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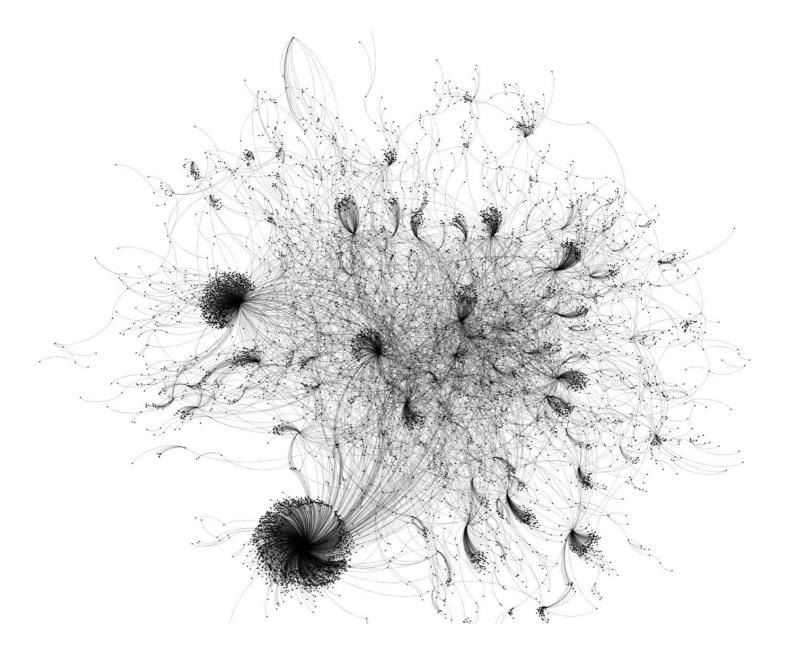
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The structure and dynamics of scholarly networks between the Dutch Republic and the Grand Duchy of Tuscany in the 17th century



Ingeborg van Vugt

The structure and dynamics of scholarly networks between the Dutch Republic and the Grand Duchy of Tuscany in the 17th century

ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad van doctor aan de Universiteit van Amsterdam op gezag van de Rector Magnificus prof. dr. ir. K.I.J. Maex

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Promotores:	prof. dr. C.M.J.M. van den Heuvel prof. dr. S. Pastore	Universiteit van Amsterdam Scuola Normale Superiore di Pisa
Copromotor:	prof. dr. J.J. Noordegraaf	Universiteit van Amsterdam
Overige leden:	dr. D.H. van Netten prof. dr. I. van Renswoude dr. L. Simonutti prof. dr. F. Benigno prof. dr. G. Caravale	Universiteit van Amsterdam Universiteit van Amsterdam Consiglio Nazionale delle Ricerche Scuola Normale Superiore di Pisa Università degli Studi Roma III
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Dit proefschrift is tot stand gekomen binnen een samenwerkingsverband tussen de Universiteit van Amsterdam en de Scuola Normale Superiore met als doel het behalen van een gezamenlijk doctoraat. Het proefschrift is voorbereid in de Faculteit der Geesteswetenschappen van de Universiteit van Amsterdam en de Facoltà di Scienze Umane van de Scuola Normale Superiore.

This thesis was prepared within the partnership between the University of Amsterdam and the Scuola Normale Superiore with the purpose of obtaining a joint doctorate degree. The thesis was prepared in the Faculty of Humanities at the University of Amsterdam and in the Facoltà di Scienze Umane at the Scuola Normale Superiore.

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Abbreviations

ASCH	Private Archives of the noble Dutch family Van Asch van Wijck, Prattenburg
ASF	Archivio di Stato di Firenze
BNCF	Biblioteca Nazionale Centrale di Firenze
BML	Biblioteca Medicea Laurenziana, Florence
BNF	Bibliothèque Nationale de France
CCF	Catalogo dei Carteggi - Firenze, Card Catalogue of the National Library of Florence
COR	Biblioteca Corsiniana, Rome
KB	Koninklijke Bibliotheek, National Library of the Netherlands
KNIR	Koninklijk Nederlands Instituut Rome
LMU	Ludwig Maximilian University Library, Munich
MdP	Mediceo del Principato, part of the Medici Archives in the State Archive of Florence
MM	Miscellanea Medicea, part of the Medici Archives in the State Archive of Florence
MOR	Biblioteca Moreniana, Florence
MPM	Museum Plantin-Moretus Archive, Antwerp
NA	National Archives of the Netherlands
NIKI	Nederlands Interuniversitair Kunsthistorisch Instituut, Florence
RIC	Biblioteca Riccardiana, Florence
UBA	Universiteitsbibliotheek Amsterdam
UBL	Universiteitsbibliotheek Leiden
UBU	Universiteitsbibliotheek Utrecht

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Glossary of network analysis terms

This glossary is partly compiled in conjunction with the Early Modern Digital Agendas: Network Analysis institute in July 2017 at the Folger Institute in Washington DC, a research summit on the use of network analysis in the historical field. The glossary below aims to understand the terms used in the context of this study.¹

Bipartite (also bimodal) network

A network of two node types in which connections are only between nodes of different types. One can perform a projection on a bipartite network.

Centrality of a node

A numerical measurement of importance of a node. Degree is a simple example. Four types of centrality: 1) Degree Centrality; 2) Closeness Centrality; 3) Betweenness Centrality; 4) Eigenvector Centrality.

Degree centrality – hubs

Number of connections a node has. A node with a high degree centrality has many connections (edges): a hub.

Closeness centrality

Closeness Centrality measures the proximity of a selected node to all other nodes within the graph.

Betweenness centrality - brokers

The number of "shortest paths" in the network that flow through a node or edge. To what degree a node provides a bridge to other nodes. A node X has a high betweenness centrality if the shortest path from Y to Z is through X. Nodes with a high betweenness centrality can also be thought as brokers.

Eigenvector centrality

Eigenvector centrality measures "the influence of a particular node by the connectedness of its closest neighbors. This can be thought of as the who you know type of centrality, wherein an individual node might not be thought of as important on its own, but its relationship to other highly connected nodes indicates a high level of influence. As Stephen Borgatti puts it: "the idea is that even if a node influences just one other node, who subsequently influences many other nodes (who themselves influence still more others), then the first node in that chain is highly influential" (Stephen P. Borgatti, 'Centrality and Network Flow', *Social Networks* 27 (2005), 61).

Cascade effect

A cascade has the potential to occur when people make decisions sequentially, with later people watching the actions of earlier people and from these actions inferring something about what the earlier people know. A cascade thus develops when people abandon their own information in favor of inferences based on earlier people's actions.

¹ https://folgerpedia.folger.edu/Glossary_of_network_analysis_terms, last accessed 1 April 2019.

Cliques

Cliques (or clusters) represent segments of the networks that are more tightly knit in their connections to one another, and more limited in their connections to other components of the network.

Clustering Coefficient

The clustering coefficient is a measure of the degree to which nodes in a graph tend to cluster together. It is often used to indicate the presence of Triadic closure. Duncan J. Watts and Steven Strogatz introduced the measure in 1998 to determine whether a graph is a small-world network.

Component

A connected part of the network. Networks often consist of multiple disconnected components.

CSV files

Comma separated values files allow data to be saved in a table structured format. CSVs look like a gardenvariety spreadsheet but with a .csv extension (Traditionally they take the form of a text file containing information separated by commas, hence the name).

Degree (of a node)

The number of edges connected to a node. Variants include in-degree/out-degree, which counts the number of ingoing and outgoing edges in a directed network. Sometimes indicated by the size of the sphere representing the node. Also called degree centrality.

Density

Density (or cohesion) is a measurement of the number of edges across the network, which relate to its stability and facilitation of information flow.

Diameter (of a network)

The largest shortest path length.

Dyad

Two nodes, usually connected by an edge.

Edge

Connections, link, or ties between nodes.

Ego Network

A network focused around one central node. A classic example is a correspondence network derived from the collected letters of a single individual.

Homophily

The tendency of nodes to become connected to other nodes that are similar under a certain definition of similarity.

Multimodal network

A network consisting of multiple types of nodes. Whereas the sociologist can work with complete unimodal or otherwise bimodal networks, the historian has to rely on the availability of the past. This

means that every piece of evidence that has come down to us needs to be included to interpret relations in the past: letters, books, persons, memberships, journals and so forth. This leads to a range of different kinds of nodes and links: the multimodal network emerges.

Node

Sometimes called a "vector" because it marks the intersection of lines, and sometimes called an actor, nodes are the elements of a network that are being connected.

Projection (of a bimodal network)

Transformation of a bimodal network into a weighted network of just one of the two original node types in which the weight of the connection is the number of shared neighbors in the bipartite network. When you project a bipartite network, in other words, you transform one of the node types into an edge: instead of two people nodes being connected to a place, they are connected to each other, and the place becomes the edge connecting them.

Power law or scale-free degree distribution

Intuitively one might expect the degree distribution in a network to follow a bell curve, which is more formally described as a normal (or Gaussian) distribution: a large rounded peak tapering away rapidly on each side. A simple probability distribution that resembles a bell curve or normal distribution is the roll of two dice. The distribution is centered around the number 7 and the probability decreases as you move away from the center on either side. A power-law distribution, by contrast has no peak; instead it decreases continuously and rapidly for increasing degrees. In fact the distribution of the data points within a power-law distribution is so broad across several orders of magnitude that it is normally plotted on logarithmic axes. On these axes a power law distribution appears as a straight diagonal line, which means that the shape of the distribution is the same for high and low degrees, resulting in what is known as a scale-free degree distribution. Whether we look at the network as a whole, or at a specific region, due to the scale-free distribution we will always find a few relatively well-connected nodes or "hubs", and a much larger number of nodes with a relatively small number of connections compared to the hubs. A wide range of networks have been shown to exhibit this property, including power grids, social networks, and the world-wide web.

Shortest path

The fewest number of steps between two nodes in the network.

Signed Graph

A signed graph is a network in which every edge is designated to be either positive or negative. These edges are also called signed edges. This type of graph is essential in the structural balance theory.

Small-world

The "small-world hypothesis", first developed by Duncan J. Watts and Steven Strogatz, expresses the idea that every individual in a given population can reach every other via some "short" chain of intermediaries.

Structural balance theory

The principles underlying structural balance are based on theories in social psychology dating back to the work of Heider in the 1940s and generalized and extended to the language of graphs beginning with the

work of Cartwright and Harary in the 1950s. Structural balance theory attends to a group's network of negative (-) and positive (+) sentiments and posits that this network alters over time toward particular structural forms of balance. Using the term "friend" to designate a positive sentiment and the term "enemy" to designate a negative sentiment, the classic balance model defines a sentiment network as follows: + + + (balanced); + - (unbalanced); - - (unbalanced/balanced).

Transitivity

Transitivity of a relation means that when there is an edge from x to y, and also from y to z then there is also a tie from x to z (friends of my friends are friends) Transitivity depends thus on triads.

Triad

Three nodes connected by an edge.

Triadic Closure

Triadic closure is a measure of the tendency of edges in a graph to form triads. The basic principle of triadic closure is that if two people in a social network have a friend in common, then there is an increased likelihood that they will become friends themselves at some point in the future.

Unipartite or unimodal network

A network of just one node type, in contrast to a bipartite network. Networks are typically unipartite. In a social network, such as the epistolary community of the Republic of Letters, correspondents are the nodes, and the relationships linking them are the edges.

Introduction

In recent years, the theoretical approaches of social network analysis have already made an impact in the historical field.² Specifically, the Republic of Letters, the pan-European intellectual community of the sixteenth, seventeenth and eighteenth century, has been the subject of a rich interdisciplinary historiography for the past few decades. But although this letter-writing community has attracted more and more scholarly attention in conjunction with a global turn in the practice of the digital humanities, the study of networks in historical research remains a field in its infancy. It has yet to establish its methodology, its ontologies, the best digital tools, and even the language by which we invoke technical processes in the study of early modern history. Rarely do historical studies offer an actual implementation and testing of how the mathematical tools employed by network scientists offer valuable ways of understanding and exploring the past. Most studies underline the potential utility of network metrics, but leave their exploration for future research.³ To add to this conceptual murkiness, the use of digital tools is often looked upon in a suspicious way, considered to be too simplistic and hence unsuitable to deal with the complexity and uncertainty of historical sources.⁴ There is, as underlined by Ruth Ahnert and Sebastian Ahnert, "still much work to be done before statistical methods are embedded within the literary historian's toolbox".5 We need, therefore, to continue to sharpen our digital tools and experiment with network models that give nuance, subtilty and detail to historical data.

This study attempts to take up this challenge and to demonstrate how social network analysis enables us to advance the cause of historical inquiry. It will address this challenge by exploring the ways in which early modern scholars capitalized on opportunities in the social structure to which they were connected. Accordingly, much of the essence of this study focuses on methodology rather than historical narrative. We might even say that this study has an experimental character in nature. Specifically, we will take a look at how early modern networks were actively and consciously constructed, modified, questioned and navigated by early modern scholars. They were constantly monitoring their interactions with one another in making decisions. On the one hand, early modern scholars were expected to

² See Ruth Ahnert and Sebastian E. Ahnert, 'Protestant Letter Networks in the Reign of Mary I: A Quantitative Approach', ELH 82, no. 1 (2015): cit. 2. For many other examples, see the extensive bibliography maintained by Marten Düring, 'HNR Bibliography', *Historical Network Research* (blog), last accessed 6 February 2019 http://historicalnetworkresearch.org/bibliography/. See also, Marten Düring et al., *Handbuch Historische Netzwerkforschung: Grundlagen und Anwendungen.* (Berlin: LIT Verlag, 2016).

³ Daniel Stolzenberg, for example, states the following: "In the future it may be possible to create digital maps of early modern scholarly communication that integrate letters and books in a unified web. Until then, we must not lose sight of what the new digital methods leave out, lest a partial but useful perspective becomes a misleading and distorted one", quoted in 'A Spanner and His Works: Books, Letters, and Scholarly Communication Networks in Early Modern Europe', in *For the Sake of Learning: Essays in Honor of Anthony Grafton*, ed. Ann Blair and Anja-Silvia Goeing (Leiden & Boston: Brill, 2016), cit. 172. Moreover, Charles van den Heuvel has aimed to set out the "requirements for the future development of digital intellectual and technological geographies and to combine these with network representations of actors and documents relevant for the history of knowledge exchange in Early Modern Europe", see 'Mapping Knowledge Exchange in Early Modern Europe: Intellectual and Technological Geographies and Network Representations'. *International Journal of Humanities and Arts Computing* 9, no. 1 (2015): cit. 95. In another co-authored article, Van den Heuvel, discussed several hypotheses needed to analyze the content of letters and which can be tested "once sufficient material is digitized", see Charles van den Heuvel et al., 'Circles of Confidence in Correspondence. Modeling Confidentiality and Secrecy in Knowledge Exchange Networks of Letters and Drawings in the Early Modern Period', *Nuncius* 31, no. 1 (2016): 79-80 (cit. 90).

⁴ Lorraine Daston well describes this suspicious attitude towards the application of sociological models to history, writing that "models of human conduct are frankly imperialistic in their aims. But insofar as there has been any humanistic response to them, it has been a rolling of eyes heavenward and a shrugging of shoulders about the absurdity of it all", in 'Whither Critical Inquiry?', *Critical Inquiry* 30, no. 2 (2004): 361. For a discussion related to skepticism about the Digital Humanities, see Dan Edelstein et al., 'Historical Research in a Digital Age: Reflections from the Mapping the Republic of Letters Project. Historical Research in a Digital Age', *The American Historical Review* 122, no. 2 (1 April 2017): 400–424.

⁵ Ahnert and Ahnert, 'Protestant Letter Networks in the Reign of Mary I: A Quantitative Approach', cit. 2.

contribute towards the achievement of the collective goals of the Republic of Letters – the *bonum commune* – that rested on the imperative of sharing knowledge without frontiers. Nevertheless, they had to deal with many tensions and inefficiencies at a time in which the freedom of communication was not always guaranteed. These tensions ranged from restrictions imposed by the Inquisition to scholarly rivalries, jealousy and competition. As a consequence, it seems that the citizens of the Republic of Letters often found themselves between extremes, struggling to find a balance in dealing with these tensions. They had to strategically negotiate between open and closed circles in their networks, between friendly and hostile relationships and between openness and secrecy in their communication.

To explore these dynamics, this study focuses on the epistolary contacts between scholars from the Grand Duchy of Tuscany and the Dutch Republic during the reign of Cosimo III (1670-1723), a period that is characterized by an ever-increasing amount of interchange between the two respective societies. The lively epistolary exchange between these two societies allows for a comprehensive view on the supra-confessional Republic of Letters, providing a framework to grasp the sometimes conflicting dynamics in the sharing of knowledge. The opposed religious and social paradigms between these two areas might have influenced the choices people had to make, and the strategies they adopted to achieve or ignore coordination on an international scale. In fact, scholars had to deal with many tensions between Italy (with its organized control of ideas and consequent suppression of anything that transgressed the boundaries defined by the Church) and the Dutch Republic, often referred to as an area with relative tolerance and freedom of expression.⁶

This study consists of six chapters which contents can be broken down into two parts. The first part consists of three introductory chapters that provide background and an historical context to the relations between Tuscany and the Dutch Republic during the reign of Cosmo III. The first chapter discusses that secrecy and confidentiality were needed to foster the exchange between the Dutch Republic and the Grand Duchy of Tuscany. The second chapter focuses on the travels of prince Cosimo in the Dutch Republic in the years 1667-1669 – an experience that has undoubtedly aroused his interest to maintain close contact with the Dutch country. The third chapter turns the relationship around and discusses the stream of Dutch travelers who made their way to the Grand Duchy of Tuscany. The favorable attitude Cosimo III had towards them attracted several Dutch scholars, who came to Florence with the prospect of consulting the rich manuscript collections in the Medici libraries. Furthermore, the Dutch scholars valued the opportunity such visits afforded to meet Cosimo's legendary librarian Antonio Magliabechi (1633-1714).

Shortly after the return of Cosimo from his grand tour in the Dutch Republic and the death of his father Ferdinando II, he ascended the grand ducal thrown in 1670 at the age of 28 years. Cosimo's journey to the Dutch Republic had made a great impact on him. The Grand Dukes fascination for the Dutch culture seems to have been fuelled by his conviction that the Dutch Republic could guarantee profit for the Grand Duchy in every aspect possible. During his visit in the Dutch Republic, he visited publishing houses, cabinets of curiosities, the headquarters of the East and West Indian Trading

⁶ For a discussion of the general theme of tolerance in the Dutch Republic, see Christiane Berkvens-Stevelinck, Jonathan Irvine Israel and G.H.M. Posthumus Meyjes, eds., *The Emergence of Tolerance in the Dutch Republic* (Leiden/Boston: Brill, 1997); Christine Kooi, 'Religious Tolerance', in *The Cambridge Companion to the Dutch Golden Age*, ed. Helmer J. Helmers and Geert Janssen (Cambridge: Cambridge University Press, 2017), 208-224; Jo Spaans, 'Religious policies in the seventeenth-century Dutch Republic', in *Calvinism and Religious Toleration in the Dutch Golden Age*, ed Ronnie Po-chia Hsia and Henk van Nierop (Cambridge: Cambridge University Press, 2002), 72-86; Andrew Pettegree, 'The politics of toleration in the Free Netherlands, 1572-1620', in *Tolerance and intolerance in the European Reformation*, ed. Ole Peter Grell and Bob Scribner (Cambridge: Cambridge University Press, 1996), 182-198; Luisa Simonutti, 'Looking beyond home shores: Dutch tolerance at the end of the seventeenth century', *History of European Ideas* 44, no. 8 (2018): 1092-1110; *Ibidem, Arminianesimo e Tolleranza nel Seicento Olandese* (Florence: Olschki, 1984).

companies, churches and fortifications, observed the workings of windmills, dykes and polders and established contact with a large portion of the intellectual and mercantile life in the Dutch Republic. Cosimo used this network to help Tuscany profit economically, technologically and culturally to the fullest extent possible. This fascination for the Dutch culture has been underlined by Andrew McCormick and Henk Th. van Veen, who argued that the "Dutch influence on Tuscany had never been, and would never be, so great, thanks to Cosimo's fascination with practically every aspect of Dutch culture and society".⁷ This claim raises the question of how you can actually determine this influence. Network analysis, as I will demonstrate in this study, can play a role in this regard.

To foster and strengthen his relationships with the Dutch, Cosimo primarily relied on the administrative techniques and methods of learning handled by two principal figures at the Medici court: the grand ducal secretary Apollonio Bassetti (1631-1699) and the court librarian Antonio Magliabechi (1633-1714). The co-existence of two such powerful men at the service of Cosimo III favored a substantial increase of correspondence and interchange between the Dutch Republic and his court in Tuscany, Florence in the second half of the seventeenth century. While the eighteenth-century historian Riguccio Galluzzi had flattened Cosimo's reign to the level of mere bigotry, he recognized the important role of Bassetti and Magliabechi. According to Galluzzi, it was difficult for a man of Bassetti's brilliance to receive the goodwill and support of the Grand Duke, who only "loved blind dependence and adulation".⁸ He considers Bassetti as the mastermind behind Cosimo's efforts to curb the seemingly, yet inevitable decline of Tuscany. Likewise, Magliabechi "who was admired by the literary world" made Florence a hub for scholarly correspondence and book circulation.⁹

The first three chapters serve as the framework for the following chapters, in which the focus lies on the complexity of models used for assessing the networked structure of the relations between the Dutch Republic and the Grand Duchy of Tuscany. To do so, this study draws inspiration from a main body of social theory, namely graph theory, or social network theory. Graph theory highlights the constitutive importance of social networks in the context of the Republic of Letters, a field where much remains to be done and which will continue to stimulate us for many years to come.

1. THE DIGITAL REPUBLIC OF LETTERS

This study is intricately connected with one of the greatest themes of history: the Republic of Letters. In the 1970s, a number of scholars began to investigate the nature and meaning of the Republic of Letters. According to Dan Edelstein et al. "an international community of scholars has developed and defined this subject in the decades since, tracing the rise and decline of this ideal society and its real connection to cultural and intellectual practices and scholarly communities".¹⁰ The Republic of Letters was the self-

⁷ Henk Th. van. Veen and Andrew P. McCormick, *Tuscany and the Low Countries: An Introduction to the Sources and an Inventory of Four Florentine Libraries* (Florence: Centro Di, 1984), 62.

⁸ Riguccio Galluzzi, Istoria del Granducato di Toscana sotto il governo della casa Medici, vol. VII (Florence: Stamperia Vignozzi, 1781), 83-85.

⁹ Galluzzi, 274, "che facea l'ammirazione del mondo letterario".

¹⁰ Edelstein et al., 'Historical Research in a Digital Age: Reflections from the Mapping the Republic of Letters Project. Historical Research in a Digital Age', cit. 410. For more about the history of the Republic of Letters, see, Lorraine Daston, 'The Ideal and Reality of the Republic of Letters in the Enlightenment', *Science in Context* 4, no. 2 (1991): 367-386; Hans Bots, *Republiek der letteren: Ideaal en werkelijkheid: Rede uitgesproken bij aanvaarding van het ambt van buitengewoon hoogleraar aan de Katholieke universiteit te Nijmegen* (Amsterdam: Apa-Holland universiteits Press, 1977); *Ibidem, De Republiek der Letteren. De Europese Intellectuele Wereld* 1500-1760 (Nijmegen: Van Tilt, 2018). Françoise Waquet, "Qu'est-ce que c'est la République des lettres? Essai de sémantique historique', *Bibliothque de l'Ecole des Chartres* 147 (1989): 473–502; Hans Bots and Françoise Waquet, La République des lettres (Paris: Belin-De Boeck, 1997); Marc Fumaroli, *The Republic of Letters*, trans. Lara Vergnaud (New Haven/London: Yale University Press, 2018). See also the various essays in Hans Bots and Françoise Waquet, eds, *Commercium Litterarium. La communication dans La République des Letters. Forms of communication in the Republic of Letters* 1600-1750

proclaimed community of scholars which became highly popular across Europe over the course of more than three centuries. The Latin expression *respublica literaria* appeared for the first time at the beginning of the fifteenth century in Italy and is then notoriously recovered by Desiderius Erasmus (1466-1536) from about 1500 onward.¹¹ Since Erasmus was an exemplary letter-writer, new generations of scholars often used the expression 'Republic of Letters' and it has remained in use ever since, in Latin and in diverse vernaculars. The very expression of the Republic of Letters connoted mutual support, reciprocity, merit and the accumulation of knowledge, emphasizing its independence from the pressure of political structures, ecclesiastical interest and social hierarchies.

Letters were the medium of communication in the context of the Republic of Letters, or rather a precondition that held the pan-European community of scholars together. Dirk van Miert, for example, pointed out that "people became part of this community by the very act of writing letters: those scholars who failed or refused to establish sustained lines of communication, could not be reckoned as citizens of this Republic."12 Anthony Grafton argued that "it is above all in the thousands of surviving letters that the outlines, highways and capitals of the Republic can be glimpsed most vividly" and Paul Dibon stated that "epistolary exchange was, in fact, the network that held this community together".¹³ This emphasis upon the pivotal role of the letter poses unique challenges for visualizing it, something which was envisioned by Hans Bots already in 1971. He urged for "the availability of an electronic memory, including a research laboratory with sufficient financial means to optimize the use of seventeenth-century historical sources, such as correspondences, which would provide us with more accurate knowledge of the intellectual life in the XVII century".¹⁴ Likewise, taking the case of the Gottfried Wilhelm von Leibniz (1646-1716), Maarten Ultee argued in 1987 that a social history of the Republic of Letters would explore the concrete details of memberships in this imagined community, including its geography, "the volume and frequency of letters as well as the social positions of its participants".¹⁵ Specifically, Ultee urged for the need for "applying the techniques of social history to surviving correspondences", developing as such new ways to explore historical data.¹⁶ Such an approach, he argued, would stress the limitations of his own abilities to convey what he had found in words in Leibniz's correspondence, concluding that "eventually a graphical representation will clarify the links in his network."¹⁷ Ultee's research inspired the

⁽Amsterdam/Maarssen: APA-Holland University Press, 1994). For more recent overview on the Republic of Letters, see Alexander Bevilacqua, *The Republic of Arabic Letters Islam and the European Enlightenment* (Cambridge: Harvard University Press, 2018); Carol Pal, *Republic of Women: Rethinking the Republic of Letters in the Seventeenth Century* (Cambridge: Cambridge University Press, 2012); Maria Berbara and Karl A. E. Enenkel, eds., *Portuguese Humanism and the Republic of Letters* (Leiden/Boston: Brill publishers, 2002).

¹¹ On Erasmus, see Lisa Jardine, *Erasmus, Man of Letters: The Construction of Charisma in Print* (Princeton/Oxford: Princeton University Press, 1993); Constance M. Furey, *Erasmus, Contarini, and the Religious Republic of Letters* (Cambridge: Cambridge University Press, 2008); Hanan Yoran, *Between Utopia and Dystopia: Erasmus, Thomas More, and the Humanist Republic of Letters* (Lanham, Lexington Books, 2010).

¹² Dirk van Miert, 'What Was the Republic of Letters? A Brief Introduction to a Long History (1417–2008)', *Groniek* 204, no. 5 (2014): 270.

¹³ Anthony Grafton, 'A Sketch Map of a Lost Continent: The Republic of Letters', *Republic of Letters: A Journal for the Study of Knowledge, Politics, and the Arts* 1 (2009): 9. Paul Dibon, 'Communication in the Respublica Literaria of the 17th Century', *Res Publica Literarum. Studies in the Classical Tradition* 1 (1978): 50.

¹⁴ Hans Bots, *Correspondance de Jacques Dupuy et de Nicolas Heinsius (1646-1656)* (the Hague: Springer, 1971), 237 (stelling VIII), "De beschikking over een elektronisch geheugen, waarbij tevens de aanwezigheid van een research-laboratorium met voldoende geldelijke middelen ver- ondersteld wordt, zou een optimaal gebruik van zeventiende-eeuwse historische bronnen, zoals correspondenties, bevorderen en zou ons tevens een nauwkeuriger kennis verschaffen van het intellectuele leven in de XVIIe eeuw."

¹⁵ Maarten Ultee, "The Republic of Letters: Learned Correspondence, 1580-1720", *The Seventeenth Century* 2, no. 1 (1987): 100. ¹⁶ *Ibidem*, 100.

¹⁷ Ibidem, 103.

subsequent work of a new generation of scholars in the late 1990s who increasingly brought the methods of cultural and social history to study the Republic of Letters in its social context.¹⁸

The more historians began to consider correspondence in relationship to the reconstruction of social networks, the more urgent the claims of Hans Bots and Maarten Ultee became.¹⁹ In 1998, David S. Lux and Harold J. Cook observed that social network analysis can provide an alternative way of thinking about the circulation of knowledge during the scientific revolution.²⁰ They were inspired by the work of the well-known sociologist Mark Granovetter, who had studied the ways in which people sought employment. He concluded that job-seekers received information about job openings "from acquaintances rather than from those within their inner circle".²¹ He termed this the "strength of weak ties".²² Accordingly, Lux and Cook argued that weak ties were the reason why scholars in the Netherlands could do "excellent natural philosophy without having to be formally associated in a scientific society".²³ Then, in 2001, David Kronick pointed to the use of new techniques of digitizing and analyzing early modern correspondence. In particular, Kronick underlined how the use of citation analysis, a method used in the social sciences to cluster pairs of authors who cite the same paper in their bibliographies, can be used to describe relationship among individuals in early modern science. Such an analysis would reveal "more seventeenth- and eighteenth century invisible colleagues than those of which we are currently aware".²⁴ This "idea did not really bear fruit for the next decade".²⁵ In 2010, Yves Gingras reiterated Kronick's idea and developed a way to explore the role of citation and co-citations in the correspondence of Marin Mersenne (1588-1648), Henry Oldenburg (1615-1677) and Charles Darwin (1809-1882).²⁶ He took advantage of the digitization of Oldenburg's correspondence by the Electronic Enlightenment Project at Oxford University and JSTOR's searchable versions of the Philosophical Transactions to reconstruct their networks.²⁷ Gingras' idea of co-citation networks was integrated in the ePistolarium tool of the Huygens Institute of the History of the Netherlands in 2013.²⁸

²³ Lux and Cook, 'Closed Circles or Open Networks?', 202.

¹⁸ Edelstein et al., 'Historical Research in a Digital Age: Reflections from the Mapping the Republic of Letters Project. Historical Research in a Digital Age', cit. 411. For this new generation, see, for example, Anne Goldgar, *Impolite Learning: Conduct and Community in the Republic of Letters, 1680-1750* (Yale University Press, 1995); Dena Goodman, *The Republic of Letters: A Cultural History of the French Enlightenment* (Ihaca/London: Cornell University Press, 1996); Martin Mulsow, Die unanständige Gelehrtenrepublik. Wissen, Libertinage und Kommunikation in der Frühen Neuzeit (Stuttgart/Weimar: J.B. Metzler, 2007).

¹⁹ This claim is made by Edelstein et al., 'Historical Research in a Digital Age: Reflections from the Mapping the Republic of Letters Project. Historical Research in a Digital Age', cit. 415.

²⁰ David S. Lux and Harold J. Cook, 'Closed Circles or Open Networks?: Communicating at a Distance during the Scientific Revolution', *History of Science* 36, no. 2 (1 June 1998): 179–211.

²¹ Lux and Cook referred to the work of Granovetter, in 'Closed Circles or Open Networks?', 181.

²² Mark S. Granovetter, 'The Strength of Weak Ties', American Journal of Sociology 78, no. 6 (1973): 1360–80.

²⁴ David A. Kronick, "The Commerce of Letters: Networks and "Invisible Colleges" in Seventeenth- and Eighteenth-Century Europe', *The Library Quarterly* 71, no. 1 (2001): 42.

