu Hurayra family - ranging from Fayum where the cloth was made to Fustat where it was sold - were more restricted than those of Ibn Awkal. However, what they had in common was their use of written communication as an important tool for trade. Like Ibn Awkal, Abu Hurayra regularly exchanged letters with his partners in Fustat. His business had its complexities, which included dealing with agriculturists, organizing transport to Fustat, seeing that the cloth was sold, and so on, but his sphere of action was limited, and consequently not comparable with the Fustat merchants who had partners abroad and shipped their merchandise to faraway destinations. ${ }^{5}$

The Papyrus collection also sheds light on the practice of writing in rural areas within the period of the ninth to eleventh centuries. Although one would not expect villagers to have made much use of paper in the early medieval period, the Papyrus archive gives a different perspective, by showing not only individual papers related to rural areas but also family archives, involving different members of a family, or encompassing more than one generation. Jean-Michel Mouton has studied the family archive of the three Banu Biham brothers, who resided near Fayum, in a village called Damuyah. This family left 39 papers dating from 992 to 1029 dealing with economic matters, which include seven contracts, and receipts for taxes and the sale of agricultural products. Indeed, it was common practice for tax payments to be put down in writing, as we know from the hundreds of tax receipts that the collection contains. But these people

[^134]also put their other dealings down on paper, such as the purchase of a house and the sale of agricultural products. ${ }^{6}$ One would imagine that in a rural context, an oral contract would suffice for the sale of agricultural products, especially in view of the fact that oral contracts were and are legal in Islamic law as long as they are properly witnessed. In fact, the Banu Biham were not alone in this practice since written contracts in rural areas were not uncommon, as shown by the many deeds published by Adolf Grohmann. The contracts he published not only include deeds of purchase undertaken in villages, but also deeds between close family members such as husband and wife where one would expect that an oral contract or an informal understanding would be sufficient. ${ }^{7}$ However, the use of written contracts in rural regions should not be considered evidence of widespread literacy as this is unlikely to have been the case in such areas. Much more likely is the scenario we see in the work of Jennifer Cromwell on Jeme (Djeme) and an eighth-century village scribe in Upper Egypt who left many papers. ${ }^{8}$ This scribe undertook to write contracts and fiscal deeds on behalf of the illiterate villagers; nevertheless, he was not the only person in the village who could write. In fact, Cromwell not only identified some 40 sets of handwriting within this archive, of varying levels of skill, but also the handwriting of a couple of women.This is not unusual. Recent publications show an ongoing trend of letter writing, by women to other women or to their male relatives, from late antiquity to early Islam. ${ }^{9}$ The letters in the Abu Hurayra/Banu Abdul Munim archive as

[^135]well as those of the Geniza merchants have another feature in common which sheds light on the way that paper was used and on why it was so widespread. Many of the letters dealt with business matters but they were not limited to this; although trade was an essential part of their correspondence, the letters include a lot of private and family content. The letters of the Geniza merchants often mentioned family and friends, and referred to a variety of personal matters, like the writer's health, the difficulties of travel or quarrels with a family member. Likewise, Banu Abdul Munim/ Abu Hurayra's letters contain family news, such as the announcement of a death, a family quarrel, complaints from his brother that he and his sister did not have any wheat in the house and would Abu Hurayra please send them the wheat they need, Abu Hurayra's advice to a young husband not to stay away from his wife for too long because this caused her distress, and so on. ${ }^{10}$

This feature is relevant insofar as it sheds light on the attitude that was held towards writing; what is more, it is an additional factor that could go to explain the volume of paper that the archives contain. Without doubt, writing was a tool that traders and merchants used to run and control their business, but these family letters show that writing was also a tool of communication, to swap family news and make friendly exchanges with one's work partners. In other words, these people used the written word for other purposes than their livelihood; and these papers, containing family matters and swapping news, were a significant part of their culture. Exchanging letters was a common practice in both urban and rural locations, both before and after the Arab conquest.

What does all this mean? In a couple of articles published some years ago, I suggested that the words "literacy" and "illiteracy" were

[^136]not sufficient for an understanding of premodern societies. Instead, we need to see the broad spectrum and the many types of variation between the two terms. ${ }^{11}$ I was referring to the early modern period, but this model can be applied to earlier centuries too. In the light of the Geniza and Papyrus archives, it is appropriate to stress another aspect, notably the people who needed the written word and preserved these papers, aware of their content, but not able to read it. It is unlikely that the level of literacy was high. One literate person in an entourage could serve a large number of illiterate people. This is what some of the village deeds suggest, especially when they involved women who had someone read them out for them.

One further explanation can be put forward for the extensive writing and existence of family archives. Papyrologists have uncovered ample evidence showing that in the centuries prior to the Arab conquest of Egypt in 642, family archives were a common practice, among persons who had large estates (the Zenon archive), as well as those with smaller businesses (the Aurelius Leonidis archive). This fourth-century archive in many ways reminds us of the ninthcentury archive of Banu Abdul Munim / Abu Hurayra in spite of the five centuries that separate them: both were traders; both bought flax from villagers and sold it to craftsmen; both had to deal with other flax traders; both lived in relatively close proximity, in flaxgrowing, textile-producing regions; both used writing to record their dealings. ${ }^{12}$ Their similar conditions led to similar practices.

There is also a continuity from late antiquity to the Arab conquest in the existence of family archives that include both business matters and private letters between family members and friends. If we set aside the issues of both language (whether these letters are in Demotic, Aramaic, Coptic or Judeo-Arabic) and religion (Coptic,

[^137]Jewish or Muslim), we can see a continuous and uninterrupted line of such letters and family archives for about a millennium. ${ }^{13}$

These factors offer a partial explanation for the volume of the Papyrus and Geniza archives of medieval Egypt; they help us to better understand these treasures that have come down to us and the societies which created them.

[^138]
# The Expansion of Finance: Comparing Paper Credit in Shakespeare and Defoe 

Natalie Roxburgh<br>University of Hamburg

As Fernand Braudel points out, in the Early Modern period, credit as such was ubiquitous, at least if one accounts for the way transactions were undertaken amongst merchants in very specific networks. However, money markets took a bit of time to develop, and their expansion was uneven across Europe, as finance implied radically new ways of understanding value. Braudel points to a north-western dispersion of financial practises in the Early Modern period, beginning around the thirteenth century. "As time went on," he writes, "the money market moved towards Holland, and later London." ${ }^{1}$ Regarding the development of money markets, "[w]hat was universal [...] was the emergence of people willing to advance funds, and of networks of money lenders [...]. Every time we come across any information about this, usury appears to be alive and well; and this was true of every civilization in the world" (ibid.). The uneven development of money markets - and the financial instruments and know-how that accompany them - also comes with different attitudes about what constitutes economic value. In what follows, I will suggest that literary texts are particularly relevant for economic history precisely because they emphasize economic value as a social negotiation. Literary texts may or

[^139]may not portray the past in a way that historians would view as realistic, but they often represent conflicting cultural perceptions of finance, and these attitudes are tied to the development of money markets as well as to the willingness to participate that Braudel emphasizes.

Two of the most canonical Early Modern British authors, William Shakespeare and Daniel Defoe, produced works that are replete with financial themes. Both refer extensively to contemporary credit mechanisms and for this reason reflect cultural anxieties about, and a fascination with, the rise of finance as a dominate way of producing value. Indeed, in literary criticism, we often discuss a difference between price and value in order to illuminate this anxiety. ${ }^{2}$ What is important here is that the price of something is often not the same as how it is valued in social terms, and this is often reflected in disparaging remarks about the dominance of credit and increasing prevalence of money markets. Interestingly, Braudel's seminal three-volume study, which carries the English title The Wheels of Commerce, contains 17 references to Defoe on credit but none on Shakespeare. This short paper will discuss the way paper credit is represented in a key work of Shakespeare (which contrasts greatly to that of Defoe) to illuminate the importance of ideological changes in Britain, a transformation often discussed in terms of a north-western dispersion of finance and money markets, and which is connected to what historians have called the "financial revolution". ${ }^{3}$

Shakespeare's The Merchant of Venice, first performed in 1605, features a nobleman who defaults on a loan offered by a merchant, Shylock. The play - which is anti-Semitic in its representation of the Jewish money-lender - contrasts different attitudes towards credit and

[^140]usury, and it suggests that southern developments in banking and finance were distrusted by Early Modern English people. Just over a century later, Defoe would publish multiple texts, both fictional and non-fictional, on how to manage credit, works which take for granted the prevalence of practices represented as being a problem in Shakespeare's play. ${ }^{4}$ What happens to attitudes about finance in the century spanning Shakespeare and Defoe? There is an ideological sea change between the works of these authors, and yet in both we observe how doctrines, practices, and know-how about finance and accounting are present. By examining literary texts, which are invested more in representing a play of social perspectives than they are in portraying facts or actualities, one observes that it is also an attitude toward finance and paper credit that spreads to the Northwest.

The British financial revolution took place in the late seventeenth and early eighteenth centuries in the general aftermath of the Glorious Revolution of 1688, much later than the development of money markets in Italy and Holland. The Exchange Bank of Amsterdam, which issued paper notes, would eventually be supplanted in terms of its influence by the Bank of England in the eighteenth and nineteenth centuries. What was significant about the Bank of England was that it was - from its establishment in 1694 - a private company backed by the Parliament. It coined its credit into paper money to solve the state's money shortage problem as well as to raise money for war by servicing a national debt through the issuing of credit contracts (combining the state bond with the bill of exchange) that functioned as money because they were endlessly transferable. ${ }^{5}$ By 1760, the Bank of England serviced about 70 percent of the British national debt, but this institution took time and political negotiation to develop. ${ }^{6}$ In the first decades after the Bank was established,

[^141]Defoe played a role in arguing in favour of English public credit in his 1710 An Essay Upon Public Credit, and these arguments promoting a credit system inform his fictional writings as well. ${ }^{7}$ Robinson Crusoe, published in 1719, puts paper (in particular, in the form of an accounting ledger) in the centre of the early part of narrative. ${ }^{8}$ Through texts we would now call both fictional and non-fictional, Defoe worked out why credit as a form of accounting underlying the paper contract can be rendered trustworthy, and he helped his readers to understand this, too.

In his 1726 non-fiction work, The Compleat English Tradesman, the merchant is elevated to the status of the gentleman, which would have been offensive to some readers still in the middle of the eighteenth century, as credit and money markets were seen as threatening to aristocratic ideology. This text is a fascinating one, as it focuses on behaviour and reputation (132), offering advice on when to marry (93), how to deal with bankruptcy (53), and which pleasures are acceptable (81). Most importantly, the manual teaches the reader how to behave. Well-managed credit, which by the 1720s is essential for trade, is ultimately more important than what is actually produced, and the paper accounting ledger is fundamental to the tradesman's conduct. Defoe, reflecting an attitude supportive of the development of paper credit in particular, is often read and cited by historians such as Braudel for the reason that he emphasizes the know-how of finance. We will not linger on Defoe's works here, as his affinity with well-managed credit is already well documented; rather, we will compare this relative ease of integrating credit and markets into social contexts to a period in Britain in which this integration was far from smooth.

To get a sense of cultural attitudes over 100 years before, one might compare positive attitudes toward well-managed credit in

[^142]Defoe's writings to Shakespeare's The Merchant of Venice, whose plot is well known. Antonio, a gentleman who does not even know the whereabouts of his own ships (his assets) on the seas, requires capital, and he takes out a loan from Shylock to help his friend Bassanio court Portia, an heiress. Antonio defaults on the loan and, as per their agreement, Shylock demands a pound of his flesh. To save him, Portia dresses up as a lawyer and intervenes through the law. In the end, Shylock cannot collect the pound of flesh because nowhere in the contract does it state that he can also collect blood. This impossibility renders Shylock's case null, and he is driven from the town. In other words, he is not able to enforce the contract, and his capital along with his social standing - is nullified.

This play is correctly read by literary critics as reflecting antiSemitic and anti-finance views. ${ }^{9}$ It is worth pointing out that the play nonetheless contains information on how finance works. Unlike some contemporaries who saw finance as a sort of mischievous alchemy since it creates value out of nothing, this play describes the paper credit contract that is backed by the law, which was already having an impact on the English state. It is important to note here that financial paper is not mere paper; rather, it is paper backed by legal contract, and contracts are formed by negotiations. Paper credit is the culmination of a negotiation, an abstraction that entices one to forget the social manoeuvring required. The Merchant of Venice captures this negotiation well, and it shows what happens to financial capital when it is not possible to legally enforce a contract.

First, the play contrasts Bassanio and Antonio in terms of creditworthiness. Bassanio admits: "I have disabled mine estate / By something showing a more swelling port / Than my faint means would grant continuance" (1.1.123-126). ${ }^{10}$ While his capital investments are less easy to quantify, Antonio nonetheless has a more

[^143]promising capacity to repay. He tells Bassanio: "Thou know'st that all my fortunes are at sea / Neither have I money nor commodity / To raise a present sum. / Therefore go forth - / Try what my credit can in Venice do" (1.1.177-80). So, from this very early exchange, we already get a glimpse of what Craig Muldrew calls a culture of credit, even though this culture is more limited than it would be later in the eighteenth century when Defoe was writing. Muldrew argues that eighteenth-century financial practice entailed "a reordering of notions of community relations towards a highly mobile and circulating language of judgment." ${ }^{11}$ Antonio represents an aristocratic value system; the amount of capital he has to his name is questionable, but, in terms of his reputation, he is nonetheless creditworthy.

What we do not yet observe here, and what we find all over Defoe's oeuvre, is what Margot C. Finn calls the character of credit. That is to say, a notion of trust that comes from a character's behaviour is not present. Finn, looking at the 1770s, writes: "While early modern debt relations had been predicated on conceptions of mutual trust, modern consumer credit was shaped most decisively by notions of personal character. [...] Perceptions of personal worth, in turn, registered the successful use of goods and services obtained on credit to construct creditworthy characters. Credit thus reflected character, but also constituted it." ${ }^{12}$ Shylock, who holds a grudge against Antonio for the latter's opinion on usury, nonetheless carefully assesses his financial risk by stating that "Antonio is a good man" (1.3.12). Here, it is important to mention that he does not mean Antonio is virtuous or has a virtuous character, which is what the gentleman or gentlewoman audience member would assume. The meaning is inherently economic: Shylock trusts that he will get a return on his investment because of Antonio's status. Shylock says: "My meaning in saying he is a good man is to have you understand

[^144]me that he is sufficient" (1.3.15-16). He then goes on to lists Antonio's probable assets (1.3.17-26). These include ships in Tripoli, the Indies, Mexico, England, and elsewhere. "There be land rats and water rats, water thieves and land thieves - I mean pirates - and then there is the peril of waters, winds, and rocks. The man is, notwithstanding, sufficient. Three thousand ducats; I think I may take his bond" (1.3.22-26). Here, in non-eloquent language (compared to the high register of the aristocratic characters), we witness Shylock undertaking an in-depth assessment of his own risk. But this is not through an idea of character, which - as both Muldrew and Finn point out is an eighteenth-century phenomenon.

Furthermore, while The Merchant of Venice examines what is required to establish a credit relationship, it also reveals different ideas about money lending, and thus different moral economies, to use a term made famous by E.P. Thompson. ${ }^{13}$ Shylock's moral economy is much closer to the world Defoe was writing into being whereas Antonio and Bassanio share the moral economy of aristocratic communities. Bassanio tellingly tries to get Shylock to dine with them, which can be interpreted as a gesture of friendship. This, however, contradicts the money-lending practice in which people participate not out of disinterested friendship but rather because of the possibility of profiting through an interest-bearing loan. In fact, the rejection of the dinner invitation is a telling part of how credit relations work: Moneylending is not based on communal obligation. Rather, it is grounded on an idea of mutual self-interest and a system of contract and law that ensures that everyone plays by a fair set of rules. In fact, Shylock hates Antonio because "[h]e lends out money gratis and brings down / [t]he rate of usance here with us in Venice" (1.3.41-2). In other words, Antonio lends money to his friends without interest, which complicates the market for credit of people looking out for themselves in terms of financial interest. This is where the grudge comes from between the two characters. It is, after all,

[^145]Antonio's deep friendship with Bassanio that leads him to take out a loan in the first place: "I neither lend nor borrow / By taking nor by giving of excess, / Yet to supply the ripe wants of my friend / I'll break a custom" (1.3.58-61).

The clash between these social perspectives allows Shakespeare to teach the audience a bit about conflicting attitudes towards finance in his time, attitudes that often entail unfair anti-Semitic stereotypes. Shylock refers to a time in the past when Antonio had berated him for usury. They have a debate over Biblical precedent for making resources breed and have very different views of the Book of Genesis. Antonio thinks, for example, the domestication of animals is God's work whereas Shylock thinks it is man's, and breeding livestock is compared to compelling money to breed ( p . 122). Despite the clear anti-Semitic reading that this passage encourages, we should note here that it is Antonio, and not Shylock, who suggests that the loan is actually between enemies rather than friends. "If thou wilt lend this money, lend it not / As to thy friends; for when did friendship take / A breed for barren metal of his friend? / But lend it rather to thine enemy / Who, if he break, thou mayest with better face / Exact the penalty" (1.3.128-33). This enmity is where the pound of flesh as interest derives, and this deviates from normal financial practice because it signifies revenge rather than gain from contractual lending in the form of interest. Further, this reference to flesh, including blood, was a common metaphor in mercantilist doctrine, and thus it gestures towards contemporary balance of trade arguments rather than capital produced through the interest-bearing contract. ${ }^{14}$

While it is certainly true that The Merchant of Venice, unlike Defoe in the 1720s, contains an attitude very sceptical about credit in the form of paper contract, I would like to propose here that the six-teenth-century England Shakespeare observed was already very much transformed by credit transactions facilitated by paper. Robert

[^146]Brenner argues that most feudal lords transformed their households in order to make them more profitable, and by the end of the sixteenth century, there were very few feudal lords who did not engage in financial practice, and this also entailed a new form of state. ${ }^{15}$ When we examine The Merchant of Venice not only through its ideology but also through its representation of the doctrines, practices, and know-how about finance and accounting, we see that the dispersion of finance from the South had already started to take hold.

While certain aspects of what is represented in Shakespeare's play do not hold up with actual practice, it nonetheless captures the social negotiation. The credit contract within the play works through a logic that will allow paper credit to flourish - and even become money - in Defoe's time: through trust that the loan will be repaid, and that the terms of the paper contract will be fulfilled. This requires infrastructural change, however, and the trust in the institutions backing credit contracts, such as the Bank of England. But, even in Defoe's time, attitudes toward finance were still very diverse, as there was still a very entrenched moral economy that sought to argue that gaining interest on a loan was against the principles of community. One observes this in many conservative texts written over the course of the eighteenth century. Shakespeare was invested in describing this great clash, as he saw the new form of state described by Brenner coming into being.

At the same time, Shakespeare's play asks us to imagine paper credit as a personal negotiation. This will change by the eighteenth century, when paper credit becomes paper money, and trust is virtualized. While Bank of England notes did not circulate much outside of the British Isles, their technological attributes influenced global commercial trade. These paper contracts - bills of exchange mixed with government bonds - formed what Christine Desan has called a "fiat loop" insofar as the government began to accept their own credit instruments in the form of tax payments (319). These debt

[^147]instruments issued by the state become money through the rise of public credit, finance and money markets becoming not only acceptable but also increasingly necessary. The character of Shylock would begin to disappear by the time the Compleat English Tradesman was drafted because of the institutional changes outlined in Desan's book. These changes, however, tellingly require people to behave with a character worthy of the credit transaction. The price versus value distinction may persist into the following centuries, but how to pay for things becomes less of a question as the credit contract becomes solidly embedded within state institutions, thus depersonalizing and virtualizing money: the very opposite of a pound of flesh.

# A Window onto the World of Merchants: An Analytical Grid for Interpreting Notarial Contracts in the Seventeenth and Eighteenth Centuries 

Cátia Antunes<br>Leiden University

Abstract
Early Modern historians have long been fascinated by the mercantile world of the late medieval and early modern periods. The reason for their fascination can be ascribed to the wealth, cosmopolitism, social capital and political clout that many of these merchants (mostly men) projected onto their compatriots at the time and continue to project onto historians today. However, there are obstacles to entering the world of early modern merchants as sources for certain geographical areas are abundant, but rather scarce for others. Urbanized regions like the Italian Peninsula, the Low Countries or the former Hansa towns seem to offer better insights into the world of merchants than areas plagued by natural disasters or where different mercantile practices prevailed, such as in the Eastern Mediterranean or the Iberian Peninsula (with a significant difference between the sources to be found for Portugal and those available for Spain). This article proposes an analytical grid for the interpretation of notarial contracts worldwide (based on the experience of Amsterdam) in order to better understand the social intricacies that framed the world of premodern merchants.

## 1. Introduction

Early Modern historians have been fascinated by the mercantile world of the late medieval and early modern periods. The reason for their fascination can be ascribed to the wealth, cosmopolitism, social capital and political clout that many of these merchants (mostly men) projected onto their compatriots at the time and con-
tinue to project onto historians today. However, there are obstacles to entering the world of early modern merchants as sources for certain geographical areas are abundant, but rather scarce for others. Urbanized regions like the Italian Peninsula, the Low Countries or the former Hansa towns seem to offer better insights into the world of merchants than areas plagued by natural disasters or where different mercantile practices prevailed, such as the Eastern Mediterranean or the Iberian Peninsula (with a significant difference between the sources to be found for Portugal and those available for Spain). ${ }^{1}$

Historians have traditionally used two types of primary sources to gain insights into the world of merchants: on the one hand, administrative and institutional records and, on the other hand, personal papers. Administrative records, such as taxation lists, have been paramount in determining social hierarchies in urban settings and enabling the reconstruction of merchant groups and their whereabouts in specific towns, while institutional papers, such as court cases, have been particularly useful in providing insights into how merchants resolved their quarrels with neighbours, partners,

[^148]competitors and, often enough, the state. ${ }^{2}$ Other types of institutional records, such as those held by foreign merchant communities, are also of interest, particularly for comparing and contrasting the way in which autochthonous and foreign traders responded to institutional and market changes, and applied mechanisms of self-regulation. ${ }^{3}$ Merchants' personal papers, however, are harder to come by, while, as well as being difficult to find, personal and mercantile correspondence, accounting books and ledgers are rarely complete. ${ }^{4}$ Developing narratives based on these rather partial sources consequently demands great contextualization and even greater interpretative models on the part of historians.

There is, however, a third type of documents that may complete the information provided by administrative, institutional and personal papers, or be used as an alternative when other types of documents are absent from contemporary archives. In most western European markets, merchants registered some of their public and private affairs with public notaries. These contracts, at times referred to as notarial deeds, include not only legally binding contracts, but also witness reports and documents for future memory. Here, I propose to use the window provided by seventeenth- and eighteenthcentury notarial deeds from the city of Amsterdam as an example to propose an analytical grid that may be applied to notarial collec-

[^149]tions elsewhere. This analytical grid provides a tool for comparing and contrasting merchant behaviour in Europe and overseas because the typology, function and durability of these contracts signify and translate specific personal and business relationships that endured throughout the trading life span of particular merchants, mercantile partnerships and firms, or even merchant communities. ${ }^{5}$

The data at the core of the proposed analytical grid include only contracts directly connected with trading activities (freight contracts, insurance, short- and long-term commercial loans, powers of attorney, and protests of bills of exchange). The sample comprises a total of 17,654 contracts for the period between 1580 and 1776 , covering only transactions registered in the months of March, April, September and October. The choice of these months reflects an attempt to cover the diversity of businesses, weather patterns and annual rhythms in a port connected to various European sub-regions (the Baltic, the North Sea, Iberia and the Mediterranean) and overseas spaces (the North Atlantic, the Caribbean, the South Atlantic and Asia).

The added value of bringing notarial deeds into a historiographical conversation about merchants and their social and economic contribution to early modern societies is that these deeds open up new avenues of research and offer nuanced answers to long-standing historiographical questions regarding trust, reputation, risk assessment in personal relationships and business opportunities, as well as giving some clues to the underlining resilience of some merchants vis-à-vis others in times of war and peace, economic crisis and prosperity, and political, social and religious turmoil.

This article starts by providing insights into the typology of contracts to be examined, with particular attention being paid to their economic and relational nature and the function they played in the

[^150]daily lives of early modern merchants in Amsterdam. The second part of the article turns to the proposed cross-sectional grid for analysing contracts and examines how these sections can help reconstruct and exploit the daily experiences of Amsterdam merchants. The article closes with a few suggestions for possible uses and added value of this analytical grid for future research.

## 2. Typology of Notarial Contracts: Insights into Trade

When departing from the notarial collection of the city of Amsterdam, similar to many other notarial collections worldwide, researchers are confronted with two types of mercantile deeds. On the one hand, they have to deal with notarial deeds of a commercial nature and that were issued as a means of regulating trading activities. These include freight contracts, insurance policies (mostly maritime), commercial credit and powers of attorney for activities directly linked to mercantile business. On the other hand, the notarial collection in Amsterdam also includes deeds of a financial nature, the majority of which were meant to mediate capital investments between different merchants and financiers. These financial deeds include personal loans, mortgages (for urban dwellings and Atlantic plantations), bills of exchange (for payments of commercial debt and diversified financial services, for transferring capital across different currency zones and economic systems, and for transfers of bullion), and purchasing notes for shares or bonds in commercial, chartered and joint stock companies, or national and international public debt.

The sample at hand focuses exclusively on the deeds that can be considered commercial in nature, as well as a few financial deeds that can be directly connected with trading activities (such as bills of exchange for payments of commercial debt and transfers of currency or bullion for payment of commercially incurred costs). Graph 1 illustrates the distribution of these various notarial instruments in terms of typology and chronology from the end of the sixteenth to the late eighteenth century. The trend evidenced here
supports the general view that Amsterdam became the centre of European trade during the 1620 s, while its role as a major trading hub declined after the War of Spanish Succession (1701-1713). ${ }^{6}$

Freights, insurance and powers of attorney illustrate a wellknown pattern of diverse portfolio investments by individual merchants and their partnerships and firms. These diverse portfolios were supported by the Baltic trade's co-dependency on the Iberian and Mediterranean trades, with grain, wood and victuals from the Baltic being exchanged for wine, fruit, wool, iron, salt and Atlantic and Asian products, the latter mostly acquired in the Iberian markets. Amsterdam was not only a centre for the import and export of these products, but also and primarily a staple market that articulated the redistribution of a varied range of products to different consumption and proto-industrial markets. ${ }^{7}$ The variety in the business portfolios of the Amsterdam elite was further enlarged by the careful combining of bulk and luxury products, a meticulous and efficient manner of managing risk and curbing uncertainty (Figure 1).

The city transformed from a mid-size port in the 1590s into a main European commercial hub in the 1650s, and was the core of the western European capital markets until the end of the eighteenth century. ${ }^{8}$ In the sample under analysis, we can see a move from contracts reflecting direct (maritime) trading activities, such as freight contracts, insurance and commercial loans, towards an emphasis on contracts supporting the agency and financing of mid- and, most notably, long-distance trade, such as powers of attorney and bills of exchange.

[^151]Figure 1
Distribution of Notarial Deeds from Amsterdam, 1580-1776


Source: Stadsarchief Amsterdam (SAA), Archief van de Notarissen ter Standplaats Amsterdam (NA), inv. 5075 (based on a sample of ( $\mathrm{n}=$ ) 17,654 commercial contracts collected by the author).

When moving from trading into the management of trade, as evidenced by the typology of the commercial contracts, Amsterdam also witnessed a significant social transformation. The city's dynamic commercial elite of the seventeenth century evolved into a well-established urban oligarchy, a social position that was partially the result of the many business endeavours that transitioned from commercial enterprises into partnerships and firms with portfolios focusing on the commercial and financial management of long-distance business affairs and the provisioning of financial services. As capital accumulation followed the commercial successes of the 1600s, traders' upward social mobility stagnated, with the elite becoming richer, but also more closely knit than ever before. Those individuals, referred to as 'regents' (regenten), transformed their vested social capital into political positions of importance in the city, the province of Holland and the Dutch States General, thus aligning some of their goals and ambitions with those of the state. ${ }^{9}$

[^152]
## 3. Analytical Grid: Commercial Notarial Contracts and Commercial Connectivity

The general inferences regarding typology that we attain from analysing a sample of notarial contracts offer only an incremental view of our current knowledge of Amsterdam's trading characteristics and how these changed over time. By focusing, however, on the function of the contracts, we zoom in on the relationships that grounded the experience of early modern merchants. Freight contracts bound merchants to shipowners, skippers and crews hired to transport specific products, the property of the merchant or his partners, on pre-determined routes. Alongside the products to be traded and the routes to be followed (including the ports to be called at), freight contracts explained in detail the price to be paid for transporting each product, expressed in weight or dimensions, and the number of days stipulated for calling at ports, as well as the bonuses to be offered to skippers and crews if they exceeded the contractually agreed performance. While many freight contracts seem to have been random, the majority ( $53 \%$ ) bound the same merchant to the same skipper or shipowner on more than five occasions during a particular merchant's span of business. The frequency of contracting between the same partners appears to be linked to a trend of specialization as, by the 1660s, most skippers in Amsterdam specialized in specific routes or ports rather than products. ${ }^{10}$

Maritime insurance policies followed the pattern of freight contracts, with increases in the latter corresponding to increases in the former. However, we need to be careful in taking this correlation for granted as it has been demonstrated that a very significant share of the maritime insurance underwritten in Amsterdam was intended to protect foreign trade not calling at or directly related to Amsterdam. This was certainly the case for the trade between Portugal and

[^153]Brazil, ${ }^{11}$ as well as for the trade organized in French ports. ${ }^{12}$ In these types of contracts, single merchants or their firms attained contractual protection against unexpected perils at sea in a relationship that linked merchants and insurers for the duration of a voyage. As in the case of freight contracts, however, many merchants ( $67 \%$ ) used the same pool of insurers for the same maritime routes over the years they traded, a phenomenon already ascertained in the case of trade to and from West Africa, ${ }^{13}$ even though a broader choice of insurers seems to have become available in the eighteenth century. This shift would seem to be directly related to, on the one hand, the capital accumulation that facilitated the entry of a larger pool of insurers into the market and, on the other hand, to the increasing anonymity of the financial markets, which signified a broader offer of insurance services. ${ }^{14}$ Nevertheless, relationships between merchants and insurers were as close as those between merchants and shipowners and skippers, although merchants more often shared their social position with insurers and some shipowners who also happened to be merchants than with skippers belonging to a specialized maritime working group.