²⁵ Edelstein et al., 'Historical Research in a Digital Age: Reflections from the Mapping the Republic of Letters Project. Historical Research in a Digital Age', cit. 415.

²⁶ Yves Gingras, 'Mapping the Structure of the Intellectual Field Using Citation and Co-Citation Analysis of Correspondences', *History of European Ideas* 36, no. 3 (2010): 330–39.

²⁷ Edelstein et al., 'Historical Research in a Digital Age: Reflections from the Mapping the Republic of Letters Project. Historical Research in a Digital Age', 416.

²⁸ 'ePistolarium', accessed 26 September 2013, http://ckcc.huygens.knaw.nl/epistolarium/. About ePistolarium, see W. Ravenek, C.M.J.M van den Heuvel and G.H. Gerritsen, *The ePistolarium: origins and techniques*, in *CLARIN in the Low Countries*, in *CLARIN in the Low Countries*, ed. Jan Odijk, & Arjan van Hessen (London: Ubiquity Press, 2017), 317-323. For the most recent discussion about the possibilities and limitations of the ePistolarium tool, see Charles van den Heuvel, 'Chapter III-4: Modelling texts and topics', in *Reassembling the Republic of Letters in the Digital Age. Standards, Systems, Scholarship*, ed. Howard Hotson-Thomas Wallnig (Göttingen: Göttingen University Press, forthcoming 2019).

In many respects, the early modern Republic of Letters can be used as an ideal testing ground for developing new ways of thinking about historical "big data".²⁹ As the number of historical letters shared online keeps growing it is time to take full advantage of this ever-extending dataset and to discover how computational approaches can advance the study and understanding of the Republic of Letters. Too much data – now as well in the past – as it turns out, might be a good thing.³⁰ Accordingly, in the past decade, early modern historiography has seen a proliferation of digital network projects that have started to map sections of the Republic of Letters. Within this relatively small field, the best-known projects – including Six Degrees of Francis Bacon of the Carnegie Mellon University, Mapping the Republic of Letters of Stanford University, Circulation of Knowledge/ePistolarium of the Huygens Institute for the History of the Netherlands in Amsterdam, RECIRC of the University of Galway, Cultures of Knowledge of Oxford University and SKILLNET of the University of Utrecht, all map relationships between early modern scholars. This study tries to contribute to this emerging field, highlighting the various gaps that exist in creating models to increase our understanding of the dynamics of early modern correspondence. Moreover, I attempt to concretize ways in which social network analysis can provide us with a better understanding of the structure and dynamics of epistolary networks in our case study of exchanges between the Dutch Republic and the Grand Duchy of Tuscany, which go beyond mere technical descriptions of centrality measures alone.

The Republic of Letters has often fallen prey to an over-socialized and static concept of networks, without examining how relationships become constituted and how they are negotiated over time. In other words, the temporal dimension of networks and the variability of their significance have not been handled well by network approaches to the Republic of Letters. Networks do not simply determine mobilization or career formation, but are a result of persuasive social interaction and a clear-cut strategy. The third chapter, therefore, focuses on the evolving dynamics of networking. In particular, we will take a look at how Tuscan and Dutch scholars build up their networks, as well as the strategies they adopted to secure their position therein. On the one hand, they needed to have access to innovative information and resources. This means that they needed to become involved with scholars from outside their own circle of trust, reaching out to others who could provide them with new information and recently published books. They needed to guarantee that their individual network was secure and trustworthy, the more so in view of the many transconfessional contrasts, which made it necessary to keep sensitive information secret and confidential. Hence, they needed to strategically negotiate between openness and closure in their network, a struggle that continued throughout their entire epistolary career.

In order to analyze these dynamics, the fourth chapter uses mathematical and computational techniques developed by social network scientists to reconstruct and analyze the social organization of the relations between the Grand Duchy of Tuscany and the Dutch Republic. Specifically, by data-mining two heterogeneous, but complementary datasets, a unified, systematized network representation has been created to better understand the way scholars between these two societies were connected. This network has been further enriched with archival transcriptions of letters extent in library collections of the Netherlands, Germany and Italy, as well as with early printed correspondences. The result is a dataset that comprises metadata of circa 10.000 correspondences that forms the backbone of this research. On the basis of this network of the social relations between the Grand Duchy of Tuscany and the Dutch Republic, in this chapter, patterns based on a set of principles will be discussed to capture some subtle

²⁹ Edelstein et al., 'Historical Research in a Digital Age: Reflections from the Mapping the Republic of Letters Project. Historical Research in a Digital Age', 414.

³⁰ I refer here to the study of Ann Blair, *Too Much to Know. Managing Scholarly Information before the Modern Age* (New Haven/London: Yale University Press, 2010).

distinction in how one's network position benefits or disadvantages those people who occupy them. The distant reading of these patterns, which will be introduced in more detail in the next paragraph, will be combined with a close reading of the correspondence to underpin the evolving dynamics of the early modern epistolary network.

The Republic of Letters is often described in very idealistic terms. Hans Bots called it a 'supranational European community of scholars', Franz Mauelshagen referred to it as "a fictitious community-without a territory" and Anthony Grafton as "Europe's first egalitarian society".³¹ Yet, traditional literature has taught us that the harmony of the ideal of the Republic of Letters was rarely achieved in reality. Within the dynamics of cross-cultural exchanges between the Dutch Republic and the Grand Duchy of Tuscany, scholars had to deal with the many tensions and conflicts arising from the opposing political and religious realities. In addition, jealousy and competition dictated the choices scholars had to make in the formation of their network. To reason about how fissures in an epistolary network may arise from the dynamics of conflicts, disagreement and antagonism between corresponding scholars, in the fifth chapter we will focus on a theory that never has been considered before in analyzing early modern correspondence networks: the structural balance theory. The principles underlying structural balance are based on theories in social psychology dating back to the work of Heider in the 1940s.³² Structural balance offers to capture both positive and negative links to understand the tensions between people within the network. In addition, it assumes that people constantly evaluate the quality of their relationships in order to achieve a balanced position in a network. With the application of this method from the social sciences, I intend to fill the gap between digital and traditional research methods of the humanities used in the analysis of the Republic of Letters so far. In most approaches that map the Republic of Letters digitally, the connections have a rather positive meaning. Such representations reinforce the rather naive idea that the Republic of Letters was an ideal community of peaceful co-existence between intellectuals. Therefore, the fifth chapter will argue that the digital representation of the early modern scholarly network should also account for the negative and hostile relations in the network.

In the Republic of Letters knowledge was not just transferred by letters. Building on the actornetwork theory of Bruno Latour, I argue that agentic objects or nonhuman actors, like books, deepen our understanding of the early modern epistolary network.³³ Most studies employ one-modal networks where one node of the graph represents a correspondent and an edge between a pair of nodes corresponds to a letter exchanged between them. Yet, reducing the early modern society to a network in which the actors are connected by one single type suggests a static uniformity that does not take into account the multi-faced dynamics of epistolary exchange. In addition to letters, the early modern network was tied, and untied, together primarily by means of books. Books always have been powerful and could foster ties when given as gifts, as well as influence and endanger the network if unwanted or provoked by others. Therefore, this final chapter intends to discuss un approach that integrates both letters and books in a unified and dynamic multimodal network representation.

Important in this respect is the study of Héloïse Hermant, who has used the notion 'dispositif' to describe early modern communication "as a plan or mechanism with many individual parts developed in

³¹ See Charles van den Heuvel et al., 'Circles of Confidence in Correspondence. Modeling Confidentiality and Secrecy in Knowledge Exchange Networks of Letters and Drawings in the Early Modern Period', cit. 80. Examples of these idealizations can be, according to Van den Heuvel, found in the work of Grafton, 'A Sketch Map of a Lost Continent: the Republic of Letters; Franz Mauelshagen, 'Networks of Trust: Scholarly Correspondence and Scientific Exchange in Early Modern Europe', *The Medieval History Journal* 6, no. 1 (2003); Hans Bots, 'Introduction', in Christiane Berkvens-Stevelinck and Hans Bots, eds., *Les grands intermédiaires culturels de la République des Lettres* (Paris: Honoré Champion Editeur, 2005).

³² See David Easley and Jon Kleinberg, *Networks, Crowds, and Markets: Reasoning About a Highly Connected World* (Cambridge: Cambridge University Press, 2010), cit. 108.

³³ Bruno Latour, We Have Never Been Modern, trans. Catherine Porter (Cambridge: Harvard University Press, 1993).

order to overcome an obstacle or to achieve a goal".³⁴ Building on this definition, multimodal networks can be seen as the equivalent of 'dispositifs', in the sense that they both consist of multiple entities that characterized the dynamic nature of communication. Whether the goal is to circumvent control, or to overcome confessional barriers, multiple layers of data may provide a broader picture of the networks and strategies in question.

2. THE IMPORTANCE OF DISCLOSE READING

The digital turn of the last decades affords the unique opportunity to chart the cross-cultural exchange between the Dutch Republic and the Grand Duchy of Tuscany. This study looks at the potential of databases to generate histories. As the number of historical letters shared online keeps growing it is time to take full advantage of this ever-extending dataset that can be used in more sophisticated ways than just making use of them as an ordinary catalogue to query for results. In fact, they offer the prospect of applying computational visualizations and analyses that enables us to handle a large amount of data that traditional research fails to do. This is what in the digital humanities is being called "distant reading", a term coined by Franco Moretti, as opposed to close reading, where one takes a step back and looks at the archive as a whole to spot overarching trends or developments that have been overlooked perhaps by traditional scholarship.³⁵ Distant reading, however, results in a loss of contextual and textual information that a close reading, so the in-depth reading of the historical source, can reveal.

An understanding of the patterns of cross-cultural exchanges can be improved by thinking in new terms of collectivity rather than in individuality, in structures rather than in biographies. On the other hand, numerous statements of, for example, confidentiality and secrecy, are impossible to check without the close reading of many letters. Therefore, the hybrid nature of epistolary networks will require a multidisciplinary approach combining book historical research with hermeneutics and digital humanities methods based on pattern recognition. In other words, the value of this research lies in the combination of methods for network analysis for distant reading of large sets of letters with close reading devoted to achieving a deep understanding of the source. These two methods are in continuous interaction with each other. This means that distant reading will uncover how social relations are represented and constructed, sometimes reinforced and sometimes even transformed and dissolved, which is enriched by close reading to focus on specific features that have influenced those dynamics. Vice-versa, one could identify several interesting angles for in-depth research and comparison of processes occurring in societal developments directed by a richer version of the properties of a network.

Both methods have their strengths and weaknesses; with close reading one often tries to hypothesize overarching theories from a very limited sample of letters while with distant reading one may identify overlapping patterns in a larger set of letters, but it often results in a loss of the contextual information that a close reading can reveal. Ideally, historical research should switch smoothly between distant and close reading that are complementary, rather than contradictory:

"The important next step is combining the distant and the close reading, mixing traditional historical research with the newer quantitative studies. The combination holds the promise of

³⁴ Héloïse Hermant, 'Les Dispositifs de Communication de Don Juan José et l'orchestration d'un Mouvement d'opinion', in *La Communication En Europe de l'âge Classique Au Siècle Des Lumières*, ed. Pierre-Yves Beaurepaire (Paris: Belin, 2014), 162– 94.

³⁵ Franco Moretti, *Close Reading* (London/New York: Verso, 2013). Matthew L. Jockers refers to this same approach as "macroanalysis", see *Macroanalysis: Digital Methods and Literary History* (Urbana: University Of Illinois Press, 2013).

a new historical synthesis, a longue durée history more firmly grounded in the sea of as-yetdisconnected micro- and meso-histories we often find ourselves trudging through".³⁶

Thus, both readings should interact to strengthen historical interpretations. I would like to call this combination "disclose reading" whose implementation will become central throughout this study.

Distant reading does certainly not do our work faster for us, but rather points to where our work lies as well as giving depth to our research field. In this respect, the pioneering research of a Roman Catholic priest come to mind. In 1941, Father Roberto Busa (1913-2011) initiated his PhD in Thomistic philosophy at the Pontifical Gregorian University of Rome, focusing on the concept of 'presence' in the works of the thirteenth-century philosopher and theologian Thomas Aquinas (1225-1274).³⁷ When searching through indexes for the words of praesens and praesentia, Busa soon noticed that Aquinas linked such words with the preposition in. Consequently, he began to manually compile an index of all the concordances of the preposition in in the works of Aquinas. Busa wrote out by hand 10.000 cards, each containing a sentence with the preposition in or a word connected with in. "Grand games of solitaire followed", to use the Busa's words.³⁸ Busa's dissertation, which he defended in 1946, was thus founded on a complete, handmade concordance - consisting of 10.000 hand written cards. Nevertheless, it consisted of only one entry: in. The next challenge for Busa was an index of the lemmatization of all words in the complete works of Aquinas, containing all inflected forms of a given word in order to analyze them as single items. This Index Thomisticus was needed to get not only insight into Aquinas's own conceptual system but, above all, to help other scholars for analogous studies. For this enterprise, he was in need of "some type of machinery" that could process texts containing more than million words.³⁹ This brought him, in 1949, to the Unites States, specifically to the International Business Machines Corporations (IBM) in New York, whose director at the time, Thomas J. Watson Sr. (1874-1956) agreed to help him in this project. In the United States, the IBM had become leader in the mechanical manipulation of punch cards - also called IBM cards.⁴⁰ Busa gradually transferred the entire texts of Saint Thomas Aquinas to these mechanical punch cards to generate the concordance.⁴¹ 30 years later, this resulted in the Index Thomisticus, a complete lemmatization of the works of Aquinas automatically composed and printed by punched card machines. The Index is divided in 56-volumes and was published from 1974 until 1980, representing nowadays the landmark of the Digital Humanities.⁴² The case of Father Busa shows how the use of data-processing tools can enrich literature and scholarly studies. In fact, according to Busa, researcher should not use the computer primarily for speeding up processes or minimizing the work:

"To repeat: the use of computers in the humanities has as its principal aim the enhancement of the quality, depth and extension of research and not merely the lessening of human effort and time. In fact, the computer has even improved the quality of methods in philological

³⁶ Scott Weingart, 'The Networked Structure of Scientific Growth', The Scottbot Irregular, accessed 22 February 2012, http://www.scottbot.net/HIAL/index.html@p=12050.html, 29.

³⁷ Steven E. Jones, Roberto Busa, S. J., and the Emergence of Humanities Computing: The Priest and the Punched Cards (Routledge, 2016), 1. Other studies regarding the extraordinary accomplishments of Busa: Julianne Nyhan and Andrew Flinn, Computation and the Humanities. Towards an Oral History of Digital Humanities (Cham: Springer, 2016), 1-3; Corrado Bonfanti, 'Roberto Busa (1913-2011), Pioneer of Computers for the Humanities', in Reflections on the History of Computing : Preserving Memories and Sharing Stories, ed. Arthur Tatnall (Heidelberg: Springer, 2012), 57-61.

 ³⁸ Roberto Busa, 'The Annals of Humanities Computing: The Index Thomisticus', *Computers and the Humanities* 14 (1980): 83
 ³⁹ *Ibidem*, 83.

⁴⁰ Thomas Nelson Winter, 'Roberto Busa, S.J., and the Invention of the Machine-Generated Concordance', *The Classical Bulletin* 75, no. 1 (1999): 7.

⁴¹ Winter, 'Roberto Busa, S.J., and the Invention of the Machine-Generated Concordance', 8.

⁴² Busa, 86–87.

analysis, because its brute physical rigidity demands full accuracy, full completeness, full systematicity. Using computers, I had to realize that our previous knowledge of human language was too often incomplete and anyway not sufficient for a computer program. Using computers will therefore lead us to a more profound and systematic knowledge of human expression; in principle, it can help us to be more humanistic than before."⁴³

⁴³ Busa, 89.

CHAPTER 1

Confidentiality and secrecy in the epistolary network

INTRODUCTION

Before analyzing networks in a quantitative way, first an impression needs to be given of the nature of the relationships in the scholarly exchange in the networks between the Dutch Republic and the Grand Duchy of Tuscany, two societies on either side of the confessional divide, roughly between 1667 and 1715. Communication between these two societies would seem to test the limits of how much disunity a scholarly community could bear. In fact, many tensions arise due to the different social, cultural, political and confessional paradigms involved. These tensions ranged from restrictions imposed by powerful political and religious institutions, for example by the Inquisition, to scholarly rivalries, jealousy, suspicion and competition. Consequently, people were forced to negotiate carefully between the desire to exchange knowledge and the need to avoid these tensions. This interaction between openness (the liberty to share information) and secrecy (caution to avoid suspicion from others) in epistolary communication could dictate the choices and network strategies early modern scholars adopted. For example, broad measures of confidentiality, dissimulation and self-censorship in communication were required to avoid the pitfalls of social, political and theological control.⁴⁴ But before looking at how these strategic measures came to the fore in the networks and letters between the Grand Duchy of Tuscany and the Dutch Republic, we will briefly take a look at the broader context of secrecy and confidentiality in the field of early modern studies and network theory. This context will underline the delicate atmosphere of caution and vigilance that surrounded the world of early modern letter-writers as well as discuss how each instance of concealment could shape the scholarly network in significant ways.

1. CONFIDENTIALITY IN EARLY MODERN EPISTOLOGRAPHY

The Reformation of the sixteenth century has resulted in deep political and cultural chasms among various religious groups. Consequently, the early modern society became marked by political turmoil, social upheaval and religious controversies in an increasing way, often leading to outright clashes. It goes without saying that these clashes thoroughly affected the lives and behavior of many early modern scholars.⁴⁵ They could not shy away from these tensions, which were impossible to ignore, not even in the ideal world of the Republic of Letters. Their activities in various fields of knowledge often led to

⁴⁴ For a detailed account on the role of openness and secrecy in early modern historiography, see Koen Vermeir, 'Openness versus secrecy? Historical and historiographical remarks', *British Society for the History of Science* 45, no. 2 (2012): 165–188. See also, Koen Vermeir and Daniel Margóczy, 'States of Secrecy: an introduction', *British Society for the History of Science* 45, no. 2 (2012): 153-164. Moreover, Noel Malcolm has argued that the German Jesuit Athanasius Kircher's (1602-1680) pursuit of secrecy – and his unfounded claim to mysterious knowledge about ancient Egypt – put him in conflict with the Republic of Letter's principles of openness, transparency and full citation of evidence (Noel Malcolm, 'Private and Public Knowledge: Kircher, Esotericism, and the Republic of Letters', in *Athanasius Kircher: The Last Man Who Knew Everything*, ed. Paula Findlen (New York/London: Routledge, 2004), 457-545).

⁴⁵ On the link between the Reformation and scholarly identity see the various contributions in Richard Kirwan, eds., *Scholarly Self-Fashioning and Community in the Early Modern University* (Farnham: Ashgate, 2013), in particular the work of Kenneth Austin, 'Academic Exchanges: Letters, the Reformation and Scholarly Self-Fashioning', 39-59.

insights or activities that did not correspond with the established opinions of themselves and their superiors. Most intellectuals were dependent on the protection of princes, cardinals, prelates, grand dukes and governments and they were aware of the fact that openness on certain controversial matters could seriously endanger their career. As a result, they often found themselves between extremes: on the one hand, they desired to play a fundamental role in the international exchange of ideas, but, on the other hand, they did not want to cross the boundaries imposed by their superiors or by themselves. Consequently, this entente between scholarly sociability and loyalty inevitably influenced the behavior of early modern letter-writers, who often struggled for control over the circulation of their letters.

Exercising control over one's letters depended primarily on the trust they put in the recipient's promise to maintain confidentiality. For example, on the 6th of May 1675, the librarian Antonio Magliabechi wrote to the Dutch scholar Jacob Gronovius (1645-1716) that he would never have entrusted him with a secret if he would not be sure that Gronovius would have kept his mouth shut:

"Le scriverò segretissimamente il tutto, ma con condizzione però, che non solamente V.S.Ill.ma mi onori di stracciar subito questo foglio, ma che in oltre mai in tempo alcuno, parlerà di questo ad anima vivente. Di tal cosa ne la supplico per le sante leggi dell'amicizzia, ed mi rendo certo che mi sia per fare tal grazzia. Se non avessi in V.S.Ill.ma tal fiducia, cioè ch'mai, è per parlare di questo, certo che non le lo scriverei in alcuna maniera."⁴⁶

This passage shows that the significance of confidentiality in the Republic of Letters is based on trust and as an expression of friendship – the *sante leggi dell'amicizzia* to use the same words of Magliabechi.⁴⁷ These concepts "reflected and strengthened the sense of equality that structured the relations among the citizens of the Republic of Letters",⁴⁸ enabling both Dutch and Tuscan scholars to associate themselves with men of different religious thoughts and beliefs, while frequently being faced with repression by those in power, either from, for instance, the powerful Medici family in Florence or from the Holy Office. In other words, confidentiality was essential to foster cross-cultural exchange.

How does the concept of confidentiality comes to the fore in the Republic of Letters? In his study of the correspondence of the Dutch lawyer Hugo Grotius, Henk Nellen has argued that "it was simply not done to procure a wide audience with access to the information that was exchanged" – via handwritten copies and certainly not through publication – "without the express approval of the letter-writer".⁴⁹ In the early modern scholarly community, recipients customarily showed their letters to their colleagues, who sometimes copied them out or passed them on to other colleagues. Therefore, in the

⁴⁶ Magliabechi to J. Gronovius, 6 May 1675, LMU, Cod. 4° Cod. Msc 777, ff. 171-174, "I will write you in secret everything, provided however that, Your Illustrious Lordship does not only deem himself to tear up this paper immediately, but also that you will never talk to a single soul about this. I beg you this for the holy laws of friendship, and I am sure that you are about to do me that favor. If I would not have that confidence in Your Illustrious Lordship, namely that you will never talk about this, it is certain that I would never have written to you in any way about this".

⁴⁷ See Charles van den Heuvel et al., 'Circles of Confidence in Correspondence. Modeling Confidentiality and Secrecy in Knowledge Exchange Networks of Letters and Drawings in the Early Modern Period', 79-80. About the role of confidentiality and trust in the Republic of Letters, see Franz Mauelshagen, 'Networks of Trust and Imagined Community of the Learned', 1-32; The concept of confidentiality has been extensively studies in the correspondence of the Dutch lawyer Hugo Grotius, for which see H.J.M. Nellen, "In strict confidence': Grotius' Correspondence with his Sociaian Friends,' in *Self-presentation and Social Identification. The Rhetoric and Pragmatics of Letter Writing in Early Modern Times*, ed. Toon van Houdt et al. (Leuven: Leuven University Press, 2002), 227–245; *Ibidem*, "The Correspondence of Hugo Grotius', in *Les grands intermédiaires culturels de la République des Lettres. Etudes des réseaux de correspondances du xvie au xviiie siècles*, ed. Christiane Berkvens-Stevelinck et al. (Paris: Honoré Champion, 2005), 127–164. *Ibidem*, 'Codes of Confidentiality in Hugo Grotius's Correspondence (1594-1645)', *Text* 17 (2005): 254. *Ibidem, Hugo Grotius: A Lifelong Struggle for Peace in Church and State*, *1583 – 1645*, trans. J.C. Grayson (Leiden/Boston: Brill Publishers, 2015), 337.

⁴⁸ See Goodman, The Republic of Letters: A Cultural History of the French Enlightenment, cit. 18

⁴⁹ Nellen, 'Codes of Confidentiality in Hugo Grotius's Correspondence (1594-1645)', 254.

case a letter contained sensitive information, it was necessary to state explicitly if one wanted a particular letter to remain confidential. There is for, example, a letter of 1675, from Magliabechi to Jacob Gronovius in which he urged not to show his letter to anyone, "ne anche al suo signore Fratello, ne al signore Grevio".⁵⁰ In the case Gronovius would break the confidentiality of Magliabechi's letters by showing them to others, this was considered a gross offence.⁵¹ If a recipient sanctioned unauthorized disclosure, the sender had every right to express that his interests had seriously been harmed. In 1674, for example, Magliabechi warned Jacob Gronovius that his Dutch colleague Nicolaas Heinsius wrote disparaging comments about him behind his back. Gronovius, however, had to "finger sempre di non ne saper nulla, per non propalare il segreto, e che non apparisca ch'io abbia violata la segretezza delle Lettere."⁵²

The publication of letters was certainly not compatible with their confidentiality and was even considered a taboo without the consent of the author.⁵³ In 1696, the Dutch burgomaster Gisbert Cuper (1635-1689) informed Magliabechi about all the books that were going to be published in the Dutch Republic. Between the lines of all the books Cuper mentioned, Magliabechi's attention was drawn to one particular publication that could have serious consequences for his reputation and would have caused him difficulties with the authorities. He professed his concerns to Cuper in a letter of the 10th of December 1696:

"Col solito infinito contento, ricevo l'umanissima, ed eruditissima Lettera di V.S.Ill.ma ripiena al solito di prezziose novità Letterarie, delle quali le rendo grazzie infinite, essendomi più grate di qualsivoglia tesoro. Fra esse leggo, che sieno stampate in 4, le Lettere dell'eruditissimo signore Marquardo Gudio, e che fra esse ve ne sieno alcune mie. Assicuro V.S.Ill.ma che tal cosa mi darebbe un grandissimo dolore, se io non sapesse, che ha date in luce le dette Lettere, il signore Burmanno, il quale è solamente eruditissimo, ma anche prudentissimo, e perciò, per cosa sicura, stimo, che non avrà fatto stampare se non quello che può liberamente vedersi da tutti."⁵⁴

It concerned a publication by the well-known philologist Pieter Burman (1668-1741), who had printed an edition of the letters of the German classical scholar Marquard Gude (1635-1689). In this edition, Magliabechi's letters to Gude were included as well.⁵⁵ Magliabechi was certainly not hostile to the idea that others would publish his letters, but he needed to be sure that Burman would only put in print those letters "che possono liberamente vedersi da tutti".⁵⁶ Magliabechi went on in his letter to Cuper by saying that he had to answer to hundreds of letters coming from every corner in Europe so that there was hardly any time to control the contents of this letters. Furthermore, added Magliabechi, while answering to all

⁵⁰ Magliabechi to J. Gronovius, 6 May 1675, LMU, Cod 4° Cod. Msc 777, f. 171, "not even to your brother, or to sir Grevio [Johannes Georgius Graevius]."

⁵¹ Dirk van Miert, 'Confidentiality and Publicity in Early Modern Epistolography: Scaliger and Casaubon', in *For the Sake of Learning. Essays in Honor of Anthony Grafton*, ed. Ann Blair and Anja-Silvia Goeing, vol. 1 (Leiden/Boston: Brill Publishers, 2016), 19.

⁵² Magliabechi to J. Gronovius, 6 May 1675, LMU, Cod 4° Cod. Msc 777, ff. 171-174, "always pretend that you do not know anything about it, in order not to spread the secret, so that it does not appear that I have violated the secrecy of [his] letters". ⁵³ Nellen, 'Codes of Confidentiality in Hugo Grotius's Correspondence (1594-1645)', 254

⁵⁴ Magliabechi to Cuper, 10 December 1696, KB, KW 72 D 10, f. 121-122, "With the usual infinite pleasure, I receive the very humble and learned letter of Your Illustrious Lordship, full, as usual, with precious literary news, of which I thank you infinitely, being more appreciated than any other treasure. Among these I read, that the letters of the very learned sir Marquard Gude are printed in 4, and that amongst these letters there are several of mine. I can assure you how much pain it would have caused me, if I would not have known that Burman had brought to light these letters, who is not only very learned, but also very careful, and therefore, it is sure that he would not have printed them, except for those that can be freely seen by everyone." ⁵⁵ Pieter Burman eds., *Marquardi Gudii et doctorum virorum ad eum epistolae : quibus accedunt ex Bibliotheca Gudiana clarissimorum et doctissimorum virorum, qui superiore et nostro saeculo floruerunt* (Utrecht: Franciscus Halma, 1697). Three letters of Antonio Magliabechi to Gude are published in this edition on page 64-67.

⁵⁶ *Ibidem*, "Is going to print only those letters that can be liberally seen by everyone".

these letters, he received visits of many friends, who came from different parts of the world to dialogue with him and ask him infinite questions.⁵⁷ With all the commotion, there is hardly any time to control the contents of his letters.⁵⁸ It is therefore possible that, sometimes, he would have written something that he probably should not have. Yet, this does not matter if the contents of his letters remained amongst friends, because "altro è, come mi pare che in un luogo dica Plinio il giovane, lo scrivere ad un Amico, ed altro lo scrivere al Pubblico".⁵⁹ Magliabechi drew here the boundary between private and public in terms of authorial control:

"Bene spesso si scrivono confidentemente a gli amici varie cose, che in niuna maniera si vorrebbe che fossero note a tutti, perché potrebbero non poco nuocere a chi le scrive."⁶⁰

During the seventeenth century, this distinction between the private and public was omnipresent, as underlined by Dirk van Miert in his study of the French classicist Isaac Casaubon (1559-1614), who heavily condemned the publication of material without the author's consent.⁶¹ Unauthorized circulation and publication, in fact, could have serious consequences for the reputation of a scholar. A similar apprehension surrounded the prospect of letters being published posthumously.⁶² For example, in 1699, Magliabechi commissioned Jacob Gronovius to always burn his letters whenever he is called upon to do so because "non si sa in mano di chi doppo della nostra morte sieno per andare, e possono apportare grandissimo pregiudizzio alla fama degli amici".⁶³

Besides the letters of Marquard Gude, the same editions also contained the letters of the controversial French scholar Claude Sarrau (1600-1651). This provided another reason for Magliabechi to worry because he absolutely did not want to be associated with a publication of Sarrau's letters! In 1654, he had already received an edition of Sarrau's letters through the Calvinist preacher Alexander Morus (1616-1670).⁶⁴ Magliabechi detested this edition so much that he wished that it would never had been published:

"La prima edizzione mi fu già donata dal signore Alessandro moro, e restai nel leggerle non poco scandolezzato della poca prudenza di chi le aveva date in luce, poiché come V.S.Ill.ma avrà osservato, in alcune di esse il Sarravio grandemente loda l'Einsio Padre, in altre ne scrive

⁵⁷ Magliabechi to Cuper, 10 December 1696, KB, KW 72 D 10, f. 121, "Io come V.S.Ill.ma potrà sapere qua da chi che sia mi riservo due soli giorni della settimana a scrivere, e a rispondere alle Lettere, cioè il Martedì, ed il Sabato. Ne detti solo due giorni, bene spesso, mi conviene rispondere a più di cento Lettere".

⁵⁸ *Ibidem*, "Sono per tanto costretto a scrivere non solo correntissimamente, e senza poter rileggere quello che ho scritto, ma in oltre, con mille interrompimenti".

⁵⁹ *Ibidem*, "It is one thing, as Pliny the younger (61-c. 113) said somewhere, to write to friends; it is another thing to friends to the public".

⁶⁰ *Ibidem*, "Often one writes to friends several things in confidence, which in no way one wants these to be known to all, because these can harm more than a little the ones who writes them".

⁶¹ Miert, 'Confidentiality and Publicity in Early Modern Epistolography', 19.

⁶² Ibidem, 8-10. See also, Henk Nellen, 'Confidentiality and Indiscretion: The Intricacies of Publishing Grotius' Correspondence Posthumously," in *Produktion und Kontext. Beiträge der Internationalen Fachtagung der Arbeitsgemeinschaft für germanistische Edition im Constantijn Huygens Instituut, Den Haag, 4. bis 7. März 1998*, ed. H.T.M. van Vliet (Tübingen: Niemeyer, 1999), 135–44.

⁶³ Magliabechi to J. Gronovius, 1699, LMU, Cod 4° Cod. Msc 778, f. 13, "one does not know in the hands of whom they will end up after our death, and can bring great damage to the reputation of our friends".

⁶⁴ Two letters of Alexander Morus (1616-1670), professor at Amsterdam, are extent in the National Library of Florence (BNCF, Magl. VIII 1183, cc. 7-8), written in 1655 and 1657 from Genova and Amsterdam. No mention of his publication is made in these letters. A correspondence between Morus and Magliabechi never got off the ground, which might have something to do with Magliabechi's aversion to his publication of Saurrau's letters.

malissimo, ecc. ecc. Molte altre cose simile si trovano in quelle Lettere, che per riputazzione non solamente da altri, ma anche da medesimo Sarravio, era necessario non pubblicare".⁶⁵

A correspondence between Morus and Magliabechi never got off the ground, which could be related to Magliabechi's aversion to his publication of Saurrau's letters. More importantly, Morus, a Calvinist preacher and professor of ecclesiastical history at Amsterdam, wrote Magliabechi shortly after having been introduced to the Florentine scholarly society. In the 1650s, Michele Ermini, librarian of Cardinal Giovan Carlo de' Medici (1611-1663), discovered the intellectual abilities of the young Magliabechi and introduced him to his Florentine colleagues. In these Florentine circles, he had to carve a reputation for himself, and he could not simply allow himself to start his first exchange in the Dutch Republic with a Calvinist preacher. He had to establish a secure and trustworthy network first, before reaching out to more risky contacts abroad. This is a theme that will be central in the fourth chapter of this study.

2. SECRECY: INCLUSION/EXCLUSION

The practices of secrecy have crossed numerous stages throughout history, from rites to mystery cults, from baroque dissimulation to the reason of state, from the emergence of the sphere of intimacy to the idea of privacy. This long and complex history has meant that the nature of the secret is characterized by a plurality of dimensions, ranging from strategies of domination to forms of protection. The philosopher Sissela Bok has offered an overarching framework to denote the significance of secrecy in this wide range of disciplines. She defined secrecy as "intentional concealment" – that is, the deliberate withholding or hiding of information in order to prevent someone else from knowing the truth.⁶⁶ Bok's definition of secrecy as intentional concealment is also the form of secrecy Georg Simmel had in mind when he referred to the keeping of secrets as one of humanity's greatest achievements and as a "sociological technique that, among other things, excludes outsiders and gives insiders a sense of possession".⁶⁷ This internal role of secrecy is primarily conditioned by confidentiality and trust. This means that secrecy is all about inclusion and exclusion, whereby only a few have access to exclusive and elitist knowledge, which means an increase in social and economic capital.⁶⁸ In Simmel's view, secrecy is thus a structural force of society and social hierarchy, something which we have to keep in mind when analyzing the structure and dynamics of networks in general.

The phenomenon of secrecy in the early modern world has received much scholarly attention. Better yet, the early modern period has often been labelled as the age of secrecy *par excellence*.⁶⁹ Daniel Jütte, for example, concluded that "no other period in European history has been marked by so profound

⁶⁵ Magliabechi to G. Cuper, 10 December 1696, KB, KW 72 D 10, f. 121-122, "The first edition was donated to me by sir Alessandro Moro, and I remained not little scandalized in reading the little prudence of the one who had brought it to light, because, as Your Illustrious Lordship would have observed, in several passages Sarravio [Claude Sarrau ca. 1600-1651)] greatly praises Father Heinsius [Daniel Heinsius (1580-1655)] and in other passage he writes bad things about him, etc. etc. Other similar things one can find in these letters, which for the reputation, not only of others, but also for Sarravio himself, was necessary not to publish it".

⁶⁶ Sissela Bok, Secrets: On the Ethics of Concealment and Revelation (New York: Vintage, 1982), 9.

⁶⁷ Georg Simmel, The Sociology Of Georg Simmel, trans. Kurt H. Wolf (Glencoe: The Free Press, 1950), 330-332.

⁶⁸ Kocku von Stuckrad, 'Secrecy as social capital', in Constructing Tradition. Means and Myths of Transmission in Western Esotericism ed. Andreas B. Kircher (Leiden/Boston: Brill publishers, 2010), 239-255.

⁶⁹ For a general overview of the concept of secrecy in the early modern period, see Djoeke van Netten, Geheime praktijken?!' Zeventiende-eeuwse geheimen en waar ze te vinden', in *Jaarboek De Zeventiende Eeuw 2018* (Hilversum: Uitgeverij Verloren, 2018), 9-21. See also the various essays in *In vriendschap en vertrouwen: Cultuurhistorische essays over confidentialiteit*, ed. Jos Gabriëls, Ineke Huysman, Ton van Kalmthout and Ronald Sluijter (Hilversum: Uitgeverij Verloren, 2014).

a fascination with secrets and secret sciences".⁷⁰ In particular, he has shown that European Jews played a pre-eminent part in the economy of secrets in the early modern period. Specifically, he framed his book around a biography of Abramo Colorni, a Jew from Mantua, to focus on the involvement of Jews in the trade in secrets, which included confidential knowledge as well as exotic objects such as unicorns' horns. Christians accused Jews of concealing their perfidious doctrine and behavior underneath a veil of secrecy, an idea that persisted throughout the early modern period. Jütte's characterization of early modern times as the age of secrecy is not an isolated case. Jon Snyder, for instance, even entitled his book *Dissimulation and the culture of secrecy in early modern Europe*, arguing that "the sixteenth and seventeenth centuries have been called "the age of secrecy" in Europe".⁷¹

Secrecy has received much attention in the context of governance. In early modern Europe, there was keen awareness of the need for governments to control tightly all access to the *arcana imperii* or secrets of the state. Jacob Soll, for instance, focused on the role of state secrecy in France under Louis XIV. According to him, the French politician Jean-Baptiste Colbert (1619-1683) was an innovator of state intelligence and information handling and resorted to a policy of secrecy to run government affairs.⁷² Better yet, Colbert saw secrecy as a vital principle to good government. Furthermore, Guido de Bruin examined state secrecy in the Ancient Régime in general, and in the Dutch Republic in particular.⁷³ He demonstrated that the Dutch Republic was certainly not less efficient than the centralized domains of early modern Europe, such as the Grand Duchy of Tuscany or Venice. As opposed to these centralized states, the Dutch Republic was fragmented and basically federated which caused ramifications in information flow and handling, making it much harder to maintain secrecy inside the walls of the government. Yet, at the same time, the impact of political corruption was lower since it was less easy for foreign regimes to target key decisions makers.

To keep the Florentine grand ducal secretary Apollonio Bassetti informed about the political situation in the Dutch Republic, the Florentine merchant Giovacchino Guasconi (1636-1699) forwarded secret news reports from the diplomat Abraham de Wicquefort (1606-1680).⁷⁴ Wicquefort had been commissioned by the Dutch States General to write a national history of the country. He used this position to start a secret news agency, informing other countries about the course of wars and the negotiations that followed. His secret news agency became a great success as a result of the relatively open government culture of the Dutch Republic. Yet, as time passed by, Wicquefort encountered difficulties to obtain the news he needed to satisfy his clients. When Bassetti asked Guasconi why he did not receive any newsletters from Wicquefort, Guasconi replied the latter had told him that it was easier to penetrate the state affairs when these were managed by the various governmental bodies of the Dutch Republic. Now that everything was operated by the Prince of Orange and pensionary Van Beuningen, it became impossible for Wicquefort to obtain the news because "le cose nell'Aija presentemente

⁷⁰ Daniel Jütte, *The Age of Secrecy. Jews, Christians, and the Economy of Secrets, 1400–1800* (New Haven/London: Yale University Press, 2015), 224.

 ⁷¹ Jon R. Snyder, *Dissimulation and the Culture of Secrecy in Early Modern Europe* (Berkeley: University of California Press, 2009), 8.
 ⁷² Jacob Soll, *The information master. Jean-Baptiste Colbert's Secret State Intelligence System* (Ann Arbor: the University of Michigan Press, 2009).

⁷³ Guido de Bruin, Geheimhouding en Verraad: de geheimhoulding van staatszaken ten tijde van de Republiek (1600-1750) (The Hague: SDU, 1991).

⁷⁴ On Wicquefort's secret news agency see D. Everzwijn, *Wicquefort en zijn proces* (Leiden: Gebroeders van der Hoek, 1857) and Marika Keblusek, 'Book Agents, Intermediaries in the Early Modern World of Books', in *Your Humble Servant. Agents in Early Modern Europe*, ed. Marika Keblusek, Badeloch Vera Noldus, and Hans Cools (Hilversum: Uitgeverij Verloren, 2006), 104.

camminano molto più secrete di quello è seguito per avanti".⁷⁵ This example shows that, in order to preserve state secrecy, one needed to disclose one's plan to as few people as possible.

Bassetti exclusively relied on the services of the Florentine merchant Guasconi to obtain the secret news reports of Wicquefort. As will be shown in chapter four of this study, the network of Bassetti in the Dutch Republic was characterized by internal cohesion. He primarily maintained close contact with the community of Tuscan merchants in Amsterdam, who acted as his agents in the circulation of knowledge between the Dutch Republic and the Grand Duchy of Tuscany.⁷⁶ This close-knit network of merchants enabled Bassetti to create a wall which other people could not easily penetrate. In this context, Bonnie Erikson's work on secret societies gives an interesting insight that levels of density in networks are an indication of the control of secret resources.⁷⁷ Great risks, as is, for example, the exchange of *arcana imperii* in the newsletter of Wicquefort, suggest the use of trusted others, or strong ties, and stronger ties are easier to build in dense, tightly knit networks because they generate confidentiality, trust and control. In the fourth chapter of this study we will see that in a closed network, meaning a network in which everyone knows everyone else (like in the case with the Florentine merchant community in Amsterdam), unusual activities, like misbehavior or treason, are easily discovered.

So, tightly-knit networks are difficult to infiltrate from the outside. It is in this context that the role of espionage comes to light.⁷⁸ Most recently, Nadine Akkerman has explored the role of women in espionage practices, examining "the ways in which women escaped suspicion and how they become invisible"⁷⁹. Diana Steward, for instance, was employed to spy on Royalists in exile, "using her sexual availability to infiltrate their close-knit circle".⁸⁰ Moreover, Akkerman shows how letters written by women that ostensibly focused on familiar affairs and gossip could be overlooked by interceptors when, in fact, they included important political code and sensitive information.⁸¹ So, elaborate strategies and forms of strategies were needed to infiltrate tightly-knit networks.

Secrecy was also a key concept in early modern artisanal culture. Karel Davids has focused on Dutch craft secrecy and industrial espionage, while Pamelo O. Long has showed that trade and craft secrets and plagiarism were concepts already current in medieval and Renaissance culture.⁸² In addition,

⁸⁰ Ibidem, 7.

⁷⁵ Giovacchino Guasconi to Apollonio Bassetti, 7 July 1673, ASF, Mediceo del Principato, 4261, c. 497, "the things from the Hague are kept much more secret than that happened in the past."

⁷⁶ The role of Giovacchino Guasconi as both a merchant and an intermediary of (secret) political news is by no means exceptional, and his multidimensional career as an agent for the Grand Duke of Tuscany is mirrored in the careers of many of his contemporaries. Merchants, artists, booksellers and other cultural players were often enlisted as political agents (sometimes even as spies) for their respective masters and patrons to be involved in negotiations or communications of intelligence and, as such, played a distinctive role in the international politics of their time. About this argument, see Marika Keblusek and Badeloch Vera Noldus, eds., *Double Agents: Cultural and Political Brokerage in Early Modern Europe* (Leiden/Boston: Brill Publishers, 2011); Noldus Badeloch, Marika Keblusek, and Hans Cools, eds., *Your Humble Servant. Agents in Early Modern Europe* (Hilversum: Uitgeverij Verloren, 2006).

⁷⁷ Bonnie H. Erikson, Secret Societies and Social Structure', *Social Forces* 60, no. 1 (1981): 188-210.

⁷⁸ Numerous studies focus on the role of espionage in, for instance, the Venetian Republic or in England under Elizabeth I: Ioanna Iordanou, 'What News on the Rialto? The Trade of Information and Early Modern Venice's Centralized Intelligence Organization', *Intelligence and National Security* 31, no. 3 (2016): 305–26. Stephen Budiansky, *Her majesty's spy master* (New York: Viking (Penguin group), 2006) Stephen Alford, *The Watchers: A Secret History of the Reign of Elizabeth I* (London: Bloomsbury Publishing, 2013); John Cooper, *The Queen's Agent: Francis Walsingham at the Court of Elizabeth I* (London: Faber & Faber, 2011); Robert Hutchinson, *Elizabeth's Spy Master : Francis Walsingham and the Secret War That Saved England* (London: Weidenfeld & Nicolson, 2006).

⁷⁹ Nadine Akkerman, *Invisible Agents: Women and Espionage in Seventeenth-Century Britain* (Oxford: Oxford University Press, 2018, 11.

⁸¹ Akkerman, 51.

⁸² Karel Davids, 'Openness or secrecy? Industrial espionage in the Dutch Republic', *The Journal of European Economic History* 24 (1993): 333-348; *Ibidem*, 'Public Knowledge and Common Secrets. Secrecy and its Limits in the Early-Modern Netherlands', *Early Science and Medicine* 10, no. 3 (2005): 411-420; Pamela O. Long. *Openness, Secrecy, Authorship: Technical Arts and the Culture of Knowledge from Antiquity to the Renaissance* (Baltimore: Johns Hopkins University Press, 2001).

Francesco Martelli has shown that Cosimo III sent the Florentine engineer Pietro Guerrini abroad to spy on the latest technological innovations, a case which will be discussed in more detail in the second chapter of this study. The case of Guerrini will show that it was certainly not always easy to obtain the desired, often secret, information and Guerrini even reports during his espionage tour in the Dutch Republic that he was unable to observe the use of a several machines in the linen industry because the Dutch "non lo mostrano volontieri".⁸³ Again, close-knit circles are difficult to infiltrate from the outside.

Keeping your circles tightly-knit to guard your secrets for making profit is also central in the context of the Republic of Letters. Dániel Margócsy has argued that secrecy "transformed the honorific, gift-based exchange system of the early modern Republic of Letters into a competitive marketplace".⁸⁴ Instead of working together towards establishing a consensus, early modern scientific practitioners hoped to gain an edge over rivals by debunking each other's discoveries and research methods. Margócsy makes the example of the German bibliophile Zacharias Conrad von Uffenbach (1683-1734) who visited the anatomical cabinet of the renowned anatomist Frederik Ruysch (1638-173) in Amsterdam. Uffenbach wondered how Ruysch prepared his preparations to make them appear alive. Ruysch told him that he prepared the specimen's according to his own secret invention of injecting the circulatory system with wax. To reveal his secret, Uffenbach could sit in a lecture against payment.⁸⁵ Ruysch might have offered the same business proposal to secretary Apollonio Bassetti, who visited the cabinet in 1668 on occasion of Cosimo's Grand Tour. In the second chapter of this study we will see that Bassetti was stunned by the collection's rich display of anatomical specimens and wondered how the anatomist had prepared the specimens to look so alive, referring to a "cadavero di un Putto così ben conservato, che par vivo."⁸⁶

3. PRACTICES OF DISSIMULATION

An analysis of secrecy needs to be placed in a broader context of phenomena and behavioral practices and strategies, such as dissimulation, which do not necessarily involve secrets that need to be hidden, but that involve practices of secrecy. Jon R. Snyder, for example, discerns dissimulation in particular as an attitude of the courtly world of the sixteenth- and seventeenth-century. According to Snyder, courtiers were praised as experts in the art of hiding their thoughts and feelings behind localized displays of etiquette, conversational skills, and rituals of power.⁸⁷ The obvious source for this type of dissimulation is Niccolò Machiavelli (1469-1527), whose Prince was advised to imitate the cunning of a fox, lying and deceiving his own subjects and allies whenever it suits his own interests.⁸⁸ Likewise, the Flemish humanist Justus Lipsius (1547–1606) wrote his *Politica* with the express intention of teaching the art of statecraft through political secrecy and dissimulation.⁸⁹

Yet, dissimulation was a phenomenon that reached well beyond the ruling class. It pervaded the whole of any given society, whose subjects frequently resorted to it as a refuge from the repressive power of states. In this respect, the work of Rosario Villari is particularly relevant. Characterizing the seventeenth century as the "great age of dissimulation", Villari argues that Torquato Accetto's book –

⁸³ Francesco Martelli, Il Viaggio in Europa Di Pietro Guerrini (1682-1686): Edizione Della Corrispondenza e Dei Disegni Di Un Inviato Di Cosimo III Dei Medici, vol. 1 Carteggio con Apollonio Bassetti (Florence: Olschki, 2005), LXXIII.

⁸⁴ Dániel Margócsy, Commercial Visions: Science, Trade, and Visual Culture in the Dutch Golden Age (Chicago/London: The University of Chicago Press, 2014), 6.

⁸⁵ Margócsy, 4. About Ruysch see also Harold J. Cook, *Matters of exchange. Commerce, Medicine, and Science in the Dutch Golden Age* (New Haven/London: Yale University Press, 2007), 281-283.

⁸⁶ Biblioteca Moreniana, Bigazzi 32, "Memorie di Bassetti", f. 166, "corpse of a *putto* (chubby male child) that well-perserved, it seems real."

⁸⁷ Snyder, Dissimulation and the Culture of Secrecy in Early Modern Europe, 22.

⁸⁸ Ibidem, 126.

⁸⁹ Ibidem, 7.

Della dissimulazione honesta (1641) – provided new insights into the justification of dissimulation as an indispensable tool of survival in the face of political oppression.⁹⁰ Parallel to political dissimulation, religious dissimulation was a widespread practice. Specifically, Perez Zagorin added the label "age of dissimulation" to the Reformation and the Counter-Reformation, arguing that dissimulation, or "pretending not to be what one actually is", was necessary in the face of repressive Church or state persecution.⁹¹ Accordingly, religious dissimulation was widely practiced throughout early modern Europe, as a means of avoiding exile or worse. This concept is discussed at length in studies on the widespread phenomenon of forced conversions as well as Nicodemism.⁹² Nicodemism, a term coined by the French reformer John Calvin (1509-1564), referred to the dissimulation practiced by Protestants-atheart who hid their faith behind a mask of outward and publicly conformity to Catholic rites because they were not prepared to face exile or worse. The study of Nicodemism, initiated by Delio Cantimori, shows that Italian heretics in the second half of the sixteenth century preferred to adopt the practices condemned by Calvin rather than suffer the inevitable consequences of an open confession of their faith.⁹³ Moreover, Carlo Ginzburg and Adriano Prosperi have argued that Nicodemism constituted a formal theology of Christian belief, but largely defined Nicodemism as existing completely in the minds.⁹⁴ Nicodemism was thus not simply a prudent policy for Protestants in Catholic lands, but a powerful and radically inward religion, the adherents of which regarded all outward religious observance with complete indifference".95 In this respect, Nicodemism led to the division of society into rival confessional camps, which, in the context of network theory, is related to the concept of homophily. The principle of homophily - the tendency of individuals to associate and bond with similar others - can divide a social network into densely connected clusters that are weakly connected to each other.⁹⁶ In this social network between Protestant and Catholic groups, two such divisions in the network can become apparent.

Religious dissimulation was often necessary during travel. The dominant religious culture in Italy affected the behavior of numerous Protestant travelers, who often needed to hide their religious identity and motives.⁹⁷ In fact, those who were travelling in Italy without safe conduct or protection, or those who fomented scandal by attacking the Catholic Church or promoting Reformed doctrines, could risk prosecution for a range of crimes related to heresy and to an eventual abjuration.⁹⁸ Magliabechi, for

⁹⁰ Rosario Villari, Elogio della dissimulazione. La lotta politica nel Seicento (Bari: Laterza, 1987).

⁹¹ Perez Zagorin, *Ways of Lying. Dissimulation, Persecution, and Conformity in Early Modern Europe* (Cambridge/London: Harvard University Press, 1990), 3-6. For more about the act of dissimulation to circumvent the strict laws of the Inquisition, see also Giorgio Caravale, 'Le ambigiutà della parola: eresia e ortodosia tra oralità e scrittura nella predicazione italiana del cinquecento', *The Italianist* 34, no. 3 (2014): 478-492.

⁹² Stefania Pastore, 'From 'Marranos' to 'Unbelievers': The Spanish Peccadillo in Sixteenth century Italy', in *Dissimulation and Deceit in Early Modern Europe*, ed. Mariam Eliav-Feldon and Tamar Herzig (London: Palgrave macmillan, 2015), 79-95. See also Giorgio Caravale, 'Dissimulation and Conversion: Francesco Pucci's Return to Catholicism' in the same volume. Howard Louthan, *Converting Bohemia. Force and persuasion in the Catholic reformation* (Cambridge: Cambridge University Press, 2009).
⁹³ Delio Cantimori, *Eretici italiani del Cinquecento e altri scritti* (Turin: Sansoni, 1992).

⁹⁴ Carlo Ginzburg, *Il nicodemismo: simulazione e dissimulazione religiosa nell'Europa del'500* (Turin: Einaudi, 1970). 159-81; Adriano Prosperi, *L'eresia del Libro Grande: Storia di Giorgio Siculo e della sua setta* (Milan: Feltrinelli, 2000), 322-37. Yet, Carlo Eire had interpreted Nicodemism as a response to fear rather than a coherent doctrine, see Carlo Eire, *War against the Idols: The reformation of Worship from Erasmus to Calvin* (New York: Cambridge University Press, 1986).

⁹⁵ Thomas A. Brady, 'Il nicodemismo: Simulazione e dissimulazione religiosa nell'Europa del'500' by Carlo Ginzburg', Renaissance Quarterly XXVI, no. 2 (1973): cit. 194.

⁹⁶ Easley and Kleinberg, Networks, Crowds, and Markets: Reasoning About a Highly Connected World, 77.

⁹⁷ On this subject see Kim Siebenhüner, 'Conversion, Mobility and the Roman Inquisition in Italy around 1600', Past & Present, no. 200 (2008): 5–35; Peter A. Mazur, Conversion to Catholicism in Early Modern Italy (London/New York: Routledge, 2016); P. Schmidt, 'L'inquisizione e gli stranieri', in L'inquisizione e gli storici. Un cantiere aperto (Rome: Accademia Nazionale dei Lincei, 2000), 365-72; P. Simoncelli, 'Clemente VIII e alcuni provvedimenti del Sant'Uffizio (De Italis habitantibus in partibus haereticorum)', Critica Storica XIII /1976): 129-72; Isabel Karremann, Cornel Zwierlein, and Inga Mai Groote, Forgetting Faith?: Negotiating Confessional Conflict in Early Modern Europe (Berlin/Boston: Walter de Gruyter, 2012), 15.
⁹⁸ Mazur, Conversion to Catholicism in Early Modern Italy, 77.

example, discussed in his letters to Jacob Gronovius the case of a "svezzese" who "per essere stato trovato se non erro a parlare ad una Monaca senza di averne la Licenzia, fu fatto prigione."⁹⁹ Given the dangers of persecution, Protestants travelling through Catholic territories would do best to follow the advice of Justus Lipsius. In 1578, Justus Lipsius in his famous *Epistola de fructu peregrinandi et praesertim in Italia* (Letter on the benefit of traveling, especially in Italy) advised his readers to follow three basic rules while travelling in Italy, and especially in the city of the Popes: "*frons tibi aperta, lingua parca, mens clausa*".¹⁰⁰ Lipsius himself had spent quite some time in Italy, particularly in Rome where he worked as a secretary to cardinal Granvelle from 1568 to 1570.¹⁰¹ Here, he must have learned that it was better to keep one's eyes open and one mouth and mind shut.¹⁰²

Lipsius' advice is all the more convincing in the very particular context of conversions in early modern Italy. As shown by Peter A. Mazur, by the end of the seventeenth century an infrastructure of institutes of conversions and missionaries had been created in Italy that had proven surprisingly effective at intercepting and converting Northern European Protestants.¹⁰³ This on-going effort to convert Protestant and defend the Catholic faith was especially present at the Medici court under Cosimo III. In the third chapter of this study, we will briefly encounter the tensions raised by the Danish scientist Niels Stensen (1638-1686). In 1668, Stensen converted to Catholicism and became obsessed with converting Protestants in Florence. In his letters to his Dutch correspondents, Magliabechi secretly discussed the strategies adopted by Stensen. If travelling Protestants were not willing to become a Catholic, Stensen reported them to the Congregation of the Holy Office with the result that they had to abandon the Italian territory immediately. In 1676, Magliabechi advised the Dutch philologist Laurens Gronovius (1647-1724), who was on this way to Florence, to study manuscripts in the *Bibliotheca Medicea Laurenziana*, to watch out for Stensen. In the case Laurens would meet Stensen, it was best, according to Magliabechi, that he "gli fingerà visceratissimo".¹⁰⁴

Carlo Ginzburg has shown that people dissimulated their confession and faith for purposes of economic prosperity. In the third chapter of this study we will discuss the travels of the Utrecht scholar Jacob Tollius (1633-1696) in 1688. In Florence, he approached Cosimo III who promised him a financial reward if he would convert to the Catholic faith. This event is critically described by the Huguenot printer from Amsterdam, Henry Desbordes, who informed Magliabechi that he could absolutely not trust Tollius because he is "capable de vendre sa religion pour de l'argent".¹⁰⁵ This example shows that the unstable

¹⁰⁴ Magliabechi to Gronovius, 1676, LMU, Cod 4° Cod.Msc 778, f. 8, "you pretend to be genuine to him".

⁹⁹ Magliabechi to J. Gronovius, 1702, LMU, Cod 4° Cod. Msc 778, f. 21, "Swede"; "was found, if I am not mistaken, talking with a nun without permission, was made prisoner".

¹⁰⁰ J. Lipsius, *Epistola de peregrinatione Italica* (Leiden: Franciscus Hegerus, 1633), discussed in A. Frank-van Westrienen, *De Groote Tour. Tekening van de educatiereis der Nederlanders in de zeventiende eeuw* (Amsterdam: Noord-Hollandsche Uitgeversmaatschappij, 1983), 19-42.

¹⁰¹ See Gloria Moorman, Discovering Rome through Joan Blaeu's Admiranda Urbis Roma: the creation of the town atlas of Rome (Amsterdam, 1663) in the light of Italian-Dutch relationships in the seventeenth century (Master Thesis, Leiden University, 2014): cit. 9. Retrieved from http://hdl.handle.net/1887/28635, last accessed 1 April 2019. Moorman's observation refers to page 42 of Anna Frankvan Westrienen, De Groote Tour: Tekening van de educatiereis der Nederlanders in de zeventiende eeuw (Amsterdam: Noord-Hollandsche Uitgeversmaatschappij, 1983), 42.

¹⁰² Christopher Brooke, *Philosophic Pride: Stoicism and Political Thought from Lipsius to Rousseau* (Princeton, Princeton University Press, 2012), 12.

¹⁰³ Peter A. Mazur, *Conversion to Catholicism in Early Modern Italy* (New York/London: Routhledge, 2016), 55-56. About this argument, see also Irene Fosi, "Procurar a tutt'huomo la conversione degli heretici": propaganda e conversioni nell'Impero nella prima metà del Seicento', in Studi in memoria di Cesare Mozzarelli, vol. 1 (Milan: Vita e Pensiero, 2008), 699-711; *Ibidem*, "Roma patria comune". Foreigners in Rome in the early modern period', in *Art and Identity in Early Modern Rome*, ed. J. Burke and M. Bury (London: Ashgate, 2008), 27-43; *Ibidem*, "Con cuore sincero e con fede non finta": conversioni a Roma in età moderna fra controllo e accoglienza', in *Les modes de la conversion confessionelle à l'époque moderne. Authobiographie, altérité et construction des identités religieuses*, ed. M.C. Pitassi et D. Solfaroli Camillocci (Florence: Olschki, 2010), 215-232.

¹⁰⁵ H. Desbordes to Magliabechi, 20 September 1689, BNCF, Magl. VIII 1163, "capable of selling his religion for money." Carlo Ginzburg underlined that people dissimulated their confession and faith not only to fall into the hands of the persecuting

behaviour of Tollius, who was willing to change his faith in exchange for money, could have serious consequences in the balance of a relationship: conversions could have very real effects, negatively, in the formation of a network, in creating distrust and making social relations unstable, and possibly even crumble. This is a theme that will be central in discussing the structural balance theory in chapter five.

According to Koen Vermeir, "the mystery around secrets and dissimulation gives their bearers an aura of superiority. Secrets can be icons and indices of power, used for controlling people."¹⁰⁶ Although Jacob Tollius convinced Cosimo III about his inclination towards the Catholic faith, he did not manage to persuade Cosimo's oldest son, prince Ferdinando III (1663-1713) about his true intentions. He then pretended to have "segreti ammirandi in materia Chimica", which aroused the interest of Ferdinando who was willing to compensate him if he would reveal his secrets. Yet, soon Ferdinando discovered that Tollius had lied about everything and ordered him to leave the Grand Duchy of Tuscany immediately. So, practices of secrecy, especially when revealed, could lead to suspicion and distrust. For example, on the 1st of December 1682, the Italian scholar Giovanni Cavoli Cinelli (1625-1706) warned Gisbert Cuper about the secretive behaviour of Enrico Noris, who was "il ritratto della simulazione, del tradimento".¹⁰⁷ Therefore, he advised Cuper not to praise him in his newest publication, the *Apotheosis vel consecratio Homeri* (1683) because his name would only bring "gran danno della sua reputazione".¹⁰⁸

4. SELF-CENSORSHIP IN EARLY MODERN EPISTOLOGRAPHY

Leo Strauss pointed out that religious or political persecution gave rise to a peculiar type of writing because (persecuted) writers had to develop the capacity of "writing between the lines" by using various self-protective and deceptive techniques of writing.¹⁰⁹ These writings were addressed primarily to intelligent and trustworthy readers, those who will respond to the challenge and use the knowledge and insights gained discreetly. Likewise, Jean-Pierre Cavaillé has argued that the seventeenth century is full of individuals in inner revolt against the absolutist system, and that we, therefore, need to "listen for the wounded cry in the text that keeps silent".¹¹⁰ Furthermore, Ann Goldgar has argued that "we must read between the lines, and ask whether scholars' world view was really entirely structured around the subject matter discussed."¹¹¹ Though a structural analysis of the early modern correspondence can direct our attention to moments of tensions and closure in a network, these kind of statements are impossible to check without the close reading of letters.

This note of caution characterizes much of Magliabechi's surviving correspondence, as we shall see throughout this study. In many cases, Magliabechi knew that unless he practiced a form of secrecy or self-censorship, the authorities would persecute him. The following case sheds light on this practice. In the 1670s, Magliabechi found the manuscript the *De Bello Italico* in the collections of the *Biblioteca Medicea Laurenziana*, a case which will be recalled in the sixth chapter of this study. The manuscript, written by the Florentine Bernardo Ruccelai around 1510, was written on account of Charles VIII's 1494 military campaign into Italy and his conquest of the Kingdom of Naples. Magliabechi clearly saw the value of this manuscript for the scholarly community and desired that the manuscript would be published. Yet, he

institutions, but also for purposes of political and economic prosperity, see Carlo Ginzburg, Il Nicodemismo: Simulazione e Dissimulazione Religiosa Nell'Europa Del '500. (Turin: Giulio Einaudi Editore, 1970).

¹⁰⁶ Vermeir and Márgóczy, 'States of Secrecy: an introduction', 163.

¹⁰⁷ Cinelli to Cuper, 1 December 1682, KB, KW 72 D 10, f. 1, "the portrait of the dissimulation and betrayal".

¹⁰⁸ *Ibidem*, "Non s'impegni a nominarlo nel suo dottissimo libro dell'Apotheosi d'Omero, perché primo non succederà che con gran danno della sua reputazione, e di nuovo la reverisco." [great damage to your reputation].

¹⁰⁹ Leo Strauss, 'Persecution and the Art of Writing', Social Research 8, no. 1/4 (1941): 490-491.