Commercial loans linked merchants to a pool of capital investors comprising fellow merchants and family members who provided liquidity for trade, when needed, and a broad range of specialized investors who supplied the merchant community with enough capital for new trading endeavours. These loans were usually short-

[^154]term and lasted for the duration of the voyage, with the longest loan registered for the Atlantic being for a total of twelve months. Interest rates varied between the seventeenth and eighteenth centuries, depending also on the destination of the ships and fleets, and with the main factors influencing them seeming to have been war, embargoes and agricultural production crises, particularly of grain. Interest rates on three-month loans varied from $5 \%$ to $20 \%$, while rates on twelve-month loans were between $8 \%$ and $25 \%$. These variations are insufficient, however, for an overall reading of developments in the market for commercial loans and should be interpreted cautiously, given that interest rates between family members were often higher than those offered in the market and may indicate that families were used only as lenders of last resort.

Powers of attorney connected merchants to fellow merchants and commercial agents by transferring the right to take specific decisions or particular action from the merchant to his partner or agent. These instruments were used mostly outside the domestic markets of the Dutch Republic and fulfilled three essential commercial management functions. Firstly, they were used to request partners and agents to purchase or sell specific products in a local market. In these cases, the instructions ranged from a simple request for one product to rather complex requests for multiple products and multiple routes in what we may see as an attempt to decentralize coordination of trading flows in order to improve market connectivity. Secondly, powers of attorney were used as a means to collect debts in a particular market, with partners and agents being instructed to collect debts incurred in commercial exchanges and arrange for these payments to be transferred to Amsterdam, or as a means to settle the principal's debts in the local Amsterdam market or a market subservient to the first market (with colonial markets being a case in point). The third function was to transfer commercial gains from a specific market to Amsterdam or to a third market, where the principal in Amsterdam may have had commercial interests or debts to pay. ${ }^{15}$

[^155]The social and economic relationships that we can identify from powers of attorney are twofold. On the one hand, these instruments contractualized the relationship between a merchant or firm in Amsterdam and partners elsewhere in the world, reflecting relationships between relatively equal social actors (although partners may have had varying degrees of wealth). On the other hand, they also cemented relationships of agency, whereby the agent, regardless of his wealth or social standing in the local market, was at the service of the Amsterdam merchant, and was often paid a salary or received commission for his services. These relationships came closer to a contract for service or labour (as in the case of freight contracts with skippers) than the more equal relationships established with partners and were more comparable to the type of relationship established with insurers. These latter powers of attorney are also the notarial contracts offering information closest to what we find in collections of merchant letters.

Bills of exchange appear in the notarial archives in a rather distorted manner because they were not registered separately by notaries. What historians find in the notarial archives, therefore, are documents protesting unpaid bills of exchange. From these protests, we can reconstruct not only the bill itself, but also all the endorsers and endorsees, the markets the bills pertained to and the 'routes' they took. In these protests, we can discern a multitude of chains of implicit trust between the different endorsees and for different commercial transactions, ranging from payments for products, freights, insurance, wages and financial services to advancements of liquidity for payments abroad or simply transfers of payments (in different currencies) across different markets. Even where bills of exchange existed in their own right, some of them were directly associated with commercial loans as the loans were the contracts in which the terms

[^156]of agreement between merchants were set out, while the bills of exchange were the instrument that enabled the stipulations regarding transfers of capital from one market to another to be completed. ${ }^{16}$

The function of each contract can still be cross-referenced with the time span linking the contracting partners, and hence connecting merchants, skippers, shipowners, insurers, debtors, creditors, partners and agents. If we assume that the longer the period of time for which people are bound, the longer and more enduring their relationship will become, we may argue that freight contracts linked merchants and skippers for the term of a voyage, and that the same applied in the case of insurers. In the case of commercial loans, though, men were contractually bound for anything between three and eighteen months. This period could increase significantly if the debtor had insufficient liquidity to repay the principal or settle the interest due on the debt. In those cases, and where creditors did not call in debts, merchants were bound to their debtors and creditors for longer than the period stated in the original contracts. Conversely, longer periods of contractualization meant, in principle, longer-term and consequently more stable relationships, but also a higher risk of default and the chances of having to denounce defective behaviour by a party.

In the case of powers of attorney where agency stood central, long-term relationships started with specific temporary tasks, usually designed to test the agent's capacity to meet the principal's demands. Where agents responded satisfactorily, principals moved to increase the tasks and the time span encompassed by the powers of attorney, as well as their frequency, thus reflecting a relational process of building trust step-by-step. On the other hand, powers of attorney destined for partners abroad tended to be broader in scope and endure for longer periods of time.

[^157]The time span for bills of exchange was determined at the outset as all parties agreed on the period for which the bill would be valid before the final discount. If, however, bills were not paid upon maturity, some creditors were willing to extend the maturity of the bill, whereas others were not. This means some bills endured beyond the date that had been agreed at the start of the relationship. In these cases, new deadlines and new terms (mostly interest rates) were renegotiated and implemented. For the purpose of this analytical grid, however, it is of the essence to differentiate the bills that were more likely to be prolonged from those that were not. Looking at the present sample, we can see that two types of bills tended to be prolonged when debtors failed to make payment. Tolerance was afforded to first-time defaulters or to debtors who in the past had ultimately paid their bills after a default. In these situations, firsttime offenders and men able to build on their past behaviour, and thus reputation, had more chance of having their unpaid bills renewed. On the other hand, men with less of an established reputation or who had been discredited in the past had less chance of having their bills renewed. In such cases, however, about $12 \%$ of the bills ended up being settled from liquidity provided by commercial loans from within the family, with the interest rates on these loans exceeding the rates that would have been paid on the bills if they had been extended when the protest was issued.

What we may infer from these explorations is that different types of contracts had different functions in regulating commercial relationships of Amsterdam merchants. The intensity of these commercial relationships was further determined by the time span encompassed by each contract (Figure 2), which in turn reflected the levels of connectivity between the different actors. Intense commercial relationships comprised a specific level of economic involvement between different merchants, skippers, insurers, creditors, representatives and agents, translating simultaneously into different degrees of social engagement and co-dependencies. ${ }^{17}$

[^158]Figure 2
Merchants' Commercial Relational Grid according to Notarial Contractualization


## 4. Analytical Grid: From Commercial Contractual Connectivity to the Social Relational World of Merchants

The functions and time span of notarial contracts reflect the commercial relationships that ensued between merchants, skippers, insurers, creditors, agents and partners. In these contractual relationships we can decipher the levels of connectivity between different actors for specific functions and over time. The intensity of these commercial relationships underlined connectivity that was used, in turn, to interpret social relationships in the mercantile world. Figure 3 suggests how, by departing from a range of commercial notarial contracts, historians can view commercial functionality over time and establish how these factors of analysis translate into levels of commercial connectivity. At the same time, different levels of connectivity translate into a diversified breadth of social re-

[^159]Figure 3
Notarial Contracts as a Reflection of Commercial Connectivity and Social Relations

lationships that can be asserted through in-depth reading and interpretation of the notarial contracts.

Figure 3 suggests that commercial notarial contracts can be divided by function as being set up for task oriented activities (freights, insurances, loans, powers of attorney for agency, and bills of exchange) or for representation (powers of attorney for representatives). The duration of tasks and periods of representation vary between 6 weeks (freights, some insurances and some bills of exchange) and eighteen months (loans and some bills of exchange), with significant variations according to typology of contract. The correlation that arises between a type of contract, its function and time span, translates into brackets of different connectivity between the contracting partners, simply posed here as low, medium and high (see table 1), being these three words used differently according to the triangulation of type of contract $x$ function $x$ time span. Keeping in mind the function of a specific contract, its duration over time and the connectivity between the contracting partners, we may assess the interactions arising in the world of merchants as incidental, substantial or consequential (Table 1). Here we define incidental as a relationship that arises only at times, often by chance, and is less important, or of reduced importance, when compared to other relationships being considered here. Substantial we take as qualifying relationships that arise with regularity, by (pro)active choice of (at

Table 1
From Notarial Contract to Social Relationship: An Alternative Window into the World of Merchants

| Type of Contract | Function | Time Span | Connectivity | Social <br> Relational |
| :--- | :--- | :--- | :--- | :--- |
| Freight contracts | Task | $1-12$ months | Low | Incidental |
| Insurance | Task | $1-12$ months | Low | Incidental |
| Commercial <br> loans | Task | $1-18$ months | Medium | Substantial |
| Powers of attorney | Representation | 12 months + | High | Consequential |
| Bills of exchange | Task | 6 weeks- <br> 12 months | Medium | Substantial |

Source: SAA, NA, inv. 5075 (based on sample of ( $n=$ ) 17,654 commercial contracts collected by the author).
least) one of the partners and with significant impact on the durability of the exchange/relationship. Consequential, on the other hand, qualifies relationships that are often recorded within the same universe of partners and which durability tends to have a strong and definitive influence on future decisions. These three types of interaction constitute the pillars upon which merchants and their contracting partners built their relational sphere socially and in the market place.

A question that arises when applying this interpretative grid is whether the social relationships that can be inferred from the commercial relationships of historical actors appearing in notarized contracts pre-dated the contract and were hence the initial reason for choosing the contracting party or whether, alternatively, social relations arising from notarized contractualization resulted in new, renewed or stronger bonds between commercial actors. Further research is needed to make a broad claim about this question, although existing literature would suggest that the selection of partners was likely to have been based on existing social relationships. ${ }^{18}$

[^160]In the case, however, of powers of attorney, and particularly powers of attorney where agency was commissioned, we can see a gradual increase in the degree of responsibility bestowed upon the agent, and that this was proportional to the fulfilling of several contracts satisfactorily. In other words, the better the results the agent delivered, the higher the chances that he would see his commission being re-issued, broadened or intensified. ${ }^{19}$

Table 1 reflects the end result of the use of the proposed analytical grid on commercial notarial contracts to assess the relational world of the contracting parties. Freight contracts often portrait low levels of connectivity as they signify incidental encounters between merchants and skippers. However, incidental encounters could turn substantial when merchants turned to the same skippers for freights over a period of time. Labour specialization in the eighteenth century, changed the nature of incidental encounters into substantial relationships. Insurances follow the inverse pattern of freights, as incidental relationships can be read from this type of contracts particularly in the eighteenth century, when the anonymity of the financial markets increased, as did the pool of insurers offering services in the market. Commercial loans, however, imply a substantial relationship between the parties. Although essentially regulating a task, these contracts held the longest duration of all commercial contracts, binding people for the longest period of time and generating a medium levels of connectivity. The exception in this case being the commercial loans signed between close family members. The close relationship between commercial loans (the contract) and bills of ex-

[^161]change (the means through which payments of loans and regular commercial payments were made) portrait similar social relations, though bills of exchange tend to endure shorter periods of contractualization than the commercial loans. The only exception here the extended deadline for the payment of defaulting bills. The powers of attorney appear as the contract that forged the highest connectivity and cemented the most consequential social binding. It was so in the case of long-standing powers of attorney for agents, but the more so for powers of attorney that regulated representation of the principal in Amsterdam by a partner in a foreign market.

Table 1 opens a new window onto the world of merchants by associating the information and knowledge acquired by the study of notarized commercial contracts with their economic function and duration over time as a means of assessing inter-personal connectivity and laying the path to a meaningful understanding of the social relations underpinning commercial relationships. This window is intended to be supportive of other types of merchant documents, such as merchant letters, or used as an alternative when all other available archives provide little to no information on specific mercantile groups. The advantage of this interpretative window is that it enables us to consider merchants in their own individual right, while simultaneously also providing sufficient grounds for presenting more general arguments about the group as a whole.

## 5. Notarial Deeds: Broadening Insights into the World of Merchants

The use and broad application of notarial deeds, including commercial and financial contracts, in economic and social research broadly reflect the personal choices, economic connectivity and social relational world of early modern merchants. In this sense, these types of primary sources offer a unique window into the lives and behaviours of early modern entrepreneurs worldwide, given that notarial contracts pertain not only to activities in Europe, but also
elsewhere. The fact, therefore, that notarial deeds also exist outside Europe offers additional potential for global comparisons.

The analytical grid proposed in this article offers insight into how the mercantile cosmos developed. Notarial contracts not only ascertain the perspective of the merchant, partnership or firm regarding business transactions, but above all situate specific merchants in a field of economic and social relationships and behaviours. It is in this relational sphere that notarial contracts can contribute as a juxtaposition or alternative to what merchant letters, accounting ledgers, court cases on commercial disputes and urban taxation lists can offer, given that these documents normally exclude a view of the merchant as part of a broader social group. The use of a cross-sectional analytical grid ultimately questions and relativizes historians' insights into the world of merchants because, often enough, what seems to be important to historians was of less importance to Early Modern merchants themselves. From this analysis, we can see how the contractualizing of commercial relationships greatly increased merchants' freedom to select their partners, thus contributing at times to the estrangement and replacement of family, and concomitantly increasing and facilitating the familiarity of strangers. ${ }^{20}$

[^162]
# The Civilization and the Journeys of Paper in the Medieval and Modern Ages: Some Remarks for a History on the Side of the Papermakers 

Renzo Sabbatini<br>University of Siena

I have taken the opportunity of the conferences and initiatives of Paper in Motion to go back and reflect on the issues relating to the history of paper: first, the culture of work handed down through the centuries: and now, with this work, the need to enhance - admittedly in new ways - the centrality of human labour in manufacturing and marketing paper, to keep the "micro historical" and the broader European and global horizon of interconnections closely linked. ${ }^{1}$

I would like to start with a couple of preliminary remarks, without any intention to analyse deeply the various historiographical positions on such wide-ranging issues. First of all, the reference I made to "microhistory." The use of superscripts is meant to underline that I do not intend to take up a paradigm that has certainly produced remarkable results but which has also provoked varied and sometimes divergent reflections among the scholars who have resorted to it. Let us think about, on one hand, the innovative contributions in the 1970s and 1980s by Carlo Poni, Carlo Ginzburg, Giovanni Levi, Edoardo Grendi (just to mention the most famous ones); ${ }^{2}$ volumes and essays that on the other hand will be comple-

[^163]mented by their reflections developed starting from the 1990s up to recently. ${ }^{3}$

The second instance, in the light of the very terms I have chosen to indicate it, that is to say a global horizon of interconnections, aims at avoiding on the one hand, the flattening on a an increasingly rarefied and trivialized Global History and on the other hand wants to recover a kind of drive for the factual concreteness of Connected Histories. ${ }^{4}$

A decade ago, in her dense and insightful essay that drew on the work and theoretical approach of Ginzburg and Levi, ${ }^{5}$ Francesca Trivellato already questioned the future of compatibility between the Italian Microhistory and the Global History. The two authors have recently returned to reflect, through essays and interviews, on the respective declinations of micro history. ${ }^{6}$

Without subscribing to any schools ${ }^{7}$ (not least because of the risk

[^164]of ending up embracing a trend), I simply wish that on the wave of initiatives such as Paper in Motion a new season of research on paper civilization will see the light with new and stimulating perspectives and a general rethinking of what we are supposed to continue to call "Paper History", always bearing in mind the need to give it new methodologies, objects of study and contents. New or at least capable of taking up in an innovative way issues that were already presented or at least had been hinted to some decades ago, trying to fill that kind of historiographical continuity gap that in my opinion characterizes temporary research activities (to be completely true, not only relating to paper studies).

One cannot but positively welcome the results of the conferences organized by the International Association of Paper Historians, both in the area of the increasingly technologically advanced study of the watermarks and in the analysis of paper as an object with the help of highly advanced scientific instruments, and also in the review with a global vision - of the most varied uses of paper products, and finally in the adoption and study of the latest production processes.

Nevertheless, for the medieval and modern age, let's say for the age of handmade paper, I personally feel a sense of dissatisfaction because behind the technical or historical and economic aspects as well as behind the commercial flows, I don't always see the decisive presence of the human factor: the culture of work, the gender division, the migration of the masters, the relationship between the papermakers and the community at first small (and then increasingly larger) where paper mills were located, the attitude towards technical or process innovation, the transmission of know-how from one generation to the other. In short, the presence of subjectivity - individual and collective - embedded in the sheet of paper.

This is why I'm particularly fond of a photo, that I have reproduced several times, ${ }^{8}$ portraying the central moment in the activity of a hand-operated paper mill, the one that sets the pace of production and involve three of the leading characters: the actual paper

[^165]maker, who shapes the sheet, the "ponitore" and the "levatore." But, in the other rooms of the paper mill there are some women, other grown-up men and some young boys and girls. The photo, courtesy of the Magnani Archives and the Museum of Paper of Pietrabuona di Pescia, cannot be precisely dated, but it seems taken in the 1940s. Handmade paper was still manufactured following the ancient techniques for a market that was certainly smaller, but that wasn't yet the niche it is today, fuelled by an activity that has nothing to do with the past, neither regarding raw materials nor the production times.

The civilization and the journeys of paper between the Middle Ages and the Modern Age: I have chosen a very general title that can allow just for a few considerations, perhaps trivial, but often times neglected by a historiography that is getting more and more specialized and focused on the quantitative aspects.

The journeys of paper, then. Real and long-distance journeys of paper as a support for handwritten and printed words: books and lighter and more flexible instruments of communication such as notices, gazettes, newspapers, posters. Long journeys of paper as a packaging material for colonial products; and also much shorter journeys for the several uses of paper as wrapping material in everyday life, because the value of waste paper makes transport over long-distances quite expensive (and because the lower quality paper sheets are the first ones to be manufactured in the countries that are still obliged to import white paper). Not to mention the use of paper and cardboard in manufacturing activities (let us think about the packaging of pieces of fabrics to be shipped to the international markets) up to the use of special, large, perforated sheets to improve the hygienic conditions in silkworm nurseries during the peak of Italian silk production in the seventeenth and eighteenth centuries. But the journeys of paper also in a broader sense, as the movement of men, skills, know how, information, culture as underlined by the recent exhibit at the Riccardiana library. ${ }^{9}$ And as illustrated by the archival

[^166]exhibition opened in Prato (and in other related European archives) during the meeting focused on the journeys of paper seen as a commercial and financial tool. ${ }^{10}$ Paths that historians can reconstruct because after the journeys the papers rest in the archives.

What would the last centuries of the Middle Ages and the entire Modern Age have been in Europe (and even in the New World) without paper? How is a paperless world still thinkable today, even in this process of dematerialization (moreover, more announced than realized)? It is not out of place, then, to give paper the praise it deserves. «Mille all'huomo arrecar commodi suole», says the lyrics by Francesco Stelluti, (hidden in a note of his translation of Persio) one of the founders dell'Accademia dei Lincei. ${ }^{11}$ From his native Fabriano, though now in decline as the capital of paper, Stelluti draws the image of the formation of the sheet; the essential elements are present: the rags, the milky suspension of the pesto in the vat, the master hand. And the verse I quoted completes the first quatrain, probably the best one even from the poetic point of view. The rest of the sonnet is dedicated to delineating the literary, educational and cultural use of paper and to glorify its capability to triumph over time and to give immortality to human being. These are strenuous and scholastic verses.

And certainly even more strenuous are the verses on the use of paper published in 1630 in the anthology of his works by John Tay-

[^167]lor, who used to call himself «The water Poet». The poem, The praise of Hemp-Seed, had already appeared in 1620, in one of the publications that the peculiar individual followed personally and that were extremely appreciated by a large popular public. ${ }^{12}$ The use of paper, not only to write - as Taylor claims - is universal: it regards everybody, regardless of age, sex or social condition. After four centuries, the whole path of "Paper in Motion" sounds as a confirmation of this statement.

It would be out of place to do a kind of bibliographical review of the studies carried out in the last decades. But, I wish to take this opportunity to remember - certainly not out of a mere duty of gratitude to Prato - the volume of the proceedings of the $23^{\text {rd }}$ Week of the International Institute of Economic History "Francesco Datini", dedicated to paper and books: with its more than one thousand pages, it described the relationships, the communications and the debate that had animated an extremely rich Week so much so that thirty years later the volume is still an unescapable reference. ${ }^{13}$

On that occasion, the prologue was entrusted to such an eminent historian like Jean-François Bergier. I summarize his closing remarks, which are still extremely relevant: Which are - he asked - the merits of paper? Stimulating new uses and behaviours; contributing to the management of enterprises and states favouring a quality leap of bureaucracy; supporting accounting, commercial letters, letters of exchange; the scriptural material facilitating the development of the activities of the notaries and that offers a new dimension to the ad-

[^168]ministration of justice. Paper conveys information, collects the memories of scribes, businessmen, companies and the State. ${ }^{14}$ And, we can add pushing our look beyond economic history, paper keeps track of family and personal memories, of creative and literary writing.

For the Italian historiography, the Datini Week dedicated to paper and books arrived after a season of innovative works such as those by Ivo Mattozzi in 1975, who emphasised both the production and the trade of paper from Veneto, ${ }^{15}$ or those by Manlio Calegari, who started the research on the Genoa paper manufacture intertwining the technological aspects of a more functional working process and the ownership and lease relationships of the paper mills, as well as the outlets on the European market. ${ }^{16}$

As for me, in the volume of $1990,{ }^{17}$ and in my speech at the Datini Week, ${ }^{18}$ I had tried to outline some peculiarities of the manufacture of paper and the typology of the building, trying to imagine a kind of caesura between paper production and trade in the Middle Ages and those in the first half of the modern age: not a substantial technological difference but rather a more efficient organization of the production cycle in response to a new growing demand of paper following the development and the dissemination of printing. And I had also started

[^169]to lay the foundations for an analysis that had to keep together the articulation of production cycles (organized in phases envisaging some interruptions during the process) and employment (with a special attention to gender division) as well as the ownership relationships showing a variety of regulatory instruments. I was also posing the problem of the public intervention in a production that we could define as strategic. Finally, I had also drawn the attention on the relationship between innovation, quality and market as well as on the aspects of everyday life of paper craftsmen in the early modern age, starting from the peculiarity of the presence at the paper mill of the entire family and the phenomenon of migrations that led to the complex issue of the attitudes of the community, swinging from acceptance to isolation, with some peaks of xenophobia.

In closing, I will comment the latest contribution dedicated to paper trade in the early modern age: the "journeys of paper", precisely. But first, without any claim to exhaustiveness, I will do an overview of some texts that I deem significant, each one in its own way, because of the issues they touched upon. I would like to start underling the contribution made by the Fabriano conferences and the publications of the Fondazione Fedrigoni, for which you can refer to the volumes written or edited by Giancarlo Castagnari ${ }^{19}$ and to the recently published essays by Emanuela Di Stefano, ${ }^{20}$ Livia

[^170]Faggioni ${ }^{21}$ and Giovanni Luzi. ${ }^{22}$
Internationally, the synthesis volume by Richard Hills, ${ }^{23}$ that is nowadays a classic, certainly deserves to be quoted; even though, we should not forget the pioneering study by Donald Coleman, who in 1958 started from the observation that "much has been written about paper, and very little about paper industry." ${ }^{24}$ Fortunately, in the following decades, research has expanded toward the desired direction even though the risk of focusing more on paper as an object leaving behind the history of paper production and trade is still lingering.

The monography by Judith McGaw is extremely interesting; in her book, the author examines with great acumen the development of Berkshire paper industry in the nineteenth century, intertwining the process of mechanization of paper mills with social developments and changes. ${ }^{25}$ Structured as a technical manual, the book by the leading expert Peter Tschudin, was published in 2007 and translated into Italian in $2012 .{ }^{26}$

An excellent contribution regarding the use of the paper machine in France comes from the monography by Louis André, published in 1996. ${ }^{27}$ A French scholar who died prematurely, and who was for a long time the director and animator of the Musée des arts et métiers, André has been at the centre of two intense days of study, organised in memoriam, regarding the French paper industry "between history and industrial heritage."

[^171]As for Spain, I would like to pinpoint two volumes dedicated to very different aspects and moments of the Spanish paper manufacture and industry. José Carlos Balmaceda, a restorer, paper historian and leading expert in watermarks, in his book of 2004, investigates with acuity the contribution of the Genoa papermakers to the development of the Spanish paper manufacture starting from the fifteenth century. ${ }^{28}$ The study by Miguel Gutiérrez Poch, published in 1999, starting from an extremely rich and skilfully used archival materials, follows the evolution of paper industry in the Anoia area, analysing the transition from hand manufacture to the introduction of machines. ${ }^{29}$ A professor of economic history at Barcelona University, Gutiérrez has later expanded his research field to the entire Spain covering a time span going from 1750 to 1936. ${ }^{30}$

Finally, I would like to mention two interesting Italian contributions. The collection of essays Cinque secoli di carta, edited by Renzo Corritore and Luisa Piccinno in 2005, dedicated to paper manufacture in the area of Lombardy over a long period of time. ${ }^{31}$ The volume contains, among the others, the paper by Ivo Mattozzi on the dissemination of the Dutch cylinder and its social implications. ${ }^{32}$ And the monography by Augusto Ciuffetti that analyses the markets and the smuggling of paper raw materials in the Pontificial State between the eighteenth and the nineteenth centuries is also worth of attention. ${ }^{33}$

[^172]I would like to conclude my article with some broader and more precise remarks regarding the recently published collection of essays investigating paper trade in the early modern age, edited by Daniel Bellingradt and Anna Reynolds. ${ }^{34}$ The volume stems from a conference held in Erlangen in February 2019 and has the well-deserved merit to put at the centre of the research the essential and often understudied topic of the trade of such a strategic material: "Early modern Europe was a paper age - an age of paper production, of paper usage, of paper consumption, and also of paper trading." ${ }^{35}$ And it fulfils its task with varied and diverse contributions both geographically and chronologically and with relevant first-hand case studies. We would have expected a greater attention to the Italian case, even in the bibliographical references, which has not always been inattentive to the aspects of the European paper market produced in Italy.

The real strength of this scientific operation is undoubtedly its very broad disciplinary spectrum: the history of books, literature, the history of science, the history of communications, digital humanities, library sciences. ${ }^{36}$ And, in the pages of the Introduction, the economic history.

Only the history of paper was excluded from this list. And it is on this topic that Bellingradt focus his attention on the Introduction:

All' interno della storia della carta, tuttavia, l'industria della carta [...] viene solitamente descritta concentrandosi esclusivamente sulle complessità della produzione del materiale. Nell'evidenziare le complessità di questa arte, e in particolare per quanto riguarda le mutevoli tecniche di produzione e ge-

[^173]stione della produzione, è stata creata la conoscenza di un impressionante universo di cartiere, filigrane e formati di carta, e continua ad essere creato all'interno di una vivace comunità accademica. Ma queste attività di ricerca sono diventate scientificamente e accademicamente isolate negli ultimi decenni; il risultato è una sottodisciplina ausiliaria incentrata sulla tecnologia che, nella migliore delle ipotesi, afferma che la carta viene ovviamente venduta dopo la produzione. ${ }^{37}$
The perspective from which Bellingradt looks at paper history is undoubtedly that of paper trade, which is the topic of the volume. Nevertheless, we can only be fully and totally in agreement with the characteristics and the overall limits of studies like this. It is exactly the dissatisfaction I have personally expressed at the beginning of this article. As a scholar of history who is also interested in paper, rather than as a "paper historian" in the common and traditional sense of the word, I welcome the stimulus coming from these remarks and I do wish for a new paper history, revitalized by the historiographic sensibilities that animate - in interrelated research fields - the project "Paper in Motion", that in turns could be further enriched.

I am comforted in this belief by the considerations of an historian like Margaret Jacob:

Il volto umano dell'innovazione industriale è stato oscurato dalle condizioni materiali, ritenute sufficienti a spiegare il progresso dell'economia. Riporta il capitale umano nella storia e improvvisamente menti, libri, conferenze, programmi scolastici diventano centrali nella storia dello sviluppo economico

[^174]occidentale. Ci sono mancati per troppo tempo, e senza attori umani scompaiono la vitalità, la creatività, le domande incessanti e il ragionamento sperimentale di tentativi ed errori. Perché dovremmo impoverire così tanto le nostre storie e renderle molto meno interessanti? Perché trasformare qualcosa di così complesso come lo sviluppo industriale in un'astrazione ${ }^{\text {? }}{ }^{38}$
This is the very question, referred to the object of our study, that I want to repeat in the conclusion: why should we impoverish this history and making it less interesting? Let us bring the human subjectivity back at the centre of the history of paper, making it a real history.

In order to proceed in this direction, it could be interesting to carry out a critical analysis of the various "museums of paper" both Italian and European; ${ }^{39}$ an analysis investigating the documented historical basis used to make choices regarding the staging that must have certainly resorted to oversimplification and spectacularization in order to please a larger number of visitors. An approach to the museum form going beyond the purely aesthetic and artistic aspects, such as showcasing an activity of the past in a purely emotional form.

A more direct contribution to this breakthrough can come from a new season of archival works. If in the past the papers in the archives - both public and private - have been used essentially to

[^175]prove the existence of the paper mills, possibly discovering the date of birth and the transfers of property over the years, the time has come to find paper mill archives that allow us to get inside the buildings, to study the manufacturing process in all its scientific, technical, social, human aspects as well as those related to the culture of work. As of today, the archives that allow us to document hand paper manufacturing are not so many: generally, some traces still remain in the production sites that have gone on with machine paper production until today, ${ }^{40}$ or have stopped some decades ago. ${ }^{41}$

Two fortunate exceptions, which will enable fruitful research, are the Archivio storico Magnani, and the Archivio Cartiere Miliani Fabriano, among the leading Italian company archives. The first is kept at the Museum of Paper of Pietrabuona-Pescia (waiting to be definitely moved to the old paper mill Le Carte) and its inventory should be completed by the end of 2023, offering scholars an extremely rich research material starting from the last decades of the eighteenth century up to almost the end on the twentieth century. ${ }^{42}$ An even more relevant new research opportunity is offered by the Miliani papers, an asset inherited and handled by the Fondazione Fedrigoni Fabriano, whose documents starts from 1782. Needless to mention once again the well-known scientific activity of the Fon-

[^176]dazione in the field of watermarks and of the artistic use of handmade paper. ${ }^{43}$ I deem it useful to wish for a new investigation campaign regarding the culture of work. Evidences of the extraordinary potentials of the Fabriano documents were given, at the time, by Andrea Federico Gasparinetti in his bibliographical study on the protagonist of the relaunch of paper making in Fabriano, Pietro Miliani. ${ }^{44}$ As well as by the recent republication of that volume, enriched by an essay by Marianna Astore and the bibliographical notes on Gasparinetti by Giancarlo Castagnari. ${ }^{45}$ Yet, a lot remains to be done and the Archives could give many interesting answers to the questions of scholars studying hand paper-making and the work in the paper mills, researchers who see history as the science of life lived.

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## Review Articles

# Rethinking Luigi Einaudi. About a Recent Book on Economic Associationism in Liberal Italy 

Paolo Pecorari, Andrea Cafarelli<br>University of Udine

Three seem to be the most significant keys to reading Francesco Dandolo's fine book, Luigi Einaudi e l'associazionismo economico nell'età liberale, with an introduction by Maurizio Sella and essays by Filippo Sbrana and Valerio Torreggiani, published by Associazione bancaria italiana (the Italian Banking Association). The first reading key sees naturalism as synonymous with determinism (C. Barbagallo). The second one considers the socio-economic model, both Comtian and Spencerian as inadmissible. The third aims at leaving behind neo-voluntarism and at looking at the logical sense of the term in the historical and historiographical investigation. The three abovementioned reading keys should be accompanied by Veblen's theoretical contribution (quoted by Fanfani) to see how the American scholar doesn't defend an abstract theory of society but rather strives to shed light on the goals of human action within a specific cultural framework whose common thread, though underlying a complex interpretation, pays attention to several steps and various facets. More generally, Veblen doesn't just give a critical reading of the topic, but evaluates the contributions of the early German historical school of economics (Roscher, Knies, Hildebrand, Schmoller), warning that this is just a sort of cognitive step during which Veblen equally manifests his own neo-voluntarist personality, especially when he recovers the so called "criticism of the unbalance" between production and con-
sumption. The work initiated at the Laboratory of Political Economy founded by Cognetti de Martiis in 1893 (cfr. L. Einaudi) and attended by his students before and after graduation is a kind of "pendant". Thirty years later, Richard Ely recovers the relativist theory of the historians and the evolutionary thesis of Marx, in order to universalize private property and its socialization. In short, private property isn't considered as something intangible but rather as a bundle of those rights that are modified over time, with a general tendency to broaden the concept of nation and public utility.

Francesco Dandolo is familiar with the quicksand of such a quaestio on the interrelationships between naturalistic schemes and new realities, nor does he miss the substantial relevance of the problems embedded in an «Anglo-Saxon pro-liberalist perspective as an irreplaceable compass for interpreting and correcting the economic evolution». Not surprisingly, quoting both Einaudi and Galilei, Dandolo acknowledges their wording, clarifying (with his entire volume) the exact meaning of coeval scientific method and experimental method. The answer is that every purpose-directed human action implies a form of isolation whereas it is in the experiment/process that this is accomplished. Moreover, it is in the Galilean science that mathematics acknowledges the method of the new science as a content. It is not simply inductive, because induction serves as an orientation in the formulation of the hypothesis, whereas it is precisely through logical-mathematical deduction that the hypothesis produces the consequences which can be verified by the experiment itself. Dandolo's Galilean quote thus takes on a maieutic function and the same can be said for the direct interlocutors. On this point Luigi Einaudi agrees that there can be no economic history (indeed, history tout court) without distinguishing between idea and practice. More precisely, in order to do economic history, it is essential to possess the historical (and also economic) sense of things (C. Cipolla). Which doesn't mean that pure mathematics has in turn the ability to present reality. This synthesis of experience, mathematics and action, that is the essence of Galilean science, is something new "with respect to the logics of epistéme, even
though the elements of the synthesis come from the earlier philosophical and scientific culture" (G. Luzzatto). It is also worth noting that the antithesis between the experimental method and rationalism isn't proposed (or envisaged) by Galilei, who moreover knows that experience isn't deceiving. Furthermore, reasoning cannot replace experience but can only extend it by analogy from the known to the unknown. Nevertheless, experience constitutes the limit of human knowledge, which has to abandon the idea of reaching the essence of things. Hence, as Dandolo rightly believes, it follows that the interpretation of the socio-economic contexts cannot do without a rigorous method, placing the relevant problems at the centre, while intertwining various elements including the valorisation of resources, especially human ones; mutual trust among people; deposits and investments; the «attempts to elaborate the very possibility of scientific meditation: all historical issues that participate in the formation of an anthropological, economic and sociologic clinamen.

This ideological-doctrinal set can be complemented by the works of Francesco Ferrara and Luigi Luzzatti, both well-known liberals and liberalists between the $19^{\text {th }}$ and the $20^{\text {th }}$ centuries. The presence of two eminent personalities helps define the phenomenology of economic and social associationism and also sheds some light on the peculiarities of the Italian and European cooperativism: for instance, the experience of Schulze-Delitzsche and Raiffeisen, of Ketteler and Toniolo, whose action is characterized by openings that are not only cultural but also solidaristic, as it has been proven using other lines of argument by Droulers and Tramontin, Molette and Mattiazzo, Malgeri and Corsini. In particular, it may be added that a cooperative body, despite the fact that it can often inspire and enhance a strong ethical attitude in its members, from an economic perspective can only be judged for the specific services it can provide, which when combined to other groups or situations can be numerous and extremely helpful. In any case, cooperative bodies, when their norms and social structures are dictated by the relevant practical needs they have to meet, are deprived of any autonomous
principles that could differentiate them from any other ordinary commercial company (see the case of Federconsorzi investigated by A. Ventura).

Proceeding in medias res, it should be reminded that the abovementioned basic concepts of associationism are elaborated (and refined): from liberal capitalism to social peace, from full freedom to dialectic between collective representations of workers and entrepreneurs, from the primacy of work to the elevation of man, from intermediate bodies to the dialectic between the two sides of the industry. Which is compatible with the naturalistic option experienced in the already mentioned lab of Cognetti de Martiis and that shows the relations "of inspiration, not of school", binding the new American economists and the European critics, initially listened to for their criticism to lack of historical sense, and later abandoned in order to better adapt to the American doctrinal contributions, both in the field of psychology and economy and history. This doesn't prevent Einaudi from freely and solidly relating to the tradition of classical economic ideas: Smith, Ricardo, Marx, keeping John Stuart Mill on a separate chapter. And it is precisely along this track that Einaudi's thinking finds some links between liberalist economic history and social legislation, between cultures that are interested in the dignity of man and in the critical study of the classics, between political economy and morality. A clarification that helps us understand what he means by invisible hand or better to say, why Smith and his followers inherit the faith in the same invisible hand, that is to say the age-old realization of the human tendency to take care of its own good and to study its consequences for the society. Smith's optimism, therefore, isn't in the fact that he sees man as a righteous being but rather as selfish one. And there is more: for the homo oeconomicus this isn't an obstacle to social coexistence and human progress. But he thinks that a time will come when man will distrust the only individual flaw capable of rendering great services. And thus, selfishness is an engine opposing Platonic collectivism.

As to the latter, two convergences-divergences between Einaudi and Luzzatto emerge: the first one suggests the existence of a possi-
ble economic historiography, meaning that economic facts are guided both by external circumstances and individual temperaments; the second concerns the change triggered by new economic situations and their causes, focusing less on institutions and more on the economic process, including its nature and relationships. It can also be said that, apart from the true or false statistics, and leaving aside formulas and theories, at the very centre of history - religious, general, political, military - there is always man, with his flaws and errors, beliefs and misinformation: man, who wants to solve everyday problems which aren't just having a roof and some food, but also regard the social, political, economic and moral growth. (L. de Rosa). It is therefore man who must be first and foremost studied. And even more so, in connection with the problems of economic associationism. So, after agreeing on the need to recognize the historical importance of economic history, the problem of the place to be assigned to the history of economic thought is addressed, a key point of the different approach to economics, also underling the fact that for men such as Einaudi formal distinctions are not enough. According to Luzzatto «the most urgent problem is to encourage and guide young people toward research, underlining not only the most interesting topics but also the sources the authors can study in order to achieve better results ». In fact, the political structure and the economic composition of the society are closely and intimately coordinated and connected: it is no coincidence, as stated above, that laissez-faire and liberalism form a whole, while in the same inclusion, seen from the inside, the role of the historian becomes more positive (cfr. B. Croce). In order to solve the crisis of the contemporary society (that is mostly a moral crisis) an ethical reform, a political-juridical reform and an economic reform are needed. As to the latter, in its true form - that is to say the reform theorized by the classical English economists - it has been studied and defined as market economy with controlled free competition. The 'miracle' of the harmonization lies in the fact that man purposelessly and effortlessly achieves the profit of the society, which is to say the great and perfect harmony. The political and social conse-
quences of ideas and actions further separate political liberalism from laissez-faire, although it is easy to prove that hypertrophy is the enemy of State. And this is true even bearing in mind the difference between freedom seen as a practical ideal and freedom as a philosophical concept or as a consistent philosophical system. Galasso's studies on Croce shed a very important light on that.

In conclusion, Francesco Dandolo's volume brings into focus extremely interesting problems, points out new historical and historiographical issues and guides critics in the mare magnum of specialised bibliographic references.

## Book Reviews

## Book Reviews

Giampaolo Conte, Il credito di una nazione. Politica, diplomazia e società di fronte al problema del debito pubblico italiano 18611876, Edizioni di Storia e Letteratura, Rome, 2021, pp. XIII, pp. 114.

Giampaolo Conte's book, divided into three chapters - plus the introduction and the final considerations - addresses a fundamental question of economic and financial studies, treated extensively due to its importance in reality and in present society: public debt. The approach of the author, however, represents a turning point in the analysis of public debt management and sustainability, wishing to detach itself from the analysis methodologies of social scientists belonging to the field of economic-statistical studies, which have characterized the work of recent decades on this topic; and it has the ambition of providing a new interpretation regarding phenomena which, today more than ever, are relevant and in need of interpretation, namely the importance of the political credibility and reliability of a State regardless of its financial conditions.
The author "intends to deal with the events of the Italian public debt in the first post-unification phase from an eminently historical perspective, placing them within that basket of political, diplomatic and social problems of the years of government of the liberal Right" ( p . IX). The debt problem is placed within a broader framework in which the initiatives of Italian diplomacy are analysed "using a multi and inter-disciplinary approach, which goes beyond the purely economic field, embracing methodological elements typical of contemporary history and of international relations", with the ultimate aim of creating a homogeneous narration of the events inserted in a precise chronological order (p. IX).
The volume, which presents a solid endowment of unpublished archival documents and leading secondary sources, touches on key topics of the first phase of the history of Italy up to 1876: the birth of the liberal state; the political situation characterized by the liberal Right and the liberal Left; the social stratifications of the country; the question of the South, where the creation of profit caused the emergence of clear inequalities whose repercussions have been evident up to present time. This study mainly examines the liberal Right, i.e., that
set of personalities who had made the Risorgimento and who had a culture of the Savoyard diplomatic-military state, who find themselves, after the interlude of the agreement with France for the renunciation to Rome, in a country where there is a clear separation between the real and the legal country. However, the central theme of this research is the issue of debt, which, by the author, is defined as "a primarily political issue to the extent that it is politics that decides an increase or decrease in public spending, also and above all in deficit" (p.1).
The history of public debt and of debt policies, implemented by the various state actors, is closely linked to domestic and foreign policy factors and defines the social stratification of the Italian nation, its problems, the power struggles and the most important issues at international level, i.e. the issues of geopolitics and sovereignty. Therefore the thesis supported by the author is that public debt policy is a political choice that reflects clear class interests within society: the Italian State, therefore, was born in the awareness of grounding its own credibility on the ability to repay debts contracted for the wars of Risorgimento, the unification and the creation of that network of infrastructures useful for integrating Italy into the European context and into the capitalist world-economy of the $19^{\text {th }}$ century (p. 102). The liberal Right, therefore, through its objectives and, at the same time, instruments, i.e. order and the economy, gives up the possibility of cancelling the debts of the pre-unification states and those contracted during the unification process: in fact, the constitutive nature of the new Italian state was the desire to fully integrate into that model of relationship between state and capitalism typical of the advanced liberal states of Northern Europe, above all France and Great Britain, directly or indirectly interested in the process of Italian unification.
In the first phase following the unification of Italy we find a state governed by a small elite, generally made up of exponents of the richest classes, therefore the debt policy was to the advantage of the latter. The next phase, on the other hand, brings a radical change: in fact, thanks to the enlargement of the voting right, new social classes were born, which, in turn, expressed the desire for greater consideration; therefore, with the aim of legitimizing itself in the face of these emerging players in the society, the State favoured specific debt policies to meet the new needs, exploiting the debt for the purpose of nationalizing the masses.
The post-unification Italian state was born with a very low public debt, around $40 \%$ of GDP (Chart 1, p. 107), yet it was a nation on the verge of financial abyss: the size of the public debt, in fact, does not affect decisively the financial stability of the country compared to other European nations (p. 25). Italy had numerous other internal and
external problems which did not include the ratio of public debt to gross domestic product, but which could have crushed it. The most pressing issues were: intractable budget deficits; an almost generalized weakness of the administration; an unsuitable bureaucracy; unfair and absent taxation; the reactionary demands and the peasant malaise; banditry; the continuing problems of border defence against external threats. In a later phase, however, when the public debt of the country increased, Italy was considered as a credible state, by virtue of the measures adopted in the financial field. In this context, the role and capabilities of Italian diplomats are carefully underlined, as political action had to be supported by diplomatic action of the same level and quality: in fact, the ruling classes of the period in question were represented by capitalists, educated politicians and diplomats who, although in competition with each other, worked together to achieve certain common objectives.
The final chapter of the volume is dedicated to the theme of the management of the papal public debt, following the conclusion of the second war of independence, which demonstrates how a part of the delegation of the papal state becomes part of Italy, without, however, the willingness to recognize its sovereignty: this question raised a diplomatic problem which had to be resolved within the framework of foreign policy through the mediation of Napoleon III (pp. 81-99). The importance of the skills of the Italian diplomacy is analysed in depth by explaining this complicated negotiation, at the end of which the Italian State took charge of the papal debt, despite the fact that part of the country was not in favour of this solution, and moved the capital from Turin to Florence, as the result of a compromise which, in any case, would not have been a definitive solution.
The volume describes the encounter and the clash between different economic and social systems which are expressed even in the preunification phase in different economic and financial structures and public debt policies. The liberal Right governed a country that did not enjoy the trust of the European financial elites, therefore, the credit that the Italian nation had to achieve, even in the strict and technical sense of the term, was the same reliability at an international level. The author clearly describes the passages concerning the efforts of Liberal Right politicians in the cases of the management of the papal public debt and the negotiation of debts on international markets or on domestic markets, in an attempt to keep the Italian State afloat, which they succeeded.
Furthermore, Conte also manages to define the exemplary case of Naples, which represented a contradictory context with respect to the ideas of advanced Anglo-Saxon capitalism and of the entire European space: while between the sixteenth and seventeenth centuries, Spanish

Naples was a large financial centre in the Mediterranean, two centuries and a half later it was relegated to the rank of marginal reality (pp. 4748). However, the case of Naples, as demonstrated by the author through the re-reading of analyses by eminent scholars, retained its clear specificity as regards public debt, as each social class had the possibility of investing in cuts, even very small ones, of public debt.
The examples described by Conte present a phase of a longer lasting journey concerning the affirmation of modernity, brought about by a ruling class interested in defending the interests of a particular social class, but who, by realizing this mutation, transformed a country that did not enjoy the trust of the powerful States of the Old World projecting it towards the nation-building phase, although the final results were modest compared to those initially hoped for. The "responsibility" and "moral worth" of the liberal Right led them to "pursue their own goals at the expense of their popularity" (p. 101). In fact, the ruling class that governed from 1861 to 1876 was often accused of "excessive cynicism in the face of growing discontent in the country and perhaps of little passion" (p. 101). However, as Conte states, the men of the liberal Right must be recognized for "the firmness of their convictions and the unfailing tenacity applied in the achievement of the pre-established goals, despite the political price then paid" (p. 101). Achieving the balanced budget objective was a concern for prime ministers and finance ministers, aware that it was not just a question of "mere economic data but a result of great ideological value, in the belief that the moral program of the unification included its economic stabilization" (p. 101). The European geopolitical situation of those times required the achievement of this objective to consolidate the new Kingdom politically, financially and morally among the great European nations (p. 104). As the author states: "Despite the obvious difficulties that emerged in the management and recovery of a country suffocated by a desperate fiscal situation, the unity of the objectives pursued by the men of the Right was decisive in making the new-born Kingdom a respectable nation, with ambitions of a future international power" (p. 104). The political class of the Right, therefore, carried out a revolution, "silent but capable of preparing the country for the effective leap towards that model of industrial-capitalist society" which allowed a large part of the Italian population to emerge from "a condition of objective misery" (p. 104). Conte concludes his reflection by stating that "the foundations laid by the men belonging to the Historic Right in moral, ethical and practical terms have been an example on which the future of Italy and its position at the centre of the capitalist world economy has been built" (p. 104).

Matteo Nardozi

Gian Paolo Manzella, Europa e sviluppo armonioso. La strada della coesione europea: dal Trattato di Roma al Next Generation EU, il Mulino, Bologna, 2022, pp. 199.

The beginning and the conclusions that Gian Paolo Manzella - who has been studying European policies for several years, in his double capacity of expert and scholar - offers to the readers are the framework of the path (that is only retrospectively linear) that the European countries have been using to deal with the nowadays solid European cohesion policy for more than 50 years. The book retraces the change that took place in this period of time, from the financial, administrative, regulatory and institutional point of view. Particular attention is focused on Italy, one of the founding countries of the European Economic Community, characterized by a dual economic development and by a great number of eminent scholars who have been dealing with cohesion policy and its problems. The author quotes among the others Fabrizio Barca, Antonio Giolitti, Tommaso Padoa-Schioppa, Renato Ruggiero, who are also portrayed in a good selection of photographs.
The oldest references date back to the Messina Conference (1955) and to the Treaty of Rome (1957). Art. 2 mentions the "harmonious development of the Community and of its balanced and continuous expansion" (p. 21). This statement was firstly adopted by the Conference on the Regional Autonomies promoted by the European Commission in December 1961, attended by leading personalities of the development policies, industry and universities from the various Member States (p. 24). The appointment of a commissary, the German Hans Von der Groeben, who "was in charge of domestic market issues as well as those regarding the regional policy" (p.30) goes in the same direction. After a promising start, the talks for the implementation of the cohesion policy didn't achieve the desired results. The years between 1960 and 1970 are a kind of deadlock where the only event capable of shedding some hopeful light was the recognition, in May 1971, of a real development of the "European Agricultural Guarantee Fund" (p. 40). As highlighted by the Author, the decisive turning point seems to be the Thomson Report of 1973. After that, "it was also thanks to the firm action of the community administration, supported in particular by the Italian and Irish governments, that during a new meeting held in Paris, in December 1974, the Heads of States and Governments, decided to launch the European Regional Development Fund, starting from January 1975" (p. 47).
Chapter 4 and 5 are dedicated to the 1980s where Manzella describes the conditions and the changes in inequalities within the Community caused initially by the first enlargement of the 1970s with the accession
of Denmark, Ireland and the UK and now exacerbated by the entry of Greece, Portugal and Spain. Antonio Giolitti, appointed commissary in charge of the regional policy of the Jenkins Commission (1977-1985) stands out in paying particular attention to the link between the enlargement policy and the cohesion and development policy. In June 1984, after a harsh negotiation between the Commission and the Member States, the new discipline regulating the regional policy is finally approved. "The change - as stated by Manzella - concerned in particular the relationships between the community administration and the regional and sub-regional levels, with an escalation and intensification of the relationships between the Commission, the regional stakeholders and the universe of associationism laying the foundations for overcoming the exclusivity that had characterized, until that moment, the relationships between the Commission and the Member States" (pp. 66-67).
In chapters 6 and 7 the Author talks about the so called "Great Reform" of the Cohesion policy. The Single Act of 1986 inserted Title V in the Treaty, which was especially dedicated to Economic and Social Cohesion, "with which - as the Author says - the intervention had at last a constitutional coverage (p. 75). The Padoa-Schioppa report of 1987 reiterates the need for a reform to tackle the "triple challenge" of the Community: enlargement, internal market and technological progress (p. 74). In the five years from 1994 to 1999 the Millan Commission carries out a very precise work of procedural simplification, setting up a real "Cohesion Fund" destined to the investments in networks and transports and raising awareness on issues to be further developed in the future such as environment and gender equality (p. 85).
The end of the old and the beginning of the new millennium marks a leap forward in the evolution of the regional policy. In 1997 the first forum on cohesion is held at Potsdam. Two years later, in the same city, the "European Spatial Development Scheme" is approved, which was to become the reference framework for all the various European development policies that would produce over the following years, the so called Territorial Agendas (p. 90). Incentive mechanisms to the cost effective performances in several sectors are conceived and introduced: water and waste, environmental infrastructures, transport infrastructures, energy grids, information society (pp. 93-94). In the early 2000, Manzella mentions an excerpt of the Third Report on the cohesion policy indicating a "geographical shift of the inequalities toward the East" (p.100), as well as some significant financial reforms with the strengthening of the cooperation between the European Commission and the European Investment bank, with the aim of "channelling private resources in strategic sectors such as PME, urban regeneration and microcredit" (p. 105).
Chapter 10 and 11 close the time span. The Barca report of 2014 seems
at last to adjust and update, as the Author suggests, "the approach of the European Commission to the most advanced indications of the economic doctrine of those years" (p. 113). The period between 2014 and 2020 inaugurates a change of paradigm even from a constitutional perspective: we go from "cross border cooperation" to "territorial cooperation" (p. 118). My region, my Europe, our future is the title of the Seventh Report on cohesion, in 2017. This report fixes new challenges that the Union has to take in the light of the consequences of the pandemic on territorial inequalities that require a stronger economic governance from Member States with a particular attention to the double transition, the green and the digital one (p. 128).
The last two chapters, anticipating the conclusions, rewind the tape of the story seen from another perspective. In highlighting the key points, the Author pinpoints the transformations and the turning points. A particular attention is paid to the link between development dynamics and quality of the institutions - "ascribable to the approach of Douglass North and, today, of Daron Acemoglu" among the others, - a relevant theme within the European debate on cohesion in a future perspective (p. 167).

The exacerbation of the differences between the most and the least developed regions, caused at first by the enlargement of the Community beyond the Iron Curtain, and then by the crisis of 2008, the COVID 19 pandemic and lastly by the tragedy of the war in Ukraine, is an urgent wake-up call to the Union that has to reinforce its commitment regarding cohesion. In the conclusions, Manzella also considers the idea of a "multi-level organization hinged on a shared culture, based on unitary principles and common methodologies in key sectors such as planning, pooling of interventions, monitoring and evaluation of investments" (p. 172).
At the end of the political, economic and social path walked by the European Institutions in more than 50 years of integration history, the Author turns his attention to Italy. Italy's story in the field of regional policies hasn't been neither conventional nor righteous but in this crucial moment of History it is paramount to customize national policies on the needs of the most economically backward areas, which is what is happening on these days in Europe (and in the US as well) within a kind of redefinition of the industrial policy for this new time we are living. An in-depth reflection on the future of regional territories is also needed, with an appropriate follow-up, so that they can reinforce their endogenous development potential that Antonio Giolitti mentioned four decades ago.

Jamie Martin, The Meddlers. Sovereignty, Empire, and the Birth of Global Economic Governance, Cambridge MA: Harvard University Press.

Martin's engaging research book is a well-documented analysis on the birth of international economic institutions since the end of the Great War. The devastating clash between the longest-ruling imperialistic states caused a deep trauma in the European society. This war led to a reshaping of the political and social order that influenced the new economic order. The 1920s world would not be the 1910s world. The newly-emerging "dangerous classes" ${ }^{1}$ were now well-determined to not sustaining the economic pre-war order. The rise of left and right wings parties was a result of this social transformation which made politics less related to elitist parties but closer to mass mobilization. The principle of the pre-war capital accumulation was put into question by those "dangerous classes" on the basis of the new economic and political claims posed by this emerging social groups. Broadly speaking, after the war the major European states could not ignore the social, economic and political claims made by those who fought the bloody war.
Martin's thesis is based on the assumption that the newly-born institutions were influenced by this social turmoil and by the forces of the accumulation of capital. He underlined the fact that "The first international economic institutions were designed to defend capitalism and stabilize a Europe-dominated international order that the First World War had thrown into turmoil. Their powers were shared according to the prerogatives of a few European governments and central banks".
The League of Nations is described by the author as an institution representing the new order and was hailed as a sort of panacea for keeping the capitalist order safe. If Britain was the main interested country, the US, too - just for a brief period of time - played a leading role.
This first wave of institutional-building process (the second one starts with the Bretton Woods agreements) was characterized, for instance, by the formation of international institutions which worked alongside private international cartels and business lobbying groups. This emerging order legitimized the "international intervention in economic process [...], global markets were embedded in new legal and institutional framework, underwritten by a handful of powerful states, empires, and banks".

[^178]The aim of these institutions was to offer advices to sovereign states if the international economic order would be put at stake. Even though coercion was condemned and cooperation sustained, the loans (conditional lending) negotiated to Greece and the financial aids to Germany and Austria proved the contrary. Based on the examples of many international receiverships imposed by private borrowers to many indebted States in the nineteenth-century, these institutions used their control on capital to impose their terms to the indebted states. Institutions were aimed at reassuring the capitalist social order by removing as much as possible the risk of economic destabilization. The "policy of order" was represented by the adherence to the classical economic principles such as monetary stability - or adherence to the international gold system - budget stability and fair trade. However, these rules often sounded as an informal imposition to semi-peripheral states. The creation of the League of Nations and the Bank of International Settlement, which played a leading role in promoting independent central banks cooperation, served as a fitting example for the founding of the International Monetary Fund. Though the League was backed by Britain to sustain and legitimize its hegemonic control in the world economy, IMF was forged to promote mainly the new US's goals in the global economy. The latter institution, indeed, represented the longa manus of the rising American power but at the same time the power of its capitalist class represented the Wall Street interests. Thus, "its demands for an inquisitorial IMF were being realized. The institution gradually readopted international lending practices similar to those pioneered by the League over two decades before".
Martin's work proved that the formation of the international economic institutions reflected the worldwide capitalist class willingness, and its ability to influence the political power, to control the world economy by guaranteeing the principles of capital accumulation at the expenses of the national political sovereignty of many second-rank semiperipheral states.
In conclusion, The Meddlers is an outstanding research based on a massive archival research the author made for proving his analysis. Following Polanyi's thesis of social countermovement, a deeper bot-tom-up scanning of the social reactions to the policies pursued by these institutions would be interesting to read. However, the book responds effectively to the research questions underlined in the introduction. Opinion-makers, political élites and interested academics should read this book to dispel the myth that the international institutions are profoundly neutral in their acting. Martin's book proved they are wrong.

Giampaolo Conte
University of Roma Tre

Clara E. Mattei, The Capital Order. How economists invented austerity and paved the way to Fascism, Chicago University Press, Chicago 2022.