¹¹⁰ Jean-Pierre Cavaillé, Jean-Pierre Cavaillé, Dis/Simulations. Jules-César Vanini, François La Mothe Le Vayer, Gabriel Naudé, Louis

Machon et Torquato Accetto: Religion, Morale et Politique Au XVI e Siècle (Paris: Honoré Champion Éditeur, 2002), 341. ¹¹¹ Goldgar, Impolite Learning, 5.

soon realized that the book could not be printed in "Rome, ne in altro luogo d'Italia" because Ruccellai "scrive con grandissima libertà, parlando per la verità, come si dee, da sinceri Istorici, malissimo d'alcuni, e fra gl'altri del Pontefice Alessandro VI".¹¹² To overcome this obstacle, Magliabechi made use of his network in the Dutch Republic, where the conditions of the book trade were a lot more tolerant. He asked in confidence his most trusted correspondent, Jacob Gronovius, to find someone in Amsterdam who was willing to print the book. To conceal the message, Magliabechi asked Gronovius to tear up the letter immediately after reading. If Jacob would have been unable to find a printer, wrote Magliabechi, he would write a letter to the Amsterdam printer Pieter Blaeu (1637-1706). He would do this in secret "perché non voglio che da niuno si sappia che sia stato io che abbia mandato costà il manoscritto, poiché avrei de' fastidi di Roma dagl'Inquisitori."¹¹³

In addition, Magliabechi had often to navigate between conflicting demands and loyalty to his own beliefs. This interior conflict becomes apparent from the following case, which will be discussed in the sixth chapter of this study. In 1670, Magliabechi had promised the Florentine scholar Lorenzo Panciatichi (1635-1676) to inform him about several Protestant books that circulated in Florence. He urged Panciatichi to destroy the letter immediately after reading "perché veramente sono libri empisissimi, e perniciosissimi".¹¹⁴ Reluctantly, Magliabechi started to list the names of the books, but strictly limited himself to discussing only a few in order to come to terms with his own faith:

"Mi pretesto in questo principio, che tutto quello, che scriverò di bene di essi, sarà circa alla Letteratura, giacché per altro, come buon Cattolico Romano, gli detesto con tutta l'anima, e perciò non parlerò, se non di quattro solamente."¹¹⁵

This passage shows that there were certainly limitations to scholarly openness. To clear his own conscience, Magliabechi imposed rigorous censorship on himself. Even though he understood the scholarly value of these Protestant publications, he, as "buon cattolico romano" deliberately omits information he possesses about more books than "quattro solamente". Self-censorship was thus not always prompted by the threat of external repression, but the result of an interior conflict. Although Magliabechi desired to offer transparency to promote scholarship and did understand the scholarly value of these publications, confessional divisions did evidentially cut through the ideal of the Republic of Letters. Accordingly, he often chose the way of moderation, which in this case took the form of a half-truth. This interior conflict becomes also apparent from his frequent use of the term 'eretici dottissimi'. For example, despite the fact that theologian Jean Le Clerc (1657-1736) "inserisce ne' suoi Libri bene spesso delle empietà contra i noi Cattolici Romani" Magliabechi calls him a "eretico dottissimo" because "ne' nemici si puo lodare la virtù".¹¹⁶ Magliabechi remained a fervent Roman catholic, while appreciating the scholarly value of these controversial publications, and therein lay a potential conflict. It was therefore

¹¹² Magliabechi to J. Gronovius, undated, LMU, Cod 4° Cod. Msc 778, f. 1, "Rome, neither in another place in Italy", "writes con great liberty, sincerely speaking ill, as one should as a sincere historian, about several men, among which Pontiff Alexander VI (1431-1503).

¹¹³ *Ibidem*, "because I do not want that anybody knows that I have sent the manuscript there [the Dutch Republic, otherwise I would receive trouble from Rome from the Inquisitors."

¹¹⁴ Magliabechi to L. Panciatichi, undated, in Carlo Dati, *Prose fiorentine raccolte dallo Smarrito [pseud.] accademico della Crusca*, ed. Giovanni Gaetano Bottari, Rosso Antonio Martini, and Tommaso Buonaventura, vol. quinto, parte seconda (Florence: Stamperia di S. A. R., Per li Tartini, e Franchi, 1716), 180-181.

¹¹⁵ *Ibidem,* "My pretext is that, in everything that I write good about these books, this is because of its literature value, because for another reason, as a good Roman Catholic, I detest them with my entire soul, and therefore I will talk about four books only."

¹¹⁶ Magliabechi to L. Panciatichi, undated, in Carlo Dati, Prose fiorentine raccolte dallo Smarrito [pseud.] accademico della Crusca, 183.

necessary that Magliabechi kept as much control possible over the things he wrote. This was especially true given that their letters risked interception, duplication and even, as noted earlier, publication.

The insecurity of the epistolary medium promoted a degree of secrecy or self-censorship among writers distrustful of letters going astray and falling into the wrong hands.¹¹⁷ After entrusting the mail to the courier, there was always the chance that curious outsiders would remove the seals and read their letters. The correspondence of Antonio Magliabechi contains many examples of threats of letters miscarrying, being intercepted and falling into the wrong hands. For example, in a letter of 1674 to Nicolaas Heinisus, Magliabechi urged him not to send his letters to the Medici court in the case he wanted to write him "qualcosa che avesse caro che fosse segreta" because the grand ducal secretary Apollonio Bassetti would open and read all his incoming correspondence from the Dutch Republic.¹¹⁸ Likewise, on the 30th of September 1675, he advised Jacob Gronovius to be careful in drafting his letters because "in Corte le approno, come è succeduto dell'ultima di V.S. Ill.ma".¹¹⁹

To cover himself against the consequences of letters going astray or falling into the wrong hands, Magliabechi used several techniques that attest to a general obligation to be discreet. We have already seen before that he often asked his recipients to burn or destroy his letters. This admonition was frequently used in early modern epistolography.¹²⁰ Another example of this practice concerns a letter between Magliabechi and Cosimo III. On the 28th of December 1683, Magliabechi made a complaint against several high officials of the Grand Duke, in particular the Florentine physician Giovanni Andrea Moniglia (1625-1700), who tried to do everything to get rid of him. He, therefore, asked Cosimo's permission to retreat to a place in the countryside "per cercare riparo alla persecuzzioni" he received from his enemies.¹²¹ To conceal his plans, Magliabechi asked the grand duke to tear up his letter:

"Suplico anche umilmente V.A.S. che quando per sua bontà si sarà certificata esser più che vero ciò che ho scritto voglia degnarsi di stracciar questo foglio perché essendo in Corte molti poco miei Amici, e molti parzialissimi de' miei Nemici non capitasse nelle loro mani e tanto maggiormente mi perseguitassero."¹²²

Other forms of control come to fore in Magliabechi's letters. In the practice of early modern epistolography, letter-writers typically included when they received a certain letter before the main text so their correspondents could check whether the reciprocal epistolary sequence was still intact.¹²³ This helped not only to understand which letters were lost in transit, especially in view of the many conflicts and wars that tormented Europe, it was also to confirm whether a letter was intercepted. There is, for example, a letter from Magliabechi to Jacob Gronovius in which he urged him to report the receipt of

¹¹⁷ Nellen, 'Codes of Confidentiality in Hugo Grotius' Correspondence (1594-1645)', 254, "Often included in his books ungodly things against us Catholics"; "learned heretic"; "in our enemies one can praise virtue".

¹¹⁸ Magliabechi to N. Heinsius, 25 September 1674, UBL, BUR F 8, "which you would like to keep secret".

¹¹⁹ Magliabechi to J Gronovius, 30 September 1675, LMU, Cod 4° Cod. Msc 777, f. 181, "At the [Medici] Court they will open them, as happened with the last one of Your Illustrious Lordship"

¹²⁰ Nellen, 'Codes of Confidentiality in Hugo Grotius's Correspondence (1594-1645)', 253; Miert, 'Confidentiality and Publicity in Early Modern Epistolography', 3.

¹²¹ Magliabechi to Cosimo III, 28 December 1683, BNCF, Autografi Palatini Magliabechi, n. 131, "to find shelter against the persecutions".

¹²² *Ibidem,* "I humbly beg your Illustrious Lordship, when you, for your kind heart, have certified that which I have written you is true, to tear up this sheet because at court there are many few of my friends, and many partials of my enemies, so that it will not end up in their hands which make them to persecute me even more".

¹²³ See, for example, the letter from Magliabechi to J. Gronovius, dated the 3rd of October 1704, "Risposi la passata Settimana, all'umanissima, ed elegantissima Lettera di V.S.Ill.ma, de' 3 di Settembre, ma perché mi è per esperienza noto, che in riguardo di queste Guerre, le Lettere bene spesso vanno male, e si perdono, per sua quiete, ho stimato mio obbligo, il riscriverle di nuovo anche questa sera, alcune delle medesime cose, acciocche se per disgrazzi, una di queste due mie Lettere andasse male, le capiti sicura almeno l'altra (LMU, Cod 4° Cod. Msc 777, f. 93).

the last three letters that he had sent to him "già che per esservi alcune cose che estremamente desidero che sieno segrete, mi dispiacerebbe infinitamente che andassero in mano di altri".¹²⁴ This habit to report the receipt of letters helps us to tackle the bias in correspondence networks for it allows us to record those letters that have not come down to us, a theme that will be discussed in more detail in the context of multimodal networks in chapter six.¹²⁵

Moreover, correspondents were loath to confide everything to a piece of paper. Many conversations were held to be more appropriate for personal discussions and delicate news was withheld for meetings face-to-face. Magliabechi, therefore, often awaited the opportunity that someone would visit the Dutch Republic to communicate sensitive information. On the 25th of September 1674, for example, Magliabechi restrained himself from telling Heinsius the reason why Jacob Gronovius had left the Grand Duchy of Tuscany because "da esso medesimo sentirà, V.S.Ill.ma, in breve, il tutto, poiché, tra due mesi, spera infallibilmente di dovere essere costà."¹²⁶

Furthermore, Magliabechi often used veiled references that were clear for the recipient, who was aware of the silent context, but that would not be immediately clear to outsiders. Thus in a letter to the grand ducal secretary Apollonio Bassetti in which Magliabechi complained about his enemies, Magliabechi refrained from mentioning their names, and limited himself to the following:

"Da bambino, un Astrologo mi disse, che sempre tutto il male mi sarebbe derivato dalle Bestie. Io me ne risi, ma adesso veggo avverato il suo pronostico, già che un Mulo, un Asino, ed un Frate che va contato per Bestia e mezzo, son coloro che in oggi sotto mano mi perseguitano, con imposture, furfanterie. Con ragione posso dire di essere condannato ad Bestias."¹²⁷

Magliabechi frequently replaced names with asterisks, examples of which run through this study, and deliberately concealed the end of his sentences with the word "eccetera". For example, a letter from Magliabechi to Jacob Gronovius shows that he withheld his negative views out of concern of the reaction of several high-profile officials of the Grand Duke: "Torno a replicarle, il che è verissimo, che il Padron Serenissimo è un Angiolo, ma i Ministri ecc".¹²⁸ If he had published his views candidly, and his letters would have ended up in the wrong hands, it would have been highly likely that he would have faced prosecution.

Because the letter remained a highly insecure medium, its secure transmission entirely depended on the trustworthiness of intermediaries. While "this could lead to degrees of self-censorship or messages being conveyed orally by dependable intermediaries, efforts were also made to have letters transmitted through secure means".¹²⁹ Recent scholarship has highlighted the importance of materiality in epistolary research. In particular, paying close attention to the materiality of a letters is crucial to the understanding of secrecy, an approach that is strongly advocated by James Daybell.¹³⁰ Moreover, Jana Dambrogio and Daniel Starza Smith have analyzed the techniques used to fold and manipulate paper and coined the term

¹²⁴ Magliabechi to J. Gronovius, 30 October 1674, LMU, Cod 4° Cod. Msc 777, f. 151, "Because there are several things that I extremely desire to be kept secret, I would infinitely regret if they will end up in the hands of others".

¹²⁵ See Chapter 6, paragraph 3.2.

¹²⁶ Magliabechi to Heinsius, 25 September 1674, UBL, BUR F 8, "from him himself you will soon hear about it all, because he unerringly hopes to be there [in the Dutch Republic]".

¹²⁷ Magliabechi to A. Bassetti, 1681, ASF, MdP, Carteggi dei Segretari, 1526 (1681), "When I was a kid, an astrologer said to me, that all evil would always come to me from beasts. I laughed about it, but now I see that his prognosis has come true, now that a mule [?], a donkey [Giovanni Andrea Moniglia?] and a friar [Henry Noris] which are to be counted as one beast and a half, are the ones who persecuted me, with fraud, villainy. With reason I can say that I am condemned to the beasts". ¹²⁸ Magliabechi to J. Gronovius, 5 October 1677, Cod 4° Cod. Msc 778, f. 216, "I continue to repeat, which is true, that the Serene Lord is an angel, but the ministers, etc."

¹²⁹ Daybell, The Material Letter in Early Modern England, cit. 170.

¹³⁰ Ibidem, 10.

'letterlocking' to refer to the act of folding and securing a letter to function as its own envelope.¹³¹ The more intricate the manner in which the letter was prepared for delivery, the more difficult it was to open the letter without damaging it. Seals would break, corners would cut off, the paper would slit; each damage might indicate any potential interference by individuals.¹³² That letterlocking techniques functioned as useful means of detecting interference by individuals becomes apparent from a letter written by Magliabechi to Cosimo III. In February 1685, Magliabechi informed the Grand Duke that he had sent him several letters to express his anger towards the court physician Andrea Giovanni Moniglia. For the utmost secrecy, he had repeatedly "più volte disigillate" his letters to make sure that they "arrivassero sicura alle mani di V.A.S."¹³³ Moreover, tight folding that suggests a very small package may also be indicative of secrecy. As shown by Nadine Akkerman and James Daybell, many techniques were employed by these intermediaries to have correspondence secretly conveyed: letters were often carried sewn into collars, sleeves or other clothing; they were hidden in barrels and other merchandise.¹³⁴ The letters sent by Magliabechi provide a very important cross-section to understand the ways letters circulated and the techniques used to avoid that they ended up in the wrong hands. For example, in March 1681, Magliabechi lamented the unreliability of the postmasters in Florence, who frequently opened his letters, or detained them without notice. Therefore, he wrote to Bassetti "per non mettere in sospetto queste arpie, scrivo in questa poca carta, perché il piego riesca minore."¹³⁵ Moreover, on the 5th of October 1677, Magliabechi wrote a letter to Jacob Gronovius in which he told him how he got tired of being powerless against the oppressive forces of the Medici court. Cosimo's influential officials and secretaries continuously checked what he was doing and even sent the police to his house to search for anything that could be used against him.¹³⁶ Magliabechi, then, told everything what happened to Vittoria Della Rovere (1622-1694), the Grand Duchess of Tuscany and the wife of Ferdinando II, father of Cosimo III. She made sure that the policemen responsible for the inspection ended up in prison.¹³⁷ However, Francesco Redi (1626-1698), physician of Cosimo III, went to the latter and told him "mille bugie, cioè che io mi ero doluto con la Serenissima Gran Duchessa Vittoria, di¹³⁸ The next day the policemen were released. This episode had disturbed Magliabechi so much that he deemed it necessary that Jacob became aware of what was going on in Florence:

"Mai mi sono ardito a scriverle quello che adesso le scriverò, per dubbio che le mie Lettere sieno aperte, ma è pur necessario che una volta io le faccia consapevole il tutto, e che sappia,

¹³¹ A full definition of letterlocking can be found in the *Dictionary of Letterlocking* (DoLL): 'Letterlocking: Dictionary', accessed 30 January 2019, http://letterlocking.org/dictionary/. A similar project is carried out by Ineke Huysman: 'Letterlocking - Huygens Instituut Voor Nederlandse Geschiedenis', accessed 30 January 2019, https://www.huygens.knaw.nl/letterlocking/.

¹³² Akkerman, Invisible Agents: Women and Espionage in Seventeenth-Century Britain, 98.

¹³³ Magliabechi to Cosimo III, February 1685, BNCF, Autografi Palatini Magliabechi, 126, "repeatedly sealed", "securely arrive in the hands of Your Illustrious Lordship".

¹³⁴ James Daybell, The Material Letter in Early Modern England (London: Palgrave Macmillan UK, 2012), cit. 170; Akkerman, Invisible Agents: Women and Espionage in Seventeenth-Century Britain, 28-29.

¹³⁵ Magliabechi to Bassetti, Marc 1681, ASF, MdP, Carteggi dei Segretari, 1526 (1681). In his letters, Magliabechi commonly referred to the postmasters as arpie or harpies, mythical monsters in Greek mythology, having the form of a bird and a human face. The creatures "were sent down by Zeus to punish, most famously Phineus. Phineus, a king of Thrace, had the gift of prophesy. Zeus, angry that Phineas revealed too much, punished him by putting him on an island with a buffet of food which he could never eat. The Harpies always arrived and stole the food out of his hands right before he could satisfy remains" his hunger, and befouled the ('Harpy', in New World Encyclopedia, http://www.newworldencyclopedia.org/p/index.php?title=Harpy&oldid=941857, last accessed 3 April 2019).

¹³⁶ Magliabechi to J. Gronovius, 5 October 1677, LMU, Cod 4° Cod. Msc 778, f. 116-119, "Rappresentai a S.A.S. che i Birri senza ordine di alcuno mi erano venuti in Casa; che mi avevano infamissimamente cercata tutta la Casa".

¹³⁷ *Ibidem*, "La Serenissima Gran Ducchessa Vittoria, benché io ne gliene avessi parlato, ne fattogliene parlare, vedendo che i Birri in tanto tenoi non avevano avuto gastigo alcuno, spontaneamente fece ella mettergli in Segrete".

¹³⁸ Ibidem, "thousand lies, that I have been complaining by the Serene Grand Duchess Vittoria, that...."

che adesso, non è più paese per V.S.Ill.ma, per me, o per niuno altro che se ne voglia vivere pacificamente, a se medesimo, ed a' suoi studi."¹³⁹

To ensure that the letter arrived safely in the hands of Gronovius, Magliabechi sent the letter to Abraham de la Fontaine, the Dutch consul in Livorno.¹⁴⁰ The Dutchman in Livorno recurred to the following strategy to ensure the delivery of the letter: "per scippar ogni inconvenienza, l'ho mescolata con un pieghetto libri ben accomodato in carta legato, e soprascritto all'medesimo signore Gronovio".¹⁴¹ Since books were transported as loose, unfolded sheets, letters could be easily covered up. Once the letter arrived in the hands of Gronovius, he had to "stracciare il tutto, e ora, e sempre".¹⁴² Throughout this study we will see other examples of how Magliabechi penned on small sheets of paper to share secretive news with his correspondents in the Dutch Republic.

5. DIGITAL SECRECY AND CONFIDENTIALITY

As online corpora suggest, the advent of digital humanities has brought new capacities for representing and analyzing confidentiality and practices of secrecy in early modern correspondence. This is however, still in its early stages. Charles van den Heuvel and Henk Nellen, for example, have attempted to research the concept of openness and confidentiality in digitized scholarly correspondence. In a small-scale experiment, they used keyword and similarity search of words related to confidentiality in the web-application called ePistolarium. With this application, developed by the Huygens Institute for the History of the Netherlands, researchers can browse, analyze and visualize around 20,000 letters that were written by and sent to 17th century scholars who lived in the Dutch Republic.¹⁴³ Their question was whether "the theme of confidentiality, which recurs regularly in the letter of the Dutch lawyer Hugo Grotius [...] could be retrieved automatically from the corpus of correspondence in the Circulation of Knowledge project".¹⁴⁴ It turned out that the use of implicit language significantly distorted their results. If letterwriters asked the recipient to keep certain knowledge secret or to exert confidentiality, they almost never use these words themselves, using sentences like 'nobody is allowed to know this' or 'please burn after reading'.¹⁴⁵

Secrecy and confidentiality depended on the nature of the relationships between correspondents. For example, the stronger the relations between correspondents became, the greater the confidentialities exchanged. These relationships were primarily strengthened through mutual respect and reciprocity.¹⁴⁶ Letters were meant to be answered and gifts reciprocated which resulted in an ongoing correspondence. Books, for example, were often sent as gifts that could encourage reciprocity in the form of a response

- ¹⁴² Magliabechi to J. Gronovius, 5 October 1677, "tear up everyting, now, and always".
- ¹⁴³ Ravenek, Van den Heuvel and Gerritsen, *The ePistolarium: origins and techniques*, 317.
- ¹⁴⁴ Van den Heuvel et al., 'Circles of Confidence in Correspondence', cit. 81.

¹³⁹ Ibidem, "Never I dared to write you what I will write you now, doubting that my letters were going to be opened, but it is also necessary that once I make you aware of everything, and that you know that, for now, this is not a country anymore for Your Illustrious Lordship, as well as for me, or for everyone else who wants to live in peace, to himself, or in his studies". ¹⁴⁰ Questa mia, per maggior sicurezza, la mando a Livorno al Signore De la Fontaine, che è stato eletto Console della Nazzione, ed esso avrà cura che pervenga nelle mani di V.S.Ill.ma per mia quiete, come l'avrà avuta, si degni con un solo verso di avvisarmene la ricevuta".

¹⁴¹ De la Fontaine to Magliabechi, 19 October 1677, BNCF, Magl. VIII 299, f. 15, "To avoid any inconvenience, I have mixed it up with a box of books nicely wrapped in paper, and addressed to sir Gronovius himself".

¹⁴⁵ Henk Nellen and Charles van den Heuvel, 'The Nature of Scholarly Communication and Networks of Confidentiality', accessed 30 January 2019, http://ckcc.huygens.knaw.nl/?page_id=1100.

¹⁴⁶ On the ideal of reciprocity in the historiography of the Republic of Letters, see Goldgar, *Impolite Learning*, 21–26; Van Miert, 'What was the Republic of Letters. A brief introduction to a long history (1417-2008)', 207; Goodman, *The Republic of Letters:* A Cultural History of the French Enlightenment, 18.

or a counter-gift, examples of which will be discussed in the sixth chapter of this study. Failure to reciprocate any service was associated with bad manners, resulting often in distrust and an unnecessary conflict between people.¹⁴⁷ For instance, on the 28th of October 1692, Magliabechi wrote to Gisbert Cuper that he remained "non poco scandalezzato della poco civiltà del Padre Noris nel non rispondere alle lettere che gli sono scritte dopo tanto, e tanto tempo".¹⁴⁸ As a result, the correspondence between Cuper and Noris, which took off in 1687, came abruptly to an end.¹⁴⁹ Based on the assumption that correspondent reciprocity could provide insight into aspects of confidentiality and trust in the Republic of Letters, a second small experiment was carried by Van den Heuvel et al. to determine the degree of confidentiality by using a network study of the incoming and outgoing correspondence of Grotius. In this experiment, they set up a pilot study of 7,725 letters written by or addressed to Grotius to enable an analysis of the concept of reciprocity in his personal and professional network. The degree of reciprocity corresponded to the number of letters that were answered on every one hundred letters sent. They found out that, on average, for every hundred letters exchanged in Grotius' personal network, 48 were answered, while in his professional network only 31 in 100 were answered. They concluded that these results were very inconsistent for "a large amount of correspondence in Grotius' network showed virtually no reciprocity".¹⁵⁰

Although their experiments were tentative, and although they were made on a relatively small number of correspondences, the work of Van den Heuvel and Nellen provides us some interesting points of departure. The implicit use of confidentiality in epistolary exchanges, which "lies too far hidden in between the lines, underneath the text", conditions the use of text-analytical methods such as topic modeling and makes it very difficult to look for these general words in large datasets. Moreover, reciprocity is not a sufficient indicator of confidentiality, especially taking into account that most outgoing correspondence has not survived. To overcome these difficulties, a close reading approach may be a necessary, additional method to explore how references to confidentiality and secrecy come to the fore in early modern letters, which are brought to our attention by a distant reading to reveal the topological structure of the epistolary network under study. Secrecy and confidentiality are not simply methods of protecting knowledge that people want to keep hidden for security reasons or for making profit, they are also a dynamic social practice that has a strong effect on group formation. Network properties such as structural balance, closure and brokerage can provide insight into aspects of confidentiality and secrecy in the Republic of Letters.

Structural balance affirms that signed social networks (i.e. networks with relationships indicating positive (like trust) and negative (mistrust) interactions among individuals) tend to be organized so as to avoid tensions or conflictual situations. It highlights how interacting agents, for example, letter-writers, constantly evaluate the quality of their relationships in order to achieve a balanced position in a network. In the Republic of Letters, scholars often developed distrust relationships towards each other, caused by, for example, the differing cultures, scholarly rivalries and religious conversions. Moreover, they had to deal with many tensions like those imposed by the Roman Inquisition. Each of these tensions shaped the scholarly network in a significant way, and the structural balance theory can be used as a set of dynamics mechanisms to explain and shed light on these tensions. Consequently, the moments of tension often caused people to rely on secrecy, adopting strategic measures of confidentiality and dissimulation to

¹⁴⁷ This descriptions of reciprocity fits in with the concept of reciprocity as a moral virtue, as defined by Lawrence C. Becker, *Reciprocity* (Chicago/London: University of Chicago Press, 1986).

¹⁴⁸ Magliabechi to Cuper, 28 October 1692, KB, KW 72 D 10, f. 80, "more than a little scandalized by the little effort of civility of Father Noris [Enrico Noris] for not responding to the letters that are written to him a long, long time ago."

¹⁴⁹ The correspondence between Gisbert Cuper and the theologian Enrico Noris (1631-1704) is extent in the National Library of the Netherlands and lasted from 1687 until 1692 (KB, KW 72 D 2).

¹⁵⁰ Van den Heuvel et al., 'Circles of Confidence in Correspondence', 100.

stabilise their network. I will come back to this aspect in the fifth chapter of this study. Specifically, I will show how a distant reading approach enables us to capture moments of tensions and instability implicated in a large body of correspondence, as well as identify the letters that require closer examination. A close reading will then produce a deeper understanding of the strategies used to avoid imbalance in the scholarly network, showing how methods of self-censorship, dissimulation and confidentiality were used to avert tensions in the network.

In the domain of social network theory, there is clear evidence of confidentiality being "more likely in a strong than in a weak relationship, especially when this strong relationship is embedded in a closed network".¹⁵¹ Secrecy served to reinforce the intense closeness of a group, giving them a bond of shared knowledge from which outsiders were excluded. In this closed network, it is more likely that misbehavior will be detected because everyone keeps an eye on each other. This form of control generated trust and ensured the circulation of confidential and secretive information, which was needed in particular at times of tension, when people needed to look for stability, a sense of structure and safety. On the other hand, open, more decentralized networks, with more relations distributed throughout the network and no clustering around given individuals, are riskier when it comes to keeping a secret. Yet, a more open network is needed when one wants to obtain a brokerage position which allows someone to have access to new knowledge and contacts.

Network closure is particularly relevant in the context of introductions, a theme that will be central in the fourth chapter of this study. As correspondents became part of an epistolary network, they did not so in a world where anyone can just write a letter to join the network, "but in a world regulated by social norms and rules of etiquette".¹⁵² This means that letters of introduction were needed to get admitted into an epistolary network. These letters were often written by mutual contacts which made it is easier for individuals to trust one another and to have confidence in the integrity of exchange that would take place between them.¹⁵³ If we trust a friend, we also tend to trust the friend of our friend. For example, if Magliabechi trusts Gronovius and Gronovius trusts Graevius, then Magliabechi can derive some conclusions about the degree of trust he can have about Graevius when Gronovius recommends him. Network closure infers thus new trust relationships and plays an important role in transferring confidentiality through introductions.

¹⁵¹ Burt, Brokerage and Closure an Introduction to Social Capital, cit. 97.

¹⁵² Van den Heuvel et al., 'Circles of Confidence in Correspondence', 95.

¹⁵³ This is also known as *embeddedness*, see Easley and Kleinberg, 59.

CHAPTER 2

The Dutch roots of the Medici network under Cosimo III

INTRODUCTION

"Alle 14 si scoperse Utrekt, vicino al quale un gran sobborgo, dove diversi mulini a vento che invece di macine fanno andare l'edifizio della sega. Si girono con le barche per il fosso reale le mura della città che sono di mattoni terrapienate e ripartite ad ogni tanto di qualche maschio mezzotondo in buona difesa, il suddetto fosso introduce nella città per mezzo di canali che la dividono, e servono di gran comodo co 'l barchereccio al traffico, ed al commercio."¹⁵⁴

Travel diary secretary Apollonio Bassetti, 17th of December 1667, Utrecht.

In the winter of 1667-1668, the young Florentine Prince Cosimo de' Medici (1642-1723) travelled through Northern Europe, not – as a persistent rumor would have it – to escape his unhappy marriage with Marguerite Louise d'Orléans (1645-1721), but with the explicit aim to learn more about the various types of government and the blossoming intellectual, cultural and economic cultures in Germany and especially – the Low Countries.¹⁵⁵ He had left Florence on the 22nd of October 1667, destined for Mainz where he would descend the Rhine by means of a canal boot to Arnhem. Once he arrived in Arnhem, he continued his journey to Utrecht where he stayed for two days. In Utrecht, as shown by the above passage, they had every opportunity to see how the Dutch used windmills and controlled the water for commerce and transportation. From there, Cosimo and his entourage went to Amsterdam, the city which at that time was the undisputed global hub of trade, printing industry, and knowledge, where he remained until the 7th of January 1668. Guided by his agents Francesco Feroni (1641-1696) and Pieter Blaeu (1637-1706), Cosimo visited here the town hall, publishing houses, cabinets of curiosities, the headquarters of the East and West Indian Trading companies, churches and synagogues. He then carried on his voyage and went to Haarlem, Alkmaar and Leiden, where he visited the University and the botanical garden. Afterwards he made a stop in Den Haag and Scheveningen, and continued his travels to Delft. On the 16th of January, he sojourned in Rotterdam, followed by Dordrecht where he left on the 19th of January, taking the route to Zeeland from where he descended the river Scheldt to Antwerp and Brussels. From Antwerp, Cosimo returned to Rotterdam and The Hague on the 5th of February 1668, where the Prince

¹⁵⁴ Apollonio Bassetti, Memorie delle occorrenze del viaggio intrapreso dal Ser.mo Principe Cosimo di Toscana per Alemagna, et Olanda il di 22 Ottobre 1667, Biblioteca Moreniana, fondo Bigazzi 32, f. 134v, "At two o'clock we explored Utrecht, close to where there is a big suburb, where various windmills, instead of machinery, get the lumber yard going. With the boat we travelled the moat of the city walls, which consists of an embankment of bricks, alternated, now and then, with a *maschio mezzotondo* in good defense. The moat introduces into the city by means of canals that divide it, and serve with great convenience the traffic of the boats, and commerce".