There are few books that once read manage to leave a clear idea and a full-fledged thesis imprinted on the reader's mind: Chiara E. Mattei's book is one of them. The preservation of the capitalist order is seen by liberal-capitalist forces (both class and state) as fundamental to the economic order of a state. When the capitalist social and productive system is in danger, any political and economic means are accepted and endorsed to restore the pre-existing order. Austerity is the main tool through which the capitalist class can enforce the reestablishment of a capitalist social order. In the era of the rising democratic state, austerity has the aim of depoliticizing the economy.
Dictatorship and industrial austerity (in the Italian case), or simply harsh monetary, fiscal and employment policies (as in the British case) are seen as necessary to maintain the existing capitalist order. What the author makes clear is the fact that with the end of the Great War, and the social chaos that ensued, the masses became increasingly conducive to important social and material claims. In fact, it is not just a demand for increased wages and better living conditions in the factories (which in fact increased between 1918 and 1922), but an organic threat to the capitalist system of production. The gradual entry of the masses into the political life of the two European countries, through the extension of voting rights from the nineteenth century onward, as well as the immense sacrifices endured by the worker-soldiers at the front during the Great War (not to mention the victorious example of the revolution in Russia), put workers' social demands on the right side of history. The Great War proves that a direct state intervention in the economy is a concrete possibility if there is a strong leading political will. The principles that governed the capitalist economy such as private property can be subverted if there are clear political and national interests. The working masses became the bearers, consciously or unconsciously, of an alternative economic model that undermined in its long-standing foundations the principle of the centrality of capital accumulation in productive and social processes. ${ }^{1}$ This is a direct threat to the power and existence of the capitalist class, which plays a hegemonic role (using Antonio Gramsci's words) in European capitalist states. To avoid this collapse, the capitalist class relies on the champions of

[^179]liberal economic orthodoxy to bend the masses and weaken its social claims. Briefly, capital's reaction against this threat is called Austerity: the central issue of Clara E. Mattei's research book.
The purpose of Austerity is thus to weaken the workers' struggle through harsh instruments of economic repression. Fiscal austerity (with increased taxation on consumption - which affects all citizens and a reduction in taxation on large incomes/assets) together with monetary austerity (deflation) and industrial austerity (reduction of wages and, at least initially, employment) are intended to return to stimulate capital accumulation and the savings rate.
In the immediate term, Austerity weakens the bargaining clout of workers. Embedded in a capitalist society, the holders of capital - who often identify themselves or are allied with the state's ruling class and therefore have the country's armed forces on their side - still retain the ability to direct coercive actions against labourers. Moreover, the nonhomogeneity of the working classes - divided between skilled and unskilled labourers - makes them disinclined to pursue a unified policy in case of economic setbacks (just refer to Jack London's The Iron Heel).
Austerity puts the cardinal principles of the capitalist economy back on track and strengthens the rule of the capitalist class. We are thus talking about an economic policy that supports clear class interests. The economic theory that supports Austerity serves only to politically legitimize a clearly ideological and partisan economic behaviour. As the author remarks: "Economic theory was no longer a tool for critical thought and action; it was a mold for imposing passive consent and maintaining a top-down status quo".
As far as I am concerned, austerity policies are not only those perpetrated in the early 1920s (just refer to Britain's return to the gold standard in 1821 or the economic policies pursued by the Italian Destra Storica -1861-1876 - and especially by ministers Sella and Scialoja). However, Clara E. Mattei's book undoubtedly has the merit of convincingly demonstrating how austerity has been and still is an instrument that carries with it a clear economic strategy, namely to reinforce the cardinal principles of a capitalist social and productive model by sheltering them from possible threats. Let us hope that in the public debate there will be discussions as courageous and solid as the theses brought forward by the author.

Giampaolo Conte
University of Roma Tre

Karin Pallaver, Gian Luca Podestà (eds.), Una moneta per l'impero. Pratiche monetarie, economia e società nell'Africa Orientale Italiana, FrancoAngeli, Milano 2021, pp. 225.

The volume edited by Karin Pallaver and Gian Luca Podestà is the result of a research conducted within the PRIN project (2015), funded by the Ministero dell'Istruzione, dell'Università e della Ricerca (Italian Ministry of Education, University and Research): this work represents the first study that reconstructs the process of introducing currencies in the Italian colonies of East Africa. This analysis enhances new sources, while indicating unprecedented research perspectives, for a field of the economic and financial history of European and, in particular, Italian colonialism that has been too often overlooked. The volume, characterized by a multidisciplinary approach, boasts the collaboration between Africanist historians, economic historians and historians of Italian colonialism, who have given their contribution through the eight essays making up the volume.
The eight case studies in the volume draw inspiration from the numerous analyses of African monetary systems, extensively investigated by historians and anthropologists interested in studying African economic structures and institutions, providing an overall look at the history of Italian monetary policies in Africa: these, in fact, were characterized by "several failures, which shed light on the limits of the colonial state's ability to control African economies and monetary systems" (p. 12).
The volume tries to explain that the adoption of a new monetary system in the African colonies was not only an essential element for the functioning of the colonial economy, but also had an important symbolic value in the context of that "civilization process of African societies, which was a fundamental component of the European colonial project", and which constituted one of the main justifications of the colonial project (p.9). The export and imposition of a monetary system, modelled on that of the mother country, was a process characterized by numerous failures, often caused by the inadequacy of the Italian colonial administration and by the inability to understand the complexity of the monetary practices of African societies. The volume highlights, in the case of the Italian dominions in East Africa, the "strategic and operational differences between the central and the colonial government", trying to make comparisons, relationships and parallels "with monetary practices and policies of other historical and geographical contexts" (p. 14).

In contrast to West Africa, the monetary history of East Africa, apart from some analyses focused on British East Africa, has been little
studied: for this reason, the historiography is lacking in insights into the Italian colonies. Through the analysis of African monetary systems, however, it is possible to study the economic and social history of Africa during the Italian colonial period and understand the ways in which the European colonial powers tried to impose their hegemony and the responses of the local populations to these practices: in fact, "European attempts to standardize and rationalize African monetary systems" were constantly opposed, often leading to open protests by the African society (p.12). The attitudes of the African populations, as stated by the editors of the volume, can be interpreted "both as a contestation of the prerogatives of the colonial power, and as the result of the articulation and superimposition of various pre-existing monetary and economic circuits which were in contradiction with an idea of coincidence between the colonial state, space and political control" (p. 12). Despite the fact that the Europeans had delineated clear borders between the various African possessions, these remained, however, "porous throughout the colonial period and therefore continued to be crossed by African merchants who exchanged their goods by continuing to use the pre-colonial currencies in addition to the European ones" (pp. 12-13).
During the first years in Eritrea, the Italians had concentrated their colonial interests in the control of commercial exchanges, which involved above all the port of Massawa: this, in the centuries preceding the landing of the Italians, had been and would continue to be crossed by important caravan routes. ${ }^{1}$ The poverty of the possessions, induced by the lack of natural resources of the conquered territories, was one of the most problematic factors of the Italian colonial experience, therefore the "enhancement" of the territories was mainly oriented towards the commercial sector and, in particular, towards agriculture. In this way the Italian ruling class was convinced that it had favoured the valorisation and insertion of the colonial territories in the international market. However, the lands facing the Red Sea and the Arabian Peninsula, according to different methods and measures, were already included in the networks of international trade even before the arrival of the Italians. ${ }^{2}$ In fact, not counting internal and infra-African traffic, in the

[^180]centuries preceding the arrival of the Italians, products directed to Arabia and India or to the internal regions of Africa passed through the Eritrean coasts; livestock and related products were sent from the ports of Somalia to the Arabian Peninsula; finally, products from Tripolitania and Cyrenaica were destined to the East, West and Europe. ${ }^{3}$
In Eritrea, historically considered as a territory of transit, there were numerous international communities, mostly dedicated to commercial activities. The group of Europeans consisted above all of professionals involved in the export of products coming from the interior or fished in the Red Sea. Among the products they dealt with, the following stood out: hides, mother of pearl, coffee, eraser, ivory, which was, however, handled in smaller quantities because it was monopolized by the Indians, and plant products used in the chemical industry. ${ }^{4}$ Exports were then joined by the importation of European products,

[^181]such as silk fabrics, yarns and glass beads. Within the group of Europeans, then, the Greeks stood out as they practiced petty trade. The "Bania", ${ }^{5}$ on the other hand, a rich community who had been living in Eritrea and the archipelagos facing the coasts of the Colony since the end of the $16^{\text {th }}$ century, practiced above all the export of ivory to be sent to Bombay, as well as of gold and pearls, which escaped any customs inspection. Imports from India mainly concerned special fabrics, gauzes, muslins, with the addition of ordinary raw cotton, which were sold at a lower price than the Swiss ones, even though the latter were the cheapest ever. Finally, the peoples of Arab origin, who were the most committed community in the Horn of Africa, had been involved for centuries in the trade between the two shores of the Red Sea and in exchanges with Syria and Egypt. ${ }^{6}$
With regard to the currencies used in the context of the exchanges carried out in the Horn of Africa, one of the exemplary cases that have been explored in the volume is that of the Thaler of Maria Theresa. This coin, minted in Vienna since the eighteenth century, but now out of circulation and without legal value, circulated already in the area of the Red Sea and the Western Indian Ocean well before the beginning of Italian colonialism. Despite several attempts, the Italian administration never managed to replace it: this failure was "certainly due to the roots, even symbolic, of this currency and to the specific uses made of it by the African populations" (p. 13). In fact, the Thaler was used in numerous transactions, such as in the case of interregional trade as a means of exchange, accounting currency and store of value: this function is explained in the second essay written by Alessandro De Cola, in which the author analyses the various theories of colonial literature for the construction of a colonial monetary system and the replacement of the Thaler (p. 71).
The ruinous monetary management in Eritrea and Ethiopia from the settlement on the Eritrean coast at the end of the $19^{\text {th }}$ century to the loss of East Africa and the uses that the local population could make of the coins - such as in the production of jewellery and in the context of monetary practices apparently similar to those of Europe under the old regime - is treated in the essay by Gian Luca Podestà, in which the author describes the "clash" between two conceptions of money: "the Western/Italian one which tries to impose a national and generalist

[^182]currency (multipurpose) to integrate the economy of the colony into that of the motherland and assert its domination, and the local one linked to a practical/conjunctural vision of the medium of exchange and more concentrated on the different possible functions (also, but not only monetary) that an object can cover" (p.37).
The study of Claudio Sessa presents a further ruinous case of Italian monetary policies, namely that of the Italian silver rupee, introduced in Somalia in 1910, which definitively disappeared in 1925, when the lira was introduced. The project, which was marred by inadequate planning, had the ambition of "placing the colony within an international context of commercial and financial exchanges" and the "precise objective of protecting the internal balance from fluctuations in the thaler", transformed over time into a political-economic disaster "which brought the colony to the brink of bankruptcy" (p. 95).
In the fourth essay, edited by Silvia Bruzzi, the author deals with the monetary question by observing it from a gender perspective: the research, in fact, "analyses the monetary uses and the impact of the introduction of colonial currencies in the context of economic payments and social issues arising from marriage relationships and the payment of bride wealth, concubinage relationships and prostitution in the context of Libya and Eritrea" (p. 13).
Alessio Gagliardi, in his essay, delves into one of the most interesting topics regarding the question of Italian colonialism, namely the confusion and complexity of the administrative action in the empire, with the aim of explaining how the monetary policies of the state were implemented within this contradictory context. In fact, as the author states, the overlapping of different institutions and powers and the personal rivalries between the officials who worked in the motherland and those who worked in the colony "were part of the ordinary functioning of the administrative machine in charge of governing the imperial economy" (p. 136). The "administrative disorder", therefore, was reflected in the monetary system, "already characterized by a significant endogenous disorder, due to the coexistence that in fact was created between the lira introduced by the Italian authorities and Thaler of Maria Theresa" (p. 136).
Karin Pallaver, by reconstructing the events of the withdrawal of nickel coins during the Second World War, explains, from a further perspective, the contradictory and confused actions practiced by the central government and the colonial administrations, noting that, despite the withdrawal program, Italy failed to accumulate the amount of material necessary to deal with the conflict, and the essay recounts the inconsistencies and the "tensions of the empire", i.e. "between those who decided and therefore conceived the colonial project in the
motherland, and those who instead were in the colony to implement this project and who had a greater knowledge of local monetary systems and the preferences of those who used these currencies on a daily basis" (p. 162).
The seventh essay, written by Luca Puddu, intends to explain the formation of the "network of interests that moved the articulations of the British bureaucratic-military apparatus during the occupation regime" through the analysis of the monetary policy adopted by the British administration in Eritrea (p. 189). In fact, the latter did not hesitate to "exploit its government prerogatives to carry forward their respective particular agendas, favouring the integration of the territory into specific regional exchange networks or using the lira issue to reformulate the relations with the social body" (p. 189).
The concluding essay, written by Donatella Strangio, concerns Italy's postcolonial policies to expand its influence and indirect control over newly independent African countries, i.e. through the exploitation of economic, commercial and monetary practices (p. 212). The essay therefore analyses the preliminary acts of the decolonization process in Somalia which led to the creation of the Italian Trusteeship, focusing its attention on the Italian monetary policy, on the creation of economic institutes involved in the development of Somalia, as in the case of the "Cassa per la circolazione monetaria della Somalia", and the ItalianSomali clearing function.

Matteo Nardozi

Michael Sonenscher, Capitalism, the story behind the word, Princeton University Press, Princeton, NJ, 2022.

Michael Sonenscher's book is not the usual narrative of a diachronic or synchronic history of capitalism; it is a stimulating analysis of the concept of capitalism. The author has the merit of being able to contribute to the debate on the concept of capitalism in an original and intriguing way.
The author debunks the assumption that under the term Capitalism we can denote all the structures and superstructures of the market economy that we are aware of. The term Capitalism has been constructed over time. In the beginning, the French word "capitaliste" was generally attributed to an investor lending money to another or to the French government for wartime needs. Thus, capitalist was a person, and then capitalism was a full-fledged economic system. At the eve of this
term capitalism "was the solution, not the problem because capitalism in its original guise had more to do with public credit and state expenditure than with private property and competitive industry".
In Michael Sonenscher's research, what is clear from the outset is that capitalism and division of labour are not the same thing, but they are two distinct subjects. As Adam Smith recalls, commercial society exists through the division of labour even before the existence of capital. Thus the author makes it clear: "Unlike capital itself, the division of labour presupposed markets, and markets, in turn, entail prices. Markets and prices are relentless and remorseless because, unlike capital, they are not the types of thing that can really be owned". So, according to the author, what makes the ruthless system we know comes from the aseptic mechanism of the division of labour that follows cold mechanical rules. While it is true that the market and the prices can be controlled by a set of rules (both private and public) "they were still not the types of thing that could be physically occupied or possessed in the way that a house or a field or even a body can be owned".
In fact, markets involve commodities and prices, while capital is about possession and ownership. Capital is in addition to the market - which has its own rules to abide by - giving shape to an economic system that is identified as capitalism.
However, early capitalism is not like what we know today. That system continues to change and evolve. To explicate some aspects of this evolution, the author tells us about Lorenz von Stein - a follower of Hegel - as the forerunner of social democracy. According to Stein, public finance and public debt initiate a further step forward because they impose a set of economic limits on domestic policy and these limits, as David Ricardo has pointed out, generate new incentives to find alternative ways on which to base foreign trade on the basis of comparative advantage. "Before capitalism became a problem, the problem of commercial society began with the subject of the division of labour". Making these assumptions, Louis Blanc sees right in giving a distinct definition of capitalism and capital. Indeed, the suppression of capitalism would not lead to the suppression of capital. Blanc clarifies how capitalism means the private appropriation of capital: "Capital was, therefore, the means to neutralise capitalism". Therefore, to achieve such neutralization, one must socialize or nationalize capital.
As far as I am concerned, the author sees right in placing much emphasis on the role of public debt as a central element of capitalism. The idea of making public debt the engine of economic growth had fascinated many $18^{\text {th }}$-century economists such as James Steuart and his French estimators in the early years of the French Revolution. To
talk about public debt, we need to go back to Stein. According to him, the creation of a currency linked to the growth of public debt has the effect of turning borrowing and lending into a kind of taxing-andspending policy. "On Stein's terms, only a state had the resources to keep the division of labour at bay. Stein called the outcome "social democracy." And again "public debt was the real mechanism with the power to reconcile the state and civil society because the financial resources that the state could generate had the potential to overcome the contradiction between multiple individual personalities and its single personality".
In fact, public debt allows the mobility of resources as a way to increase the availability of credit through interest payments. As much as this principle is a zero-sum game, we must point out that this assumption may prove incorrect if debt payments flow to foreign countries. Thus, only the payment of interest to domestic creditors activates the above principle. On the other hand, if the interest ends up in the hands of foreign creditors, we have a transfer of net wealth and an impoverishment of the indebted state (we must in this case refer to John Stuart Mill). In conclusion, Michael Sonenscher allows the reader to reflect critically on the nature and mystifications of the concept of capitalism. This page-turner book, which is well written and accessible even to a nonspecialist audience, can certainly help to define the capitalist system more clearly through a refined critical approach.

Giampaolo Conte
University of Roma Tre

## Books received

## Books received

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PAPER AND THE ECONOMY OF KNOWLEDGE IN THE EARLY MODERN MEDITERRANEAN. FINANCE, SEMIOTICS, AND THE COMMUNICATION REVOLUTION Edited by José María Pérez Fernández and Gaetano Sabatini

## Articles by

Erik Aerts
Cátia Antunes
José Ramón Ayaso Martínez
Matteo Calcagni
Pietro Delcorno
Nelly Hanna
Chiara Marcheschi
Michael McKeon
José María Pérez Fernández
Natalie Roxburgh
Gaetano Sabatini
Renzo Sabbatini
Elvira Vilches
Review Articles
Rethinking Luigi Einaudi. About a Recent Book on Economic Associationism in Liberal Italy
Paolo Pecorari, Andrea Cafarelli
Book Reviews


[^0]:    ${ }^{1}$ Karl Marx, Capital, Delhi, 1948, chapter I, "Commodities", section 4, "The Fetishism of Commodities and the Secret Thereof", pp. 71-83, pp. 71, 72, 74, et passim. How to do Things with Words was the title of the foundational essay of pragmatics, published several decades ago by J.L. Austin, Oxford, 1962.

[^1]:    ${ }^{2}$ Aristotle already discusses the notion of currency (noumisma) as both a signifier and a unit of measurement which works as an equalizer of sorts - in all the different significations of the noun equalizer. This turns it into a consensual social force whose circulation brings about association: "Currency, then, acts like a measure, making things commensurable and so equalizing them; for there would be no association without exchange, no exchange without equality, and no equality without commensurability. Strictly speaking, of course, it is impossible that things so different in kind should become commensurable, but in relation to people's needs a sufficient degree of commensurability can be achieved. There must then be some single element involved in all cases, and this must be something laid down by agreement - which is why it is called 'currency' [noumisma]" (Aristotle, Nichomachean Ethics, V.6.1133b.17-24, S. Broadie ed., C. Rowe ed. and trans., Oxford, 2002, p. 167).
    ${ }^{3}$ Ernst Cassirer, "The Concept of Symbolic Form and the System of Symbolic Forms", in The Philosophy of Symbolic Forms (trans. R. Manheim, New Haven \& London, 1955, vol. 1), pp. 73-85, p. 75, italics in the original.
    ${ }^{4}$ Galileo Galilei, Il Saggiatore, (1623), Milano, 2020, p. 38.

[^2]:    ${ }^{5}$ Nicolaus Copernicus, De estimatione monete (ca. 1519), De monetae cudendae ratione (1526).
    ${ }^{6}$ Wallace Stevens, Collected Poetry and Prose, ed. F. Kermode and J. Richardson, New York, 1997, p. 907. In his Poetry \& Money: A Speculation (Liverpool, 2020, pp. 25-26) Peter Robinson explores Wallace Stevens' statement and uses the presence of monetary metaphors in poetry to discuss the concept of money itself as a metaphor. This is a question which takes us to the relation between finance and fiction, which we do not have space to discuss here, but which is addressed in the essay by Pérez Fernández, and in some more detail in Elvira Vilches' article too.

[^3]:    ${ }^{7}$ Jean-Joseph Goux, Symbolic Economies: After Marx and Freud, trans. Jennifer Curtiss Gage (Paris, 1973), Ithaca, NY, 1990; Jean Braudillard, For a Critique of the Political Economy of the Sign (Paris, 1972), New York, 1981; Jean-François Lyotard, Libidinal Economy (Paris, 1974), Bloomington, 1993.
    ${ }^{8}$ Marc Shell, Money, Language and Thought: Literary and Philosophical Economies from the Medieval to the Modern Era, Berkeley, CA, 1982.

[^4]:    ${ }^{9}$ See José María Pérez Fernández, How to do things with paper in King Lear, originally published online as part of the PIMo Visual Reflection series (April 30 th 2020); also available at http: / /hdl.handle.net/10481/61735 (accessed on 02/05/2023).
    ${ }^{10}$ Henry V, Prologue, lines 16-19.

[^5]:    ${ }^{11}$ Consuetudo, vel lex mercatoria, or The ancient law-merchant. Diuided into three parts: according to the essentiall parts of trafficke. Necessarie for all statesmen, iudges, magistrates, temporall and ciuile lawyers, mint-men, merchants, marriners, and all others negotiatin in all places of the world, London, 1622, p. 99.
    ${ }^{12}$ This can be viewed as a case of Cassirer's symbols as inseparable components of the semiotic currency they materialized and of the value which they generated, and not just as mirror-like signifiers of their signifieds, which thus stood as distinct and separate entities in a dual relation with each other.

[^6]:    ${ }^{13}$ For a representative case see José María Pérez Fernández, "Notes for a Communicative History of Early Modern Paper: Giovanni Antonio Tagliente's Handbooks", in Livia Faggioni, Mauro Mussolin (eds.), La Carta e il Mediterraneo: Produzione, Commercio, Communicazione, Fabriano, 2022, pp. 147-167.

[^7]:    ${ }^{14}$ These Hebrew documents were first made available to the academic community and the general public through a hybrid exhibition organized by the PIMo Paper in Motion work group, see José María Pérez Fernández, Giovanni Tarantino and Matteo Calcagni, Paper in Motion: Information and the Economy of Knowledge in the Early Modern Mediterranean, Viterbo, 2021, also available online at https:/ /www.paperinmotion.org/, accessed on $26 / 04 / 2023$ ). The documents in question are the following: https:/ / www.paperinmotion.org / paper / acknowledgement-of-debt-in-hebrew /; https: / / www.paperinmotion.org / paper/receipt-for-books-in-hebrew/; https: / / www.paperinmotion.org/paper/letter-in-hebrew / (accessed on 01/05/2023). ${ }^{15}$ In contrast with traditional accounts such as Larry Neal's Rise of Financial Capitalism: International Capital Markets in the Age of Reason, Cambridge, 1991, more recent scholarship has foregrounded important precedents in the Hispanic and Portuguese empires: see for example María Portuondo, Secret Science: Spanish Cosmography and the New World, Chicago, 2009, and Bern Brendecke, The Empirical Empire: Spanish Colonial Rule and the Politics of Knowledge, Berlin, 2016.

[^8]:    ${ }^{16}$ Some of the documents displayed in our online exhibition exemplify this exchange of news on recent and current events alongside commercial and financial information dated in different periods. See for example these cases: https:/ /www.paperinmotion. org / paper/letter-from-rosso-di-strozza-strozzi-to-luca-del-sera/; https:/ / www.paperinmotion.org/ paper/news-about-the-victory-in-lepanto/; https:/ / www.paperinmotion.org / paper / news-on-an-encounter-with-the-turkish-navy-in-calabria/; https: / / www.paperinmotion.org / paper / a-letter-with-news-from-lisbon/; https:/ / www.paperinmotion.org/ paper/letter-with-news-from-rouen/ (accessed on 01/05/2023).

[^9]:    ${ }^{17}$ On this topic see Marina Rustow, The Lost Archive: Traces of a Caliphate in a Cairo Synagogue, Princeton, NJ, 2020.

[^10]:    18 "Wealth has circulated, and still circulates, up in the air, in papers and contracts, registers, and letters of exchange, in currency, silver, and gold, not in more deserving material goods that do bear fruit and by attracting foreign wealth support domestic affluence" (Martín González de Celórigo, Memorial de la política necesaria y útil restauración a la República de España [Valladolid, 1600], quoted in Elvira Vilches, New World Gold: Cultural Anxiety and Monetary Disorder in Early Modern Spain, Chicago, 2010, p. 45).

[^11]:    ${ }^{19}$ The activities organized and the research conducted by members of the Paper in Motion work group have resulted in a series of publications which include the following: Livia

[^12]:    Faggioni and Mauro Mussolin (eds.), La Carta e il Mediterraneo: Produzione, Commercio, Communicazione, Fabriano, 2022, https:/ / globhis.files.wordpress.com/2022/11/fag-gioni-mussolin-2022.pdf, accessed on 26/04/2023); José María Pérez Fernández, ed. "Approaches to the Paper Revolution", a special section published in CROMOHS, vol. 20, 2020, pp. 76-168 (https: / / oajournals.fupress.net/index.php / cromohs/issue/ view / 533/111, accessed on 26/04/2023); José María Pérez Fernández, "Paper in Motion: Communication, Knowledge, and Power. Methods and Case Studies for an Interdisciplinary Approach", in CROMOHS, no. 23, 2020, pp. 81-112 (https:/ / doi.org /10.36253/cromohs-12025); Giovanni Tarantino, Giorgio Riello and José María Pérez Fernández, Encounters at Sea: Paper, Objects and Sentiments in Motion across the Mediterranean, with an afterword by Cátia Antunes (Pisa, 2020, available online at https:/ / globhis.files.wordpress.com/2022/09/en-counters-at-sea.pdf, accessed on 26/04/2023).

[^13]:    * I thank the anonymous referees for their supportive and much appreciated comments. I am especially indebted to José María Perez Fernández who kindly invited me to his workshop at Prato in January 2022. It goes without saying that this paper is limited to the spread of the use of the new numerals in accounts. Their spread elsewhere (e.g., on coins and seals, for house numbers, etc.) warrants a separate study. Incidentally, the so-called Hindu-Arabic numerals were in actual fact neither Hindu nor Arabic (see D. A. King, The Ciphers of the Monks. A Forgotten Number-Notation of the Middle Ages, Stuttgart, 2001, p. 310).
    ${ }^{1}$ R. Danna, "Elaboration and Diffusion of Useful Knowledge in the Long Run: The Case of European Practical Arithmetic ( $13^{\text {th }}-16^{\text {th }}$ Centuries)", in Rivista di Storia economica, vol. 38, no. 1, 2022, p. 58.

[^14]:    ${ }^{2}$ Here in the sense of company accounts with the exclusion of the private accounts of great households or land estates owing to their overall lack of preservation.
    ${ }^{3}$ L. Hilaire-Pérez and C. Verna, "Dissemination of Technical Knowledge in the Middle Ages and the Early Modern Era: New Approaches and Methodological Issues", in Technology and Culture, vol. 47, no. 3, 2006, p. 542.

[^15]:    ${ }^{4}$ P. Bertrand, Les écritures ordinaires. Sociologie d'un temps de révolution documentaire (entre royaume de France et empire, 1250-1350), Paris, 2015, pp. 219-220; Danna, Elaboration and Diffusion, pp. 75 and 77.
    ${ }^{5}$ A. Cappelli, Lexicon abbreviaturarum. Dizionario di abbreviature latine ed italiane usate nelle carte e codici specialmente del medio-evo riprodotte con oltre 14000 segni, $5^{\text {th }}$ edition, Milan, 1954, p. LV; W. Endrei, "De l'abaque aux chiffres arabes, leur lutte en Europe", in L. de Rosa (ed.), Studi in memoria di Federigo Melis, vol. 1, Naples, 1978, pp. 281 and 288-289; M. Kool, Die conste vanden getale. Een studie over Nederlandstalige rekenboeken uit de vijftiende en zestiende eeuw, met een glossarium van rekenkundige termen, Hilversum, 1999, pp. 21-22.
    ${ }^{6}$ R. Danna, "The Spread of Hindu-Arabic numerals among practitioners in Italy and England ( $13^{\text {th }}-16^{\text {th }} \mathrm{c}$.): two moments of a European innovation cycle", in G. Nigro (ed.), L'economia della conoscenza. Innovazione, produttività e crescita economica, nei secoli XIIIXVIII (The knowledge economy. Innovation, productivity and economic growth, $13^{\text {th }}$ to $18^{\text {th }}$ century), Florence, 2023, forthcoming, pp. 59-62; B. Kirchgässner, Das Steuerwesen der Reichsstadt Konstanz, 1418-1460, Konstanz, 1960, pp. 66, 67 and 74.

[^16]:    ${ }^{7}$ R. A. Goldthwaite, "The Practice and Culture of Accounting in Renaissance Florence", in Enterprise \& Society, vol. 16, no. 3, 2005, p. 615.
    ${ }^{8}$ Danna, "The Spread of Hindu-Arabic", pp. 70-72.
    ${ }^{9}$ Ph. Braunstein, Les Allemands à Venise 1380-1520, Rome, 2016, p. 446.
    ${ }^{10}$ Endrei, De l'abaque, p. 294; H. Jenkinson, "The Use of Arabic and Roman Numerals in English Archives", in The Antiquaries Journal, vol. 6, no. 3, 1926, p. 266.

[^17]:    ${ }^{11}$ Brussels, General State Archives, Chambers of Accounts, reg., nos. 2021 and 2022.
    ${ }^{12}$ Brussels, General State Archives, Chambers of Accounts, reg., no. 2842 and nos. 2991/3 and 2992.

[^18]:    ${ }^{13}$ Brussels, General State Archives, Chambers of Accounts, reg., nos. 4419 and 4420.
    ${ }^{14}$ Brussels, General State Archives, Chambers of Accounts, reg., no. 4370.
    ${ }^{15}$ Brussels, General State Archives, Chambers of Accounts, reg., nos. 5166 and 5167.
    ${ }^{16}$ Lier, Town Archives, Oud Archief, no. 476, account Jan.-Dec. 1653.
    ${ }^{17}$ Brussels, General State Archives, Chambers of Accounts, reg., no. 31,069 and no. 31,070.