¹⁵⁵ Initial studies suggested that the Florentine prince's journey had been mainly motivated by the longstanding conflict with his wife, for which see P. J. Blok, 'Cosimo III van Toscana in de Republiek', 522-539 and Godefridus J. Hoogewerff, *De Twee Reizen van Cosimo de' Medici, Prins van Toscane, Door de Nederlanden (1667-1669). Journalen En Documenten.* (Amsterdam: Johannes Muller, 1919); C.M. Radulet, 'Cosimo III Medici and the Portuguese Restoration: A Voyage to Portugal in 1668-1669', *E-Journal of Portuguese History* 1, no. 2 (2003): 1–8. H. Th. van Veen, however, has shown that Cosimo's travels have been mainly driven by political and diplomatic motives, for which see 'Cosimo de' Medici's Reis Naar de Republiek in Een Nieuw Perspectief', *BMGN: Low Countries Historical Review* 102, no. 1 (1987): 44–52.

of Orange invited him to a ballet. The next day, the prince travelled to Amsterdam where he remained several days before moving on to Hamburg and to return to Italy. As shown by figure 1, he made several stops along the way from Amsterdam to the German border.¹⁵⁶

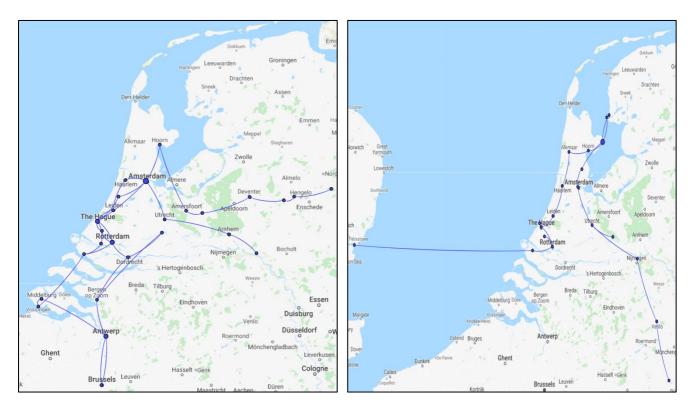


Fig. 1 Itinerary of Cosimo's travels in the Dutch Republic. The first grand tour (1667-1668) is at the left of the image, while Cosimo's second stay (1669) in the Dutch Republic is shown at the right. These patterns have been created with the tool nodegoat, following the entries of Hoogenwerff's edition of Cosimo's grand tour.

Apparently Cosimo was so fascinated by what he had seen during his first voyage that he returned to the Dutch Republic the next year. In 1669, Cosimo embarked on a second trip, this time to Spain, Portugal, Great Britain, France, and again, the Low Countries (figure 1).¹⁵⁷ During his second stay in the Dutch Republic, Cosimo visited places he had not seen before: he visited the Beemster and Schermer polders, then recently drained lakes, and went to Friesland, visiting Molkwerum and Stavoren, which were highly recommended to him by Grand Pensionary Johan de Witt (1625-1672).¹⁵⁸ The Dutch Republic was thus

¹⁵⁶ Several project have begun to use large datasets to map the social networks of the Grand Tour in Italy. The mapping the Republic of Petters project of at Stanford University uses spatial and temporal data to georectify 18th century maps in order to assess the likely routes that travelers may have taken, and produced route maps for individual travelers according to contemporary routes and conditions (http://republicofletters.stanford.edu/casestudies/grandtour.html [last accessed, 12-10-2018]). The Itinera project at the University of Pittsburgh, seeks to map the interactions between people, places, and art objects over time. Specifically, Itinera is an map-based and interactive resource that overlays the movements of travelers alongside the objects of their study and their own creative output. In this respect, they adopt a multi-layered approach which is a central theme in the fifth chapter of this study (https://itinera.pitt.edu [last accessed 12-10-2018]).

¹⁵⁷ For Cosimo' travels in Portugal see C.M. Radulet, 'Cosimo III Medici and the Portuguese Restoration: A Voyage to Portugal in 1668-1669', *E-Journal of Portuguese History* 1, no. 2 (2003): 1–8; Susana Varela Flor, 'Portraits by Feliciano de Almeida (1635-1694) in Cosimo III de' Medici's Gallery', *RIHA journal* 0144 (2016). For his five-month stay in Spain, see Taín Gusmán, *A Medici Pilgrimage: The Devotional Journey of Cosimo III to Santiago de Compostela (1669)* (Turnhout: Brepols publishers, forthcoming January 2019). For England, see Stefano Villani, 'La Religione Degli Inglesi e Il Viaggio Del Principe: Note Sulla Relazione Ufficiale Del Viaggio Di Cosmo de' Medici in Inghilterra', *Studi Secenteschi* XLV (2004): 175–94.

¹⁵⁸ For Cosimo's visit to Friesland see Hans Cools, 'A Tuscan Travel Party amongst the Frisian Natives The Day Trip of Prince Cosimo to Stavoren and Molkwerum, 26 June 1669', *Incontri: Rivista Europea di Studi Italiani* 30, no. 2 (2015): 80-90.

the only country he visited twice in the course of both his grand tours, which testifies to Cosimo's fascination for this country.

There has been a long tradition of historical studies that have acknowledged the strong relationship between the Dutch Republic and the Grand Duchy of Tuscany, especially after Cosimo III's two visits to the Low Countries.¹⁵⁹ These visits, in fact, established the foundation upon which the future exchange between the Grand Duchy of Tuscany and the Dutch Republic could take place. During his stay in the Dutch Republic, Cosimo not only learned about a different culture, but used the opportunity to build his social network. Scholars, dignitaries and merchants were sized up during these personal encounters, and Cosimo must have acknowledged the fact that, even if the Dutch held a different faith, they were excellent scholars. Trust was built and Cosimo, once he returned to Florence and became Grand Duke, seemed to be eager to maintain close contact with several individuals he had met during his travels. As Henk Th. van Veen and Andrew P. McCormick observed, it appears that Cosimo tried to use these relationships to deal with the rapid decline of the Grand Duchy.¹⁶⁰

The Grand Tour equipped Cosimo thus socially and provided him with a wider knowledge of the world that made him more fit to rule, reserving him a position of both national and international distinction. A letter from Vincenzo Marucelli, a young Florentine nobleman travelling to the Low Countries in 1672, to the grand ducal secretary Apollonio Bassetti, for instance, reads that "non saprei più esprimere quanto vantaggio sia alla nostra nazione nel viaggiare, dopo che il serenissimo Padrone ha acquistata sì gran fama ne' suoi viaggi, che il nome solo di fiorentino produce vantaggio per la grande stima acquistata da Sua Altezza da per tutto".¹⁶¹ Vice versa, as we will see in more detail in the next chapter, many Dutch philologists travelled to the Grand Duchy of Tuscany in the 1670s for they knew that the Grand Duke had remained impressed by the Dutch intellectual communities and was glad to welcome them in his reign. He afforded them access to the rich manuscript collections of the Florentine libraries and even offered them positions at the University of Pisa.

Yet, no attempts have been made to investigate systematically the subsequent development and significance of the relationship between the Grand Duchy of Tuscany and the Dutch Republic after the Prince returned from his grand tour. To sustain his relationship with the Dutch Republic, Cosimo primarily relied on the administrative techniques and methods of learning handled by to principal figures at the Medici court: the grand ducal secretary Apollonio Bassetti (1630-1699) and the court librarian Antonio Magliabechi (1633-1714). Cosimo's decision to assign Bassetti and Magliabechi an important role at the Medici court immediately after his return to Florence is thus a clear indication of his efforts to put their experiences and contacts with the Dutch Republic to work for Tuscany. This chapter will give an impression of the remarkable personality of Bassetti, who accompanied Cosimo on his first grand tour, while the next chapter will focus on the book-hermit Antonio Magliabechi.

This chapter will show that Cosimo, despite his strong religious convictions, was open to the liberal culture of the Dutch Republic and very ambitious to sustain a relationship with that country. A close reading of travel diaries and correspondence will provide insights as to the nature and significance of Cosimo's interest in the Dutch Republic. Specifically, I will use archival sources that have been

¹⁵⁹ See, Henk Th. van Veen and Andrew P. McCormick, *Tuscany and the Low Countries: An Introduction to the Sources and an Inventory of Four Florentine Libraries* (Florence: Centro Di, 1985), 62-63; Frans Felix Blok, 'Cosimo III van Toscana in de Republiek', *Onze Eeuw* I, no. 2 (1901): 522–39.

¹⁶⁰ Henk Th. van. Veen and Andrew P. McCormick, 62.

¹⁶¹ Marucelli to Bassetti, 16 December 1672, ASF, Mediceo del Principato (MdP), 4261, c. 514, in Francesco Martelli, *Il Viaggio in Europa Di Pietro Guerrini (1682-1686): Edizione Della Corrispondenza e Dei Disegni Di Un Inviato Di Cosimo III Dei Medici*, vol. 1 Carteggio con Apollonio Bassetti (Florence: Olschki, 2005), XXIX, "I would no longer express how much our nation has benefitted from travelling, after the Serene Lord has acquired so much fame in his travels, that only the mentioning of the name Florentine will bring advantage because of the great fame acquired by Your Highness everywhere".

overlooked in previous research, including the travel diaries and the correspondence of Apollonio Bassetti and the court physician Giovanni Andrea Moniglia (1624-1700), both of whom we will met often during the course of this study.

1. OFF TO A GOOD START: PREPARING THE GRAND TOUR

From 1665 onwards Cosimo started to make plans for his upcoming voyage to northern Europe, and to the Dutch Republic in particular. It was especially thanks to the Tuscan merchant Francesco Feroni and the Amsterdam bookseller Pieter Blaeu that Cosimo came to know the Dutch culture. In fact, it was through them that Cosimo received a continuous flow of books and news from Amsterdam, which he subsequently used to prepare himself for his upcoming visits to the Dutch Republic. Because of the important role played by Feroni and Blaeu in Cosimo's grand tour, here a brief resume of their lives will be presented.

Born in 1614 into a family of wool dyers from Empoli, Francesco Feroni went to work in the bank of the distinguished Buonaccorsi family in Florence.¹⁶² In the 1640s, Feroni moved to Amsterdam, probably sent there by Lorenzo Buonaccorsi to act as their agent in the Dutch Republic.¹⁶³ Once in Amsterdam, Feroni established himself as a merchant banker in his own right. Within a few years, Feroni became one of the wealthiest merchant-bankers in Amsterdam, and this mainly thanks to his role as a shareholder of the Dutch West Indian Company and as an intermediary in the slave trade in the Spanish indies.¹⁶⁴ His growing prestige was quickly spotted by Cosimo's father, Ferdinando II de' Medici, who summoned him to act as his representative to the Dutch States-General during the first Anglo-Dutch war between 1652 and 1654. Feroni needed to ensure that the Dutch would respect the Grand Duchy's "neutrality and give up their naval blockade of Livorno, where an English convoy returning from Smyrna had taken refuge".¹⁶⁵ He successfully performed his task and throughout the next two decades, Feroni served as a Tuscan envoy in the Dutch Republic, to ultimately become Tuscany's official representative in 1666.¹⁶⁶ During his occupation, he weekly sent letters and new reports to the Tuscan court, which contained all kinds of information about the political, economic and cultural life of the Dutch Republic, he facilitated the acquisition of cultural artefacts, such as books, tapestries and paintings and distributed gifts to Dutch dignitaries and aristocrats. Moreover, Feroni assisted traveling Florentines during their stay in the Dutch Republic, including Cosimo Ciferi, who, as will be shown later in more detail, was commissioned by Cosimo III to spy on the latest innovations in the linen industry.¹⁶⁷

The grand ducal secretary, Apollonio Bassetti took care of the correspondence with Feroni. The voluminous reports resulting from this correspondence, which are nowadays preserved in the State

¹⁶² The figure of Feroni has been extensively studied by Paola Benigni and Hans Cools. See Paola Benigni, 'Francesco Feroni Empolese Negoziante in Amsterdam', Incontri - *Rivista Di Studi Italo-Nederlandesi* 3 (1985): 98–121. *Paola Benigni, Francesco Feroni: da mercante di schiavi a burocrate', in La Toscana nell'età di Cosimo III: atti del convegno, Pisa-San Domenico di Fiesole (FI), 4-5 giugno 1990,* ed. Franco Angiolini, Vieri Becagli, and Marcello Verga (Florence: Edifir, 1993), 165–83. Hans Cools, 'Francesco Feroni, intermediario in cereali, schiavi e opere d'arte', *Quaderni storici* 2 (2006): 353-366. The same article is later published in English in Hans Cools, 'Francesco Feroni, 1614/16–1696. Broker in Cereals, Slaves and Works of Art.', in *Your Humble Servant. Agents in Early Modern Europe*, ed. Marika Keblusek, Badeloch Vera Noldus, and Hans Cools (Hilversum: Uitgeverij Verloren, 2006), 39–50. Hans Cools, 'An Italian in the Metropolis: The Amsterdam Career of Francesco Feroni (ca. 1640-1672)', in *The Quintessence of Lives: Intellectual Biographies in the Low Countries Presented to Jan Roegiers*, ed. Jean-Pierre Delville et al., Bibliothèque de La Revue d'Histoire Ecclésiastique 91 (Turnhout: Brepols Publishers, 2010), 227–47.

¹⁶³ Benigni, 'Francesco Feroni Empolese Negoziante in Amsterdam', 99–100.

¹⁶⁴ Cools, 'Francesco Feroni, 1614/16–1696. Broker in Cereals, Slaves and Works of Art.', 45.

¹⁶⁵ Cools, 'An Italian in the Metropolis: The Amsterdam Career of Francesco Feroni (ca. 1640-1672)', 233.

¹⁶⁶ Cools, 'Francesco Feroni, 1614/16–1696. Broker in Cereals, Slaves and Works of Art.', 41.

¹⁶⁷ Francesco Martelli, Il Viaggio in Europa Di Pietro Guerrini (1682-1686): Edizione Della Corrispondenza e Dei Disegni Di Un Inviato Di Cosimo III Dei Medici, vol. 1 Carteggio con Apollonio Bassetti (Florence: Olschki, 2005), XV-XVI.

Archive of Florence, must have aroused Cosimo's enthusiasm for the Dutch Republic, who decided to see the country for himself in 1667.¹⁶⁸ During Cosimo's stay in the Dutch Republic, Feroni acted as his guide. When Cosimo arrived in Amsterdam, he directly made his way to the house of Feroni on the Keizersgracht, and stayed there from the 19th of December 1667 until the 7th of January 1668.

Bassetti continued to exchange letters with Feroni in Amsterdam until 1673. The French invasion of the Dutch Republic in 1672, the so-called *rampjaar* [disaster year], and problems with the slave trade, had precipitated the departure of Feroni from Amsterdam, who "was convinced that the Dutch Republic would shortly collapse".¹⁶⁹ He was sure that Tuscany would be able to take over the Republic's prosperous commerce after its downfall, and naturally he thought that he himself would play a leading part in the future commercial revival of the Grand Duchy.¹⁷⁰ Notwithstanding Feroni's predictions, the Dutch Republic overcame its crisis and by the first half of the 1680s the Amsterdam trade had fully recovered from the crisis caused by the French invasion.¹⁷¹ Yet, part of Feroni's prophecy was true: when Feroni returned to Florence in 1673, Cosimo III appointed him senator and *depositorio generale* or, to put it in modern terms, Tuscany's Minister of Finance, making him responsible for the Grand Duchy's income and financial resources.¹⁷²

Feroni's appointment was a clear indication that Cosimo III wished to put Feroni's experience in the Dutch Republic to work for the Grand Duchy of Tuscany. For example, when Cosimo made Feroni Marquis of Bellavista, a Medici estate, in 1683, he began draining and reclaiming the land and constructed a windmill.¹⁷³ In addition, Feroni appears to have stimulated innovations at the port of Livorno and opened a new silk shop to revitalize the Florentine industry.¹⁷⁴ When his silk shop was running higher than expected costs, Feroni proposed to lower the real wages by increasing the price of food. That would induce the labor force to work harder and enable manufacturers to produce more cheaply. Here, Feroni appealed to the example of the Dutch, as he wrote to Apollonio Basseti:

"Ho reconosciuto che in Leida si spenda molto meno nel mangolare la lana e ridrula in panno, di quello che si fa qua, e pur il vivere è più caro di qua; ma come travaglia quella nazione incessantemente tutto il giorno facendo il suo denaro sopra il lavoro, e ola la sera tornando a casa. Da questa loro assiduità ne succese col far più lavoro, guadagnano da vantaggio di questi, che solo la metà del giorno vogliono travagliare".¹⁷⁵

¹⁶⁸ 383 letters between Bassetti and Feroni concerning the Dutch Republic are extent in ASF, MdP, 4260, cc. 186, 195, 313-549; 4261, cc. 194-476 and are written between the 4th of April 1667 and th 6th of March 1672

¹⁶⁹ Cools, 'An Italian in the Metropolis: The Amsterdam Career of Francesco Feroni (ca. 1640-1672)', 244.

¹⁷⁰ *Ibidem*, 244.

¹⁷¹ Ibidem, 244.

¹⁷² Benigni, 'Francesco Feroni Empolese Negoziante in Amsterdam', 113. The Amsterdam merchant Giovacchino Guasconi, who replaced Feroni in his role as agent of the Medici family, sent his congratulations to Feroni through Bassetti on the 3th of August 1674, "Con sommo contento ho inteso la benigna elezione fatta il mio Serenissimo Padrone per suo depositario generale e senatore il signore Ferroni che Dio piu oltre conceda quanto di bene sa desiderare, sendo chiaro che la benignita di S.A. eccede ogni termine in beneficio" (ASF, Mediceo del Principato, 4262, f. 389).

¹⁷³ Van Veen and McCormick, Tuscany and the Low Countries: An Introduction to the Sources and an Inventory of Four Florentine Libraries, Italia e i Paesi Bassi, 36.

¹⁷⁴ Mario Baruchello, *Livorno e Il Suo Porto. Origini, Caratteristiche e Vincede Dei Traffici Livornesi* (Livorno: Soc. An. Editrice Riviste Tecniche, 1932), 420–22. See also, Corey Tazzara, *The Free Port of Livorno and the Transformation of the Mediterranean World* (Oxford: Oxford University Press, 2017), 141–48.

¹⁷⁵ Feroni to Bassetti, 24 November 1673, ASF, MdP, 1523, ff. 251-255, transcribed in Tazzara, *The Free Port of Livorno and the Transformation of the Mediterranean World*, 143 "I myself saw in Leiden that it costs much less to press wool and turn it into clooth than it does here, and the costs if living is higher than here. But that nation works incessantly all day long, eating while they work, and only returns home at night. From their assiduity they do more work and earn more than these Florentines, who only want to work half of the day".

Moreover, in his quality as *depositorio generale*, Feroni arranged funding for missions abroad. When Cosimo ascended the grand ducal throne in 1670, he regularly sent out his subjects to travel to the Dutch Republic to spy on the latest technological innovations. From the correspondence of the Florentine engineer Pietro Guerrini, it becomes clear that Feroni supplied him with the necessary funds to sustain his living abroad.¹⁷⁶ In 1683, as will be discussed in more detail later, Guerrini was commissioned by Cosimo to tour through northern Europe, in particular in the Dutch Republic, to spy on the latest developments in fortifications and other technical inventions.¹⁷⁷

It seems that the extraordinary success of Feroni, however, turned him into a heartless and arrogant person, which can be deduced from multiple sources that put Feroni in a very bad light. In 1671, for example, the Dutch scientist Jan Swammerdam (1637-1680) called Feroni a fraud, claiming that he intentionally withheld the books and wine sent to him by the Danish scientist Niels Stensen (1638-1686) who was in Florence at the time.¹⁷⁸ Moreover, when the Dutch burgomaster Coenraad Ruysch (1650-1731) became acquainted with Feroni during his visit in Florence in 1674, he lamented the fact that Feroni did not remember the distinguished counsel Nicolaas de Bije de Jonge (1610-1675), who had written Ruysch's recommendation. According to Ruysch, Feroni did not want to acknowledge the fact that under De Bije's jurisdiction and country he had made a fortune. Yet, someone who comes from "nothing" (Feroni was, as noted earlier, the son of a wool dyer), easily becomes arrogant and conceited after becoming "something":

"Naer de middach gingen wij aen 't huys van de heer Veroni, aen de welcke neef van Hoogheveen een briefken van den raetsheer De Bije aen hadt te leveren, doch naer dat wij ruym een half uer foor de deur gewacht hadden, wierden wij seer superbs en groots van hem ontfangen. Selfs toonde hij mienen van den raetsheer de Bije niet meer te kennen, soo dat wij seer mal satisfait van deze kerel van daen gingen, de wij meenden dat ten minste met beleefde minen behoorde te toonen dat hij die luyden estimeerden onder wien en in wiens vaderlandst hij syn fortuyn gevonden hadt. Doch als in niet tot iet komt, soo is het syn selven onkenbaer."¹⁷⁹

¹⁷⁶ See, for instance, Guasconi to Bassetti, 4 February 1675, ASF, Mediceo del Principato, 4262, f. 417, "Questo ordinario ricevo la sua de 25 scorso et in essa la nota delle spese fatte per il Serenissimo Padrone alla somma di fiorini 2772.7 che si riducono alla quantità di pezze 709 e 2/3 pagabili in Livorno, dove sarà cura di questo signore depositario [Feroni] grato il darne li ordini havendomi S.A. comandato di metter nelle mani di lui l'istesso nota acciò ne sommetta il rimborso".

¹⁷⁷ Martelli, Il Viaggio in Europa Di Pietro Guerrini (1682-1686): Edizione Della Corrispondenza e Dei Disegni Di Un Inviato Di Cosimo III Dei Medici, vol. 1: 13, "et d'ogni somma ch'egli andrà borsando con sua ricevuta ne faccia pur tratta o in Sua Altezza o nel signore Depositario Generale". See also ASF, Mediceo del Principato, 4263, f.712bis "A di primo luglio 1683, Io a giorno sottoscritto confesso aver riceuto dal signore giovaccchino Guasconi la somma di fiorini settecento corrente moneta d'Amsterdam, quali m'a pagati d'ordine dell'Illustrissimo signore Abate Apollonio Bassetti di Firenze e per dover esser rimborsato dalla depositaria di S.A.S. nostro signore, avendo questa fatta con altra simile ambidue contenenti un solo pagamento. Questo di et anno sopradetto in Amsterdam, Io Pietro Guerrini".

¹⁷⁸ J. Swammerdam to M. Thévenot, Amsterdam, 30 October 1670, cited in Eric Jorink, 'Swammerdam, hoveling? Enige kanttekeningen bij de reputatie van een wetenschappelijk onderzoeker', *Studium* 8, no. 4 (24 May 2016): 187, 'Mons Stenon heeft aan Feroni eenige boeken voor mij gesonden, maar hy speelt den onwetende, gelyk hij met uwe wijn, ende Uytenbogerts, ende andere haar wijn gedaan heeft, dan het is een bedrieger als bekent is; t'is wonder den Hertog dat niet ter oore komt. [Sir Stensen has sent to Feroni several books for me, but he [Feroni] pretends to know nothing, like he did with your Wine, and the one of Uytenbogerts, and other wine, it is known that he is a fraid, it would be a miracle if the Duke will not hear about this''.

¹⁷⁹ C. Ruysch, "Journaal van een reis naar Geneve, Italië" en Frankrijk van Coenraad Ruysch met zijn neef Dirck van Hoogeveen", The Hague, National Archives of the Netherlands, Family Archive Teding van Berkhout, 1408, f. 31r, "In the afternoon we went to the House of Mr. Veroni [Feroni]. Hoogheveen had received a letter of recommendation from counsel De Bije for the cousin of Feroni. After having waited more than half an hour in front of his door, he wonderfully and greatly received us. He revealed that he did not know counsel De Bije anymore, making us leave very dissatisfied, believing that he should have been polite towards those men under whose jurisdiction and in whose fatherland he had made his fortune. Yet, when someone from nothing becomes something, he becomes unknowable [of his humble origins]. The travel account of Ruysch is entirely transcribed by Alan Moss at www.alanmoss.nl [last accessed 4 May 2017].

Again, in 1675, the librarian Antonio Magliabechi referred to the heartless character of Feroni in a letter to the Dutch philologist Jacob Gronovius (1645-1716), writing in strict confidence that Feroni "fa stridere ogniuno e vorerebbe che i poveri si morissero effetivamente di fame".¹⁸⁰ Magliabechi probably refers here to the above mentioned reform program championed by Feroni to increase the price of food to maximize the profit of the Florentine silk industry.

The information about the Dutch Republic that Cosimo received from Feroni, was augmented by the news and books which the Amsterdam bookseller Pieter Blaeu sent to the Tuscan court. Pieter Blaeu was born on the 8th of October 1637, the second son of the well-known publisher and bookseller Joan Blaeu (1596-1673).¹⁸¹ Pieter held a central position in his father's publishing house in Amsterdam, which is remembered today mainly for its atlases.¹⁸² The activities of Pieter Blaeu cannot be traced until he started to correspond with Antonio Magliabechi in the 1660s.¹⁸³ On the 12th of October 1660, Pieter wrote Magliabechi from the Frankfurther Burchmesse to thank him for his hospitality in Florence where he just came from. He had travelled to Italy to promote the interest of the publishing firm and to collect information and material for his father's new project of a series of *theatri* or books on the principal towns of a number of Italian states. During this trip, Pieter also went to Florence, where he arrived with a letter of recommendation to Magliabechi. Consequently, Magliabechi introduced Pieter to the Medici court where he could make arrangements with the Grand Duke, Ferdinando II, his brother Leopoldo, and Cosimo concerning the production of a town atlas of the Grand Duchy of Tuscany. As we will see in the next chapter, in which the specifics of Pieter's sojourn in Florence will be discussed in more detail, the project of a Tuscan town atlas was never finalized. Although the project failed, Pieter's business trip in Italy opened up a new market for his father's family business. Once he returned in Amsterdam in 1660, Blaeu remained in contact with both Magliabechi and Cardinal Leopoldo de' Medici (1617-1670), and frequently sent both of them books, news and letters. Soon, Magliabechi became Pieter's largest customer in Italy, both on his own behalf and of that of the Medici family. A part of the books Magliabechi ordered from Pieter were for Prince Leopoldo de' Medici, Prince Francesco Maria de' Medici (1660-1711) and Cosimo III. Yet, just prior to Cosimo's departure to the Dutch Republic, in April 1667, it was Cosimo himself who wrote to Pieter directly, requesting him to send him the book China Illustrata by Athanasius Kircher, and a nautical atlas.¹⁸⁴ Pleased with the prompt delivery of the books, Cosimo subsequently ordered anything published in Amsterdam "che trattassero materie di viaggi nuovi o di cognizioni pellegrine, e recenti".¹⁸⁵ Evidentially, Cosimo was preparing himself for his upcoming visit to the Dutch Republic towards the end of 1667.

¹⁸⁰ Magliabechi to J. Gronovius, Florence, undated [1675], LMU, Cod 4° Cod. Msc 777, f. 28, "he makes everyone squeal and he would like that the poor actually die of hunger"; "Mi onori in ogni maniera di stracciar subito questo foglio, perche mai in tempo alcuno possa esser veduto da anima vivente. Ne la supplico per le viscere di Gjesù Cristo signore Nostro, e per tutte le sante Leggi dell'amicizzia".

¹⁸¹ About the establishment of the Blaeu firm see Djoeke van Netten, *Koopman in Kennis: De Uitgever Willem Jansz Blaeu in de Geleerde Wereld (1571-1631)* (Zutphen: Walburg Pers, 2014). See also, Gloria Moorman, 'Publishers at the Intersection of Cultures The Significance of Italo-Dutch Contacts in the Creation Process of Joan Blaeu's Theatrum Italiae (1663)', *Incontri* 30, no. 2 (2015): 70–79; Gloria Moorman, 'A Changing Perspective on the Eternal City Revealed Blaeu's Admiranda Urbis Romae (1663) Compared to Later Editions of the Town Atlas of Rom', *Quaerendo* 45 (2015): 108–24.

¹⁸² Moorman, Discovering Rome through Joan Blaeu's Admiranda Urbis Romæ: the creation of the town atlas of Rome (Amsterdam, 1663) in the light of Italian-Dutch relationships in the seventeenth century, 4.

¹⁸³ Ibidem, cit. 34. See also Alfonso Mirto and Henk Th. van Veen, Pieter Blaeu: Lettere Ai Fiorentini. Antonio Magliabechi, Leopoldo e Cosimo III de' Medici, e Altri, 1660-1705 (Amstedam/Maarssen: APA Holland University Press, 1993), 51.

¹⁸⁴ Cosimo to P. Blaeu, Florence, 4 April 1667, in Mirto and Van Veen, 313.

¹⁸⁵ Cosimo to P. Blaeu, Florence, 10 May 1667, in Mirto and Van Veen, 313, "regarding matters of new travels or knowledge of pilgrims, and recent"

2. TWO FLORENTINE COURTIERS: APOLLONIO BASSETTI AND ANDREA MONIGLIA

In stark contrast to the librarian Antonio Magliabechi, who never set a foot outside of Florence, a travel party of about forty Florentine courtiers accompanied Cosimo during his travels abroad. To keep memories alive of what Cosimo had seen during his travels, many of them wrote a diary. After their return to Italy, their travel accounts were edited by Cosimo's chamberlain Filippo Corsini (1647-1706) and bound into an official account of the Grand Tour, which is nowadays held at the *Biblioteca Medicea Laurenziana*.¹⁸⁶ The official diary is complemented by an album of drawings and watercolors containing representation of landscapes, fortresses, harbors, cities and churches, which are attributed to Pier Maria Baldi (c. 1630-1686), who had visited the Dutch Republic together with Cosimo.¹⁸⁷ A modern edition of the official account of Cosimo's grand tour was published in 1919 by the Dutch scholar Godefridus Joannes Hoogewerff and recently re-edited by Lodewijk Wagenaar.¹⁸⁸ Yet, as noted by Hans Cools and Carmen Radulet, Hoogewerff wrongly labelled the official account as Corsini's personal diary, claiming instead that the main author of the account is the Florentine intellectual Lorenzo Magalotti (1637-1713), who like Corsini had accompanied Cosimo on both trips.¹⁸⁹

The grand ducal secretary Apollonio Bassetti and the court physician and poet Giovanni Andrea Moniglia, who both accompanied Cosimo on his first trip to Germany and the Low Countries, also kept a diary. The journal that Bassetti kept during Cosimo's travels, is now preserved in the collections of the *Biblioteca Moreniana* in Florence.¹⁹⁰ The diary consists of two thin oblong volumes, closely written on both sides of the page in a, sometimes, rushed handwriting. Bassetti's diary is thus much less formal than the journal of Moniglia as it was mostly intended for personal use. The small booklet, in fact, could be easily held in Bassetti's pockets, making annotations of his observations and impressions along the way. In addition, as will be discussed in the following paragraphs, the diary of Bassetti served a larger purpose, functioning in effect like a field reporter's notebook, that later became an important source of inspiration to other travelers. Moniglia's journal, on the other hand, is completely composed in *terza rima* and can be found today in at least four surviving manuscripts in Leiden and Florence.¹⁹¹ Less informative and descriptive about the customs and practices of the Dutch, the diary has a strong literary value, mainly written to entertain, and to inspire its readers. Each of these diaries is thus completely different in nature, both in style and in content, yet they both show the fascination of the Grand Duke for the Dutch

¹⁸⁶ Florence, Biblioteca Medicea Laurenziana, Ms. Med. Pal. 12.

¹⁸⁷ See Radulet, 'Cosimo III Medici and the Portuguese Restoration: A Voyage to Portugal in 1668-1669', 3.

¹⁸⁸ Hoogewerff, De Twee Reizen van Cosimo de' Medici, Prins van Toscane, Door de Nederlanden (1667-1669). Journalen En Documenten. Other diaries described in the edition of Hoogewerff are from the grand ducal treasurer Cosimo Prié and the Bolognese physician Giovan Battista Gornia (1633-1684), the first of which kept a diary during the first voyage while the second wrote a journal of Cosimo's second trip. A new edition of Hoogenwerff's book is curated by Lodewijk Wagenaar, *Een Toscaanse prins* bezoekt Nederland: de twee reizen van Cosimo de Medici 1667-1669, trans. Bertie Eringa, (Amsterdam: Lubberhuizen, Uitgeverij Bas, 2014).

¹⁸⁹ Cools, 'A Tuscan Travel Party amongst the Frisian Natives. The Day Trip of Prince Cosimo to Stavoren and Molkwerum, 26 June 1669', 85; C.M. Radulet, 'Cosimo III Medici and the Portuguese Restoration: A Voyage to Portugal in 1668-1669', *E-Journal of Portuguese History* 1, no. 2 (2003): 1–8.