[^19]:    ${ }^{18}$ W. Vallaey, Onderzoek en beschrijving van typologische kenmerken van de stadsrekeningen van de stad Roeselare in het archief van de stad Roeselare in de vroegmoderne tijd (ca. 15291789) (unpublished thesis, Advanced Master in Archival Science, University of Brussels, Brussels, 2022), p. 89.
    ${ }^{19}$ G.A. Vorsterman van Oijen, Theorie der Algemeene Rekenkunde, Schoonhoven, 1866, p. 17.
    ${ }^{20}$ L. De Mecheleer, Inventaris van het archief van de Rekenkamers. Delen en banden (registers). Reeks stadsrekeningen van Aalst 1395-1786, Brussels, 2011, p. 15.
    ${ }^{21}$ Leuven, Town Archives, Oud Archief, no. 5308.
    ${ }^{22}$ Brussels, General State Archives, Chambers of Accounts, reg., no. 35,062 and no. 35,063.
    ${ }^{23}$ Brussels, General State Archives, Chambers of Accounts, reg., no. 40,168 and no. 40,169.
    ${ }^{24}$ Brussels, General State Archives, Chambers of Accounts, reg., no. 32,804 and no. 32,805.
    ${ }^{25}$ Numerous examples can be found in the Leuven town account of 1670-1671, such as "xxii Januarij anno 1518", "viia Junij 1578" or "xxi Julij 1608" (Leuven, Town Archives, Oud Archief, no. 5293, fol. 20, 49 and 62).
    ${ }^{26}$ Endrei, De l'abaque, pp. 288-289 and 296; Jenkinson, The Use of Arabic, p. 267; Kool, Die conste vanden getale, p. 36 .

[^20]:    ${ }^{27}$ Leuven, Town Archives, Oud Archief, nos. 5299, 5300 and 5304.
    ${ }^{28}$ Lier, Town Archives, Oud Archief, no. 638, fol. 181 (account Jan.-Dec. 1600). I thank Nadine Janssen for bringing this example to my attention.
    ${ }^{29}$ Lier, Town Archives, Oud Archief, no. 470, fol. 7v, 9v and 53 (account Jan.-Dec. 1626). Other examples in Lier, Town Archives, Oud Archief, no. 470, fol. 7 and 49 (account Jan.-Dec. 1627) and fol. 7v (Jan.-Dec. 1628). These examples refer to both dates and numbers.
    ${ }^{30}$ Vallaey, Onderzoek en beschrijving van typologische, p. 89.
    ${ }^{31}$ B. Verbist, Traditie of innovatie? Wouter Ameyde, een makelaar in het laatmiddeleeurwse Brugge 1498-1507 (unpublished doctoral dissertation University of Antwerp, History Department), Antwerp, 2014, pp. 90 (plate 7), 96 (plate 9), 188 (plate 18), 253 (plate 27), 256 (plate 28) and 258 (plate 30).

[^21]:    ${ }^{32}$ O. Mus, "De Brugse compagnie Despars op het einde van de 15e eeuw", in Handelingen van het Genootschap voor Geschiedenis "Société d'Emulation" te Brugge, vol. 101, no. 1, 1964, p. 10.
    ${ }^{33}$ J.A. Goris, Étude sur les colonies marchandes méridionales (Portugais, Espagnols, Italiens) à Anvers de 1488 à 1567. Contribution à l'histoire des débuts du capitalisme moderne, Leuven, 1925, plates III and IV on pp. 120-121.
    ${ }^{34}$ W. Brulez, De Firma della Faille en de internationale handel van Vlaamse firma's in de 16e eeuw, Brussels, 1959, p. 442.
    ${ }^{35}$ A. Meskens, Wiskunde tussen Renaissance en Barok. Aspecten van wiskunde-beoefening te Antwerpen 1550-1620, Antwerp, 1994, p. 55.
    ${ }^{36} \mathrm{~A}$. Meskens, "Antwerpen en cultuur in de zestiende en vroege zeventiende eeuw", in Scientiarum Historia, vol. 32, 2006, p. 4; Kool, Die conste vanden getale, p. 36.

[^22]:    ${ }^{37}$ Verbist, Traditie of innovatie, pp. 345-346 and 353.
    ${ }^{38}$ O. Landolt, Der Finanzhaushalt der Stadt Schaffhausen im Spätmittelalter, Ostfildern, 2004, p. 81; E.I. Strubbe and L. Voet, De chronologie van de middeleeuwen en de moderne tijden in de Nederlanden, Antwerp, Amsterdam, 1960, pp. 89, 118 and 130.
    ${ }^{39}$ Kool, Die conste vanden getale, p. 36.
    ${ }^{40}$ K. Bjarnadóttir, "History of Teaching Arithmetic", in A. Karp and G. Schubring (eds.), Handbook on the History of Mathematics Education, New York, 2014, p. 433.
    ${ }^{41}$ Braunstein, Les Allemands à Venise, p. 445, note 131.
    ${ }^{42}$ R. de Roover, "Aux origines d'une technique intellectuelle: La formation et l'expan-

[^23]:    sion de la comptabilité à partie double", in Annales d'histoire économique et sociale, vol. 9, no. 44, 1937, p. 191; Endrei, De l'abaque, p. 288; Kool, Die conste vanden getale, p. 35; A. Sangster, "The Genesis of Double Entry Bookkeeping", in The Accounting Review, vol. 91, no. 1, 2016, p. 305.
    ${ }^{43}$ This was suggested by Danna, "The Spread of Hindu-Arabic", pp. 69-70. For difficulties between the English king, the barons and the Italians, see M. Allen, "Italians in English mints and exchanges", in C. Given-Wilson (ed.), Fourteenth Century England, vol. 2, Woolbridge, 2002, p. 53 or M. Prestwich, "Italian Merchants in Late Thirteenth and Early Fourteenth Century England", in The Dawn of Modern Banking, New Haven, London, 1979, pp. 80-81 and 95.
    ${ }^{44}$ E. Aerts, "Italian presence in the late medieval Bruges stock market", in L. Brunori, S. Dauchy, O. Descamps and X. Prévost (eds.), Le droit face à l'économie sans travail. Finance, investissement et spéculation de l'Antiquité à nos jours. Tome II: L'approche internationale, Paris, 2020, p. 215.

[^24]:    ${ }^{45}$ For example, in the demesne accounts of Lier for the years 1612-1613 and 1660-1661 (Brussels, General State Archives, Chambers of Accounts, reg., nos. 5020 and 5028). There is another example in West Flanders in 1690, where the specialist auditor used the Hindu-Arabic numerals while the receiver himself continued to use the traditional Roman characters (Brussels, General State Archives, Chambers of Accounts, reg., no. 2991/3).
    ${ }^{46}$ Compare, for example, Brussels, General State Archives, Chambers of Accounts, reg., no. 1946 with no. 2022.
    ${ }^{47}$ M. Van Lerberghe, De Antwerpse stedelijke financiën onder Filips II (unpublished master's thesis University of Gent, History Department), Gent, 2012-2013, p. 31. The same phenomenon can be noticed in the town accounts of Konstanz around 1440 (B. Kirchgässner, "Studien zur Geschichte des kommunalen Rechnungswesen der Reichs städte Südwestdeutschlands vom 13. bis zum 16. Jahrhundert", in Finances et comptabilité urbaines du XIIIe au XVIe siècle, Colloque international Blankenberge 6-9-IX-1962. Actes, Brussels, 1964, p. 243).
    ${ }^{48}$ Brussels, General State Archives, Chambers of Accounts, reg., no. 32,805, fol. 26.

[^25]:    ${ }^{49}$ Brussels, General State Archives, Chambers of Accounts, reg., nos. 2022-2036.
    ${ }^{50}$ Brussels, General State Archives, Chambers of Accounts, reg., no. 2842, fol. 473-474 and no. 2992.
    ${ }^{51}$ For Brussels: Brussels, General State Archives, Chambers of Accounts, reg., nos. 44204422; for Antwerp: nos. 5167-5169.
    ${ }^{52}$ Brussels, General State Archives, Chambers of Accounts, reg., nos. 40,121, 40,133 and 40,139.
    ${ }^{53}$ J.-B. Santamaria, "Savoirs, techniques et pratiques comptables dans l'administration des Pays-Bas bourguignons, fin XIVe-début XVe siècle", in Comptabilités, Revue d'histoire des comptabilités, vol. 7, 2015, [online], accessed on 20 July 2022.

[^26]:    ${ }^{54}$ Endrei, De l'abaque, p. 289; J.-B. Santamaria, "Comptabilité publique et innovation à la fin du Moyen Âge: les institutions princières et l'émergence d'une culture numérique dans un ordre conservateur", in Médiévales. Langues, Textes, Histoire, vol. 76, 2019, p. 126.
    ${ }^{55}$ For Lier, see note 16.
    ${ }^{56}$ This was also the case in other small towns and in large(r) towns (V. Neckebroeck, De Leuvense stadsfinanciën (1642-1661), unpublished master's thesis University of Leuven, History Department, Leuven, 2008, p. 31; W. Prevenier, "Quelques aspects des comptes communaux en Flandre au Moyen Âge", in Finances et comptabilité urbaines du XIIIe au XVIe siècle, Colloque international Blankenberge 6-9-IX-1962. Actes, Brussels, 1964, p. 145; P. Vandepitte, De stadsfinanciën van Tielt vanaf de regering van Filips II tot het begin van de Oostenrijkse periode 1557-1718, Tielt, 1966, pp. 26, 30 and 76).
    ${ }^{57}$ Brussels, General State Archives, Chambers of Accounts, reg., nos. 2841 and 2842.

[^27]:    ${ }^{58}$ M. van der Heijden, "Stadsrekeningen, stedelijke financiën en historisch onderzoek", in NEHA. Bulletin voor de economische geschiedenis, vol. 13, no. 2, 1999, pp. 132-133. See also the interesting observations on "la position des clercs" in the diffusion of financial knowledge in Santamaria, Comptabilité publique et innovation, pp. 116 and 129. Some towns had two receivers, one of whom was sometimes called the "bookkeeper" (for example in Lier).
    ${ }^{59}$ B. De Munck and H. Soly, "Learning on the Shop Floor in Historical Perspective", in B. De Munck, H. Soly and S.L. Kaplan (eds.), Learning on the Shop Floor. Historical Perspectives on Apprenticeship, New York, Oxford, 2007, pp. 3-30; J. Puttevils, The Ascent of Merchants from the Southern Low Countries. From Antwerp to Europe 1480-1585 (unpublished doctoral dissertation University of Antwerp), Antwerp, 2012, pp. 163-171.
    ${ }^{60} \mathrm{~A}$. Orlandi, "The emergence of double-entry bookkeeping in Tuscan firms of the thirteenth and fourteenth centuries", in Accounting History, vol. 26, no. 4, 2021, p. 537.

[^28]:    ${ }^{61}$ Danna, "The Spread of Hindu-Arabic", p. 64; Id., Elaboration and Diffusion, pp. 63 and 64.
    ${ }^{62}$ R. Black, Education and Society in Florentine Tuscany, vol. 1, Leiden, Boston, 2007, pp. 1 and 222; F.G. Dragomann (ed.), Cronica di Giovanni Villani a miglior lezione ridotta coll' ajuto de' testi a penna con note filologiche di I. Moutier e con appendici storico-geografiche, vol. 3, Florence, 1845, p. 324.
    ${ }^{63}$ P. Benoît, "La formation mathématique des marchands français à la fin du Moyen Age: l'exemple du Kadran aux marchans (1485)", in Annales de l'Est, $5^{\text {th }}$ series, vol. 34, nos. 1-2, 1982, p. 221; Danna, Elaboration and Diffusion, pp. 64 and 72.
    ${ }^{64}$ Kool, Die conste vanden getale, p. 24; B. De Munck and H. de Ridder-Symoens, "Education and Knowledge: Theory and Practice in an Urban Context", in B. Blondé, M. Boone and A.-L. Van Bruaene (eds.), City and Society in the Low Countries 1100-1600, Cambridge, 2018, pp. 220, 225, 234, 238 and 251-252.
    ${ }^{65}$ A. Meskens, Practical mathematics in a commercial metropolis: mathematical life in late 16th century Antwerp, Dordrecht, Heidelberg, London, New York, 2013, p. 36.

[^29]:    ${ }^{66}$ Danna, "The Spread of Hindu Arabic", p. 77.
    ${ }^{67}$ H.L.V. de Groote, "Zestiende-eeuwse boekhoudkundigen en cijfermeesters in betrekking met Antwerpen", in Scientiarum Historia, vol. 3, no. 3, 1961, pp. 142-156; Kool, Die conste vanden getale, p. 48.
    ${ }^{68}$ Danna, Elaboration and Diffusion, pp. 61 (table 1), 74 and 76; Kool, Die conste vanden getale, p. 51,
    ${ }^{69}$ Danna, "The Spread of Hindu-Arabic", p. 71; Jenkinson, The Use of Arabic, pp. 264 and 266.
    ${ }^{70}$ Braunstein, Les Allemands à Venise, pp. 445 and 447.

[^30]:    ${ }^{71}$ Quotations from Goldthwaite, The Practice and Culture, p. 633 and Orlandi, The emergence of double-entry bookkeeping, p. 535.
    ${ }^{72}$ Bertrand, Les écritures ordinaires, p. 388 even uses the expression "pratiques de bricolage" or " do-it-yourself practices". An English translation of this impressive study is available as Documenting the Everyday in Medieval Europe. The Social Dimensions of a Writing Revolution, 1250-1350, Turnhout, 2019.
    ${ }^{73}$ Danna, Elaboration and Diffusion, p. 58.

[^31]:    * Acknowledgement: My participation in the initiatives of the "People in Motion: Entangled Histories of Displacement across the Mediterranean (1492-1923)" (CA18140) Cost Action provided me with a fertile intellectual environment in which to discuss and, hopefully, improve a previous version of this contribution. Here my gratitude goes to Giovanni Tarantino and José María Pérez Fernández. I am also grateful to Dr Francesco Bianchi and the anonymous peer reviewer of this journal for their suggestions, as well as to the Archivio di Stato di Padova and the Archivio Generale Arcivescovile di Bologna for the permission to reproduce images of their documents. Some of the findings mentioned in this article, relating to the effect of late medieval preaching, stem from the "Lenten Sermons Bestsellers: Shaping Society in Late Medieval Europe (1470-1520)" (VI.Veni.191H.018) project, part of the Veni research programme financed by the Dutch Research Council (NWO).

[^32]:    ${ }^{1}$ See D. Montanari, Monti di Pietà e presenza ebraica in Italia (secoli XV-XVIII), Rome, 1999; M.G. Muzzarelli, Il denaro e la salvezza: l'invenzione del Monte di Pietà, Bologna, 2001, and P. Delcorno and I. Zavattero (eds.), Credito e Monti di pietà tra Medioevo ed età moderna: un bilancio storiografico, Bologna, 2020, which is an extensive reassessment of the scholarship on this topic. Among the most recent contributions in the field, see L. Bruni, Capitalismo meridiano: alle radici dello spirito mercantile tra religione e profitto, Bologna, 2022, pp. 27-55 and L. Righi, "Lending at Interest: A Medieval Controversy in the Contemporary Debate", in Cristianesimo nella storia, 43, 2022, pp. 61-91 and T. Skambraks, Karitativer Kredit: Die Monti di Pietà, franziscanische Wirtschaftsethik und Städtische Sozialpolitik in Italien (15. und 16. Jahrhundert), Stuttgart, 2023.
    ${ }^{2}$ The latter goal was explicit in many of the earliest Monti, including the Paduan Monte which will figure prominently in this paper; see M. Melchiorre, "La propaganda antiebraica dell'Osservanza nei centri minori: Frate Bernardino da Feltre nel distretto padovano (1491-1494)", in Il Santo, 56, 2016, pp. 43-63. Overall, see G. Todeschini, La banca e il ghetto. Una storia italiana, Rome-Bari, 2016, in which the Monti are framed within a broad (political, juridical, economic) process of delegitimation and marginalization of Jews in fifteenth-century Italy. On the intrinsic ambiguity of charity/welfare initiatives, often entangled with complex dynamics of inclusion/exclusion and control, see P. Delcorno (ed.), Politiche di misericordia tra teoria e prassi: Confraternite, ospedali e Monti di Pietà (XIII-XVI secolo), Bologna, 2018.
    ${ }^{3}$ See M.G. Muzzarelli, "Un "deposito apostolico" per i poveri meno poveri, ovvero l'invenzione del Monte di pietà", in V. Zamagni (ed.), Povertà e innovazioni istituzionali in Italia dal Medioevo ad oggi, Bologna, 2000, pp. 77-94.

[^33]:    4 "Opportet etiam habere librum et facere buletum et multas scripturas"; Sermoni del beato Bernardino Tomitano da Feltre nella redazione di fra Bernardino Bulgarino da Brescia, ed. C. Varischi, Milan, 1964, vol. II, p. 186 (henceforth: Bernardino da Feltre, Sermoni). ${ }^{5}$ See J.M. Pérez Fernández, G. Tarantino, M. Calcagni (eds.), Paper in Motion: Information and the Economy of Knowledge in the Early Modern Mediterranean, Siena, 2021, also available online: https: / / www.paperinmotion.org/ (22/10/2022).

[^34]:    ${ }^{6}$ Ibid., pp. 55-60. See also M. Carboni and M.G. Muzzarelli (eds.), I conti dei Monti. Teoria e pratica amministrativa nei Monti di pietà fra Medioevo ed età moderna, Venice, 2008.
    ${ }^{7}$ See M. Carboni and M.G. Muzzarelli (eds.), In pegno: oggetti in transito tra valore d'uso e valore di scambio, Bologna, 2012.
    ${ }^{8}$ On the donors' function, see M. Carboni and E. Loss (eds.), Oltre la carità: Donatori, istituzioni e comunitù fra Medioevo ed Età contemporanea, Bologna, 2021. One of the chapters deals with donations to the Monte of Orvieto left in 19 last wills; the donations were mainly of cash or properties (fields or vineyards), yet in 1499 a woman bequeathed to the Monte "a cloth of dark fabric" ("un pallio di panno nero"); A. Santilli, "I benefattori del Monte di Pietà di Orvieto tra la fine del Quattrocento e gli inizi del Cinquecento", ivi, pp. 91-111: 95.

[^35]:    ${ }^{9}$ Their visible role should not overshadow the fact that local political authorities had often already discussed the opportunity of creating a Monte - and invited a skilled preacher exactly for this purpose.
    ${ }^{10}$ Milan, Biblioteca dei Cappuccini, MS A17. On this manuscript and the problems of Varischi's edition (see note 4), see P. Delcorno "'Per smorbare quella città': il nesso usura/ peste in Bernardino da Feltre", in M. Tagliaferri (ed.), I Monti di Pietà nel territorio di Ravennatensia: esperienza a confronto, Treviso, 2022, pp. 23-54.
    ${ }^{11}$ Bernardino Guslino, La Vita del beato Bernardino da Feltre, ed. I. Checcoli, Bologna, 2008, p. 227.
    12 "Tuti a far bone offerte etc., et nullus lo volia manzar etc."; Milan, Biblioteca dei Cappuccini, MS A17, fol. 207v (cf. Bernardino, Sermoni, vol. II, p. 273).
    ${ }^{13}$ On donations of wheat going to form the initial capital of the Monte, see G. Silvano, A beneficio dei poveri: Il Monte di pietà di Padova tra pubblico e privato (1491-1600), Bologna, 2005, pp. 145-146, which recalls how, between 1491 and 1499 , more than $6 \%$ of the donations received by this Monte came in this form ( 3,320 out of 52,706 lire). Since between 1491 and 1495 donations of wheat were also used to organize a Monte frumentario, there may actually have been more of them; on this short-lived venture, see V. Meneghin, Bernardino da Feltre e i Monti di Pietà, Vicenza, 1974, pp. 298-299.

[^36]:    ${ }^{14}$ The story mirrors the biblical episode of the widow's offering (Mark 12:41-44).
    15 "Non volia dio che sia Piero matto che aliquid comedat de monte, non se dica may che etc."; Milan, Biblioteca dei Cappuccini, MS A17, fol. 207v (cf. Bernardino, Sermoni, II, pp. 273-274). The story is also mentioned by Bernardino Busti (a collaborator of Bernardino da Feltre): "Nemo ergo sibi appropriet predicta bona deposita pro pauperibus que etiam stulti timent sibi usurpare. Unde Petrus stultus Padue renuit comedere duo ova Monti oblata dicens: Absit ut dicatur quod Petrus fuit primus qui comedit de Monte"; Defensorium Mons pietatis, Milan, 1497, fol. i4r.
    ${ }^{16}$ Guslino, Vita, p. 193. Fabrics were often used for donations (as well as pawns), a custom that is also confirmed in Padua (see below).

[^37]:    ${ }^{17}$ See P. Delcorno, "Michele d'Acqui 'motore e fundator' del Monte di Pietà di Verona", in Il Santo, 56, 2016, pp. 65-91.
    ${ }^{18}$ Beside the classic J. Bossy, "The Mass as a Social Institution 1200-1700", in Past and Present, 100, 1983, pp. 29-61, see (also as a counterbalance to Bossy's interpretation) M. Rubin, Corpus Christi: The Eucharist in Late Medieval Culture, Cambridge, 1991.
    ${ }^{19}$ Storia di Crema raccolta per Alemanio Fino dagli annali di m. Pietro Terni, ed. G. Solera, Crema, 1844, pp. 233-235. According to Pietro da Terni, they were sponsored by Cardinal Girolamo Basso della Rovere, the commendatory abbot of Abbazia Cerreta, close to Crema. This chronicle is briefly discussed in G. Albini, "La comunità ebraica in Crema nel secolo XV e le origini del Monte di Pietà", in Nuova Rivista Storica, 59, 1975, pp. 378-406: 404.

[^38]:    ${ }^{20}$ Given the context, this may be a reference to Eleazar's heroic death (1 Maccabees 6:43-46), which in the medieval Christian exegesis was interpreted as a prefiguration of the salvific Passion of Christ - a topic and iconography also common in illustrated texts such as the Speculum humanae salvationis.
    21 "[...] ultimamente presentossi Vespasiano sopra di uno veramente triumphale carro cum tanta caterva di Giudei ligati et incatenati [...] disse molti versi in proposito dil Monte contra Giudei"; Storia di Crema, p. 235. Vespasian was the Roman emperor under whose authority Jerusalem was conquered and destroyed and many Jews were sold as slaves.
    ${ }^{22}$ Albini, "La comunità ebraica in Crema", p. 404.
    ${ }^{23}$ Silvano, A beneficio dei poveri, pp. 135-191. Meneghin, Bernardino, pp. 263-340 solely

[^39]:    considers (with his partisan approach) Bernardino da Feltre's role, while only briefly discussing the other preachers involved in strengthening this Monte (pp. 327-328).
    ${ }^{24}$ Padua, Archivio di Stato di Padova (henceforth: ASPd), Monte di Pietà, b. 18. Silvano, A beneficio dei poveri, p. 79 mentions an early copy of this document (ASPd, Monte di Pietà, b. 16) "that does not change anything of the original", however, I was not able to consult it. On the administrative culture of the Paduan elite that, in those decades, led the civic "welfare system" (i.e., the main charitable institutions and the Monte itself), see F. Bianchi, "Alle origini della scuola di Santa Maria della Carità", in La scuola della Caritù a Padova, ed. G. Silvano, Milan, 2014, pp. 25-43, in particular p. 34, which recalls how the management of these institutions was intertwined with the Scuola della Carità that expressed one of the conservador of the Monte and used it as its own bank.
    ${ }^{25}$ On this change, see Silvano, A beneficio dei poveri, pp. 159-161.
    ${ }^{26}$ ASPd, Monte di Pietà, b. 19. Both books were initiated by the notary Zanon Tergolina (see b. 18, fol. 5 r and b. 19, fol. 1r). On these two account books, see Silvano, $A$ beneficio dei poveri, pp. 76-79, which devotes particular attention to the deposits and their registration (pp. 193-219).
    ${ }^{27}$ The last donation - derived from selling six women's shirts worth 10 lire and 4 soldi and a dark velvet pair of sleeves worth 5 lire - dates from September 14, 1497; ASPd, Monte di Pietà, b. 265, f. 1, fol. 35v.

[^40]:    ${ }^{28}$ ASPd, Monte di Pietà, b. 265, f. 1, fol. 1rv. Silvano, A beneficio dei poveri, p. 136 pays little attention to this narrative or this document.
    ${ }^{29}$ Ibid., p. 136 only mentions it in a footnote. Saviolo had already published the early documents and statutes of the Monte in 1647 (see ivi, p. 26). The only scholar to extensively use Saviolo's Thesaurus is Meneghin, Bernardino, pp. 291-301. His focus is on the events of 1491 (i.e., on Bernardino's role), not on the material objects (cf. p. 297).
    ${ }^{30}$ Pietro Saviolo, Thesaurus urbis Paduanae, alter apostolicum depositum patavinum pecuniae a patribus civitatis collectae et donatae societati Pauperum ut egeni perpetuo subleventur, vocatus S. Mons Pietatis, Padua, 1682. The idea of the Monte as an "apostolic deposit" dates back to the earliest years of this institution; see M.G. Muzzarelli, "Un 'deposito apostolico' per i poveri meno poveri, ovvero l'invenzione del Monte di pietà", in Povertà e innovazioni istituzionali in Italia, ed. V. Fortunati, Bologna, 2000, pp. 77-94.
    ${ }^{31}$ Reproduced in Meneghin, Bernardino, p. 272* (his iconographic interpretation is slightly different from mine).

[^41]:    ${ }^{32}$ On the pervasive presence of this image and its civic meaning in Padua, see W. Barcham, "La trasformazione del Christo passo in un emblema urbano a Padova nel Quattrocento", in M.G. Muzzarelli and M. Carboni (eds.), L'iconografia della solidarietà: la mediazione delle immagini (secoli XIII-XVIII), Venice, 2011, pp. 29-46. More in general, see C. Puglisi and W. Barcham, "Bernardino da Feltre, the Monte di Pietà and the Man of Sorrows: Activist, Microcredit, and Logo", in Artibus et Historiae, 58, 2008, pp. 35-64.
    ${ }^{33}$ On the characteristics and meaning of these buildings, see also L. Jacobi, The Architecture of Banking in Renaissance Italy: Constructing the Spaces of Money, Cambridge, 2019, pp. 123-157.
    34 "Giovane, di carnaggione bianca, di bello aspetto, con gl'occhi grassi e con il naso aquilino, haverà l'ali alle spalle, sarà vestita di rosso, con una fiamma in cima del capo, si tenga la man sinistra sopra il cuore e con la destra versi un Cornucopia pieno di diverse cose utili alla vita humana"; Cesare Ripa, Iconologia overo descrittione dell'imagini universali cavate dall'antichità et da altri luoghi, Rome: Lepido Facii, 1603, pp. 401-402 (this is the first illustrated edition). I am grateful to Dr Lorenzo Coccoli, who called my attention to this passage.
    ${ }^{35}$ See L. Coccoli, Il governo dei poveri all'inizio dell'età moderna, Milan, 2017.
    ${ }^{36}$ The idea that the Monte summarizes and transcends the seven works of mercy is entrenched in the (visual) discourses about this institution, as well as being represented

[^42]:    in the Tabula della salute used by Marco da Montegallo ( $\dagger 1496$ ); see Muzzarelli, Il denaro, pp. 114-118.
    ${ }^{37}$ Both options occur in Ripa, Iconologia, pp. 63-64 and 403.
    ${ }^{38}$ Saviolo, Thesaurus, pp. 2-3, which depends on ASPd, b. 265, f. 1, fol. 1rv.
    ${ }^{39}$ He became involved in this charitable enterprise not right from the start (June 26, 1491), but already in the year of its foundation, when Bernardino was heavily involved in promoting the Monte; after a couple of "normal" donations, Piero's name stands out on July 24, 1491, when "PETRUS BRIXIENSIS, cognomenato SAPIENS, argentum diversarum formarum cereo cuidam appensum et aliquantam pecuniam ei affixam, cuius numerus ignoratur, habetur autem in summa pecuniarum minutatim collectarum; item tobaleas quasdam inter quas erat una auro in extremitatibus texta". At the end of the list of the donations of that day it is added: "Item, quas obtulerunt utriusque sexus persone ignotae, inter quas etiam computatur oblatio Petri cognomenato Sapientis, L. 101.3", Saviolo, Thesaurus, pp. 23-24 (capitalization and italics in the text). The text (as far as can be read) comes from ASPd, Monte di Pietà, b. 265, f. 1, fol. 5v-6r. Meneghin, Bernardino, pp. 295-296 recalls the role of Piero da Brescia not only in Saviolo's text, but also in the poem Mons Euganeus composed by Giovanni Barozzi to celebrate the foundation of the Monte (a text also significant for its harsh attacks against the Jews; p. 301). On the use of wax as an actual currency, like in the offering of Petrus, see B. Del Bo, L'età del lume: Una storia della luce nel Medioevo, Bologna, 2022, pp. 53-64.

[^43]:    ${ }^{40}$ On the basis of Saviolo, a brief mention of Piero da Brescia occurs in O. Niccoli, Il seme della violenza: Putti, fanciulli e mammoli nell'Italia tra Cinque e Seicento, Rome-Bari, 1995, p. 84. Silvano, A beneficio dei poveri, pp. 138, 141-143, mentions him while overlooking his special identity and role.
    ${ }^{41}$ The introduction of this list underlines that Michele preached during Lent "ad contribuendum Montipietatis sollicitante omnes"; ASPd, Monte di Pietà, b. 18, fol. 135r. I partially discussed this list - on the basis of Saviolo, Thesaurus, pp. 69-74 - in P. Delcorno, "All'ombra del gigante: il Monte di Pietà nell'azione di Timoteo da Lucca e Michele d'Acqui", in Credito e Monti di Pietà, pp. 245-280: 259-260.
    ${ }^{42}$ ASPd, Monte di Pietà, b. 18, fol. 135r. On the involvement of the collegium iuristarum in charitable/welfare institutions in Padua, see Bianchi, "Alle origini della scuola di Santa Maria della Carità", p. 30.

[^44]:    ${ }^{43}$ ASPd, Monte di Pietà, b. 18, fol. 135v.
    ${ }^{44}$ Ibid., fol. 135rv. The support of trade associations (in the form of deposits) can also be seen in the refoundation of the Monte of Bologna in 1504; see A. Antonelli (ed.), Il Giornale del Monte della Pietà di Bologna: Studi e edizione del più antico registro contabile del Monte di Pietà di Bologna (1473-1519), Bologna, 2003.
    45 "Magistra puellarum apud ecclesiam cathedralem [...] 1. 6; magistra de Strata Venturina [...] 1. 24; magistra alia puellarum in civitate discentium [...] 1. 24; magistra alia [... ] 1. 6"; ASPd, Monte di Pietà, b. 18, fol. 135 v .
    ${ }^{46}$ I have marked in bold the words that are changed in Saviolo, Thesaurus, pp. 72-74, sometimes owing to a mistake in reading the original (schutellinus becomes cultellinus),

[^45]:    but most often to formalize the macaronic Latin of the original text: camisia $->$ subucula; toballeoli -> mappulae; lenzoletum -> linteolus; facioleti -> sudarioli; elmus -> galea. The English translation is at times tentative, since the objects are not always clearly identifiable.
    ${ }^{47}$ For the last two items, the value at which they were sold is added in smaller writing.
    ${ }^{48}$ This point is underlined in Silvano, A beneficio dei poveri, p. 152.
    ${ }^{49}$ See P. Hohti Erichsen, Artisans, Objects and Everyday Life in Renaissance Italy: The Material Culture of the Middling Class, Amsterdam, 2021.
    ${ }^{50}$ At the end of Lent in 1504, friar Francesco di San Colombano led a fundraising campaign worth 7,534 lire (the list of donations is missing); see Saviolo, Thesaurus, p. 86. On this friar, see Delcorno, "All'ombra del gigante", pp. 260-263. To give an idea of the extent of the success of these fundraising activities, one can compare them with the annual income of the main charitable institutions of Padua at the time: Ospedale $\mathrm{Ca}^{\prime}$ di Dio about 6,500 lire in 1473; Ospedale San Francesco about 3,000 lire in 1490; Scuola della Carità 5,136 in 1487 (to which one has to add donations in kind); cf. Bianchi, "Alle origini della scuola di Santa Maria della Carità", p. 35.
    ${ }^{51}$ ASPd, Monte di Pietà, b. 18, fol. 19rv. With minor differences (two belts instead of three) in ASPd, Monte di Pietà, b. 265, f. 1, fol. 5r and Saviolo, Thesaurus, pp. 20-21.

[^46]:    ${ }^{52}$ ASPd, Monte Pietà, b. 18, fol. 19 v .
    ${ }^{53}$ ASPd, Monte Pietà, b. 265, f. 1, fol. 4v (July 10, 1491). On May 6, 1492, it recorded a donation of many books by wives and widows, but no details were given (fol. 8v). ${ }^{54}$ U. Eco, La vertigine della lista, Milan, 2009.

[^47]:    ${ }^{55}$ Guslino, Vita, p. 254, which records that Bernardino preached for one month, several times inviting the people to make donations to the Monte. We have the list of donations collected on Sunday July 22, 1494; see ASPd, Monte di Pietà, b. 265, f.1, fol. 12r-13r (and Saviolo, Thesaurus, pp. 53-57).
    ${ }^{56}$ ASPd, Monte Pietà, b. 265, f. 1, fol. 8v. On these spectacular initiatives, see Muzzarelli, Il denaro, pp. 24-29 and - for Padua - Meneghin, Bernardino, pp. 297-298 and 300-302.
    ${ }^{57}$ ASPd, Monte Pietà, b. 265, f. 1, fol. 14r. On wax used as an alternative currency, see note 39 .

[^48]:    ${ }^{58}$ On the use of banners, see Muzzarelli, Il denaro, pp. 125-136.
    59 "Hortulani libras triginta in quodam melone infixas, qui in summitate habebat aureum unum"; ASPd, Monte Pietà, b. 265, f. 1, fol. 4r (July 24, 1491).
    60 "Incolee suburbii Sancte Crucis ab intus et ab extra, una cum fornaceriis et naviculatoribus eiusdem loci, obtulerunt libras ducentasvigintiduas, hoc est L. 222. II venerunt processionaliter cum ingenti numero equorum precedentium et subsequentium tres magos ad presepe dei (?) contra domum montis instructum munera oblaturos, habentes grandem numerum ethiopum et vestitum habitus peregrini"; Ibid., fol. 6r (July 31, 1491). Borgo Santa Croce was in the southwestern part of Padua, close to the river Bacchiglione.
    ${ }^{61}$ "Oblatione del Monte de pietà de Padoa. Dieno haver adì primo mazo 1499 per loreo medesne riceputi in contadi, tratto de arzenti, cere et robe vendute offerte a dicto monte da XXVI zugno 1491 che principiò fin in april 1499, redutti in sumario per li spettabili [...] calcullatori electi a fare le ragione de dicto monte. Apare per suo conto in secretario. Registrado L. 40122, s. $9^{\prime \prime}$; ASPd, Monte di Pietà, b. 941, fol. 1r. The other entries are do-

[^49]:    nations collected in the cashboxes of some churches (for 522 lire, just $1 \%$ of the total) and the support provided by the Monte confraternity, founded in 1492 (8,710 lire, more than $16 \%$ ).

[^50]:    * Abbreviations used: ASF: Archivio di Stato di Firenze; ACDV: Archivio Caccini Del Vernaccia; AAL: Archivio Adami-Lami; BNCF: Biblioteca Nazionale Centrale Firenze.

[^51]:    ${ }^{1}$ F. Angiolini, "Il lungo Seicento (1609-1737): declino o stabilità?", in E. Fasano Guarini (ed.), Storia della civiltà toscana, Florence, 2003, pp. 41-76.
    ${ }^{2}$ F. Angiolini, V. Becagli, M. Verga (eds.), La Toscana nell'età di Cosimo III, Florence, 1993.
    ${ }^{3}$ C. Zwierlein (ed.), The Power of the Dispersed. Early Modern Global Travelers beyond Integration, Leiden, 2022; C. Antunes and F. Bethencourt (eds.), Merchant Cultures. A Global Approach to Spaces, Representations and Worlds of Trade, 1500-1800, Leiden, 2022.

[^52]:    ${ }^{4}$ G. Signorotto and M.A. Visceglia (eds.), Court and Politics in Papal Rome, 1492-1700, Cambridge, 2002.
    ${ }^{5}$ Ö. Bardakçi and F. Pugnière, La dernière croisade. Les Français et la guerre de Candie, 1669, Rennes, 2008.

[^53]:    ${ }^{6}$ P. Malanima, "L'Economia Toscana nell'età di Cosimo III", in Angiolini, Becagli, and Verga, La Toscana nell'età di Cosimo III, pp. 3-17.
    ${ }^{7}$ Id., I Riccardi di Firenze. Una famiglia e un patrimonio nella Toscana dei Medici, Florence, 1977.

[^54]:    ${ }^{8}$ M. Carmona, "La Toscane face à la crise de l'industrie lanière: techniques et mentalités economiques aux XVI et XVII ${ }^{\text {e }}$ siècles", in M. Spallanzani (ed.), Produzione, commercio e consumo dei panni lana nei secoli XII-XVIII, Florence, 1976, pp. 151-168.
    ${ }^{9}$ R. Mazzei, "Continuità e crisi nella Toscana di Ferdinando II (1621-1670)", Archivio Storico Italiano, 145/2, 1987, pp. 61-79.
    ${ }^{10}$ C. Tazzara, The Free Port of Livorno and the Transformation of the Mediterranean World, 1574-1790, Oxford, UK, 2017.

[^55]:    ${ }^{11}$ In these commercial ventures, the Florentine families with the largest personal investments in the Iberian Peninsula were the Gerini, the Ginori, and the Tempi. I am currently working on a project that aims to reconstruct the global presence of the Tuscan merchant patriciate in the long seventeenth century.
    ${ }^{12}$ ASF, Auditore dei Benefici Ecclesiastici, 5686, memorie di F. Tempi (September 29, 1676). See also F. Martelli, "'Nec spes nec metus': Ferrante Capponi, giurista ed alto funzionario nella Toscana di Cosimo III", in Angiolini, Becagli and Verga (eds.), La Toscana nell'età di Cosimo III, pp. 137-163.

[^56]:    ${ }^{13}$ P. Malanima, "I commerci del mondo nel 1674 visti da Amsterdam e da Livorno", in Ricerche di Storia Moderna, 4, 1995, pp. 153-180.

[^57]:    ${ }^{14}$ The two missing portions of the Caccini Del Vernaccia archive were purchased by the State Archives of Florence in 1989 and 2021.

[^58]:    ${ }^{15}$ BNCF, Palatino manuscript fonds, Satire by Benedetto Menzini, c. 34.

[^59]:    ${ }^{16} \mathrm{C}$. Marsilio, "O dinheiro morreu. Paz à sua alma danada". Gli operatori finanziari del XVII secolo tra investimenti e speculazioni, Palermo, 2012.
    ${ }^{17}$ ACDV, section B, Correspondence of Ugolino Del Vernaccia (1640s-1701).

[^60]:    ${ }^{18}$ ACDV, section B, unit 36, letter no. 374, Raffaello Del Vernaccia to Ugolino Del Vernaccia, Livorno, February 16, 1684.

[^61]:    ${ }^{19}$ On the development of the port of Messina, see I. Fazio, Il porto franco di Messina nel lungo XVIII secolo. Commercio, fiscalità e contrabbandi, Rome, 2021.

[^62]:    ragione 'AdamiEGras' in Acri [e] Domenico Adami e sua ragione 'AdamiENiccodemi' in Aleppo relate a' loro negozziati in Levante [...].

[^63]:    ${ }^{21}$ On limited partnerships, M. Carboni and M. Fornasari, "Tra economia e diritto. Le società in accomandita nella Bologna d'antico regime", Quaderni DSE Working Paper, 864 (January 18, 2013); for the preliminary results of an ongoing project on limited partnerships in early modern Tuscany, see F. Trivellato, "Renaissance Florence and the Origins of Capitalism: A Business History Perspective", in Business History Review, 94/1, 2020, pp. 229-251. On Francesco Feroni, H. Cools, "Francesco Feroni (1614/16-1696). Broker in Cereals, Slaves and Works of Art", in H. Cools, M. Keblusek, B. Noldus (eds.), Your Humble Servant. Agents in Early Modern Europe, Hilversum, 2006, pp. 39-50.

[^64]:    ${ }^{1}$ Elvira Vilches, "The Character and Cultures of Credit in Early Modern Spanish Texts: Matters of Trust, Belief, and Uncertainty" in Rodrigo Cacho Casal and Caroline Egan (eds.), The Routledge Hispanic Studies Companion to Early Modern Spanish Literature and Culture, London, 2022, pp. 124-139.
    ${ }^{2}$ Elvira Vilches, "Doing Things with Money in Early Modern Spain", in Hilarie Kallendorf (ed.), A Companion to the Spanish Renaissance, Leiden: Brill, 2019, pp. 508530.

[^65]:    ${ }^{3}$ Miguel Gerónimo de Santa Cruz, El dorado Contador: arithmética especulativa y práctica, Seville, 1603, preface.
    ${ }^{4}$ Bartolomé Salvador de Solórzano, Libro de caxa y manual de cuentas de mercaderes, [1590] London, 1980, fols. 41-42.
    ${ }^{5}$ See Bernardo Bátiz-Lazo et al., "Adoption of Double Entry Bookkeeping in Mexico and Spain" in América Latina en la Historia Económica, 19, 2012, pp. 164-205. Esteban Hernández Esteve, "Pedro Luis de Torregrosa, primer contador del libro de Caxa de Felipe II. Introducción de la contabilidad por partida doble en la Real Hacienda de Castilla (1592)", in Revista de Historia Económica, 3, no. 2, 1985, pp. 221-246.

[^66]:    ${ }^{6}$ Lothar Müller, White Magic: The Age of Paper, trans. Jessica Spengler, Cambridge, UK, 2015, p. 43. Jose María González Ferrando, "De las tres formas de llevar 'cuenta y razón' según el licenciado Diego del Castillo, natural de Molina", in Revista Española de Financiación y Contabilidad, 17, no. 55, 1988, pp. 183-222.
    ${ }^{7}$ Diego de Castillo, Tratado de cuentas, Burgos, 1522; Patti Mills, "The Probative Capacity of Accounts in Early-modern Spain", in The Accounting Historians Journal, 14, no. 1, 1987, pp. 95-108.
    ${ }^{8}$ John Richard Edwards, A History of Financial Accounting, London, 1989.
    ${ }^{9}$ Max Weber, The Protestant Ethic and the Spirit of Capitalism, ed. Richard Swedberg, New York, 2009, pp. 6, 77.

[^67]:    ${ }^{10}$ Bartolomé Salvador de Solórzano, ch. 11, fols. 23-25.
    ${ }^{11}$ See Hernández Esteve "Pedro Luis De Torregrosa". Pedro Madariaga, Libro subtilísimo intitulado honra de escribanos, Valencia, 1565, fol. 34.
    ${ }^{12}$ Madariaga, Libro subtilísimo intitulado honra de escribanos, fols. 24-35.

[^68]:    ${ }^{13}$ Bartolomé Salvador de Solórzano, Libro de caxa y manual de cuentas de mercaderes y de otras personas, con la declaración dellos, Madrid, 1590. Address to the reader.
    ${ }^{14}$ See Hernández Esteve. Earlier manuals such as Diego del Castillo's Tratado de cuentas, Burgos, 1522; Salamanca, 1542, focus on the legal aspects of accounting. Both Gaspar de Texeda's Suma de aritmética práctica y de todos las mercaderías con la orden de contadores, Valladolid, 1546, and Antich Rocha's Arithmética, Barcelona, 1564, inserted chapters discussing bookkeeping, following Luca Pacioli's model.

[^69]:    ${ }^{15}$ See Gómez Bravo, pp. 139-43; and Castillo, pp. 59-75.
    ${ }^{16}$ See Castillo Gómez, pp. 74-81.
    ${ }^{17}$ See Vilches, "Doing Things with Money in Early Modern Spain".
    ${ }^{18}$ Kurt H. Wolff (ed.), The Sociology of Georg Simmel, Glencoe, IL, 1950, p. 412.
    ${ }^{19}$ See Bruce G. Carruthers, "Accounting for Rationality: Double-Entry Bookkeeping and the Rhetoric of Economic Rationality", in American Journal of Sociology, 97, no. 1, 1991, pp. 31-69.
    ${ }^{20}$ Viviana Zelizer, "The Social Meaning of Money: Special Monies", in American Journal of Sociology, 95, no. 2, 1989, pp. 342-377.

[^70]:    ${ }^{21}$ Craig Muldrew, The Economy of Obligation: The Culture of Credit and Social Relations in Early Modern England, New York, 1998; Scott Taylor, "Credit, Debt, and Honor in Castile, 1600-1650", in Journal of Early Modern History, 7, no. 1, 2003, pp. 8-27.
    ${ }^{22}$ Duarte Gómez Solis, Discurso de comercio de las dos Indias: donde se tratan materias importantes de estado y de guerra, Madrid, 1622, f. 17r, ff. 32r-33r.

[^71]:    ${ }^{23}$ Luis Alcalá, Tratado en que a la clara se ponen y determinan las materias de los préstamos, Toledo, 1543, preface; Tomás de Mercado, Suma de tratos y contratos, ed. Nicolás SánchezAlbornoz, Madrid, 1977, vol. 1, pp. 92-95, vol. 2, pp. 360, pp. 494-496.
    ${ }^{24}$ Mateo Alemán, Guzmán de Alfarache, ed. Francisco Rico and Luis Gómez Canseco, [1599, 1604] Barcelona, 2012, pp. 1447-1454.

[^72]:    ${ }^{25}$ Alemán, Guzmán de Alfarache, pp. 523-542.

[^73]:    ${ }^{26}$ Salvador de Solórzano, Libro de caxa y manual de cuentas de mercaderes, fols. 49-50.
    ${ }^{27}$ Weber, p. 6
    ${ }^{28}$ Gómez Solis, ff. 17, 32-33.
    ${ }^{29}$ Alemán, Guzmán de Alfarache, p. 657.
    ${ }^{30}$ Alemán, Guzmán de Alfarache, p. 631.

[^74]:    ${ }^{31}$ Alonso Castillo Solórzano, La niña de los embustes, Teresa de Manzanares, in La novela picaresca española, ed. Ángel Valbuena Part, Madrid, 1974, pp. 331, 332.

[^75]:    ${ }^{32}$ Castillo Solórzano, La niña de los embustes, Teresa de Manzanares, pp. 368-369.
    ${ }^{33}$ Elvira Vilches, "Trade, Silver, and Print Culture in the Colonial Americas", in Latin American Cultural Studies, 24, no. 3, 2015, pp. 315-334. Philip Grierson, The Origins of Money, London, 1977.
    ${ }^{34}$ Karl Marx, Capital: A Critique of Political Economy, 3 vols., vol. 3, London, 1990, p. 516.

[^76]:    ${ }^{35}$ Fray Gabriel Téllez, Quarta parte de las comedias de Tirso de Molina, Madrid, 1635. ${ }^{36}$ Vilches, "Doing Things with Money in Early Modern Spain"; Vilches, "The Character

[^77]:    and Cultures of Credit in Early Modern Spanish Texts: Matters of Trust, Belief, and Uncertainty".
    ${ }^{37}$ Karl Marx, Grundrisse, trans. Martin Nicolaus, London, 1973, p. 163.
    ${ }^{38}$ Max Weber, "Religious Rejections in the World and their Directions," in H.H. Gerth and C. Wright Mills (eds.), From Max Weber: Essays in Sociology, New York, 1971, p. 331. ${ }^{39}$ Zelizer, "The Social Meaning of Money: Special Monies".
    ${ }^{40}$ Martijn Konings, The Emotional Logic of Capitalism, Stanford, CA, 2015, p. 18.

[^78]:    ${ }^{41}$ Kenneth Lipartito, "Reassembling the Economic: New Departures in Historical Materialism", in The American Historical Review, 121, no. 1, 2016, pp. 101-139, https: / / doi. org/10.1093/ahr/121.1.101.

[^79]:    ${ }^{42}$ Konings, The Emotional Logic of Capitalism, pp. 18-20.

[^80]:    ${ }^{1}$ The full title of Malynes's work is Consuetudo, vel lex mercatoria, or The ancient law-merchant. Diuided into three parts: according to the essentiall parts of trafficke. Necessarie for all statesmen, iudges, magistrates, temporall and ciuile lawyers, mint-men, merchants, marriners, and all others negotiatin in all places of the world (USTC 3010630)
    ${ }^{2}$ This essay is part of a long-term research project which is wider in scope. Some of my

[^81]:    results have already been published, and current work in progress should yield more detailed insights in future publications. Some of my recent publications on this and related topics include: "Notes for a Communicative History of Early Modern Paper: Giovanni Antonio Tagliente's Handbooks", in Livia Faggioni, Mauro Mussolin (eds.), La Carta e il Mediterraneo: Produzione, Commercio, Communicazione, Fabriano, 2022, pp. 147167; "Paper in Motion: Communication, Knowledge, and Power. Methods and Case Studies for an Interdisciplinary Approach", in CROMOHS, no. 23, 2020, pp. 81-112, https: / / doi.org/10.36253/ cromohs-12025; "Introduction: Information and the Early Modern Economy of Knowledge", in José María Pérez Fernández and Giovanni Tarantino (eds.), with Matteo Calcagni, Paper in Motion: Information and the Economy of Knowledge in the Early Modern Mediterranean, Viterbo, 2021, pp. 21-33. Like the present article, these essays are all the result of activities organized by the PIMo COST Action, https: / / www.peopleinmotion-costaction.org /. Outside the scope of PIMo, but also part of my long-term research on these topics is a forthcoming survey on "Information, Knowledge, and Communication in the Renaissance", to be published in The Renaissance World, Routledge Resources Online, https:/ / www.taylorfrancis.com/rrorw / ?context=rrorw, accessed on 28/04/2023.

[^82]:    ${ }^{3}$ Pacioli, 200r ff. Early in 2022 our PIMo work group Paper in Motion organized a hybrid exhibition at the Archivio di Stato in Prato which sampled different types of administrative, commercial, and financial documents, https:/ / www.paperinmotion.org /. It included, among several others, digital copies of some of the documentary genres described by Pacioli; see for example these cases from section three of the online catalogue, https: / / www.paperinmotion.org/ section-03/ \#toggle-id-2, and https:/ / www.paperinmotion.org / section-03/\#toggle-id-3, accessed on 21/04/2023.

[^83]:    ${ }^{4}$ I do not have neither time nor space to discuss in detail the authors, the ideas and the phenomena that preceded Pacioli during the $13^{\text {th }}$ and $14^{\text {th }}$ centuries. Some of these precedents have been addressed by J. Kaye in two important books dedicated to the impact that the monetization of European society during this period had upon disciplines like theology and natural philosophy, both of which engaged in an intricate dialectic with new habits of measurement and quantification and new epistemological principles based on ideas of balance and equilibrium. See J. Kaye, Economy and Nature in the Fourteenth Century: Money, Market Exchange, and the Emergence of Scientific Thought, Cambridge, UK, 1999, and A History of Balance, 1250-1375: The Emergence of a New Model of Equilibrium and its Impact on Thought, Cambridge, UK, 2014.
    ${ }^{5}$ Pacioli, 206 r.
    ${ }^{6}$ For an example of the importance of the mis-en-page when it came to the semiotic registration of information see this document from the Fugger Archive, https: / / www.paperinmotion.org / paper/matthaus-schwarz-calculates-fugger-claims-towards-the-spanish-fleets-of-1557/, accessed on 21/04/2023. This large sheet of paper $(43.5 \times 59.2 \mathrm{~cm})$ amounts to a map in which the chief accountant of the Fugger banking company arranges, cross-references and processes data of a very diverse nature into a graphic that provides a snapshot of a large section of the bank's affairs.

[^84]:    ${ }^{7}$ Werner Sombart, Der modern Kapitalismus, vol. I, Die vorkapitalistische Wirstchaft, Munich and Leipzig, 1916, p. 120; quoted in Lothar Müller, White Magic: The Age of Paper, London, 2014, p. 44; for further details see Müller, p. 45 ff. For a more recent, albeit brief, treatment of the language of mathematics and its social-semiotic dimension as part of the ideological infrastructure of capitalism see Thomas Picketty, who claims that "the statistics, historical data, and other quantitative measures presented in this book are imperfect, provisional, tentative social constructs" (Thomas Picketty, "On the Complementarity of Natural Language and Mathematical Language", in Capital and Ideology, trans. A. Goldhammer, Cambridge, Mass. and London, 2020, pp. 43-45, p. 43).

[^85]:    ${ }^{8}$ Mary Poovey, Genres of the Credit Economy. Mediating Value in Eighteenth- and Nine-teenth-Century Britain, Chicago, IL, 2008, pp. 1-4.
    ${ }^{9}$ For a sophisticated and detailed account of the longue durée in the relation between theology and the new contract culture, see W. Deckok, Theologians and Contract Law: The Moral Transformation of the Ius Commune (ca. 1500-1650), Leiden and Boston, 2012. His chapter seven focuses on how contracts were meant to regulate (and eventually, legitimise) commercial and financial exchanges upon solid moral principles ("Fairness in Exchange", pp. 507-604). The relation between Christian morality, on the one hand, and new mercantile and financial practices is also the subject of G. Todeschini's Franciscan Wealth: from Voluntary Poverty to Market Society, Saint Bonaventure, NY, 2009, in particular chapter IV ("The Market as a Form of Society", pp. 151-196). An original approach can also be found in Paolo Prodi's Settimo non rubare: furto e mercato nella storia dell'Occidente, Bologna, 2009, who stresses the impact of new habits of measurement and quantification as part of the new contractual culture and therefore as inescapable preconditions for the enfranchisement of any given individual as a legitimate agent within civic life (see e.g. pp. 137-138.)
    10 "Si deue attendere a li pacti e conuentioni che intra loro fanno per fede o per testimonio o per scripto o altro instrumento." (150r, italics are mine).

[^86]:    ${ }^{11}$ For a recent account of the nature and function of bills of exchange, see F. Trivellato's The Promise and Peril of Credit: What a Forgotten Legend about Jews and Finance Tells Us about the Making of European Commercial Society, Princeton, NJ, 2019, pp. 1-4 and 24-30. For further technical details on the letter of exchange, see Adrian R. Bell, Chris Brooks, and Terry K. Moore, "The 'Buying and Selling of Money for Time': Foreign Exchange and Interest Rates in Medieval Europe", January 6, 2015. Discussion Paper Number ICM-2015-01, Henley Business School, University of Reading, in particular p. 5, available at SSRN: https:/ / dx.doi.org / 10.2139/ssrn.2546003, accessed on 06/04/2023. Our online exhibition includes several samples of different types of bills of exchange, https: / / www.paperinmotion.org/ section-03/\#toggle-id-3, accessed on 21/04/2023. One of them (https: / / www.paperinmotion.org / paper / bill-of-exchange-with-endorse-ment-on-security-from-antonio-di-neve-in-montpellier-to-francesco-di-marco-datini-and-his-partners-in-barcelona/, accessed on $21 / 04 / 2023$ ) dates from 1410, which proves that this was a well-established practice, long before Pacioli or Malynes set about explaining their nature and functions.

[^87]:    12 "You may not say in the Bill, it may please you to pay, or I pray you to pay (although it were to your Master;) for the Bill (of his high Nature) doth carrie with it a Command without respect of persons, and most men will not vse the words (Make him good Payment) but the fewer words the more formall; neither is there any witnesses vnto it nor any seale, but a small peece of paper of some two fingers broad: and the Letter of Aduice doth declare for whose account, or to what intent or purpose the said money is taken up; which Letter of Aduice, doth accompanie the Bill of Exchange with the like inscription, with the words De aduiso" (Malynes, Lex Mercatoria, 1622, p. 394, italics are mine).

[^88]:    ${ }^{13}$ Of the Transferring or setting ouer of Billes Obligatorie, betweene Merchants and others, pp. 98-100.
    14 "For the sinceritie of plaine dealing hath hitherto beene inuiolable, in the making of the said Billes, which euerie man of credit and reputation giueth of his owne hand writing, or made by his seruant, and by him subscribed, without any seale or witnesse thereunto; and is made payable to such as Merchant or person, or to the Bearer of the Bill, at such time or times of payment as is agreed and concluded betweene the parties, either for money or commodities lent or bought, and so declared in the said Bill, according to the forme hereafter expressed" (Lex Mercatoria, p. 98, italics are mine).

[^89]:    15 "the bearer... may go to another man, and buy other commodities therewith, as if it were with readie money, the time onely considered: nay more, if he will haue readie money for these Bills, he may sell them to other merchants that are moneyed men, and abating for the interest for the time ...they shall have money at all times ... for it is properly as money paied by assignation, whereby verie great matters are compassed in the trade of merchandize ... the more commodities there are sold the lesse readie money is transported, and life in infused into trafficke and trade for the generall good" (Lex Mercatoria, p. 99, italics are mine).
    ${ }^{16}$ Lex Mercatoria, 1622, p. 99.

[^90]:    ${ }^{17}$ On imaginary money see Luigi Einaudi's classic essay "Teoria della moneta immaginaria nel tempo da Carlomagno alla rivoluzione francese", in Rivista di storia economica, no. 1, 1936, pp. 1-35. A more recent account can be found in Jan A. Kregel, "Democratizing Money", in the Levy Economics Institute, Working Papers Series, 2019, http:/ /dx.doi.org / 10.2139 / ssrn.3387582, p. 5. The concept of imaginary money evokes Pacioli's reference to the fantasia of the merchant, which as we saw above pre-exists the codification of this information by means of the semiotics of double-entry bookkeeping.

[^91]:    ${ }^{18}$ This principle of Scholastic philosophy and Roman Law also has interesting links with the nature of fiction, and the ontological status of imaginary creatures and events, a fascinating topic which I do not have time to pursue here. There is also an abundant series of both primary and secondary sources that deal with it. A first approach can be found in Mario Gaetano Lombardo, La forma che da l'essere alle cose. Enti di ragione e bene transcendentale in Suárez, Leibniz, Kant, Milano, 1995. For a more recent treatment of the concept of ens rationis see Daniel D. Novotny, Ens rationis from Suarez to Caramuel: A Study in Scholasticism of the Baroque Era, New York, 2013.
    19 "Who will denie (saieth the intellectuall part of Wit) that euen as forma dat esse rei, so I caused dame Nature to performe her function [...] when the teeth of infants come forth orderly and conioyned by my obseruation, are they made an obiect for the tongue to play vpon? [ ...] without which the Grammarian cannot ascribe to himselfe, Vox literata $\mathcal{E}$ articulata, debito modo pronunciata? By which abilitie, the Caldean, Hebrew, Greeke, and Latine letters were afterwards by Arts inuented, upon which foundation Logicke was builded, whereby I caused verum \& falsum to be distinguished, and trueth to be discerned [...] Poets are beholding vnto me, whose Naturall wittie facultie maketh them famous, according to the prouerbe, Nascimur Poeta fimus Oratores. But now Art steppeth in, and claimeth the honour of Rhetoricke, as deuised by her with the helpe of the facunditie and fluencie of speech, and is called Ornatus persuasio, [...] yonder commeth Arithmeticke, which is the originall and ground of all the seuen liberall Sciences or Arts, without which, non of them can subsist [...] Vpon this ground of natural Arithmeticke is Geometrie builded: for the proportions of all measures drawne from vnitie, which is the fountaine of numbers, whereby measures are described, before the art of it was inuented" (Lex Mercatoria, pp. 491-492).