 ¹⁹⁰ Biblioteca Moreniana, Bigazzi 32, "Memorie delle occorrenze del viaggio intrapreso dal Ser.mo Principe Cosimo di Toscana per Alemagna, et Olanda il di 22 Ottobre 1667", 2 vols. (called hereafter *Memorie Bassetti*).
 ¹⁹¹ Giovanni Andrea Moniglia's travel journal ("viaggio del Serenissimo Principe Cosimo di Toscana descritto in sette Capitoli

¹⁹¹ Giovanni Andrea Moniglia's travel journal ("viaggio del Serenissimo Principe Cosimo di Toscana descritto in sette Capitoli dal dottore Giovanni Andrea Moniglia suo Medico") can be found today in the University Library of Leiden (BPL 3294), the State Archive of Florence (Cod. Mediceo, no. 6385), the National Library of Florence (Cod. Palatino 804) and the Biblioteca Medicea Laurenziana (cod. Antinori 85). Interestingly, Hoogewerff, in his 1919 edition of selections from the journal of Prince Cosimo's travels to the Low Countries, claimed that he knew that the travel journal of Moniglia existed but that he was unable to find it: "door schrijver dezes is vergeefs naar het handschrift een onderzoek gedaan. Zeer zeker zouden meer dan tweeduizend heroïsche terzinen in het verband der hier geboden teksten misplaatst zijn geweest, maar het is toch jammer, dat den lezer er zelfs geen proefje van kan aangeboden worden", cited in *De Twee Reizen van Cosimo de' Medici, Prins van Toscane, Door de Nederlanden (1667-1669). Journalen en Documenten*, LVIII-LIX.

Republic, possibly even more so than for any other state outside of Italy. Since Moniglia and Bassetti are essential to the conduct of this study, it is necessary to address here a brief sketch of their lives and role in the Grand Duchy of Tuscany.

Bassetti was born in Florence to the second charioteer of Cardinal Giovan Carlo de' Medici (1611-1663), the second son of Grand Duke Cosimo II of Tuscany (1590-1621). On discovering the intelligence and abilities of the young Bassetti, the Cardinal guided him towards an ecclesiastical career at the Medici court. From 1654 until 1662, Bassetti acted as the Cardinal's personal secretary where he was trained to handle paperwork and correspondence. After the death of the Cardinal, Bassetti's initial training opened the way to his purchase of a position under the then prime secretary of Grand Duke Ferdinando II de' Medici, Carlo Antonio Gondi (1642-1720).¹⁹² Shortly thereafter, the Grand Duke decided to appoint Bassetti in the service of the future heir to the Medici throne, prince Cosimo de' Medici. The decision to appoint Bassetti as secretary of Cosimo, marked a turning point in the career of Bassetti, who suddenly became responsible for managing the administrative apparatus of the future ruler of the Grand Duchy of Tuscany. Furthermore, the newly obtained function permitted him to accompany Cosimo on his Grand Tour through Northern Europe, which included first and foremost a visit to the Dutch Republic.

While the prince travelled to learn how to become a ruler, the grand tour prepared Bassetti for a career as prime secretary for which he had been destined upon return at the Medici court. In fact, when Cosimo ascended the Grand ducal throne, following the death of Ferdinando II, he secured Bassetti's position by appointing him *Segretario della Cifra* in 1670, which may be defined, as a modern-day equivalent, as the Secretary of State. For the next 30 years Bassetti would act as Cosimo's chief counsellor, confidant, advisor and friend, deciding not only over the future of the Grand Duchy, but also watching over the Grand Duke's consciousness. In fact, besides fulfilling his role as Cosimo's prime secretary, Bassetti was named Canon of the Church of San Lorenzo in 1666, the parish Church of the Medici family. This position strengthened his position as a clergyman, by placing him strategically in the center of ecclesiastical power in Florence.¹⁹³ Bassetti's role as both a states- and a clergyman finds its ultimate expression in the words of Giovan Battista Frescobaldi, prior of the Church of San Lorenzo, who wrote a eulogy after the death of Bassetti in 1699. According to Frescobaldi, Bassetti "così come in Corte era l'idea degl'uomini saggi, così in Chiesa era il modello degl'uomini religiosi".¹⁹⁴

In his history of the Grand Duchy of Tuscany, Galazzi, while he flattened Cosimo's reign to the level of mere bigotry, he recognized the important role of Bassetti:

"Era il Bassetti ammirato per la sua facondia, e le sue lettere erano accolte da per tutto come un modello di stile e di buon gusto nel trattare la lingua Toscana; dedito alli studj dell'antiquaria avea profittato della familiarità che teneva col Noris per formare una raccolta dei monumenti più rari di antichità degna di qualunque gran Personaggio. Si acquistò questo Ministro gran reputazione per tutta l'Italia, e a esso attribuivasi il merito delle più lodevoli risoluzioni di Cosimo". ¹⁹⁵

 ¹⁹² Francesco Martelli, 'A Corte e in Capitolo Apollonio Bassetti, Segretario Di Cosimo III Dei Medici e Canonico Di San Lorenzo, e Il Priore Giovan Battista Frescobaldi', in *San Lorenzo: A Florentine Church*, ed. Robert W. Gaston and Louis Alexander Waldman, Villa I Tatti Series (Cambridge: Harvard University Press, 2017), 633.
 ¹⁹³ Martelli, 639.

¹⁹⁴ Martelli, cit. 632, "Just like in court he was the idea of the learned men, so he was in the Church the model of the religious men".

¹⁹⁵ G. Riguccio Galluzzi, *Istoria del granducato di Toscana sotto il governo della casa Medici* (Firenze: Per Gaetano Camiagi Stam. Granducale, 1781), vol. VIII, 354.

According to Galluzzi, it was difficult for a man of his brilliance to receive the goodwill and support of the Grand Duke, who only "loved blind dependence and adulation".¹⁹⁶ Clearly, Bassetti was the mastermind behind Cosimo's efforts to curb the seemingly, yet inevitable decline of Tuscany.

"One shearling cloak, six pairs of woollen socks, two pairs of white gloves, three winter undercoats of cashmere-like wool and four warm trousers", these items were enlisted by Apollonio Bassetti in preparation for his upcoming travel to Germany and the Low Countries in the cold winter of 1667-1668.¹⁹⁷ Bassetti made part of the entourage who accompanied Cosimo on his first grand tour. During the voyage, Bassetti was responsible for all the incoming and outgoing correspondence of the Prince, he organized meetings with Dutch dignitaries, scholars and merchants and he kept Ferdinando II de' Medici up to date on the whereabouts of his son. Bassetti's travel experience resulted in a vast network of contacts throughout Europe, which kept him updated about the latest political, economic and cultural developments in each respective country. This extraordinary correspondence is still largely intact and comprises thousands of letters in the Medici Grand Ducal Archives in Florence.¹⁹⁸

While Bassetti took care of the prince's administration, the physician Giovanni Andrea Moniglia was responsible for his well-being. Moniglia received his early formal training from Jesuit institutions in Florence, and later entered the University of Pisa, where he earned his doctorates in both philosophy and medicine. In 1664, he was the private physician of Cardinal Giancarlo de' Medici (1611-1663).¹⁹⁹ After the death of the cardinal, he became the physician of Vittoria della Rovere (1622-1694), and, after the death of the Tuscan physician Francesco Redi in 1698, of Grand Duke Cosimo III. Besides his abilities as a physician, he also worked as a literary scholar, writing comedies and opera for the *Accademia degli Immobili* and the *Accademia della Crusca*, both literary academies in Florence. Moniglia is best remembered for his work the *Ercole in Tebe*, published in Florence in 1661, that he wrote in celebration of the marriage of Cosimo III with Marguerite Louise of Orléans.²⁰⁰ From 1667 until 1681, Moniglia held a chair in practical medicine at the University of Pisa, and from 1681 until his death he assumed a chair in female medicine ("de morbis mulierum") at that same university.²⁰¹

Moniglia is best known for his quarrelsome character, episodes of which are a clear thread running through this study. Gabriel Maugain has even labelled him as "l'adversaire le plus dangereux des modernes dans le dernier tiers du XVIIe siècle".²⁰² Because Moniglia had an influential position at the University of Pisa, he could make scholarly reputations as easily as he could break them. He is known to have sabotaged the career of many university professors, including, amongst all, the Dutch philologist Jacob Gronovius (to which we return in the fifth chapter), the lawyer Federico Nomi (1633-1705), and the satirist Benedetto Menzini (1646-1704). Moreover, in 1670, Andrea Moniglia had initiated, together with other more conservative members of the Pisan faculty, a conflict against the followers of Galileo, including Lorenzo Bellini (1643-1704), Donato Rossetti (1633-1686), and Alessandro Marchetti (1633-

¹⁹⁶ G. R. Galluzzi, *Istoria del Granducato di Toscana sotto il governo della casa Medici*, vol. VII (Florence: Stamperia Vignozzi, 1781), 83-85.

¹⁹⁷ ASF, Miscellanea Medicea, 368, cc. 1366, "Appunti per lo svolgimento del lavoro di segreteria, presumibilmente durante il mandato di Apollonio Bassetti".

¹⁹⁸ For the correspondence between Bassetti and the Dutch Republic: ASF, MdP, Fiandre & Olanda, 4260-4265.

¹⁹⁹ Marco Catucci, 'Moniglia, Giovanni Andrea', http://www.treccani.it//enciclopedia/giovanni-andrea-moniglia, last accessed 16 January 2019.

²⁰⁰ Giovanni Andrea Moniglia, Ercole in Tebe: festa teatrale rappresentata in Firenze per le reali nozze de' serenissimi sposi Cosimo terzo, principe di Toscana, e Margherita Lvisa, principessa d'Orleans (Fiorenza: nuoua stamperia all'insegna della stella, 1661).

²⁰¹ Ridolfo Del Gratta, 'I docenti e le cattedre dal 1543 al 1737', in *Storia dell'Università di Pisa 1343-1737*, ed. Pisa Commissione rettorale per la storia dell'Università di Pisa, vol. 1.2 (Pisa: Edizioni PLUS Università di Pisa, 1993), 526.

 ²⁰² Franco Carnevale, 'Ramazzini vs. Moneglia: Una "Terribile" Polemica Medica Seicentesca', *Medicina & Storia* XI (2011):
 213.

1714).²⁰³ This controversy ended with a victory for Moniglia and his followers: a *de facto* prohibition was issued preventing the teachings of atomist and Galilean doctrine at the University of Pisa.²⁰⁴ Outside the walls of the university, Moniglia's main quarrel with his contemporaries concerned the death of the marchioness Maria Maddalena Bagnesi. The person involved in this quarrel was the physician Bernardino Ramazzini (1633-1714), who was, in 1681, called to the bedside of Maria Maddalena who, only a few hours after giving birth, was in a very grave condition. After her death, Ramazzini wrote a medical rapport in which he confirmed that, although she had died because the placenta was not expelled, a manual removal of the placenta would not have saved her life. The rapport was frowned upon by Moniglia who accused Ramazzini for not removing the placenta. This disagreement marked the start of a four-year debate that instigated sixteen publications between Moniglia and Ramazzini regarding their respective medical abilities.²⁰⁵ The quarrel between Ramazzini and Moniglia led to another confrontation, this time with the physician Giovanni Calvoli Cinelli (1626-1706). In his publication, the Quarta Scanzia, published in Naples in 1682, Cinelli endorsed the position of Ramazzini.²⁰⁶ Moniglia, offended by Cinelli's publication, managed to convict Cinelli out of revenge and he ended up in prison for 93 days. Moreover, all copies of the Quarta Scanzia were burned on the 11th of March 1682 in the inner courtyard of the Bargello prison in Florence. These events are extensively described in Magliabechi's letters to his Dutch correspondents:

"Non voglio tralasciare di accennarle, quel che sue, acciocché tanto maggiormente V.S.Ill.ma vegga, in che miserabili tempo qua siamo. Il povero Cinelli, compose la quarta Scanzia, nella quale offese leggerissimamente quell'infamissimo Medico. Non la fece stampare, perché la mando manoscritto a Modena al signore Ramazzini, che fu quello che la fece stampare in Venezzia. Non ostante per tanto che avesse offeso leggierissimamente quell'empio, e che non l'avesse fatta stampare, e che non fosse stampata qua, con tutto ciò, fu tenuto tre mesi in segrete; gli furono dati mille gastighi e gli fu il Libretto abbruciato pubblicamente per mano del Boia, col suono della Campana del Bargello, come quando va a impiccarsi qualcuno."²⁰⁷

From this passage we learn that Magliabechi spoke up for Cinelli, as he did for many scholars that became victim of Moniglia's vicious attacks. This, as we will see in the following chapters of this study, put Moniglia into a rage, who subsequently tried to do everything, ranging from the spreading of fake news reporting the death of Magliabechi to revenge publications, to undermine Magliabechi's reputation.

3. The travel accounts of Bassetti and Moniglia

At the time of Cosimo's grand tour, the Dutch Republic had become a major center of trade, technology, science and learning in seventeenth-century Europe. A laissez-faire attitude towards commerce and a

²⁰³ The letters between Alessandro Marchetti and Magliabechi shed light on this conflict (University Library of Pisa, MS. 356 (cc. 59-69) and 357 (cc. 73-278)), several of which are transcribed in Nicola Carranza, 'Antonio Magliabechi e Alessandro Marchetti', *Bollettino Storico Pisano*, no. XXVIII–XIX (1960 1959): 393–446.

²⁰⁴ Renée Raphael, Reading Galileo: Scribal Technologies and the Two New Sciences (Baltimore, Johns Hopkins University Press, 2017), 130–31.

²⁰⁵ Franco Carnevale, 'Ramazzini vs. Moneglia: Una "Terribile" Polemica Medica Seicentesca', Medicina & Storia XI (2011): 213.

²⁰⁶ Giovanni Calvili Cinelli, Della Biblioteca Volante Di Giovanni Cinelli Accademico Gelato Scanzia Quarta (Napoli, 1682), 6-7.

²⁰⁷ Magliabechi to J. Gronovius, Florence, undated, LMU, Cod 4° Cod. Msc 778, f. 26, "I do not want to forget to mention that, so that V.S.Ill.ma sees, in what miserable time we are here. The poor Cinelli, who composed the fourth Scanzia, in which he very lightly offended that very infamous Doctor. He did not print it, because the manuscript was sent to Modena to sir Ramazzini, who was the one who printed it in Venezzia. In spite of the fact that he had offended that villain very lightly, and that he had not printed it, and that it was not printed here, with all this, he was kept in prison for three months; he was given a thousand strokes and the Booklet was burned publicly by the Executioner, with the sound of the bell of the Bargello, as when someone will be hanged."

relatively tolerant intellectual and religious environment allowed the Dutch Republic to grow into one of Europe's most progressive and cosmopolitan societies. These thriving conditions made the Dutch Republic a popular destination for foreign travelers, including Cosimo, who visited the country twice to observe and learn from a culture that was far removed from his own. Upon the arrival of Cosimo's travel party from Florence to Utrecht on the 17th of December 1667, Moniglia wrote the following:²⁰⁸

Ma già pel'fosso alle Muraglie intorno Utrecht Piazza fortissima si gira Un ora in circa avanti al mezzo giorno,

Ivi del circuito si rimira Il largo spazzio, onde posare il Piede Dentro alle porte cirascheduno aspira, Ove purgiunti, oh quanto ben si vede L'ordine delle cose, e che l'Olanda Dei tesori di Spagna è fatta Erede.

Ivi il Pubblico regge, e sol comanda Quant'utile conosce, e cortesia, Se guadagno non è mette da banda.

With the Grand Duchy of Tuscany under the sway of strong hereditary princes, the Dutch Republic appeared in the eyes of Moniglia as a society where the citizens ought to rule themselves. In fact, as opposed to the centralized controlled state of the Grand Duchy of Tuscany, the Dutch Republic was rather fragmented without a central government – a country where "il pubblico regge, e sol comanda" – to use the same words of Moniglia. This federated form of government in the Dutch Republic was strongly advocated by political thinkers like the Grand Pensionary of Holland Johan de Witt, with whom Cosimo became acquainted during his grand tour. In his *Deduction* of 1654, De Witt wrote in defense of the adoption of the Act of Seclusion earlier that same year, which debarred the prince of Orange and his descendants from holding office in the State. De Witt's *Deduction* consisted of an oration praising Holland's absolute sovereignty and true freedom, denying any rights to the States General and the House of Orange. De Witt held that high positions cannot be assigned in a republic to those whose ancestors held these posts, without considerable peril to freedom. Interestingly, when De Witt discoursed about bad examples of Republics in Europe, he referred especially to Florence under the Medici rule, which had lost its splendor because an "eminent head" that was inherently dangerous, had damaged the freedom of the Republic.²⁰⁹

The Witt's idea that the Grand Duchy of Tuscany suffered under ineffectual Medici rule, connects to a long history in literatures critical of the political regime of the Medici family, especially under Cosimo III. The 1970s gave rise to a large number of studies that presented the traditional view of Cosimo's III reign as one characterized by bigotry, depression and intellectual obscurantism. Furio Diaz, for instance, depicts Cosimo as a weak mind, who wholly abandoned the government of his state for the sake of blind devotions, spending hours in prayer and surrounding himself with friars and priests.²¹⁰ Similarly, Christopher Hibbert writes that "Florence is much sunk from what it was", focusing mainly on Cosimo's zeal for gaining converts to Catholicism, providing pensions to foreign protestants who were willing to abandon their faith.²¹¹ Eric Cochrane presented a more nuanced, and rather generous, view of Cosimo's reign, which was, according to the latter, "certainly no worse, and probably somewhat better, than that of most other states at the time".²¹² Although they partially rehabilitated the long-vilified view of Cosimo's reign, they did not deviate from the fact that Cosimo's religious inclinations were more important than

²⁰⁸ Giovanni Andrea Moniglia, 'Viaggio del Ser.mo Principe Cosimo di Toscana. Descritto in sette Captioli dal Dot.re Gio. And.a Moniglia suo Medico [called hereafter *Viaggio Moniglia*], UBL, BPL 3294, f. 43.

²⁰⁹ Jonathan I. Israel, The Dutch Republic: Its Rise, Greatness, and Fall, 1477-1806 (Oxford: Clarendon Press, 1995), 725–726.

²¹⁰ Furio Diaz, Il Granducato di Toscana. I Medici (Turin: UTET, 1976), 494.

²¹¹ Christopher Hibbert, The rise and fall of the House of Medici (London: Allen Lane, 1974), 302

²¹² Eric Cochrane, Florence in the forgotten centuries 1527-1800 (Chicago-London: The University of Chicago Press, 1973), 272.

the government of his own state. To use the words of Cochrane, Cosimo's "exemplary piety was constantly commended by the papal states."²¹³ Many grounds concurred to form this judgement over the centuries and there is no doubt that it contains some truth. Contemporary sources attest to this. For instance, the letters of Cosimo's librarian, Magliabechi, read in part that Cosimo III "non si cura più niente degli Studi, ma della pietà".²¹⁴ In addition, in July 1696, Magliabechi wrote to the Dutch scholar Jacob Gronovius that "Questi Serenissimi Principi non comprano Libri, essendo qua per le Lettere, e per gli Studi, finita ogni cosa affatto".²¹⁵ He scrabbled these words on a small piece of paper, separate from the main letter, ready to be burned.²¹⁶

Returning to Moniglia's travel diary, Moniglia amply praises the Dutch Republic the moment Cosimo's travel party arrived in Amsterdam on the 19th of December 1667. He underlined that the Dutch economy was stimulated by Dutch maritime superiority and commercial expansion across the world, which made the Republic "la più ricca Città di questo mondo":²¹⁷

Scendi Apollo (ti prego) e con giocondo	In terra è formidabile, immortale
Aspetto per lodar, prepara i carmi	Nel mar s'è resa, e a maggior grado ancora
La più ricca Città di questo Mondo.	Nel buon governo imperiosa sale.
Non di Macchine eccelse, e non di marmi	Quivi non si dipinge, e non s'infiora
Tratti dal sen di Paro, e non d'Eroi	Il volto, e 'l seno di tenera Donzella
È fecondo Amsterdam, ma toghe, ed Armi	ne gemmato monile il collo indora,
Ha tante quante bastano; ma poi	Quanto semplice più, tanto più bella
In politica, e in ora, a questa eguale	Tra vesti umili, e pari Lini avvolta
Nell'ampio giro tuo trovar non puoi	Tratta gl'affari suoi pulita, e snella.

Seventeenth-century Amsterdam was characterized by its canal houses, ports and warehouses which mirrored the extent and success of its overseas trade. Florence, on the other hand, with its churches, palaces, marbles, statues, nobles, priests, its religious festivities, and a population immersed in religion, was the complete opposite. Once arrived in Amsterdam, Moniglia noted, as shown above, that the wealth of the city is not mirrored in the majesty of its buildings and statuaries, but rather in "toghe, ed armi" – learning and warfare. In addition, Moniglia describes the Dutch people as simple and modest, but effective and with faith in the prosperity of their business. In fact, the women are simply dressed, without any jewelry and make-up, running their business with honesty and efficiency.

The thriving commercial conditions in the Republic, attracted the attention of many foreign merchants, including many from the Grand Duchy of Tuscany. With the end of the Thirty Years' war, there was a grain crisis in Europe, and large parts of Southern Europe were threatened by famine. Partly because of this, the relations between the Grand Duchy of Tuscany and the Dutch Republic improved, who began to trade large quantities of grain.²¹⁸ Consequently, numerous Italian merchants established

²¹⁷ Viaggio Moniglia, f. 47, "The richest city in the world".

²¹³ Cochrane, 299.

²¹⁴ Magliabechi to J. Gronovius, Florence, undated [1676], LMU, Cod 4° Cod. Msc 778. f. 8, "does not care about scholarship at all, only about compassion".

²¹⁵ Magliabechi to J. Gronovius, Florence, July 1696, LMU, Cod 4° Cod. Msc 778. f. 23, "These Serene Princes do not buy any books because here the literature and scholarship are completely terminated"

²¹⁶ *Ibidem*, "Per le viscere di Gjesù Cristo, e per tutte le sante leggi dell'amicizzia, prego V.S.Ill.ma, a stracciar questa carta, subito che l'avrà letta, scrivendolela io in estrena segretezza, e confidenza, ed in sigllo di confenssior naturale, perche mai in tempo alcuno, possa esser veduta da anima vivente".

²¹⁸ Antonella Bicci, 'Immigration and Acculturation: Italians in Amsterdam', in Rome * Amsterdam. Two Growing Cities in Seventeenth-Century Europe, ed. Peter van Kessel and Elisja Schulte, n.d., 250–51.

themselves in Amsterdam, who became mainly active in trading with the Iberian Peninsula and the Spanish colonies, particularly in the Spanish wool trade and the slave trade. Francesco Feroni, immigrating to Amsterdam in the 1640s, is exemplar of this phase of the Italians' activity in the Dutch Republic. Another wave of Italian immigration took place in the second half of the seventeenth century, which coincides with the sudden upswing of Florentine's companies *in accomandita* or limited partnerships abroad.²¹⁹ This third phase is illustrated by the presence of the Florentine merchants Giovacchino Guasconi, Giuseppe Marucelli, and Giovanni de Verrazzano, who had established their trading companies in Amsterdam in the 1660s. The fact that the various branches of their families were spread throughout Europe, made them very attractive partners for the merchants of Amsterdam, and not only for them, but for Cosimo III as well.

On the 17th of December 1667, Cosimo became acquainted with Guasconi, Marucelli and De Verrazzana, who arrived in Utrecht "in una barca bella guarnita di specchi" to celebrate Cosimo's arrival in the Dutch Republic.²²⁰ They were accompanied by Francesco Feroni, the "prima figura" of the company, who was firmly put at the focus of attention "essigendo da quei cavalieri un gran rispetto".²²¹ That their business was booming at the time of Cosimo's visit, is underlined by Moniglia, who sums up his first impressions of these merchants "ingrassati":²²²

Allor sentiamo di sono arrivati	E con ordine poscia accorto, e bello
D'Amsterdam i Mercanti Fiorentini	Racchiusi in Casse ad Amsterdam mandati
Tutti con buona Cera, ed ingrassati,	Avea del Celibi sopra un Vascello;
E doppo mille baciabassi, e inchini,	Onde qual ora fussimo arrivati
Fatti da loro al Principe; Al Feroni	Dal prezioso Elisir, che Bacco stilla
Volta l'Altezza Sua, disse i miei vini	Venissero gli spirti ravvivati;
Son anco giunti? Avean provoissioni	Con tal speranza ogn'alma si tranquilla
Il Principe, di Chianti, e di Castello	Dicendo; in Amsterdam berem per bene,
Fatte in Firenze delicati, e buoni,	E d'allegrezza inpetto il cuor ci brilla.

Once arrived in Amsterdam, Cosimo and his traveling companions visited the headquarters of the East and West Indian Trading Companies. Here, they witnessed how the ships of the VOC and WIC brought into the Dutch Republic a wide variety of goods and curiosities from all corners of the world. They paid a visit to the company's warehouse, where pepper, nutmeg, cinnamon and cloves were collected and assigned an estimated value for the market:

"Nel suddetto Palazzo sono però i magazzini di tutte le merci che vengono d'India, in genere di droghe, et un altro ne anno nel cuore della città ove stanno le merci fini d'alta natura, come gioie, Telerie, udori e cose diverse. Nel primo vedole S.A. tutte le stanze, altre piene di centinaia di botti di noci mostarda altre, di Pepe, a migliara e migliara di moggia, spalato et ammortato sino al tetto, come usa nelli magazzini del grano, altre di migliara di balle di cannella, altre di garofani il cui valore ascende a millioni di fiorini".²²³

²¹⁹ Bicci, 253.

²²⁰ Memorie Bassetti, vol. 1, c. 135, "boat beautifully decorated with mirrrors".

²²¹ Ibidem, "demanding from these gentlemen great respect."

²²² Ibidem, "fattened".

²²³ Memorie Bassetti, vol. 1, c. 142, "in that same building there are however the stockrooms of all the goods that come from the Indies, which generally consists of herbs, and they have another one in the heart of the city where there are the fine goods of different nature, like jewels, fabrics, perfumes, and diverse things. In the first one Your Highness sees all the rooms, and he sees other rooms full of hundreds of bottles of nutmeg, others with thousands and thousands bushells of peper, shovelled

Moreover, The Republic's remarkable political structure and absence of a state religion impacted all branches of Dutch society, especially the printing industry. In fact, the relatively open government culture, with its religious tolerance and freer censorship policies, made Amsterdam the "magazin de l'universe".²²⁴ Printers benefitted from the lack of control, and could take advantage and profit from the stricter conditions in other countries. As a result, the Dutch printing industry flourished in the seventeenth century as information and books flowed into and out of the Dutch Republic, with Amsterdam as its printing capital.²²⁵ Not for nothing, Magliabechi referred in his letter to the Huguenot printer Pierre Huguetan in Amsterdam that he was in a country where "è lecito liberamente lo stampare ciò che vuole".²²⁶ The wealth of books in the Low Countries did not go unnoticed by Bassetti and Moniglia, who, together with prince Cosimo, visited libraries, bookshops and printer's workshops throughout their visit in the Dutch Republic. Moniglia records these moments as follows: ²²⁷

In ampie stamperia veddi infinito Gran numero di libri, dissi allora Perché di noble non son io fornito?

Il Principe Padron, che sempre onora Il mio debol talento, entro la soglia Di Camera mi chiama, e caccia fuora. Cent'ungheri; a me donagli; m'invoglia Di far nobile spese; I libri piglio Ma di studiargli m'andò via la voglia.

In Amsterdam, the Amsterdam bookseller Pieter Blaeu guided Cosimo and his travel companions to his own printing shop, where they spent hours examining and buying all sorts of books and maps:

"Si portò a veder carte recondite, e situazione di luoghi diversi disegnati delli paesi d'India. Le furono mostrati varij libri d'immagini, che mostrano li abiti, il costume e molte azioni de' popoli d'India, di China, e del Giappone e trattò di comprarli."²²⁸

Through Blaeu, Cosimo became also acquainted with the lawyer Laurens van der Hem (1621-1678). Together they paid a visit to the renowned collections of the Amsterdam lawyer, admiring "disegni di città, luoghi, e coste dell'Indie eccellentemente miniati, et un gran numero di carte geografiche universali e particolari pur manufatte". In the Hague, Cosimo visited the library of Isaac Vossius (1618-1689), which was "ricca di manoscritti".²²⁹

The universities contributed to the flourishing of the printing industry as well. Five of the seven provinces boasted institutions for higher education, of which the University of Leiden, founded in 1575, was the oldest and most important one.²³⁰ At the time of Cosimo's visit, the University had attracted an

and amortized up to the cealing, as used in the storage of grain, others with thousands of bales of cinnamon, others with carnations, the value of which comes down to millions of Florins".

²²⁴ Christiane Berkvens-Stevelinck et al., eds., Le Magasin de L'Univers: The Dutch Republic as the Centre of the European Book Trade: Papers Presented at the International Colloquium Held at Wassenaar, 5-7 July 1990 (Brill Publishers, 1992).

²²⁵ Andrew Pettegree and Arther der Weduwen have shown that the Dutch produced more printed items per head than any other country in Europe, and by quite some considerable margin, publishing at least 357.500 editions in the seventeenth century alone (What Was Published in the Seventeenth-Century Dutch Republic?', *Livre – Revue Historique*, 2018, 1).

²²⁶ Magliabechi to P. Huguetan, undated, UBL, PAP 15, "it is freely legitimate to print whatever he wants".

²²⁷ Viaggio Moniglia, c. 53.

²²⁸ Memorie Bassetti, c. 143, "He was led to see secret maps, and situations of various places of India. He was shown various books with images, that show the customs, clothes and many activities of de population of India, China, and Japan and he negotiated to buy them".

²²⁹ Memorie Bassetti, c. 49, "rich in manucripts".

²³⁰ See Paul G. Hoftijzer, 'The Dutch Republic, Centre of the European Book Trade in the 17th Century', *European History* Online (EGO), http://www.ieg-ego.eu/hoftijzerp-2015-en, last accessed 1 April 2019, cit. 4.

international faculty with some of the foremost scholars of the day including Nicolaas Heinsius (1620-1681), Johannes Fredericus Gronovius (1611-1671), Franciscus de le Boë Sylvius (1614-1672) and Johannes Van Horne (1621-1670). During his visit at the University of Leiden, Johannes Fredericus Gronovius welcomed the Grand Duke with a Latin oration. After the session, leaflets with other poems in honor of Cosimo were distributed, which were later included in a published edition.²³¹ In Leiden, Nicolaas Heinsius acted as their guide, and together they paid a visit to the printing office of the Elzevier firm, which was located right next to the academy building and the botanical garden:

"Nel cortile preambolo al liceo, vi è un elegantissimo, e ben tenuto orto di semplici, pieno assai di piante rare. Havvi ancora la famosa stamperia dell'Helzeviro librario d'Amsterdam che anche qui come ad Utrecht fa andare tale officina. In questa sono sei torchi, ed huomini esperti che sempre lavorano, e godono il benefizio di tutti li professori della facoltà che prestano ogni opera più cortese alla correzione."²³²

In Leiden, the Elzeviers served as university printers from 1620 to 1713, thanks to their large assortment of typefaces, including commercially unattractive fonts such as Arabic, which were used to print the oriental studies and text editions of the Leiden professors.²³³ The Heinsius family had an influential position in the Elzevier firm. Nicolaas' father, the renowned philologist Daniel Heinsius (1580-1655), had been a trusted advisor of the publishing house in Leiden, while Nicolaas had that same position for the Elsevier branch in Amsterdam. Specifically, Heinsius was the advisor and a good friend of Daniel Elsevier, who, on the 7th of January 1668, had presented himself to the Grand Duke and gave him several books that just came off his press in Amsterdam.²³⁴ A business correspondence between Daniel Elzevier and the Medici family, however, did not come off the ground once Cosimo returned to the Grand Duchy of Tuscany. He rather preferred to rely on the intermediation of Nicolaas Heinsius. Only in exceptional cases, when Heinsius was too busy, the Grand Duke ordered the merchant Guasconi to contact Elzevier directly: "S.A. comprerà volontieri tutti i volumi segnati in questo istesso foglio, però dice che ella ne sia coll'Elzeviro e se ne intenda anche con l'Heinsio, al quale se ne scrive, se il tempo della vendita stingesse si che V.S.ill.ma non potesse provedere con la direzione di Mons. Heinsio, vuole L'A.S. che ella con l'Elzeviro faccino nel'miglior modo".²³⁵

²³¹ Chris L. Heesakkers, 'An Lipsio Licuit et Cunaeo Quod Mihi Non Licet? Petrus Francius and Oratorical Delivery in the Amstrdam Athenaeum Illustre.', in *Ut Granum Sinapis: Essays on Neo-Latin Literature in Honour of Jozef IJsewijn*, ed. Gilbert Tournoy and Dirk Sacré, Supplementa Humanistica Lovaniensia, XII (Leuven: Leuven University Press, 1997), 333.

²³² Memorie Bassetti, c. 28, "In the inner courtyard there is a very elegant and well-kept botanical garden, very full of rare plants. There is also the famous printship of the Elzeviers, booksellers of Amsterdam, who manage here, as in Utrecht, the office. In this one there are six presses, and expert men who always work, and whose work benefits from the faculty professors who provide them to correct their work with courtesy".

²³³ Hoftijzer, 'The Dutch Republic, Centre of the European Book Trade in the 17th Century', cit. 24. For more about the Elsevier's publishing activities, see William Davis Davies, *The World of the Elseviers, 1580–1712* (Dordrecht: Springer, 1954); Paul G. Hoftijzer, ed., *Boekverkopers van Europa. Het Zeventiende-Eeuwse Nederlandse Uitgevershuis Elzevier* (Zutphen: Walburg Pers, 2000); Paul G. Hoftijzer, 'The Dutch Republic, Centre of the European Book Trade in the 17th Century Dutch Book Trade', *European History Online (EGO)*, 2015, 1–31; Alphonse Willems, *Les Elzevier: histoire et annales typographiques* (Brussels: G.A. van Trigt, 1880). Paul G. Hoftijzer, 'Between Mercury and Minerva: Dutch printing offices and bookshops as intermediaries in seventeenth-century scholarly communication', in *Les grands intermédiaires culturels de la République des Lettres*, ed. Christiane Berkvens-Stevelinck and Hans Bots (Amsterdam/Maarssen: Honoré Champion Éditeur, 2005), 119-131.

²³⁴ Memorie Bassetti, vol. 2, c. 22. For the relationship between Heinsius and Elzevier see William R. Veder, Brieven van Daniël Elsevier Aan Nicolaas Heinsius (9 Mei 1675-1 Juli 1679). Volgens Het Handschrift, Bewaard Ter Universiteits-Bibliotheek Te Utrecht, Met Enkele Aanteekeningen Uitgegeven Door de Vereeniging Ter Bevordering van de Belangen Des Boekhandels., vol. 3, Bijdragen Tot de Geschiedenis van Den Nederlandschen Boekhandel 2 (Amsterdam: Van Kampen, 1890).

²³⁵ Bassetti to Guasconi, Florence, 17 April 1674, ASF, MdP, 4262, f. 366, "Your Highness would like to buy every volume indicated in that sheet, and discuss it with both Elzevier and Heinsius, to whom a letter has been written. In these cases the time of the sale is running out, and if Your Illustrious Lordship is unable to make provisions with Heinsius, Your Highness wants that you work together with Elzevier in the best possible way".

At the University of Leiden, Cosimo also visited the anatomical theatre and the university library, which however did not live up to the expectations of the Grand Duke:

"Apresso fu condotto al Teatro dell'anatomia che è giusto come quello di Pisa, quanto all'auditorio, ma ornato di moltissimi scheletri ben collegati, d'huomini e d'animali grossi e minuti, tenestrie, aerei, aquatili, et anfibij, et di più di alcuni armarij di rarità naturali curiose in genere di animali, piante, conchiglie, minerali e cose di tal natura, donate da diversi huomini dotti, secondo a ciascuna cosa canta l'inscrizione. Tutto insieme, l'aggregato di questo teatro non ha punto del singolare, e del grande. Vi è vicina, e congiunta nello stesso ceppo di fabbriche la pubblica biblioteca a comodo della studiosa gioventù in cui né per qualità né per quantità di libri, né per ornamenti, né per nessun'altra circostanza, non si vede nulla di riguardevole, onde S.A. presto se ne sbrigò."²³⁶

Cosimo also frequented botanical gardens and cabinets of curiosities to learn about the new discoveries of natural history and anatomy, never ceasing to admire the numerous shells, animals, and plants that the Dutch had imported from the East and West Indies. In fact, it was thanks to trading networks of the East and West India Trading Companies that Cosimo could admire so many exotica in the Dutch gardens and cabinets of curiosities.²³⁷ For instance, on the 27th of December 1667, Cosimo and his travelling companions visited in Amsterdam the famous aviary of birds belonging to secretary Jan Roeters (1614-1668), who had collected birds from every corner from the world:

"Si condusse ad un Giardino fuori della città pel vedere certo serbatorio d'uccelli raccolti da uno che si dilettava conservarne di tutte le spezie reperibili in qualunque parte del mondo, i più pellegrini, e rari: onde d'India Orientale, e d'America vi sono cose bellissime. Appunto in tal giorno era morto il Padrone di tal luogo che faceva questa professione signore Routers segretario della città. Et nel medesimo punto erano anche morti due uccelli singolari, non senza molta ammirazione della gente."²³⁸

Then, the next day, they visited the private collections of Johan Wttenbogaert (1608-1680), who for the last 50 years had collected shells and minerals "quanto hanno mai condotte tutte le navi d'Indie, et d'altre parti del mondo.²³⁹ In addition, on the 4th of January they decided to pay a visit to the house of the renowned anatomist Frederik Ruysch (1638-1731). Ruysch's cabinet was one of the must-sees of contemporary Amsterdam, and Bassetti was stunned by the collection's rich display of anatomical specimens and wondered how the anatomist had prepared the specimens to look so alive, referring to a

²³⁶ Memorie Bassetti, c. 152, "Hereafter he was led to the anatomy theater which is just like the one in Pisa, as is the auditorium, but adorned with very many skeletons well bound together, of men, large and small animals, terrestrial, aerial, aquatic, and amphibian, and more cabinets filled with curious natural curiosities of all sorts of animals, plants, shells, minerals and things of that nature, donated by several learned men, as is chanted by each description. All together, this aggregate theater has nothing singular, or substantial. Nearby, and in the same strain of buildings, there is the public library, at the convenience of the young students in which, neither for its quality, nor for its quantity of books, neither for its ornaments, nor for any other circumstance, one does not see nothing of consideration, and so Your Highness quickly hurries away [from the library].

²³⁷ Dániel Margócsy, *Commercial Visions: Science, Trade, and Visual Culture in the Dutch Golden Age* (Chicago/London: The University of Chicago Press, 2014), 2. See also Eric Jorink, *Reading the Book of Nature in the Dutch Golden Age, 1575–1715*, trans. Peter Mason, vol. 191, Brill's Studies in Intellectual History (Leiden/Boston: Brill Publishers, 2010).

²³⁸ Memorie Bassetti, c. 172, "he is led to a garden outside the city to see a certain reservoir of birds gathered by a men who desired to conserve from all species available in every part of the world, the most foreign and rare ones, amongst which there are beautiful things from the East Indies and America. On that day, the proprietor of that place died, sir Routers, who was the secretary of this city. At the same time, two singular birds died as well, non without great admiration of the people."

²³⁹ Memorie Bassetti, vol. 2, c. 8, "ever brought by every ship from the Indies, and other parts of the world. About Wttenbogaart see S.A.C. Dudok van Heel, 'Mr Johannes Wtenbogaert (1608-1680), Een Man Uit Remonstrants Milieu, En Rembrandt van Rijn', Jaarboek Genootschap Amstelodamum 70 (1978): 146–69; See also Oscar Gelderblom, The Political Economy of the Dutch Republic (New York: Routledge, 2016), 132–33.

"cadavero di un Putto così ben conservato, che par vivo".²⁴⁰ In Leiden, on the 9th of January, they visited the renowned botanical garden of the University, which was "ben tenuto" and "piena assai di piante rare".²⁴¹ Moreover (although both Bassetti and Moniglia does not make mention of it) they visited the collection of insects of Jan Swammerdam (1637-1680). Cosimo was so fascinated by Swammerdam's collection that he offered the Dutch scientist 12.000 guilders for the collection, on condition that Swammerdam settled in the Florentine court.²⁴² Although the purchase of this cabinet failed, Cosimo remained interested in how these natural curiosities were collected in the Dutch Republic. For instance, in 1714, as will be explained in more detail below, Cosimo sent the botanist Jacopo Guiducci to the Dutch Republic to inform him about the present state of affairs of these collections and curiosities.

The appraisal of a city's fortification and technical innovations forms a central topic in the travel account of Bassetti, a fact that, as will be discussed in more detail later on, had significant relevance to his and Cosimo's future ambitions to deal with the many technological shortcomings in the Grand Duchy of Tuscany. During his travels, Bassetti had every opportunity to study the technical qualities of the Dutch. They had arrived in the Low Countries by means of a canal boat, with which they had travelled all the way from the German border to Amsterdam. Along the way, Bassetti spent his time inspecting fortresses, canals and water works. In Schenkenschans, for example, he witnessed a "fortezza delli Olandesi sopra la punta d'una lingua di terra" which was strategically build at the bifurcation of the Rhine to Arnhem.²⁴³ In Utrecht, as noted earlier, he observed the way the Dutch defended their territories against their enemies, how they controlled water in an efficient manner, and used windmills to cut wood.

Religion figures prominently in the organization of Cosimo's grand tour. As pointed out in the entries of their diary, nowhere than in Amsterdam, Bassetti and Moniglia witnessed a greater diversity of religions.²⁴⁴ They visited churches, both Catholic and Protestant, and even went to a service at the Portuguese synagogue in Amsterdam. Inside the synagogue, a private residence was prepared for the Prince, who was received with open arms by the Hebrew community. Yet, according to Bassetti, Cosimo "non ne usò punto e vi si trattenne anche poco", preferring the hospitality in the house of the merchant Feroni instead.²⁴⁵ In an entry of the 26th of December 1667, Bassetti reports that Cosimo "volle vedere diverse chiese d'Eretici", a clear indication of Cosimo's curiosity towards the religious traditions of the countries he visited.²⁴⁶ Consequently, they visited "una chiesa di Luterani, in una d'Anabattisti, in una di Sociniana et in una di Arminiana, che sono tutte religioni differenti". Following that, they went to the principal Calvinist Church of Amsterdam, nowadays called the *New Church*, which was, and still is located at the Dam square. The church had attracted much of their attention: "edificiato già da i Cattolici" the church was "magnifico, e superbo per ogni circostanza".²⁴⁷

Upon entry into the Church, Bassetti immediately observed the interior to be "semplice" noting that the Reformists "non tengono in Chiesa imagini d'alcuna sorte".²⁴⁸ Moreover, he noticed that there

²⁴⁰ Memorie Bassetti, vol. 1, c. 166, "corpse of a *putto* (chubby male child) that well-perserved, it seems real."

²⁴¹ Memorie Bassetti, vol. 1, c. 144, "well maintained"; "very full of rare plants". For a decription of Ruysch's cabinet, see Jorink, *Reading the Book of Nature in the Dutch Golden Age*, 1575–1715, 319–25.

²⁴² Jorink, 314.

²⁴³ Memorie Bassetti, vol. 1, c. 128, "fortification of the Dutch build upon the point of a strip of land"

²⁴⁴ On religious diversity in the Dutch Republic, see Willem Frijhoff, La coexistence confessionnelle. Complicités, méfiances et ruptures aux Provinces Unies", in *Histoire vécue du peuple chrétien*, ed. Jean Delumeau, vol. 2 (Toulouse: Editions Privat, 1979) 229-255; W. Th. M. Frijhoff, 'Dimensions de la coexistence confessionnelle', in *The Emergence of Tolerance in the Dutch Republic*, ed. C. Berkvens- Stevelink, J. Israel and G.H.M. Posthumus Meyjes (Leiden/Boston: Brill, 1997) 213-237; Benjamin J. Kaplan, *Divided by faith: Religious Conflict and the Practice of Toleration in Early Modern Europe* (Cambridge: Belknapp press, 2007), 172-176.

²⁴⁶ Memorie Bassetti, vol. 2, c. 2, "Wanted to see various heretic churches".

²⁴⁷ Ibidem, "magnificent, and superb in every instance".

²⁴⁸ Memorie Bassetti, vol. 2, c. 4, "do not hold any kind of images in the Chucrh"

was no light in the church, apart from some daylight that arrived from the stained-glass windows at the entrance, which represented the history of "l'acquisto delle Eretici sopra i Cattolici".²⁴⁹ In the back corner of the Church, Bassetti admired the grave of commander Johan van Galen (1604-1653), who was well-known to him for his involvement in the battle of Livorno, an event that had largely involved the Grand Duchy of Tuscany in the 1650s.²⁵⁰ Next to the grave, a marble memorial was erected to commemorate "la fazione delli Olandesi contro li Inglesi seguita a Livorno l'anno 1653".²⁵¹ The battle of Livorno, which took place on the 14th of March 1653, was one of the most important naval confrontations in the first Anglo-Dutch war. The war, the result of the intense commercial rivalry between the English and the Dutch during this period, did not end well for the Dutch commander Van Galen. After that a "botta di cannone" had smashed the leg of the Dutch commodore, he died "nel porto 9 giorni doppo la vittoria".²⁵²

Bassetti took time and effort to describe the religious practices of the Dutch, carefully observing the ceremony of the Reformed Christians. While visiting the *New Church*, the Eucharistic celebration must have particularly attracted his attention, which constituted one of the central points of controversy between Catholics and Protestants. While reformed Christians held that Christ's body and blood are not corporeally present in the Eucharist, but rather present in a spiritual way – or "in memoria de lui" to use the same words of Bassetti – the teachings of the Roman Catholic Church held that the bread and wine offered in the sacrifice of the sacrament of the Eucharist physically became the body and blood of Christ. Bassetti examined the ritual in the following way:

"La comunione de calvinisti va come l'ordine seguente: apparecchiano un gran tavola, lunga, e stretta come quelle de frati, posta d'avanti alla tribuna per travino della chiesa. In mezzo di essa sta il predicante volto verso la porta. All'una e l'altra banda sono sedili di panche, i quali s'empiono prima dal numero delle Donne, che seggono tutte a tavola. Il predicante ha di avanti di sé quattro gran peker [beker, cup] di argento pieno di vino, et una gran sottocoppa piena di fette di pane bianco sottili come sarebbe la pasta Reale ordinaria. Prende egli di quelle fette e ne fa bocconi de' quali empie due piatti argento empì uno della tavola destra et altro alla sinistra della tavola. Poi piglia per sé un boccone di quel pane, dicendo in fiammingo questo è il corpo del signore, pigliamolo in memoria di lui, acciò siamo fatti di degni del bene ch'egli ci promette, e restiamo purgati dalle colpe. Poi bevendo ad uno dei calici, dice, questo è il sangue del Signore, poi porge un boccone del detto pane in mano a ciascuna delle due donne che li sono a canto"²⁵³

Note here how Bassetti objectively described every detail of the whole ceremony. These descriptions stand in stark contrast with the rather explicit verses of Moniglia, which appear to be loaded with disapproval towards the Reformed culture of the Dutch Republic. For instance, the same church is described by Moniglia with the following verses:

²⁵² Ibidem, "cannon fire"; "in the harbours nine days after victory".

²⁴⁹ Memorie Bassetti, vol. 2, c. 2 "The acquisition of the Heretics from the Catholics."

²⁵⁰ Nicholas Brownlees, 'A Medici Agent's Newsletters to Florence during the Leghorn Crisis of 1653', in The Grand Ducal Medici and Their Archive (1537-1743), ed. Assonitis and Sandberg, 203–11.

²⁵¹ Memorie Bassetti, vol. 2, c. 2, "The Dutch' blockade against the English happened in Livorno the year 1653".

²⁵³ Memorie Bassetti, vol. 2, c. 3, "The communion of the Calvinists goes as follows: they set a big, long table, and tight as that of the friars, in the front of the tribune of the Church. In the middle of it stands the preacher, faced down the door. On both sides there are benches, which are being filled first with women, who sit all at the table. In front of the preacher there are four big cups of silver, full of wine, and a big plate filled with thin slices of white bread, as would be the Royal, ordinary meal. From these slices he takes some, making drabs with which he fills two big plates of silver, one for the right table, and one of the left table. He then takes a mouthful of a drab of bread, and says in Flemish, this is the body of the Lord, we take him in our memory, so that we are made worth of the good he promises us, and we remain purged from our sins. He then drinks from one of the chalices, and says, this is the blood of our Lord, and subsequently offers a bite of that bread to each of the two women that sit next to him.".

"È sontuoso il Tempio ove si onora La falsa Religion di quella setta, Che dell'empio Calvino il nome implora."²⁵⁴

The following entry might provide a better example of the grudge Moniglia held against the reformation. On the 16th of January 1668, Cosimo and his travelling companions arrived in Rotterdam, where they paid a visit to the principal church of the city – the St. Lawrence's Church. Near the church they observed the bronze statue of Erasmus, which was erected in 1620 by the renowned Dutch artist Hendrick de Keyser:²⁵⁵

"La sera si stese il giro delle carrozze alla maggiore Chiesa, dove S.A. discese, e la girò tutta osservando i vestigi della dignità di quel Capitolo, dal cui collegio uscì il famoso <u>Erasmo</u>, al quale nella piazza vicina si vede eretta una bella statua di bronzo, in abito togale, con un gran libro aperto nelle mani"²⁵⁶

While Bassetti describes the characteristics of the statue, Moniglia's account is more personal: ²⁵⁷

Qui nacque Erasmo empio tirano, e infido Al cattolico culto, ma nel mondo Per le lettere umane Uomo di grido,

Oh quant'anime, of quante andaro al fondo Per la voce di lui, che di Calvino Parlò nell'Eresia troppo facondo.

Statua di Bronzo, e di lavor più fino Oh a quel di fidia s'adeguasce, in ponte Stassi eretta a costui, quasi divino. Ei fosse; tosto mi sudò la fronte Evennemi in veder l'alto colosso Desiderio di fargli oltraggio, ed'onte;

Ma perché allora com'io vorrei non posso Dargli un sfregio, non veduto almeno Pian pian m'accosto, e te li pisciò addosso.

Bassetti frequently dwells on the restrictions on Catholic worship, which confined its services to inconspicuous hidden churches. When Cosimo and his entourage arrived in the Dutch Republic, less than 20 percent of the Dutch population was Catholic, while the largest part belonged to the Reformed Church. Tolerant as the Dutch Republic might be, the Reformed Church was the only public church, while the Roman Catholics were only allowed to gather in hidden chapels.²⁵⁸ Compared with the Reformed Church, which was sustained by the city government, the Catholics were distinctly at a disadvantage. When entering a Dominican church in Amsterdam, Bassetti witnessed the poor reality in which the Catholics priests were forced to live:

"Quei buoni padri li resero ogni rispetto, e mostrorno la loro povertà, che fu tormentata largamente con elemosina. La chiesa apparisce quasi desolata: per la porta principale non vi

²⁵⁴ Viaggio Moniglia, f. 56, "The glorious temple where one honors, the wrong religion of that cult, whose name derives from that evil Calvin".

²⁵⁵ 'Standbeeld van Erasmus- Erasmus Center for Early Modern Studies', accessed 8 February 2019, https://www.erasmus.org/index.cfm?itm_name=statueoferasmus-NL.

²⁵⁶ Memorie Bassetti, vol. 2, c. 56, "In the evening, he took the carriage to make a round around the main church, where Your Highness got off, and turned around it, observing the vestige of the Church, from which college the famous Erasmus spawns, and from whom in the square nearby one sees a beautiful statue made of bronze, in a gown, with a big book open in his hands."

²⁵⁷ Viaggio Moniglia, f. 71.

²⁵⁸ Israel, The Dutch Republic: Its Rise, Greatness, and Fall, 1477-1806, 129.

l'entra, essendo per di dentro contro a essa alzato un Muro, onde l'adito è per una porticella segreta laterale in posto indecente."²⁵⁹

Concealment, thus, was a fundamental condition of the Dutch toleration. In Haarlem, Bassetti noted that the Catholics were "lasciati viver con libertà, salvo nel far publiche le lor sacre funzioni", in Delft they were treated "con molta dolcezza" and in Leiden Bassetti observed that:²⁶⁰

"I Cattolici son lasciti viver con ogni tolleranza, e non è permesso loro l'uso publico della religione, e molti sono i luoghi privati ovi la esercitano, come molti quelli che la professano. Sono in tutti dieci i Predicanti eretici, mantenuti dalla città con buoni assegnamenti fin di 100 fiorini il mese. La chiesa maggiore detta Basilica Petrina, già consacrata a Cristiani, è ad uso riformato"²⁶¹

Throughout Bassetti's diary, Cosimo appeared to be curious and open to exploring the different religions and habits of the Dutch citizens. Yet, other sources indicate that Cosimo had also shown signs of hostility towards the Dutch tolerance. For instance, Jacob Gronovius, who travelled to France, Italy and Spain in the 1670s, wrote between the lines of his travel diary that the radical philosopher Baruch Spinoza (1632-1677), after hearing that Cosimo viewed his publication negatively, desired to meet the prince, but was told that the latter preferred not to receive "such a man".²⁶²

4. The aftermath of the Grand Tour

Although many studies call Cosimo's reign merely a disaster, failing to save the Medici court from its extinction, that does not detract from his evident involvement in the Dutch culture and society to help Tuscany profit culturally, technologically and economically to the fullest extent possible.²⁶³ In light of

²⁵⁹ Memorie Bassetti, vol. 1, c. 122, "These good Fathers gave him every respect, and showed him their poverty, which was largely tormented by charity. The Church appears almost abandoned: one does not enter through the main door because from the inside a wall has been erected, whereby one enters through a very small, secret door on the side of the Church in an obscene place."

²⁶⁰ Memorie Bassetti, vol. 2, c. 25, "left free to live, except for making public their sacred funcions" and c. 52, "gently".

²⁶¹ Memorie Bassetti, vol. 2, c. 29, "The Catholics are led free to live with every tolerance, and they are not allowed to practice their religion in public, and there are many private places where they practice it, as well as many persons that profess that faith. In total, there are ten heretic preachers, sustained by the city with good provisions of 100 Florins each month. The main church called *Basilica Petrina*, which was already consecrated by the Christians, is Reformed."

²⁶² Jacob Gronovius, Dagverhaal eener reis naar Spanje en Italië in 1672 en 1673, UBL, LTK 859, f. 26, "Als Spinosa gehoort had, dat syn Exc. syn boeck mispresen had, sond hy iemant an syn Exc. om met hem daer van te spreken, doch kreeg tot antwoort, dat syn Exc. sulck een man niet begeerde over syn dorpel te syen". This episode is extensively described by Giuseppina Totaro in, 'Niels Stensen (1638-1686) e la prima diffusione della filosofia di Spinoza nella Firenze di Cosimo III,' in Paolo Christofilini (eds.), L'Heresie Spinoziste : La Discussion Sur Le Tractatus Theologico-Politicus, 1670-1677, Et La Reception Immediate Du Spinozisme: Actes Du Colloque International de Cortona, 10-14 Avril 1991 (Amsterdam: APA- Holland University Press, 1995): 161. Cosimo's unwillingness to meet Spinoza is also mentioned in Jonathan I. Israel, Radical Enlightenment: Philosophy and the Making of Modernity 1650-1750 (Oxford: Oxford University Press, 2011), 44.

²⁶³ Van Veen and McCormick, *Tuscany and the Low Countries*, 62-63. A positive reassessment of Cosimo's reign resulted in 1993 in the volume *La Toscana nell'età di Cosimo III*, edited by Franco Angiolini, Vieri Becagli and Marcello Verga, aimed at a reconsideration of Cosimo's reign. In this study, Marcello Verga holds a similar position as Van Veen and McCormick, arguing that deep-rooted images of Cosimo as an incompetent ruler "finiscono per non farci comprendere, e quasi dimenticare, la largezza e la qualità dei rapporti intellettuali che Cosimo seppe intrecciare nei suoi viaggi europei" (Marcello Verga, 'Appunti per una storia politica del Granducato di Cosimo III (1670-1723)', in *La Toscana nell'età di Cosimo III: atti del convegno, Pisa-San Domenico di Fiesole (FI), 4-5 giugno 1990*, ed. Franco Angiolini, Vieri Becagli, and Marcello Verga (Florence: Edifir, 1993), 338. Moreover, Marcello Fantoni, for instance, has underlined that the interpretation of the Italian baroque as a decaying period for the Italian courts has hitherto obtained scarce consideration, though on the contrary it represents a central argument to interpret Cosimo's reign (Marcello Fantoni, 'Il bigottismo di Cosimo III: da leggenda storiografica ad oggetto storico', in *La Toscana nell'età di Cosimo III*, 390). This image is mainly related to the legacy of the eighteenth-century historian Jacopo Riguccio

this, it is therefore understandable that Cosimo and his closest and most qualified subjects tried to undertake, especially during their grand tour, an effective and careful evaluation of the Dutch Republic regarding its scholarly, political and economic abilities. Cosimo's reign seems to have been dominated by his commercial and political ambition that equally testifies to his great fascination for the Dutch Republic. For example, Cosimo desired to establish a Tuscan equivalent to the Dutch East-India company that would have operated from Livorno.²⁶⁴ As noted ealier, prior to his travel to the Dutch Republic, Cosimo had commissioned Pieter Blaeu to sent him every book that concerned the Dutch trade with the East Indies, information that was augmented by what Cosimo had heard and experienced in Amsterdam during his grand tour. Once he returned to Florence, he officially granted Livorno the status of a free port after the example of Amsterdam, lowering the transactions costs associated with the deposit, transit and exchange of merchandise. In addition, Cosimo's fascination for the Dutch Republic might have found its ultimate expression in 1710, when he commissioned his envoy Carlo Rinucci to leave for the Dutch Republic to request for a design plan to be drawn up by Anthonie Heinsius, (1641-1720), Grand Pensionary to the Province of Holland, and the members of the States General, detailing how the once Republica Fiorentina (1115-1532) could be restored after the model of the Dutch Republic.²⁶⁵ Cosimo III hoped to prevent the Tuscan territories from falling into foreign hands after his death. Yet, this risk was remedied with the birth of Cosimo's son and successor Gian Gastone in 1671. Consequently, the plan to turn the Grand Duchy of Tuscany into a Republic faded into obscurity.

The increasing expansion of correspondence and interchange between the Medici court and the Dutch Republic that are a direct result of Cosimo's experience in the Dutch Republic, illustrates this zeal to keep up with the latest developments in religion, politics, art and learning that took place in the North. For instance, as has been shown by Henk Th. van Veen and Andrew McCormick, shortly after Cosimo ascended the grand ducal throne, the few agents Ferdinando II had maintained in Amsterdam, like the Dutch merchant Jan van der Nessen and Francesco Feroni, were replaced by an entire network of merchants, diplomats and scholars.²⁶⁶ This network was orchestrated by two individuals – Apollonio Bassetti and Antonio Magliabechi – who, each in their own quality, embodied Cosimo's ambitions. Cosimo, right after his appointment as Grand Duke, secured their position at the Medici court, nominating Bassetti as his *Segretario della Cifra* in 1670 and Magliabechi as his court librarian in 1673. While Magliabechi's centrality in the Tuscan-Dutch exchange will be addressed in detail in the next chapter, here we take a look at the role of Bassetti in the aftermath of Cosimo's Grand Tour.

Bassetti's travel experience established the personal credit upon which the exchange between Florence and the Dutch Republic could take place, paving the way for many of his later epistolary contacts and professional activities.²⁶⁷ In fact, during his visit in the Dutch Republic, he not only traded

Galluzzi (1739-1801), who had characterised Cosimo's reign as a complete failure for which its ruler was entirely to blame. Yet, Galluzzi, as the newly appointed court historian of the Lorrain dynasty – the new sovereign of Florence – needed to diminish the performance of their predecessors to enhance their reputation. The *Istoria* of Galluzzi, in fact, was dedicated in its entirety to Pietro Leopoldo d'Asburgo-Lorena (1747-1792), Grand Duke of Tuscany from 1765 to 1790, who had commissioned Galluzzi to compile the work. In addition, Paolo Malanima has shown that Cosimo III was committed to the development of rural areas. The population in the rural areas grew about twenty-five percent, a growth that was caused by the low grain prices at the time (Paolo Malanima, 'L'economia Toscana nell'età di Cosimo III', in *La Toscana nell'età di Cosimo III*, 3-19).

²⁶⁴ Van Veen, 'Cosimo de' Medici's reis naar de Republiek', BMGN - Low Countries Historical Review 102, no. 1, (1987): 49.

²⁶⁵ Van Veen, 'Cosimo de' Medici's reis naar de Republiek', 52. About Cosimo's plan to restore the Florentine Republic once his family had died out, see also Veen and McCormick, *Tuscany and the Low Countries*, 46–49; Emilio Robiony, *Gli Ultimi Medici e la successione al Granducato di Toscana* (Florence: Bernardo Seeber, 1905), 105-114; Furio Diaz, *Il Granducato di Toscana: I Medici, 512-514*. On the Florentine republic, see Rudolf von Albertini, *Firenze dalla repubblica al principato* (Turin: Einaudi, 1970).
²⁶⁶ Van Veen and McCormick, *Tuscany and the Low Countries*, 62.

²⁶⁷ David S. Lux and Harold J. Cook, 'Closed Circles or Open Networks?: Communicating at a Distance during the Scientific Revolution', 183.

information, but he primarily judged the persons he met there, deciding whether to trust someone or not. Based on his diary, Bassetti appears to be a rather careful, systematic observer who carefully selected persons he could rely on once he returned to Florence. The Dutch scholar Nicolaas Heinsius, for instance, was a person "lentissimo nell'espressiva" and "di difficile comunicativa", yet he appeared to be a "letterato grande".²⁶⁸ The Florentine merchant Giovacchino Guasconi had made a good first impression on him during his stay in Utrecht, calling him a "uomo cortese, intelligente et di buona speranza".²⁶⁹ After his return to Tuscany, Bassetti called regularly on the services of both Heinsius and Guasconi, who provided the Tuscan court with a wealth of information about the Dutch Republic.

From 1670 onwards, when his appointment as the grand ducal secretary officially commenced, Bassetti relied on the persons he had met in the Dutch Republic to execute any conceivable request by Cosimo III. Members of this network undertook diplomatic activities on his behalf, kept him informed about recent affairs by weekly newsletters and, most importantly it seems from his correspondence, supplied him with books, paintings, tapestries and other products to enrich the grand ducal collections. Trustworthy, up-to-date information was thus the lifeblood of his daily management practices. The wealth of information that Bassetti received from his network of informers is nowadays preserved in the State Archive of Florence, and contains thousands of letters and *avvisi* containing commercial, political, diplomatic, and military news from the Dutch Republic. These information collecting practices are rather similar, albeit on a much smaller scale, to the administrative techniques designed by his contemporary, the French minister of Finance Jean-Baptiste Colbert. According to his most recent biographer, Jacob Soll, Colbert was certainly not a man who knew everything, but he could find someone to give him answers and provide reports on a wide range of topics, drawing on his networks of scholars and agents all over Europe.²⁷⁰ Colbert believed that all knowledge had practical values for the government, being convinced that a minister of state could learn from humanist, ecclesiastical, commercial, military and engineering culture alike.²⁷¹ Like Colbert, Bassetti appeared to have the same qualities as an "informationmaster", capable of managing the extensive accounts and administrative papers of the Medici reign.²⁷²

An example of how Bassetti systematically collected information is illustrated by the following case. In 1683, Bassetti wrote a series of letters to various of his subjects who were living in the most important, and well-connected cities in- and outside of Italy. Besides Venice, Genova, Naples, Livorno, Bologna and Milano, letters were addressed to his subjects living in France (Lyon and Paris), Germany (Hamburg and Augsburg), Spain (Madrid and Cádiz), Portugal (Lisbon), England (London), the Habsburg Empire (Vienna), Poland (Warsaw), the Ottomon Empire (Smirne) and the Dutch Republic (Amsterdam).²⁷³ He gave each of his agents the specific assignment to provide him with a simple account of what current standards of weights, measures and money were used in their respective countries. In Amsterdam, Bassetti enlisted the help of the merchant Giovacchino Guasconi who was asked to provide the following information:

²⁶⁸ Memorie Bassetti, vol. 2, f. 49, "very slow to express himself"; difficult to communicate with"; great learned man".