[^92]:    ${ }^{20}$ The three definitions given by the OED are the following:

    1. A rhetorical device by which an imaginary, absent, or dead person is represented as speaking or acting; the introduction of a pretended speaker; an instance of this.
    2. A figure of speech by which an inanimate or abstract thing is represented as a person, or as having personal characteristics, esp. the power to think or speak; an instance of this.
    3. In extended use: a person or thing in which some quality or abstraction is embodied; the embodiment or epitome of something.
    ${ }^{21}$ Pacioli, 1494, dedicatory letter of the Summa to Guidobaldo duke of Urbino.
    ${ }^{22}$ Book of Wisdom, XI, 17, 20.
    ${ }^{23}$ Lex Mercatoria, p. 492.
[^93]:    ${ }^{24}$ Lex Mercatoria, 1622, p. 377, italics are mine.
    ${ }^{25}$ This is also the subject of chapter III in the third part: Of the Denomination of the Imaginarie Moneys of all Places, whereupon Exchanges are made by Bills, p. 386 ff .

[^94]:    ${ }^{26}$ Lex Mercatoria, p. 383, q.v. for further details.
    ${ }^{27}$ Sic in the original.

[^95]:    ${ }^{28}$ Malynes, pp. 377-378, italics are mine.
    ${ }^{29}$ Kaye explores in great detail the Galenic concept of balance and equilibrium, and how this organic anatomical trope was embraced by $13^{\text {th }}$ - and $14^{\text {th }}$-century political theory through the concept of the body politic (see Kaye 2014, in particular his chapters 3 and 4, pp. 128-240). Malynes takes it a step further and uses it to make sense of the practices of trade, finance, and credit.

[^96]:    ${ }^{1}$ Mario del Treppo, I mercanti catalani e l'espansione della corona d'Aragona nel secolo XV, Naples, 1972, quoted by David Abulafia, "El món mercantil i el comerç català a l'Edat Mitjana", in Butlletí de la societat Catalana d'Estudis Històrics, no. 30, 2019, pp. 79-123, p. 114.
    ${ }^{2}$ The bibliography around the Datini papers, and the significant amount of secondary literature it has generated would be too long to list here. Suffice it to mention the work of Federigo Melis, who founded alongside Fernand Braudel the Istituto Internazionale di Storia Economica Francesco Datini, attached since its inception not just to the documents preserved in the archive, but to the work of these eminent historians.

[^97]:    ${ }^{3}$ The catalogue, and the essays that accompany it, is available both in print and online. See José María Pérez Fernández and Giovanni Tarantino, with Matteo Calcagni, Paper in Motion: Information and the Economy of Knowledge in the Early Modern Mediterranean, Viterbo, 2021; online version at https:/ / www.paperinmotion.org/.
    ${ }^{4}$ Further details on this in José María Pérez Fernández, "Paper in Motion: Communication, Knowledge, and Power. Methods and Case Studies for an Interdisciplinary Approach", in CROMOHS, no. 23, 2020, pp. 81-112, https://doi.org/10.36253/ cromohs-12025; also "Introduction: Information and the Early Modern Economy of Knowledge", in Pérez Fernández, Tarantino and Calcagni, 2021, pp. 21-33.

[^98]:    ${ }^{5}$ Archivio di Stato di Prato (ASPo): Datini, 1028, fol. 181r, Quaderno di Balle C, 1396-1397.

[^99]:    On the presence of Jewish and convert merchants and bankers in these areas, see Juan Leonardo Soler Milla, "Los judíos valencianos, el mercado y las rutas mercantiles en el Mediterráneo bajomedieval", in Revista de Historia Medieval, no. 15, 2006-2008, pp. 87108; also Gloria Polonio Luque, "Jueus i conversos en el comerç internacional barceloní de la baixa edat mitjana (1349-1450)", in Tamid, no. 9, 2013, pp. 27-50.

[^100]:    ${ }^{6}$ Spanish translation from the original Hebrew by José Ramón Ayaso Martínez, English translation from the Spanish version by José María Pérez Fernández.
    ${ }^{7}$ ASPo: Datini, 1174, cod. 1496 (=N.I.). Paper, $77 \times 288 \mathrm{~mm}$. Hebrew in cursive sephardic script, https://www.paperinmotion.org / paper/acknowledgement-of-debt-in-hebrew / . We follow here the transcription of the name of the signatory of this document proposed by José Ramón Ayaso Martínez, rather than that proposed by Fausto Lasinio (Arnob Delvilar) in his transcription of the document for the Datini Archive, registered in its records in 1880. This is the only documentary trace left by a person with this name.

[^101]:    ${ }^{8}$ Antonio di Guccio and Matteo di Miniato to Francesco di Marco Datini and Manno di Albizzo Agli \& Co., Barcelona-Pisa, 10 October 1393 (ASPo: Datini, 432/12, cod.100420).
    ${ }^{9}$ Sancho Díaz de Basurto (also called Sancho Díaz de Bilbao) appears to be the name of a Basque sailor. In another letter, di Guccio and di Miniato inform their superiors in Pisa of the insurance they have taken on the shipment, and value the books in more than 500 florins (ASPo: Datini, 432/12, cod. 100418, Antonio di Guccio and Matteo di Miniato to Francesco di Marco Datini and Manno di Albizzo Agli and comp., Barcel-lona-Pisa, 7 October 1393)

[^102]:    ${ }^{10}$ ASPo: Datini, cod. 1497 (=N.II), busta 1174. Paper, $85-91 \times 221 \mathrm{~mm}$. Hebrew in cursive sephardic script, https://www.paperinmotion.org/paper/receipt-for-books-in-hebrew /. This English translation is based on the Italian version of the original Hebrew document produced by Fausto Lasinio in 1880, provided by Chiara Marcheschi: "Io sottoscritto confesso di aver ricevuto da Albizio mercante di Pisa tutti i libri di mia proprietà inviati a lui da Antonio di Guccio. E perché sia in mano di lui a prova di giustificazione, ho segnato il mio nome. Qui in Pisa nel mese di Gennaio, l'ultimo giorno, nell'anno (5.)154 del nostro computo. Arnau del Vilar." The transcription of the original document and its translation have both been updated by José Ramón Ayaso Martínez.

[^103]:    ${ }^{11}$ Yom Tov Assis, "La participación de los judíos en la vida económica de Barcelona s. XIII-XIV", in Jornades d'Història dels jueus a Catalunya. Actes. Girona, abril 1987, Girona, 1990, pp. 77-92. See also, by the same author "Els jueus de Barcelona i el comerç marítim amb la Mediterrània oriental", in Tamid, no. 2, 1998-1999, pp. 29-71.
    ${ }^{12}$ Mauro Perani, "The 'Gerona Genizah': An Overview and a Rediscovered Ketubah of 1377", in Hispania Judaica Bulletin, no. 7, 2010, pp. 137-173.
    ${ }^{13}$ Eleazar Gutwirth, "Tendencias en la cultura judeocatalana medieval", in Temps i espais de la Girona jueva. Actes del Simposi International celebrat a Girona, 23, 24 i 25 de març de 2009, Girona, 2011, pp. 139-156. See also Gabrielle Sed-Rajna, "Le Psaultier de Bry, un manuscrit hébreu enluminé (Espagne, $\mathrm{XV}^{\mathrm{e}}$ siècle-Florencia, 1489)" in Revue des Études Juives, vol. 12,4 nos. 3-4, 1965, pp. 375-388.

[^104]:    ${ }^{14}$ José María Millás Vallicrosa, "Los judíos barceloneses y las artes del libro", in Sefarad, no. 16, 1956, pp. 129-136.
    ${ }^{15}$ José María Marudell i Marimón, "Encuadernadores y libreros barceloneses judíos y conversos (1322-1458)", in Sefarad, no. 21, 1961, pp. 300-338; no. 22, 1962, pp. 345-372; no. 23, 1963, pp. 74-103.
    ${ }^{16}$ ASPo: Datini, 1174, cod. 1501. Np., nd. Paper. Hebrew in cursive sephardic script (https: / /www.paperinmotion.org/paper / letter-in-hebrew/). José Ramón Ayaso's transcription and translation of line 37 in the document reads "... your servant Raymond

[^105]:    Ballester Desforn. My name years ago, when I was part of the people of Israel, was Abram Desforn". There is unfortunately no space in this essay for a full transcription and a translation of this and other relevant texts. We are currently working on a longer and more detailed essay which will also include these and other related primary sources.
    ${ }^{17}$ Isidore Loeb, "Liste nominative des Juifs de Barcelone en 1392", in Revue des études juives, vol. 4, no. 7, 1882, pp. 57-77. The document is a list of 129 Jews who had converted after the riots (which had seen the murder of more than 250 members of their community), with their new Christian names and their original Jewish names. Samuel Desforn is number 35 in the list ("Johanne Roure olim Samuel des Forn"), and Abram is number 85 ("Raymundo Ballistarii olim Abraam des Forn").

[^106]:    ${ }^{18}$ The original Hebrew phrasing for "stripped and naked" (רשא לכמ םורעו ללוש ינא יכ) היה) is a quotation from the Book of Micah 1.8.
    ${ }^{19}$ Niccolò del Ammannatto was Datini's partner and brother-in-law through his marriage with Francesca Bandini, sister to Datini's wife Margherita. Desforn writes to Falduccio, and he begs him to get in touch with Niccolò dell'Ammannato Tecchini in Pisa, to inquire where these goods are deposited. The names of more intermediaries and previous interlocutors emerge as the letter unfolds, both Italian administrators in the Datini company as well as members of Desforn's extended family in Pisa.

[^107]:    ${ }^{20}$ José María Marudell i Marimón, "La contratación laboral judaica y conversa en Barcelona (1349-1416). Documentos para su estudio", in Sefarad, no. 16, 1956, pp. 3371, 369-398; no. 17, 1957, pp. 73-102.
    ${ }^{21}$ On this see Anna Rich, "Coral, Silk and Bones. Jewish Artisans and Merchants in Barcelona between 1348 and 1391", in Nottingham Medieval Studies, no. 53, 2009, pp. 5371. See also Meritxell Blasco Orellana, José Ramón Magdalena Nom de Déu, and Juliette Sibón, "La pinqas (carnet personnel) de Mordacays Joseph (1374-1375), corailleur juif de Marseille", in Revue des Études Juives, no. 175, 2016, pp. 251-307.

[^108]:    ${ }^{22}$ The document is preserved at the Library of El Escorial, and was published by Fidel Fita i Colomé in his "Estrago de las juderías catalanas en 1391. Relación contemporánea", in España Hebrea, no. 1, 1889, pp. 166-179. We are currently working on a forthcoming publication about these and other as yet unpublished documents among the Datini papers which include new eyewitness accounts of the riots reported by Datini agents in Barcelona.
    ${ }^{23}$ Fita i Colomé, p. 178.
    ${ }^{24}$ This is the expression used by rabbi David ibn Zimra, who was born in the Iberian Peninsula around 1479, was expelled with the rest of his family, and died in Safed in 1573 (Gutwirth 2011, p. 152).

[^109]:    ${ }^{25}$ Chiara Ravera and Anna Rich-Abad, "Benedictus' Summer's Night Dream: The Journey of a Jew from Barcelona to Chios (1391-1404)", in Cultural and Social History, vol. 19, no. 4, 2022, pp. 461-474.
    ${ }^{26}$ With their different spellings, i.e.: de Furno, dez Forn, ורופצד ,ורופ Yיד. See Yitzhak Baer's Die Juden im christlichen Spanien, vol. I, Aragonien und Navarra. Berlin, 1929. The Datini document spells the surname as Desforn. ורופסד.

[^110]:    27 "Michele di Simone already wrote to me to tell me that you would never give them to anybody unless he wrote for your excellency and for his excellency Antonio di Guccio a document in his own hand" (italics are ours).

[^111]:    ${ }^{28}$ For more details on how economic and financial treatises described these practices and their protocols, see José María Pérez Fernández's essay ("The Spirit of Trafficke: Paper, Semiotics, and Finance") in this special issue. For samples of protocols and formulas in different periods, places and languages see the catalogue of the exhibition mentioned in our introduction (Pérez Fernández et al., 2021, https: / / www.paperinmotion.org/).
    29 "The carrier of this letter will be Arnau del Vilar, a Catalan from Barcelona, a man of about 40 years of age, suffering from gout, and broad-backed". The original runs thus: "La portatore di questa lettera sarà Arnao dal Vilare, chatalano di Barzalona, huomo di età di circha 40 anni cho lla ghota, scherna grossa" (ASPo: Datini, 432/12, cod. 100420, Antonio di Guccio and Matteo di Miniato to Francesco di Marco Datini and Manno di Albizzo Agli and comp., Barcellona- Pisa, 10 ottobre 1393).

[^112]:    ${ }^{30}$ Maria Giuseppina Muzzarelli, "Ebrei, famiglie e città. Gli Sforno 'di Bologna'", in Zakhor. Rivista di storia degli ebrei d'Italia, no. 2, 1999, pp. 59-77, p. 64.

[^113]:    ${ }^{1}$ Matt Goldish, The Sabbatean Prophets, Cambridge, 2004, p. 89.

[^114]:    ${ }^{2}$ Gershom Scholem, Sabbatai Sevi, The Mystical Messiah, 1626-1676 (trans. R.J. Zwi Werblowsky, Princeton, NJ, 1973); Brandon Marriott, Transnational Networks and CrossReligious Exchange in the Seventeenth-Century Mediterranean and Atlantic Worlds: Sabbatai Sevi and the Lost Tribes of Israel, London, 2015). Among other things, in refuting the notion that Christian millenarianism influenced Sabbatai's appearance in 1665 Scholem overlooks (pp. 153-154) many texts that directly concern Sabbatai's appearance, as well as the proliferation of English texts publicizing the expectation of the second coming in 1666, the number of the beast in the Book of Revelation.

[^115]:    ${ }^{3}$ See Fernand Braudel, The Wheels of Commerce, vol. 2 of Civilization and Capitalism, 15 th $18^{\text {th }}$ Century, trans. Siân Reynolds, New York, 1979, p. 163.
    ${ }^{4}$ David Armitage and Michael Braddick (eds.), "Introduction", in The British Atlantic World, 1500-1800, New York, 2009, p. 9.
    ${ }^{5}$ Francesca Trivellato, "Sephardic Merchants in the Early Modern Atlantic and Beyond: Towards a Comparative Historical Approach to Business Cooperation", in Richard L.

[^116]:    Kagan and Philip D. Morgan (eds.), Atlantic Diasporas: Jews, Conversos, and Crypto-Jews in the Age of Mercantilism, 1500-1800, Baltimore, 2009, p. 119.
    ${ }^{6}$ Marriott, who has confirmed Scholem's rebuttal of a Christian influence on Sabbatai's appearance, is also mindful that the concept of the network has an emergent and important application to informational exchange at this time.
    ${ }^{7}$ See Alan Marshall, Intelligence and Espionage in the Reign of Charles II, 1660-1685, Cambridge, UK, 1994, pp. 29-30, 55-59, 78-80, 83n.29.

[^117]:    ${ }^{8} \mathrm{Http}$ :/ / emlo-portal.bodleian.ox.ac.uk / collections/ ?catalogue=samuel-hartlib (accessed on $21 / 04 / 2023$ ). For Dury, the Scottish theologian and controversialist, see note 1.
    ${ }^{9} \mathrm{Http}$ :/ / emlo-portal.bodleian.ox.ac.uk/ collections/?catalogue=samuel-hartlib, no. 53 (Feb. 14, 1662, accessed on 21/04/2023). Diary and Correspondence of Dr. John Worthington (Feb. 24, 1662), ed. James Crossley, in Publications of the Chetham Society, vol. 36, 1855, no. 2, p. 111. Worthington was vice-chancellor of Cambridge University.
    ${ }^{10}$ CSP Domestic, vol. ccviii, 46, July 3, 1667.
    ${ }^{11}$ Public Record Office SP 29/136 (93), letter of Nov. 10, 1666, not included in Oldenburg's correspondence (see below note 13).
    ${ }^{12}$ E.g., see Benjamin Lannoy, English consul at Aleppo, to Earl of Winchelsea, Jan. 24, 1666, in Historical Manuscripts Commission Reports (HMC) Finch, p. 410; A New Letter Concerning the Jewes, Written by the French Ambassador, at Constantinople, To his Brother the French Resident at Venice (1666).

[^118]:    ${ }^{13}$ The Correspondence of Henry Oldenburg, ed. A. R. Hall and M. B. Hall, 13 vols, Madison, WI \&, London, 1965-86.
    ${ }^{14}$ Francis Bacon, New Atlantis (1627), ed. Alfred B. Gough, Oxford, UK, 1915, p. 45.

[^119]:    ${ }^{15}$ Francisci de Verulamio, summi Anglix cancellarii instauratio magna, London, 1620.
    ${ }^{16}$ Correspondence of Oldenburg, 3: 49-50, no 493, March 6, 1666.
    ${ }^{17}$ Correspondence of Oldenburg, 1: 126, no. 55, July 25, 1657; 2: 637, no. 467, Dec. 8, 1665 (both letters trans. from Latin). For more on Oldenburg's attitude toward the Sabbatian movement see Zvi Loker, "English Contemporary Opinions on the Sabbatean Movement" in Jewish Historical Studies, vol. 29, 1982, pp. 35-37.

[^120]:    ${ }^{18}$ Thomas Sprat, The History of the Royal Society of London, For the Improving of Natural Knowledge, London, 1667, pp. 71-72. All further citations will appear parenthetically in the text.

[^121]:    ${ }^{19}$ Gershom Scholem, The Messianic Idea in Judaism and Other Essays on Jewish Spirituality, New York, 1971, p. 18.
    ${ }^{20}$ Gazette, no. 8, Dec. 7-11, 1665.
    ${ }^{21}$ Samuel Brett, A Narrative Of the Proceedings Of a great Councel of Jews, London, 1655. See Richard H. Popkin, "The Fictional Jewish Council of 1650: A Great English Pipedream", in Jewish History, vol. 5, no. 2, 1991, pp. 7-22.
    ${ }^{22}$ Nicholas Culpeper, An Ephemeris for the Year 1652, London, 1651, p. 21.

[^122]:    ${ }^{23}$ Diary of John Evelyn, ed. E.S. de Beer, Oxford, UK, 1955, vol. 3, p. 158 (Aug. 28, 1655).
    ${ }^{24}$ John Evelyn, The History Of the Three late famous Impostors ([London] 1669), pp. 41-42. That the world would end with a final Fifth Monarchy was the belief of one millenarian sect of the Interregnum. According to Richard H. Popkin, Evelyn's account was taken from Paul Rycaut, The History of the Turkish Empire from the Year 1623, to the Year 1677, London, 1680: see "Three English Tellings of the Sabbatai Zevi Story" in Jewish History, vol. 8, nos. 1-2, 1994, p. 45. This may or may not explain the change in Evelyn's viewpoint.
    ${ }^{25}$ Forraign and Domestick Prophecies, London, 1659, pp. 182-183.
    ${ }^{26}$ Several New Letters Concerning the Jewes: Sent to divers Persons of Quality here in England, London, 1666, concluding letter, 6.
    ${ }^{27}$ Arise Evans, Light For the Jews: Or, the Means to convert them, London, 1664, 11, 16.

[^123]:    ${ }^{28}$ On which see Christopher Hill, The World Turned Upside Down: Radical Ideas During the English Revolution, New York, 1972.
    ${ }^{29}$ See Goldish, Sabbatean Prophets, 111, 129 on this sobriquet in a 1666 Polish pamphlet, and on the bodily basis for the association. See more generally Michael Heyd, "The 'Jewish Quaker': Christian Perceptions of Sabbatai Zevi as an Enthusiast", in Allison Coudert and Jeffrey Shoulson (eds.), Hebraica Veritas? Christian Hebraists and the Study of Judaism in Early Modern Europe, Philadelphia, 2004, pp. 234-265.
    ${ }^{30}$ See Petrus Serrarius, The Restauration of the Jews, London, 1665.
    ${ }^{31}$ Marriott, 2015, p. 117.
    ${ }^{32}$ [John Bland,] Trade Revived, London, 1660, p. 21.

[^124]:    ${ }^{33}$ See CSP, Ireland, Sir George Rawdon to Viscount Conway, from Dublin (Sept. 5, 1665), 639; Thomas Nunnes, An Almanack [...] For [...] 1666 (1666), sig.C8v; John Tanner, Angelus Britannicus, An Ephemeris for [...] 1666 (1666), sig. C7v.
    ${ }^{34}$ A New Letter from Aberdeen in Scotland, Sent to a Person of Quality, London, 1665, pp. 2-3. Typology was a Christian method of reading history that conceived the antitypes of the Old Testament to be fulfilled by the types of the New Testament.
    ${ }^{35}$ See Marriott 2015 for extended treatment of this debate. See also Cecil Roth (ed.), Magna Bibliotheca Anglo-Judaica, London, 1937, pp. 279-280.
    ${ }^{36}$ George Wither, Meditations upon The Lords Prayer, London, 1665, p. 33.

[^125]:    ${ }^{37}$ "An Epistle to the Reader" and "To the Reader," in [Increase Mather,] The Mystery of Israel's Salvation, [...] or, A Discourse Concerning the General Conversion of the Israelitish Nation. Wherein is Shewed, That the Twelve Tribes shall be saved ([London] 1669), sig. A3v, b1r. ${ }^{38}$ [Richard Baker], The Marchants Humble Petition And Remonstrance, London, 1659, p. 15.
    ${ }^{39}$ See Trivellato, "Merchants' Letters across Geographical and Social Boundaries" in Francisco Bethencourt and Florike Egmond (eds.), Cultural Exchange in Early Modern Europe III, Cambridge, UK, 2007, pp. 10-23; The Familiarity of Strangers: the Sephardic Diaspora, Livorno, and Cross-Cultural Trade in the Early Modern Period, New Haven \& London, 2009.

[^126]:    ${ }^{40}$ (Public Record Office) SP 97/18, fols. 156v, 210v, 212v, 211v, Feb. 17, Sept. 25, Oct. 9, 1666.
    ${ }^{41}$ Wither, 1665, pp. 34-35.
    ${ }^{42}$ Correspondence of Oldenberg, 3:23, no. 483, Oldenberg to Lord Brereton, Jan. 16, 1666.

[^127]:    ${ }^{43}$ Gazette, no. 35, March 12-15, 1666, letter of Jan. 8, 1666.
    ${ }^{44}$ The Wonder of all Christendom, London, 1666, p. 4; Gods Love to his People Israel. Being a True Copy of a Letter As it was sent to the East-India Company, Concerning the Jewes, London, 1666, p. 4.
    ${ }^{45}$ The Wonder of all Christendom, 6; Gods Love to his People Israel, 6.
    ${ }^{46}$ (British Library) MS. Add. 40712, fol. 32v, G. Willoughby to Sir George Oxenden, President of East India Company at Surat, March 5, 1666. Cf. also Gods Love to his People Israel, above.
    ${ }^{47}$ Nathanael Homes, Miscellanea, London, 1665, pt. 3, p. 16.

[^128]:    ${ }^{48}$ Correspondence of Oldenburg, 3:447, no. 652, July 5, 1667. "Saint" was the term used by seventeenth-century Puritans to affirm their election.

[^129]:    ${ }^{49}$ Martin Billingsley, The Pens Excellencie or the Secretaries Delight, London, 1618, C2v3r; William Fulwood, The Enemy of ldlenesse, London, 1568, repr. 1621), pp. 1-2: quoted in Jonathan Goldberg, Writing Matter: From the Hands of the English Renaissance, Stanford, CA, 1990, p. 130 and p. 249 respectively.
    ${ }^{50}$ See Paula McDowell, The Invention of the Oral: Print Commerce and Fugitive Voices in Eighteenth-Century Britain, Chicago, 2017.
    ${ }^{51}$ Walter Benjamin, "The Storyteller," in Hannah Arendt (ed.), Illuminations, New York, 1968, pp. 88, 89, 91.

[^130]:    ${ }^{52}$ Doomes-Day: or, The great Day of the Lords Judgement, proved by Scripture, London, 1647, p. 2.

[^131]:    ${ }^{1}$ The numbers are approximate due to the fact that the archives are dispersed in many locations in Europe, the United States and Egypt. The exact total number as well as the number of Arabic papyri is still a matter of debate. Adolf Grohmann, From the World of Arabic Papyri, Cairo, 1952, pp. 2-3, mentions that 50,000 Arabic documents had been found, of which roughly 16,000 were written on papyrus, most of the rest being later documents on paper. Y. Raghib, "Les plus anciens papyrus arabes," in Annales Islamologiques, no. 30, 1996, 1-19, here 2, considered this number to be far too low and suggested that the total was probably more than 150,000 Arabic papyri, the Vienna collection alone containing some 83,300 pieces in Arabic (of which 46,300 were papyrus and 36,335 paper).

[^132]:    ${ }^{2}$ Elizabeth Eisenstein, The Printing Revolution in Early Modern Europe, $2{ }^{\text {nd }}$ edition, Cambridge, UK, 2005.
    ${ }^{3}$ Jonathan Bloom, Paper before Print, New Haven, 2001; "The Introduction of Paper to the Islamic Lands and the Development of the Illustrated Manuscript", in Muqarnas, Vol. 17, 2000, pp. 17-23; Johannes Pederson, The Arabic Book, Princeton, NJ, 1984, pp. 37-38.

[^133]:    ${ }^{4}$ Norman Stillman, "The Eleventh Century Merchant House of Ibn 'Awkal (A Geniza Study)", in Journal of the Economic and Social History of the Orient, no. 1, April 1973, pp. 15-88; S.D. Goitein, A Mediterranean Society: The Jewish Communities of the Arab World as Portrayed in the Documents of the Cairo Geniza, Volume 1, Berkeley and Los Angeles, 1999, pp. 157-158; Goitein, Letters of Medieval Jewish Traders, Princeton, NJ, 1973, pp. 26-34; Moshe Gil, "The Jewish Merchants in the Light of Eleventh-Century Geniza Documents", in Journal of the Economic and Social History of the Orient, Vol. 46, no. 3, 2003, pp. 273-319.

[^134]:    ${ }^{5}$ Ragheb Youssef, "Marchands d'Egypte du VII ${ }^{e}$ au IXe ${ }^{e}$ siècle d'après leur correspondance et leurs actes", in Actes des congrès de la Société des historiens médiévistes de l'enseignement supérieur public, Reims, 1988, pp. 25-33.

[^135]:    ${ }^{6}$ Jean-Michel Mouton, "Un village copte du Fayyoum au XIe siècle, d'après la découverte d'un lot d'archives", in Comptes rendus des séances de l'Académie des Inscriptions et Belles-Lettres, 146, no. 2, 2002, pp. 447-458.
    ${ }^{7}$ Adolf Grohmann, Awraq al-Bardiyat al-Arabiya fi Dar al-Kutub al-Misriya, Cairo, Dar al Kutub, 1934, case 56, p. 146 ff. dated 239/853; case 69 p. 220 dated 459/1067.
    ${ }^{8}$ Jennifer Cromwell, Recording Village Life: A Coptic Scribe in Early Islamic Egypt, Ann Arbor, MI, 2017.
    ${ }^{9}$ R.S. Bagnall and R. Cribiore, Women's Letters from Ancient Egypt, 300 BC-AD 800, Ann Arbor, MI, 2006; Khaled Younes, Joy and Sorrow in Early Muslim Egypt: Arabic Papyrus Letters, Text and Content, PhD thesis, Leiden University, 2013; Terry G. Wilfong, Women of Jeme: Lives in a Coptic Town in Late Antique Egypt, Ann Arbor, MI, 2002.

[^136]:    ${ }^{10}$ Goitein, A Mediterranean Society, vol. 1 p. 11; Yusef Ragheb, Marchands d'Etoffes du Fayyoum du IIIe au IXe siècle d'apres leurs archives (actes et lettres), vol. 2, La correspondance administrative et privee des Banu Abd al-Mu'nim, Cairo, 1985, pp. 44-46; Daisy Livingstone, "Life in the Egyptian Valley under Ikhshīdid and Fāțimid Rule", in Journal of the Economic and Social History of the Orient, Vol. 61, no. 3, 2018, pp. 426-460.

[^137]:    ${ }^{11}$ Nelly Hanna, "Literacy among Artisans and Tradesmen in Ottoman Cairo", in Christine Woodhead (ed.), The Ottoman World, London, 2012, pp. 319-331; "Literacy and the 'Great Divide' in the Islamic World, 1300-1800", in Journal of Global History, 2, 2007, pp. 175-194.
    ${ }^{12}$ Philip Venticinque, Honor Among Thieves: Craftsmen, Merchants, and Associations in Roman and Late Roman Egypt, Ann Arbor, MI, 2016, pp. 85-89.