²⁶⁹ Memorie Bassetti, vol. 1, f. 136, "polite, intelligent and hopefullness man."

²⁷⁰ Jacob Soll, The Information Master. Jean-Baptiste Colbert's Secret State Intelligence System, 8.

²⁷¹ Soll, 2–3.

²⁷² Soll, 67.

²⁷³ "Lettere scritte fuora per aver cognizione della natura de'pesi, misure e monete straniere", ASF, MM, 367, cc. 1169-1202. Letters were destined for: Giovanni Targioni in Smirne, Alessandro Guasconi in Venice, Giovanni Battista Pucci in Vienna, Santi Bassi a Warsaw, Theodor Kerkring in Hamburg, Giulio Quaratesi a Lyon, Domenico Zipoli in Paris, Francesco Terriesi in London, Ottavio Tancredi in Madrid, Francesco Ginori in Cádiz, Lorenzo Ginori in Lisbon, Pietro Blaeu and Giovacchino Guasconi in Amsterdam, Annibale Ranuzzi in Bologna, Giovanni Pietro Cella in Naples, Francesco Bondicchi in Milan, Giovanni Battista Cinatti in Genova, Benedetto Tincher in Augsburg, Marco Alessandro del Borro e Lorenzo Gonieri in Livorno.

"Il Serenissimo Granduca nostro signore sempre intento ad arricchire il suo nobile intelletto colla cognizione più individuale delle cose, proprietà e costumi delle genti straniere, vorrebbe adesso un'esatta e piena contezza di quanto vien ricercato nell'accluso foglio, circa le loro misure, pesi e monete, ad effetto di saper bene i nomi che hanno, le passioni, l'uso, il valore, come anche il ragguaglio loro a queste nostre d'Italia. Ha pero S.A. intrapreso a procurarlo da tutte le parti del mondo consociuto, sin dove arriva il commercio e pero manda in diversi luoghi un esemplare del medesimo foglio. E reputando che anche V.S.Ill.ma coll'opera sua possa contribuire all'intento, e per se stessa che si trova in una scala si principale d'Europa, e per mezzo di amici suoi o' de corrispondenti loro, come pur coll'aiuto del signore suo fratello esistente in Moscovia vorrebbe l'A.S. da lei e da esso le notizie espresse nel foglio suddetto de seguenti paesi"274

1. Di tutte le provincie di Fiandra e Paese Basso, si degli Spagnoli che degli Olandesi e della Vestfalia ancora, Stati Luneborgo e loro adiacenze.

2. Di tutte le provincie sottoposte al dominio di Moscovia, e suoi scali maritimi dal mar Caspio, al mar bianco.

Onde S.A. dice che V.S.Ill.ma sia contenta di mettersi attentamente in questa pratica con scriverne al signore suo fratello di Moscovia, e far fare quante copie bisogneranno degli articoli della presente 1.2. e del foglio inserto per mandare alle persone che saranno credute abili a poter rendere in ciò sodisfatta S.A. la quale ne riceverà il piacere con aggrandimento singolare giache tutto quello che in tal genere è stampato su'i libri riesce molto fallace ed incerto."

Giovacchino Guasconi closely followed these instructions and sent Bassetti the units of measurements desired by the Grand Duke.²⁷⁵ Cosimo III sent the same document to Pieter Blaeu, asking him to obtain information "di tutto il dominio che hanno le Provincie unite nella Bassa Germania" and "di tutti le stati isole e scali che posseggono le medesime fuora d'Europa, come Coste d'Africa, Indie Orientali, et Indie Occidentali".²⁷⁶ During his stay in Amsterdam, it was Pieter who had revealed Bassetti insider's information about the Dutch trade with the Indies and provided him with works and maps concerning the Orient.

From this example, we learn that Bassetti depicts Cosimo as someone who cared chiefly to the fundamental necessity to learn more about foreign cultures and habits which was invaluable for his trade

²⁷⁴ Cosimo III, but written by Bassetti, to Guasconi, Florence, 20 July 1683, ASF, MM, 367, c. 1192, "The Most Serene Grand Duke, our lord, who had always had the intention to enriching his noble intellect with the most individual knowledge of the things, properties and customs of foreign people, would now like an exact and full account of what is requested in the enclosed sheet, regarding the standards of weight, measurement and money, desiring to know well the names they have, passioni, the use, the value, as well as the information they give to these of ours in Italy. His Majesty, however, has undertaken to procure this information from all parts of the known world, as far as commerce arrives and however has sent in different places a copy of the same sheet. considering as well that, Your Illustrious Lordship, with your abilities, may contribute to the intent [of the Grand Dukel, and because you find yourself in the principal layovers in Europe, and by means of your friends or correspondents, as well as with the help of your brother, who is currently in Moscow, would like the His Majesty from you and from him the account requested in the aforesaid sheet of the following countries: 1) of all the provinces of Flanders and the Low Countries, both of the Spaniards and of the Dutch, and also of Westphalia, the Luneborg States and their environs. 2) of all the provinces under the rule of Moscow and its maritime ports from the Caspian to the White Sea. Your Highness says that Your Illustrious Lordship glady takes the efforts to execute this practice, and to write to your brother in Moscow, and making as many copies as necessary of the articles 1-2 of this attached sheet, to sent to the people you esteem able to satisfy Your Highness, who receives the considerable pleasure since everything concerning this matter that is printed in books is false and uncertain.

²⁷⁵ He did so in a most effective way, sending custom-made strips that correspond to each unit of measurement, in ASF, MM, 367, c. 1193.

²⁷⁶ Cosimo III, but written by Bassetti, to P. Blaeu, 20 July 1683, ASF, MM, 367, c. 1191, "Of all the domains that the United Provinces have in Lower Germany"; Of all the states and ports of call possessed by the same [United Provinces] outside Europe, such as the Coasts of Africa, the East Indies, and the West Indies". I would like to thank Gloria Moorman for drawing my attention to the importance of Pieter Blaeu's letter.

relations with the outside world. In the aftermath of his grand tour, the curiosity of Cosimo appears thus anything but inert. The Grand Duke esteemed Bleau's and Guasconi's extensive network of international contacts and its potential for the accumulation of knowledge, especially the kind of information Cosimo could not find in print. In fact, Bassetti noted in his letter to Guasconi that "tutto quello che in tal genere è stampato su'i libri riesce molto fallace ed incerto". In addition, Guasconi was asked specifically to sent the instructions to his brother Francesco Guasconi, who was currently living in Moscow where he had established a branch of Guasconi trading company.

4.1. MERCHANTS AS CULTURAL AGENTS OF THE GRAND DUKE OF TUSCANY

The crucial figure of the agent within the early modern distribution system of information and services has, in recent years, received some scholarly attention.²⁷⁷ The seventeenth century witnessed the rise of different kinds of agents from different professional backgrounds, including diplomats, scholars, artists, booksellers and merchants, that have played an intermediary role in the early modern distribution system of information, services and products. In this paragraph, I will address these issues by focusing on the role of merchants as agents of the Grand Duke of Tuscany. Once Bassetti returned to Florence, he called regularly on the services of his new network of merchants with whom he had become acquainted in the Dutch Republic. During the reign of Cosimo's father, Ferdinando II, these merchants had played no role in the Grand Duchy's relations with the Dutch Republic whatsoever; it was only after Cosimo's appointment as Grand Duke, that the services of these merchants became of fundamental importance. Bassetti remained in contact with, amongst all, Giuseppe Marucelli, Giacinta del Vigna, Giovanni da Verrazzana, and, last but not least, Giovacchino Guasconi. From the correspondence of Bassetti, it appears that the role of Guasconi outweighted that of the other merchants, who was called upon almost weekly from 1673 until 1692 to fulfill the orders of the Grand Duke.²⁷⁸ Guasconi took over the position of Feroni as the official agent of Tuscany in Amsterdam, when the latter left Amsterdam for Florence in 1673. In his quality as agent, on average once a week he wrote to Bassetti, reporting his activities and informing the Grand Duchy about the latest political, technological, commercial, political and cultural developments in the Low Countries. Moreover, one can deduce from his letter that his chief responsibility was the acquisition of books, works of art and all sorts of other objects from the Dutch Republic and the East.

Our understanding of the activities and life of Giovacchio Guasconi is greatly hampered by a lack of primary source material.²⁷⁹ The family archive was seriously damaged by the disastrous flooding of the Arno in 1966, and is still today in complete disorder and without inventory. Yet, there are other sources that illustrate fragments of the life of Guasconi. This often fragmentary and sketchy information helps us to understand the activities of Guasconi and how he fulfilled his role as the official agent of Cosimo III in Amsterdam. He was born in Florence on the 9th of May 1636.²⁸⁰ His father descended from an old aristocratic Florentine family that had risen to prominence in Florence in the beginning of the fourteenth century, when family members held important positions in the governance of Florence. Later, as was usual in many Florentine noble families, they gained great success and wealth through their trading

²⁷⁷ Badeloch, Keblusek, and Cools, Your Humble Servant. Agents in Early Modern Europe; Keblusek and Noldus, Double Agents: Cultural and Political Brokerage in Early Modern Europe.

²⁷⁸ Approximately six-hundred letters written by Guasconi between 1668 and 1692 have been preserved in ASF, *Mediceo del Principato*, 4260-4264.

²⁷⁹ Parts of this paragraph on the life and activities of the Florentine merchant Giovacchino Guasconi are based on Ingeborg van Vugt, *Bound by Books: Giovacchino Guasconi as book agent between the Dutch Republic and the Grand Duchy of Tuscany* (Master thesis, Leiden University, 2014), available online at http://hdl.handle.net/1887/29756, last accessed 2 April 2019.

²⁸⁰ "Giovacchino di Carlo del cavaliere Alessandro Guasconi, e di Lucrezia di Carlo Franceschi"; Opera di Santa Maria del Fiore, baptismal register, inv. no. 41, no. 73 (27 April 1636–11 May 1636) and ASF, Raccolta Sebregondi, inv. no. 2785.

activities.²⁸¹ This success was partially guaranteed through the strong ties they maintained with the Medici family, who, as has been illustrated in the network study by John Padgett and Christopher Ansell, maintained strong relations with the Guasconi family as early as Cosimo de Medici's reign (1389-1464).²⁸² The first trading company of the Guasconi family established itself in a position of considerable commercial power in the first half of the seventeenth century.²⁸³ Consequently, their activities were extended to several European cities by several family members, being present in the most important trading centers, including Venice, Madrid, Paris, Moscow and of course, Amsterdam.²⁸⁴ In the 1660s, Giovacchino founded a company with his brother Lorenzo in Amsterdam, where they lived in the commercial center of the city, in a house on the Rozengracht.²⁸⁵ Giovacchino must have died prior to 1699 as can be deduced from a letter dated the 16th of July 1699, written by Pieter Blaeu, at that time secretary to the Orphans' Chamber in Amsterdam, to Apollonio Bassetti, in which Blaeu gives his permission for the departure of the widow and two children of Giovacchino to Florence.²⁸⁶

As argued by Marika Keblusek, merchants as Guasconi have to be taken into account as intermediaries in cultural and intellectual affairs in the early modern period.²⁸⁷ In his quality as a merchant, Guasconi occupied a strategic place in a network of social relations that were established at crucial points along the trade routes. He relied on a network of shippers, insurers, postmasters, booksellers, intellectuals and suppliers of political information. Guasconi's role in any of these networks was diverse: while he coordinated the transmission of books and auction catalogues on behalf of the bookseller Daniel Elsevier and Nicolaas Heinsius to Tuscany via a English convoy that was destined for Livorno,²⁸⁸ he contacted Andrew Vinius (1641-1717) in Moscow, Russian's first postmaster and son of a Dutch merchant, to supply him with carnivorous plants for the Grand Duke.²⁸⁹ While he negotiated the price of secret political news from the Hague with the Dutch diplomat Abraham Wicquefort (1606-1680), he had to bribe an English minister in Leiden for a Bible in the Icelandic language which was highly desired by

²⁸¹ In Florence, members of the Guasconi family lived in old houses in the Piazza Madonna degli Aldobrandini, besides owning an enormous Renaissance villa in the Via dei Tintori, now in front of the National Library of Florence. The coat of arms of the family can still be seen today above the entrance. It consists of three black inverted V shaped stripes with in the middle a red cross, which is symbol of the Florentine people. Various drafts of their coat of arms, as well as their family tree, can be found in ASF, Raccolta Ceramelli Papiani, inv. no. 40.

²⁸² John F. Padgett and Christopher K. Ansell, "Robust Action and the Rise of the Medici, 1400-1434," American Journal of Sociology 98, no. 6 (1993): 1280.

²⁸³ Maria Di Salvo and Alberto Alberti, Italia, Russia e mondo slavo: studi filologici e letterari (Firenze University Press, 2011), 138.

 ²⁸⁴ Guasconi's family tree shows that Carlo and Lucrezia had ten childeren: Anton Francesco, Alessandro, Giovacchino, Giovan Paolo, Andrea, Vincenzo, Lorenzo, Francesco, Ottavio and Filippo (ASF, Raccolta Sebregondi, inv. no. 2785).
 ²⁸⁵ The letters Guasconi received were addressed to "de Roozegraft tot Amsterdam."

²⁸⁶ P. Blaeu to A. Bassetti, Amsterdam, 16 July 1699, ASF, MdP, inv. no. 1036, filza 35/1036: S.A.S Repubbliche e Comunità 1694-1699, f. 161. Giovacchino had married a Flemish woman named Maria Hoshaver from Zurich, from which marriage he had two children: Carlo (?-1748) and Antonio (?-1747). Dates in the genealogical register of the Guasconi family (ASF, Raccolta Sebregondi, inv. no. 2785) in the State Archive of Florence indicate that he married in 1700 and died in 1748. Yet, this letter of Pieter Bleau confirms that this is incorrect. When the permission was granted, Apollonio Bassetti thanked Blaeu and the Buserstei to the heaversteint of Amsterdam in Neurophere 6 determines of Amsterdam in Neurophere 7.

and the Burgomasters of Amsterdam in November of that year (A. Bassetti to the burgomasters of Amsterdam, Florence, 3 November 1699, ASF, MdP, inv. no. 1036, filza 35/1036: S.A.S. Repubbliche e Comunità 1694-1699, f. 420). ²⁸⁷ Keblusek, 'Book Agents, Intermediaries in the Early Modern World of Books', 97; Marika Keblusek, Badeloch Vera Noldus, and Hans Cools, eds., 'Mercator Sapiens: Merchants as Cultural Entrepeneurs', in *Double Agents: Cultural and Political*

Brokerage in Early Modern Europe (Leiden/Boston: Brill Publishers, 2011), 95–111. ²⁸⁸ Guasconi's correspondence with Nicolaas Heinsius is extent in the University Library of Leiden: UBL 1923, nos. 1.15. See, for example, Guasconi's letter to Heinsius dated the 14th of June 1674: "Monsieur je receu par le mains de cet monsieur Pluijmer un cataloghe de livres par lequel je luij paije 321 franc, e 3 souls, et des mesmes livres je ne observere asteur les ordres du Serenissime GranDucque de Toscane au quel je n'en donne aussi l'advis, et demeurant. Toujours prompte a vost comandemans je suis"

²⁸⁹ See, for instance, Bassetti to Guasconi, 4 July 1684, ASF, MdP, 4263, no. 767, "Sua Altezza piglierebbe volentieri i semi della pianta Boranets o sia Pecorina, che è un virgulto mostruoso, mezzo animale e mezzo pianta".

Cosimo.²⁹⁰ He made sure that the goods of the Grand Duke were properly insured, while he was commisioned by the Grand Duke to buy a slave in Russia, with the help of his brother Francesco.²⁹¹ With his international connections he was pre-eminently suited as a cultural agent of the Medici family. For Bassetti, in fact, he was a point of reference that could be deployed to contact the rest of Europe, and beyond.

4.2. Spying for knowledge

The Dutch Republic served Cosimo III as an important source of inspiration in dealing with the many technological shortcomings present in the Grand Duchy of Tuscany, such as problems involving watermanagement and the linen industry. According to an anonymous account of the Grand Duchy of Tuscany, Cosimo III "mantenne a sue spese frequentemente dei giovani toscani nei paesi stranieri per istruirgli in quelle cose che egli seppe che si facevano altrove con maggiore perfezione".²⁹² After his return to Florence, he commissioned several technicians and engineers to travel to northern Europe, in particular the Dutch Republic, to spy on the latest technological innovations. For instance, in 1671, Cosimo called on the services of Cosimo Ciferi, an employer of the Florentine woolen industry, to observe the activities of the linen industry abroad.²⁹³ In October 1672, Ciferi left Florence for Bologna, from where he travelled to Milan and Basel. He then travelled to Germany and the Dutch Republic, where he visited, amongst all, Amsterdam, Leiden, The Hague, Delft and Rotterdam. Leaving Holland, he went to England and returned to Italy via Flanders and France. On the 13th of October 1671, Bassetti commissioned Francesco Feroni to assist Ciferi throughout his stay in the Dutch Republic, urging him

²⁹⁰ In 1662, Wicquefort had been commissioned by the States General to write a national history of the country for which he was granted access to highly confidential information.²⁹⁰ He used this position to start a secret news agency, providing foreign courts with political news from the Dutch Republic, for which he received a lot of money. Wicquefort provided Bassetti with secret newsletters from 1673 until 1675, when Wicquefort's agency was discovered by the authorities. After a trial that lasted 37 days, Wicquefort was imprisoned for life. In the account of the trial the names of Giovacchino and Lorenzo Guasconi appear on the sixth day of the trial, on the 26th of April 1675, as intermediaries of the newsletters to the Grand Duke of Tuscany. See, D. Everzwijn, *Wicquefort en zijn proces* (Leiden: Gebroeders van der Hoek, 1857), 52. Letters of Wicquefort to the Medici court can be found in ASF, MdP, 4262, no. 381 and 466. See also the letters between Guasconi and Bassetti, for example, ASF, MdP, 4262, no. 503, "Conformo V.S. Ill.ma per la sua gentillissima 17 dell'passato mi impone, scriverò all'Aija al monsieur Vicquefort acciò mi illumini sopra quello scrisse della resa di Narden supposta per una cosa miracolosa e conosciuta da poche persone". For the letters between Bassetti and Guasconi regarding the Islandic Bible, see ASF, MdP, 4263, no. 693 (Sua Altezza vorrebbe che Vostra Signoria illustrissima per mezzo di qualche amico intelligente facesse comprare per suo conto senza nominar il Sua Altezza al più grato prezzo che sia possibile i due libri seguenti: Biblia in lingua islandica, notata nella pagina prima al numero 9 del catalogo de teologi in foglio [...]), no. 696, no. 699, no. 703, no. 705, no. 716.

²⁹¹ Guasconi relied on the services of the Antwerp merchant Henry Francois Schilders (1638-1680) for the insurance of his merchandise. These letters, written from 1664 until 1668, are extent in: Plantin-Moretus Archive, Antwerp, Archive related families, family and business archive of Henri François Schilders and Sibilla Bosschaert (1657-1693), inv. no. 69, nos. 1-433. Schilders lived in Amsterdam in the 1650s, where he worked for three years as a pupil of Francesco Feroni. After his apprenticeship he went back to Antwerp from where he established, in 1660, a very prosperous commercial business and became one of the most important figures in the insurance world in the middle of the seventeenth century. About him, see D. van Camp, 'Onbekend Maakt Onbemind', *De Gulden Passer* 87 (2009): 25–31. Schilders also corresponded directly with Apollonio Bassetti from 1667 until 1679. The letters show that he was responsible for the acquisition of paintings and books (ASF, MdP, inv. nos. 4260-4263). The slave must meet the following requirements of the Grand Duke: "Quanto al tartaro vorrei che fosse di umor facile e di natura docile, innocente al possibile e soprattutto non vizioso né cattivo, perché con difetti gravi non me ne potrei servire e se avesse un poco di lettera cioè sapesse leggere e scrivere all'uso del paese meglio sarebbe. Ma quando pure li manchi tale abilità poco importa. Non vorrebbe già essere tanto ragazzo che poi qua gli uscisse presto di mente, la lingua sua naturale ne anche tanto duro da rendersi incapace della nostra, onde il più a proposito parrebbe dai 18 ai 20 anni" (Bassetti to Francesco Guasconi, 5 October 1683, ASF, MdP, 4263, n. 724).

²⁹² Anonymous, Memoria sopra il governo del Serenissimo Gran Duca Cosimo Terzo, ASF, MdP, 2713, c. 226.

²⁹³ Martelli, Il Viaggio in Europa Di Pietro Guerrini (1682-1686): Edizione Della Corrispondenza e Dei Disegni Di Un Inviato Di Cosimo III Dei Medici, vol. 1: XV-XIX.

to help Ciferi as good as possible so that the Grand Duke "non habbia ad incontrar fastidi o imbarazzi per conto di esso".²⁹⁴

The diary of Bassetti, which included descriptions of pilings, windmills, dams, fortresses, and other innovations, might have paved the way for the travels of these engineers. In 1682, Bassetti planned the voyage of the Florentine engineer Pietro Guerrini (1651-1716), who was commissioned by Cosimo III to tour through Northern Europe and to sketch and describe everything that seemed of technological interest. Guerrini worked in the service of the Florentine mathematician Vincenzo Viviani (1622-1703), at the time engineer of the *Capitani di Parte*, which had control over local town government in the Florentine dominions. In the 1680s, they carried several land-reclamation and water-control projects at the lake-marshes of Fucecchio, where Francesco Feroni had purchased a landholding known as Bellavista from Cosimo III. Feroni had commissioned them to drain and reclaim the surrounding land of his property, and to protect the grand ducal area from floods.²⁹⁵ To learn more about the manner in which water was managed in the Dutch Republic, Guerrini set off to northern Europe on the 22nd of September 1682.

To help Guerrini on his way, Cosimo let Bassetti write down in detail which places the young engineer had to visit and which people he could meet to obtain the required, often secret, technological information. It is most likely that the diary Bassetti had kept during his travels has helped him to compile the instructions of Guerrini, who visited the exact same places Cosimo had seen during his Grand Tour. In addition, Bassetti wrote letters of recommendation to the persons he had personally met during his stay in the Dutch Republic, asking Pieter Blaeu and Giovacchino Guasconi, to assist Guerrini throughout his stay.²⁹⁶ They ensured that Guerrini could visit poorly accessible workplaces, observing also the equipment the Dutch "non lo mostrano volentieri".²⁹⁷ Along the way, Guerrini kept Bassetti informed about the progress of his travels, sketching and describing a large number of dredging machines, bridges, dams, windmills and other innovations. For instance, in Amsterdam, where he arrived in the beginning of April 1683, he paid particular attention to how the Dutch prevented the country from floods, sending Bassetti several drawing of windmills to drain water away from the fields.²⁹⁸

Another field that Cosimo was interested in advancing was the study of botany in the Grand Duchy of Tuscany.²⁹⁹ While Guerrini and Ciferi were instructed to pay particular attention to Dutch technology, Jacopo Niccolò Guiducci was sent to the Netherlands to observe how the Dutch cultivated exotic plants, in particular regarding the cultivation of the pineapple. Towards the end of Cosimo's III reign, in 1713, Guiducci travelled north to Düsseldorf, from where he travelled to the Dutch Republic. He first stopped in Utrecht, where he observed how the bakers managed to "levar l'amaro al lievito di birra"³⁰⁰. Leaving Utrecht, he went to Leiden and to Amsterdam where he was welcomed and assisted by the Florentine merchant Cesare Sardi. At that time, Sardi was Cosimo's only agent, a clear sign of the Grand Duke's diminishing involvement with the Dutch Republic.³⁰¹ Though Guiducci might have obtained less assistance than previous travelers, Sardi ensured that Guiducci came into contact with several outstanding scholars like the female scientists and illustrator Maria Sybille Merian (1646-1717),

²⁹⁴ Bassetti to Feroni, 13 October 1671, ASF, MdP, 4261, f. 318, "does not have to face annoyances or embarrassments on his behalf".

²⁹⁵ Martelli, Il Viaggio in Europa Di Pietro Guerrini (1682-1686): Edizione Della Corrispondenza e Dei Disegni Di Un Inviato Di Cosimo III Dei Medici, 1, LX.

²⁹⁶ For these instructions and recommendations, see Martelli, 10-17.

²⁹⁷ Martelli, LXXIII, "do not shown him willingly".

²⁹⁸ Martelli, vol. 2, 54 and 58a.

²⁹⁹ Veen and McCormick, *Tuscany and the Low Countries*, 44.

³⁰⁰ Guiducci to Cosimo III, 20 March 1714, ASF, MM, 92, ins. 1, f. 50.

³⁰¹ Tammo Wallinga, 'Laurentius Theodorus Gronovius (1648-1724) as a Traveller', Lias 24 (1997a): 246.

the merchant and collector Levinus Vincent (1658-1727) and Caspar Commelijn (1668-1731), who was in charge of the *Hortus Medicus* in Amsterdam. It was Commelijn who provided Guiducci with the instructions to cultivate pineapple plants in the Grand Duchy of Tuscany.³⁰² Yet, mention of a first pineapple to being cultivated in Florence is only in the 1720s, through the intermediation of the Dutch art collector and merchant Pieter de la Court van den Voort (1664-1739), who assisted the botanists Angiolo Giannetti and Antonio Morini during their stay in Amsterdam to "osservare le cose più rare, e più stimabili di codesti giardini".³⁰³

Although the principal focus of Guiducci's travels was botany, he also informed Bassetti with other matters of interest, ranging from the construction of fortresses to the living standards of the Dutch Catholics. On the 4th of May, for example, Giuducci reports to the Medici secretariat that he went to Mass "nell'unica Chiesa di Cattolici che vi è, la quale è una miserabile soffita d'una Casa"³⁰⁴. Then, on the 15th of June 1714, Guiducci remarked that the Dutch Catholic community had made a favorable impression on him, like they had on Cosimo, who had taken the difficulties of the Catholics to heart during his own travels in the country. ³⁰⁵

In the aftermath of the Grand Tour, Cosimo continued to show interest in the Dutch Republic, as is attested by the diaries and correspondences of the several Tuscan agents that travelled north in search of information on every aspect of the Dutch cultural life. This interest was reciprocal. Indeed, in the same period several Dutch scholars profited from Cosimo's benevolence towards them to visit Tuscany. For most of these scholars, the trip to Tuscany also had another unique objective: to meet the famous and legendary librarian Antonio Magliabechi.

³⁰² Guiducci to Cosimo III, Amsterdam, 20 April 1714, ASF, MM, 92, ins. 1, ff. 64-65. The detailed instructions to cultivate the pineapple plant can be found in ff. 115-117

³⁰³ Van den Voort to Cosimo III, 10 September 1720, UBA, Hs 121 Aq 1, "to observe the rarest and most estimable things of these gardens". On the 30th of September 1720, Cosimo answered van den Voort and informed him that he received two pineapples and "di averle anche mangiatele e trovate a perfezione [eat him and found them perfect"] (UBA, hs 121 Aq 2). Later, Van den Voort would sent the Grand Duke a pineapple plant, for which see the letter between Van den Voort and Angiolo Giannetti, 14 April 1722, UBA, Hs 120 U, "supplico V.S.Ill.ma a mandarmi quattro piante di Anans di quelle grande che principino a fare il frutto e le faccia ben serrare in una scatoletta e mandarla per terra con le lettere che passano a Milano e da Milano, a Firenze e che le dette quattro piante di Anans siano dirette al Serenissimo Granduca il quale subito le farà pervenire nelle mie mani e se con esse manderà ancora quattro Corone con le quattro piante di Anans". Other letter regarding the pineapple-exchange between the Dutch Republic and Tuscany: Morini to Van den Voort, 24 April 1723, UBA, Hs 121 Dd 1; Morini to Van den Voort, 19 July 1721, UBA, Hs 121 Dd 2; Cesare Sardi to Van den Voort, 24 April 1723, UBA, Hs 123 Cp.

³⁰⁴ Guiducci to Cosimo III, 4 May 1714, ASF, MM, 92, ins. 1, ff. 69 and 81.

³⁰⁵ Guiducci to Cosimo III, 15 June 1714, ASF, MM, 92, ins. 1, f. 103, "È certissimo che tutti questi Cattolici d'Olanda, e di queste Provincie, conforme la Reale A.V. ha la bontà di accennarmi che ha osservato ne' suoi viaggi, sono esemplarissimi, e di grand'edificazione".

CHAPTER 3

Dutch travelers in the Grand Duchy of Tuscany

INTRODUCTION

While the correspondence of Apollonio Bassetti sheds light on the Grand Duke's zeal to stimulate industrial, technological innovations and to revitalize commerce, the scholarly correspondence of Magliabechi provides us with a better understanding of the librarian's efforts to curate the intellectual life of the Grand Duchy of Tuscany that emerged from the lively exchange with the United Provinces. So, while Bassetti was more closely connected to mercantile circles, Magliabechi was more closely connected to academic ones. Thanks to his huge network of contacts, Magliabechi became a highly influential figure throughout Europe, transforming Florence into a hub for scholarly correspondence and book dispersion.

Magliabechi's centrality in the Tuscan-Dutch exchange is not only exemplified by the extensive exchange of letters and books, but also by his reoccurrence in most Dutch travel journals in the second half of the seventeenth century. After he had been made librarian of the *Biblioteca Palatina* by Cosimo III in 1673, it was all but impossible for foreign visitors to come to Florence in order to collate manuscripts and not come into contact with the Florentine librarian. Upon arrival in Florence, Dutch travelers rushed to the house of Magliabechi, hoping that he could guarantee them access to the collections of the Medici libraries and arrange meetings with Cosimo III. Furthermore, by the 1670s, Magliabechi had grown so famous for the vast extent of his reading, and his amazing memory of what he had read, that he himself had become an attraction in Florence. The desire to visit the celebrated librarian is perhaps best expressed by the historian Gregorio Leti (1630-1701), he himself a correspondent of Magliabechi, in his well-known guide of travelers to Italy – *l'Italia Regnante* (1676) – writing that "cento altri Huomini celeberri, mi hanno più volte detto, che non per altro havevano desiderio, o di andare, o di tornare in Italia, che per vedere il Magliabechi".³⁰⁶

The moments in which Dutch scholars traveled to the Grand Duchy of Tuscany can be broken down into three distinct phases, each of which will be discussed separately in this chapter. The first important phase happened in the 1640s, when a number of Dutch philologists began to focus their attention on Florence. This first generation of travelers came to Tuscany when Magliabechi was still a child, yet they laid the foundation for the network on which generations of scholars to come would rely to exchange information with the Florentine librarian. The second phase, in the 1660s, is characterized by a single, yet fundamental event: the arrival in Florence of the Amsterdam bookseller Pieter Blaeu. As noted earlier in the previous chapter, the strong link between Blaeu and the Medici court finds its ultimate

³⁰⁶ Gregorio Leti, *l'Italia regnante*, vol. 3 (