[^138]:    ${ }^{13}$ B.A. van Groningen (ed.), A Family-Archive from Tebtunis (P. Fam. Tebt.), Leiden, 1950; Clive Foss, "Egypt under Mu āwiya Part I: Flavius Papas and Upper Egypt", in Bulletin of the School of Oriental and African Studies, Vol. 72, No. 1, 2009, pp. 1-24; J.G. Winter, "The Family Letters of Paniskos", in The Journal of Egyptian Archaeology, 13, nos. 1/2, April 1927, pp. 59-74; Paul Heilporn, "Des nouvelles de Paniskos", in The Bulletin of the American Society of Papyrologists, no. 49, 2012, pp. 119-138; George Fredric Franko, "Sitometria in the Zenon Archive: Identifying Zenon's Personal Documents", in The Bulletin of the American Society of Papyrologists, 25, No. 1/4, 1988, pp. 13-98; Joseph A. Fitzmyer, "The Padua Aramaic Papyrus", in Journal of Near Eastern Studies, 21, no. 1, Jan. 1962, pp. 15-24.

[^139]:    ${ }^{1}$ Fernand Braudel, The Perspective of the World, trans. S. Reynolds, Berkeley, CA, 1992, p. 51.

[^140]:    ${ }^{2}$ See for example Jill Mann, "Price and Value in Sir Gawain and the Green Knight", in Essays in Criticism, vol. 36, no. 4, 1986, pp. 294-318, p. 294; also Richard Godden, "Labour Without Value, Language at a Price: Toward a Narrative Poetics for the Financial Turn", in M. Seybold and M. Chihara (eds.), The Routledge Companion to Literature and Economics, London, 2018, pp. 50-63, p. 50.
    ${ }^{3}$ P.G.M. Dickson, The Financial Revolution in England: A Study in the Development of Public Credit, 1688-1756, London, 1967, p. 11.

[^141]:    ${ }^{4}$ See, for example, Daniel Defoe's The Compleat English Tradesman ([1726], Glouster 1987).
    ${ }^{5}$ Geoffrey Ingham, The Nature of Money, Cambridge, UK, 2004, p. 129; Christine Desan, Making Money: Coin, Currency, and the Coming of Capitalism, Oxford, UK, 2014, p. 319. ${ }^{6}$ J.H. Clapham, The Bank of England: A History, vol. 1, Cambridge, UK, 1945, p. 103.

[^142]:    ${ }^{7}$ See Valerie Hamilton and Martin Parker, Daniel Defoe and the Bank of England: The Dark Arts of Projectors, Winchester, 2016, p. 1 ff.
    ${ }^{8}$ Daniel Defoe, Robinson Crusoe ([1719], Oxford, UK, 2008), pp. 57-58; Natalie Roxburgh, Representing Public Credit: Credible Commitment, Fiction, and the Rise of the Financial Subject, London, 2016, p. 49 ff.

[^143]:    ${ }^{9}$ On this, see Lisa Freinkel, "The Merchant of Venice: 'Modern' Anti-Semitism and the Veil of Allegory", in H. Grady (ed.), Shakespeare and Modernity: Early Modern to Millennium, London, 2000, pp. 122-141.
    ${ }^{10}$ William Shakespeare, The Merchant of Venice ([1600] Oxford, UK, 1993).

[^144]:    ${ }^{11}$ Craig Muldrew, The Economy of Obligation: The Culture of Credit and Social Relations in Early Modern England, Houndmills, 1998, p. 3.
    ${ }^{12}$ Margot C. Finn, The Character of Credit: Personal Debt in English Culture, 1740-1914, Cambridge, UK, 2003, p. 19.

[^145]:    ${ }^{13}$ E.P. Thompson, Customs in Common, London, 1991, p. 270.

[^146]:    ${ }^{14}$ Jonathan Gil Harris, Sick Economies: Drama, Mercantilism, and Disease in Shakespeare's England, Philadelphia, PA, 2004, p. 79.

[^147]:    ${ }^{15}$ Robert Brenner, Merchants and Revolution: Commercial Change, Political Conflict, and London's Overseas Traders, 1550-1653, Cambridge, UK, 1993, p. 640.

[^148]:    ${ }^{1}$ For the urban areas of Italy, Germany and the Low Countries, see: G.R.B. Richards, Florentine Merchants in the Age of the Medici. Letters and Documents from the Selfridge Collections of Medici Manuscripts (orig. 1932, reprint Cambridge, MA, 2014); O. Gelderblom, Zuid-Nederlandse kooplieden en de opkomst van de Amsterdamse stapelmarkt (1578-1630), Amsterdam, 2000; J.W. Veluwenkamp, Archangel. Nederlandse ondernemers in Rusland 1550-1785, Amsterdam, 2000; M. Häberlein, The Fuggers of Augsburg. Pursuing Wealth and Honor in Renaissance Germany, Charlottesville, 2012; F. Trivellato, Familiarity of Strangers. The Sephardic Diaspora, Livorno, and Cross-Cultural Trade in the Early Modern Period, New Haven, 2012. U.C. Ewert and S. Selzer, Institutions of Hanseatic Trade. Studies on the Political Economy of a Medieval Network Organization, Frankfurt am Main, 2016. For England: J. Hoppitt, Risk and Failure in English Business, 1700-1800, Cambridge, 2022; E. Smith, Merchants. The Community that Shaped England's Trade and Empire, 1550-1650, New Haven, 2021. For Iberia see: C. Brilli, Genoese Trade and Migration in the Spanish Atlantic, 1700-1850, Cambridge, MA, 2016; A.S. Ribeiro, Early Modern Trading Networks in Europe: Cooperation and the Case of Simon Ruiz, New York, 2016; C. Antunes, S.M. Miranda and J.P. Salvado, "Commercial Cosmopolitanism? The Case of the Firm De Bruijn \& Cloots (Lisbon) in the Eighteenth Century", in F. Gottmann (ed.), Commercial Cosmopolitanism? Cross-Cultural Objects, Spaces and Institutions in the Early Modern World, London, 2021, pp. 196-211.

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    ${ }^{3}$ H. Pohl, Die Portugiesen in Antwerpen, 1567-1648: zuer Geschichte einer Minderheit, Wiesbaden, 1978. M. Bodian, Hebrews of the Portuguese Nation: Conversos and Community in Early Modern Amsterdam, Bloomington, 1999. D. do Paço, L'Orient à Vienne au dixhuitième siècle, Oxford, 2015. H. Soly, Capital at Work in Antwerp's Golden Age, Turnhout, 2022.
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[^150]:    ${ }^{5}$ A. Pitlo and A. Fl. Gehlen, De zeventiende en achttiende eeuwse notarisboeken. Een verhandeling over notarisboeken, notarisambt en notarieel recht onder de Republiek der Verenigde Nederlanden, Amsterdam, 2004. A. Fl. Gehlen and P.L. Nève (red.), Het notariaat in de Lage Landen (+/- 1250-1842), Amsterdam, 2005.

[^151]:    ${ }^{6}$ J. de Vries and A. van der Woude, The First Modern Economy. Success, Failure, and Perseverance of the Dutch Economy, 1500-1815, Cambridge, 1997. C. Lesger, The Rise of the Amsterdam Market and Information Exchange, London, 2006.
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    ${ }^{8}$ L. Neal, "How it All Began: the Monetary and Financial Architecture of Europe During the First Global Capital Markets, 1648-1815", in Financial History Review, 7, 2000, pp. 117-140.

[^152]:    ${ }^{9}$ J. Adams, The Familial State. Ruling Families and Merchant Capitalism in Early Modern Europe, Ithaca, 2007.

[^153]:    ${ }^{10}$ For similar considerations on the Portuguese Atlantic world, see: L. Freire Costa, $O$ transporte no Atlântico e a Companhia Geral do Comércio do Brasil, 1580-1663, particularly vol. 1, Lisbon, 2002.

[^154]:    ${ }^{11}$ D. Strum, The Sugar Trade. Brazil, Portugal and the Netherlands, 1595-1630, Stanford, 2013.
    ${ }^{12}$ Arguably, reforms to establish a nationwide system for maritime insurance in France arose from the threat posed by Dutch insurers in France and Amsterdam. See: L. Wade, Privilege at a Premium: Insurance, Maritime Law and Political Economy in Early Modern France, 1664-c.1710, unpublished PhD thesis, University of Exeter, 2021, forthcoming as Privilege, Economy and State in Old Regime France: Marine Insurance, war and the Atlantic Empire under Louis XIV, Boydell \& Brewer. Relevant for the Spanish case: H. Casado Alonso, El Seguro marítimo en Castilla en los siglos XV y XVI, Valladolid, 2021.
    ${ }^{13}$ C. Antunes and F.R. da Silva, "Cross-Cultural Entrepreneurship in the Atlantic: Africans, Dutch and Sephardic Jews in Western Africa, 1580-1674", in Itinerario, 35, no. 1, 2011, pp. 49-76.
    ${ }^{14}$ L. Neal, The Rise of Financial Capitalism: International Markets in the Age of Reason, Cambridge, 1990.

[^155]:    ${ }^{15}$ The works of Manuel Fernandez Chaves and Rafael Pérez Garcia evidence and

[^156]:    broadly address the topic of powers of attorney as cornerstones of agency and relational balancing in the daily business life of merchant elites in the Iberian peninsula. M.F. Fernandez Chaves and R.M. Pérez Garcia (eds.), Movilidad, interacciones y espacios de oportunidad entre Castilla y Portugal en la Edad Moderna, Sevile, 2019. M. F. Fernandez Chaves and R.M. Pérez Garcia (eds.), Mercaderes y redes mercantiles en la Península Ibérica, siglos XV-XVIII, Sevile, 2019.

[^157]:    ${ }^{16}$ Different considerations and conclusions are reached when historians use archival collections produced by the merchants/firms themselves. In those cases, clustering, rather than specialization, is signalled. See, for the case of Simon Ruiz: A.S. Ribeiro, F.L. Pinheiro, F.C. Santos, A. Polónia and J.M. Pacheco, "Structural and Temporal Patterns of the First Global Trading Market", in Royal Society Open Science, 5, no. 8, 2018, https: / / doi.org/10.1098/rsos.180577, retrieved 18 April 2023.

[^158]:    ${ }^{17}$ The argument of codependency as expressed in notarial deeds has been partially ex-

[^159]:    plored for the Portuguese case by A.S. Ribeiro, "Transnational Cooperation: An Asset in the Portuguese Overseas Trade, 1580-1590", in Storia Economica, XVIII, no. 2, 2015, pp. 415-444.

[^160]:    ${ }^{18}$ A. Greif, "Cultural Beliefs and the Organization of Society: A Historical and Theoretical Reflection on Collectivist and Individualist Societies", in Journal of Political Economy, 102, nr 5, 1994, pp. 912-950. A. Greif, "Impersonal Exchange and the Origins of Markets:

[^161]:    From the Community Responsibility System to Individual Legal Responsibility in PreModern Europe", M. Aoki and Y. Hayami (eds.), Communities and Markets in Economic Development, Oxford, 2001, pp. 3-41.
    ${ }^{19}$ S. Gailmard, "Accountability and Principal-Agent Theory", in M. Bovens, R. Godin and T. Schillemans (eds.), The Oxford Handbook of Public Accountability, Oxford, 2014, https:/ / doi.org / 10.1093/oxfordhb/9780199641253.013.0016, accessed 23-122022. We see a similar development in a different context, but within the realm of Dutch firms in the Atlantic. See: C. Antunes, S.M. Miranda and J.P. Salvado, "De Bruijn \& Cloots: Strategic Insights into a Dutch Firm in the Exploitation of the South Atlantic, 1713-1727", in Journal of Early American History, forthcoming, 2023.

[^162]:    ${ }^{20}$ Here the reference is to Trivellato, Familiarity of Strangers.

[^163]:    ${ }^{1}$ Renzo Sabbatini, "La cultura del far carta a mano, un viaggio nella storia", in Livia Faggioni, Mauro Mussolin (eds.), La carta e il Mediterraneo: produzione, commercio, comunicazione, Fabriano, 2022, pp. 29-47.
    2 "L'analisi microstorica è [...] bifronte. Da un lato, muovendosi su una scala ridotta,

[^164]:    permette in molti casi una ricostituzione del vissuto impensabile in altri tipi di storiografia. Dall'altro, si propone di indagare le strutture invisibili entro cui quel vissuto si articola. [...] Per questo proponiamo di definire la microstoria, e la storia in generale, scienza del vissuto: una definizione che cerca di intendere le ragioni sia dei sostenitori sia dei nemici dell'integrazione della storia alle scienze sociali" (Carlo Ginzburg and Carlo Poni, "Il nome e il come: scambio ineguale e mercato storiografico", in Quaderni storici, vol. 14, n. 40, 1979, pp. 181-190, p. 188; Carlo Ginzburg, "Microstoria: due o tre cose che so di lei", in Quaderni storici, vol. 29, n. 86, 1994, pp. 511-539; Edoardo Grendi, "Ripensare la microstoria?", in Quaderni storici, vol. 29, n. 86, 1994, pp. 539-549.
    ${ }^{3}$ Carlo Ginzburg, "Microhistory and World History", in Jerry H. Bentley, Sanjay Subrahmanyam and Merry E. Wieser-Hanks (eds.), The Cambridge World History, Cambridge, UK, 2015, pp. 446-473; Islam Dayeh, "Philology and Microhistory: A Conversation with Carlo Ginzburg", in Philological Encounters, no. 7, 2022, pp. 197-232; Giovanni Levi, História global, história conectada, micro-história, interview of December $5^{\text {th }} 2021$, https: / / www.youtube.com/ watch?v=JtmITnHCeZk, accessed on 07/05/2023. ${ }^{4}$ Reference is made to the works and methodological remarks of Sanjay Subrahmanyam.
    ${ }^{5}$ Francesca Trivellato, "Is There a Future for Italian Microhistory in the Age of Global History?", in Californian Italian Studies, 2(1), 2011, https: / / doi.org / 10.5070 / C321009025; Francesca Trivellato, "Microstoria, storia del mondo e storia globale", in Paola Lanaro (ed.), Microstoria. A venticinque anni da L'eredità immateriale, Milan, 2011, pp. 119-131.
    ${ }^{6}$ Pan Wenije, "Carlo Ginzburg: Scrivere di storia significa 'Tartufi per tutti'", in Doppio zero, 2, 2021; Giovanni Levi, "La storia. Scienza delle domande generali e delle risposte locali", in Psiche, no. 2, 2018, pp. 361-377.
    7 "Una 'scuola' che non è stata una scuola", Grendi, "Ripensare la microstoria?", p. 547.

[^165]:    ${ }^{8}$ Sabbatini, "La cultura del far carta a mano", p. 39.

[^166]:    ${ }^{9}$ Giovanni Tarantino, Giorgio Riello and José María Pérez Fernández (eds.), Encounters

[^167]:    at Sea. Paper, Objects and Sentiments in motion across the Mediterranean. An intellectual journey through the collections of the Riccardiana Library in Florence, Pontedera, 2020.
    ${ }^{10}$ José María Pérez Fernández, Giovanni Tarantino, and Matteo Calcagni (eds.), Paper in motion. Information and the Economy of Knowledge in the Early Modern Mediterranea, Siena, 2021.
    11 "Questa, di bianco lin candida prole, / Ch'in grembo a torbid'onda ad uso humano / Nacque formata da maestra mano, / Mille all'huomo arrecar commodi suole. / / Spiega con muto suon l'altrui parole, / E vien da presso udita, e da lontano: / Apprende ogni idioma ancorch'estrano, / E degli studi è madre, e delle scuole. / / Quanto avvien mai quaggiù, tutto n'addita. / È fragil sì; ma più de' marmi vale / In donar lunga a' nostri detti vita. / / Con l'oblio pugna, e n'ottien palma; assale / Morte, e la vince, e ne trionfa ardita, / E fa mal grado suo l'huomo immortale". (Aulo Persio Flacco, Persio Tradotto in verso sciolto e dichiarato da Francesco Stelluti Accad. Linceo da Fabriano, Roma, 1630, p. 83).

[^168]:    12 "But Europe, Asia, Sun burnt Affrica, / America, Terra incognita, / The Christians, Heathens, Pagans, Turkes \& Iewes, / And all the world yeelds matter to my Muse: / No Empire, Kingdome, Region, Province, Nation, / No Principality, Shire, nor Corporation: / No Country, County, City, Hamlet, Towne, / But must use Paper, eyther white or browne. / No Metropolitane, or gracious Primate / No Village, Pallace, Cottage, function, Climate / No age, sex, or degree the earth doth beare, / But they must use this feed to write or weare" (John Taylor, All the Workes of Iohn Taylor, the Water Poet. Being 63 in number collected into one volum by the Author. With sundry new Additions, Corrected, Revised and newly imprinted, [London], 1630, Fff1-Ggg3, Ggg1r.
    ${ }^{13}$ Simonetta Cavaciocchi (ed.), Produzione e commercio della carta e del libro. Secoli XIIIXVIII, Florence, 1992.

[^169]:    14 "Ici, c'est le papier, d'abord, qui propose ses avantages et induit dès le XIV ${ }^{\text {e }}$ siècle des usages et des comportements neufs. Car sans lui, toute la gestion des entreprises, comme celle des Etats, par l'écriture, et toute les bureaucraties ne seraient pas devenues possibles. Il est support des comptabilités, des correspondances d'hommes d'affaires, des écritures bancaires, des lettres de change, etc. Il développe l'institution notariale, donne une nouvelle dimension à l'administration de la justice. Bref, il porte l'information, retient la mémoire, celle du scribe et homme d'affaires, celle de l'entreprise, celle de l'Etat". (Jean-François Bergier, "Production et commerce du papier et du livre", in Cavaciocchi, p. 42).
    ${ }^{15}$ Ivo Mattozzi, Produzione e commercio della carta nello Stato veneziano settecentesco. Lineamenti e problemi, Bologna, 1975.
    ${ }^{16}$ Manlio Calegari, La manifattura genovese della carta (sec. XVI-XVIII), Genoa, 1986.
    ${ }^{17}$ Renzo Sabbatini, Di bianco lin candida prole. La manifattura della carta in età moderna e il caso toscano, Milan, 1990.
    ${ }^{18}$ Renzo Sabbatini, "La manifattura cartaria in età moderna: imprenditorialità, rapporti di produzione e occupazione", in Cavaciocchi, pp. 99-142.

[^170]:    ${ }^{19}$ See monographs such as Giancarlo Castagnari, Carta cartiere cartai. La tematica storica di Andrea Gasparinetti, Fabriano, 2006; also by G. Castagnari, Augusto Zonghi matematico umanista. Le carte antiche fabrianesi nell'era del segno, Fabriano, 2018. Several volumes curated by Castagnari with proceedings of conferences held at Fabriano include the following: Contributi italiani alla diffusione della carta in Occidente tra XIV e XV secolo, Fabriano, 1990; L'opera dei fratelli Zonghi. L'era del segno nella storia della carta, Fabriano, 2003; L'impiego delle tecniche e dell'opera dei cartai fabrianesi in Italia e in Europa, Fabriano, 2006; Le cartare di Fabriano. Società Donne Lavoro nei tempi della città della carta, Fabriano, 2013; see also G. Castagnari, E. di Stefano and L. Faggioni (eds.), Alle origini della carta occidentale: tecniche, produzioni, mercati (secoli XIII-XV), Fabriano, 2014; G. Castagnari (ed.), La forma. Formisti e cartai nella storia della carta occidentale, Fabriano, 2015; G. Castagnari and L. Faggioni, Il patrimonio industriale della carta in Italia. La storia, i siti, la valorizzazione, Fabriano, 2017.
    ${ }^{20}$ Emanuela di Stefano, "Dalle Marche all'Europa: produzione e diffusione della carta occidentale. Dinamiche commerciali e meccanismi di rete nel basso Medioevo", in Faggioni and Mussolin (eds.), pp. 65-79.

[^171]:    ${ }^{21}$ Livia Faggioni, "Corpus Chartarum Fabriano: il database delle filigrane fabrianesi", in Faggioni and Mussolin (eds.), pp. 81-96.
    ${ }^{22}$ Giovanni Luzi, "Lo stato degli studi sulle origini della carta occidentale e la diaspora dei cartai fabrianesi, in La carta e il Mediterraneo", in Faggioni and Mussolin (eds.), pp. 49-63.
    ${ }^{23}$ Richard L. Hills, Papermaking in Britain 1488-1988. A Short History, London, 1988.
    ${ }^{24}$ Donald C. Coleman, The British Paper Industry 1495-1860, Oxford, 1959, preface, p. i.
    ${ }^{25}$ Judith A. McGaw, Most wonderful Machine. Mechanization and Social Change in Berkshire Paper Making, 1801-1885, Princeton, NJ, 1987.
    ${ }^{26}$ Peter F. Tschudin, Grundzüge der Papiergeschichte, Stuttgart, 2007; Federica Peccol (ed.), La carta. Storia, materiali, tecniche, Roma, 2012.
    ${ }^{27}$ Louis André, Machines à papier: Innovation et transformations de l'industrie papetière en France 1798-1860, Paris, 1996.

[^172]:    ${ }^{28}$ José Carlos Balmaceda, La contribución genovesa al desarrollo de la manufactura papelera española, Málaga, 2004.
    ${ }^{29}$ Miquel Gutierrez i Poch, Full a full. La indústria paperera de l'Anoia (1700-1998): continuïtat i modernitat, Barcelona, 1999.
    ${ }^{30}$ Miquel Gutierrez i Poch, La industria papelera española: entre la tradición y el cambio técnico (1750-1936), PhD dissertation, U. of Barcelona, 2005.
    ${ }^{31}$ Renzo Paolo Corritore and Luisa Piccinno (eds.), Cinque secoli di carta. Produzione, commercio e consumi della carta nella "Regio Insubrica" e il Lombardia dal Medioevo all'età contemporanea, Varese, 2005.
    ${ }^{32}$ Ivo Mattozzi, "Alle soglie di una ricerca: il cilindro olandese fra cartiere pontificie, "venete", Piemontesi e lombarde (secondo '700-primo '800)", in Corritore and Piccinno (eds.), pp. 171-195.
    ${ }^{33}$ Augusto Ciuffetti, Carta e stracci: Protoindustria e mercati nello Stato pontificio tra Sette e Ottocento, Bologna, 2013.

[^173]:    ${ }^{34}$ Daniel Bellingradt and anna Reynolds (eds.), The Paper Trade in Early Modern Europe: Practices, Materials, Networks, Leiden and Boston, 2021.
    ${ }^{35}$ Daniel Bellingradt, "Introduction", in Bellingradt and Reynolds (eds.), p. 1.
    36 "Working across the fields of book history, literature, the history of science, the history of communication, the digital humanities, and library science, the speakers shared their geographically and chronologically wide-ranging research into the evidence supplied by watermarks, archival records, bookbindings, and large-scale databases" (Daniel Bellingrdt and Anna Reynolds, "Preface" to Bellingradt and Reynolds, p. ix).

[^174]:    37 "Within paper history however, then paper industry [...] is usually described by solely focusing on the complexities of the material's manufacture. In highlighting the complexities of this craft, and especially concerning the changing techniques of production and production management, knowledge of an impressive cosmos of paper mills, watermarks, and paper sizes was created, and continues to be created within a lively scholarly community. But this research activities have become academically and scholarly isolated over the last decades; the result is a technology-focused auxiliary sub-discipline that, at best, mentions that paper is of course sold after production". (Bellingradt, "Introduction", in Bellingradt and Reynolds (eds.), pp. 13-14).

[^175]:    38 "The human face of industrial innovation has been obscured by the material conditions deemed to be sufficient to explain economics progress. Put human capital back into the story and suddenly minds, books, lectures, school curricula become central to the story of Western economic development. We have missed them for far too long, and without human actors the vitality, creativity, relentless questioning, and experimental reasoning of trial and error disappear. Why would we want to so impoverish our histories and make them so much less interesting? Why turn something as complex as industrial development into an abstraction?" (Margaret C. Jacob, The first Knowledge Economy. Human Capital and the European Economy, 1750-1850, Cambridge, UK, 2014, p. 224).
    ${ }^{39}$ See the website of the International Association of Paper Historians (http: / / www.paperhistory.org/Museums / , accessed on 07/05/2023); the leading Italian museums include those of Toscolano Maderno, Mele, Pescia, Pioraco, Ascoli Piceno, and Amalfi.

[^176]:    ${ }^{40}$ See for example the recent and innovative volume by Giorgetta Bonfiglio-Dosio and Ilaria Montin, Carte Fedrigoni. Inventario, Padua, 2021. Also interesting is the Archivio delle Cartiere, which is part of Apice. Archivi della Parola, dell'Immagine e della Comunicazione Editoriale at the Università degli Studi in Milan (https://www.apice.unimi.it/collezioni/archivio-delle-cartiere/, accessed on 07/05/2023).
    ${ }^{41}$ This is the case of the plants of Cini on the Pistoia mountains (the description of the papers can be found at https: / / www.sa-toscana.beniculturali.it/fileadmin / risorse/inventari/CiniPistoia.pdf, accessed on $07 / 05 / 2023$ ). The company history is sketched by Sabbatini, Di bianco lin, pp. 352-359. There is also space for an in depth sudy, not always exhaustive but certainly acute, by Angelo Nesti, La Cartiera Cini de La Lima (PT): Uno studio archeoindustriale, Florence, 2005.
    ${ }^{42}$ I have personally had the opportunity to experience, some years ago, even though exceptionally and marginally, the potential of the Magnani documents; see Renzo Sabbatini "Donne in cartiera", in Il lavoro delle donne: Attività femminili in Valdinievole tra Ottocento e Novecento, Lucca, 2004, pp. 127-152.

[^177]:    ${ }^{43}$ See the essays already quoted, and included in Faggioni and Mussolin (eds.), 2021.
    ${ }^{44}$ Andrea Federico Gasparinetti (ed.), Pietro Miliani fabbricante di carta, Fabriano, 1963.
    ${ }^{45}$ Marianna Astore, Pietro Miliani mercante e imprenditore della carta, Fabriano, 2017; see also Giancarlo Castagnari (ed.), Biografia di Andrea F. Gasparinetti, Fabriano, 2017.

[^178]:    ${ }^{1}$ Louis Chevalier, Classes laborieuses et classes dangereuses: A Paris pendant la première moitié du XIXe siècle, Tempus, Paris 2007.

[^179]:    ${ }^{1}$ M. Tronti, Operai e Capitale, Einaudi, Torino, 1966. Eng. Transl. Workers and Capital, Verso, New York, 2018.

[^180]:    ${ }^{1}$ N. Labanca, Oltremare, Storia dell'espansione coloniale italiana, il Mulino, Bologna, 2002, p. 274.
    ${ }^{2}$ The most important publications: Y. Mesghenna, Italian colonialism: a case of study of Eritrea, 1869-1934. Motive, praxis and result, studentlitteratur, Lund, 1988; R. Pankhurst, "Some notes on the historical and economic geography of the Meșewa area (1520-1885)", in Journal of Ethiopian Studies, 13, 1, 1975, pp. 89-116; G.B. Beccari, Guida descrittiva economica e commerciale dei porti più rag-

[^181]:    guardevoli del Mar Rosso. Il pellegrinaggio mussulmano ed il canale di Suez, Tip. Galassi, Montevarchi 1880; E. Kurimoto, "Trade relations between western Ethiopia and the Nile valley during the nineteenth century", in Journal of Ethiopian Studies, v. 28, n. 1, 1995, pp. 53-68; R. Pankhurst, "The history of Ethiopia's relations with India prior to the nineteenth century", in Proceedings of the International Conference of Ethiopian Studies (Pices) 4, v. 1, 1974, pp. 205311; R. Pankhurst, An Introduction to the Economic History of Ethiopia, from Early Times to 1800, Lalibela House, London 1961; R. Pankhurst, Economic History of Ethiopia 1800-1935, Haile Sellassie I University Press, Addis Ababa 1968; A.H. Abdussamad, "Trade Relations of the Northern Ethiopia with Italian Eritrea 1903-19352, in Africa, 52 (3), 1997, pp. 416-430.
    ${ }^{3}$ On this topic see, for instance: R. Pankhurst, "The 'banyan', or Indian, presence at Massawa, the Dahlak islands and the Horn of Africa", in Journal of Ethiopian Studies, 12, 1974, pp. 185-212; J. Miran, Facing the land, facing the sea. Commercial transformation and urban dynamics in the Red Sea port of Massawa, 1840s-1900s, Ph.D. (History), Michigan State University, 2003; R. Pankhurst, "Indian Trade with Ethiopia, the Gulf of Aden and the Horn of Africa in the Nineteenth and Early Twentieth Centuries", in Cahiers d'études africanes, v. 14, n. 55, 1974, pp. 453-497; J. Miran, "Endowing Property and Edifying Power in a Red Sea Port: Waqf, Arab Migrant Enrepreneurs, and Urban Authority in Massawa, 1860s-1880s", in The International Journal of African Historical Studies, v. 42, n. 2, 2009, pp.151-178; J. Miran, "Red Sea Translocals: Hadrami Migration, Entrepreneurship, and Strategies of Integration in Eritrea, 1840s-1970s", in Northeast African Studies, 2012, vol. 12, n. 1, pp. 129-167.
    ${ }^{4}$ E.Q.M. Alamanni, La Colonia Eritrea e i suoi commerci: esame analitico del movimento generale d'importazione ed esportazione dei possessi e protettorati italiani, F.lli Bocca, Torino 1891, p. 284. See also: M. Zaccaria, "Italian Approaches to Economic resources in the Red Sea region", in Eritrean Studies review, 5, 1, 2007, pp. 113-155.

[^182]:    ${ }^{5}$ The "Bania" were important Indian traders well integrated into the trade networks between the East and the West. On their presence and their activities in the Horn of Africa see: R. Pankhurst, The "banyan", or Indian, presence at Massawa, pp. 185-212.
    ${ }^{6}$ E.Q.M. Alamanni, La Colonia Eritrea e i suoi commerci, p. 285.

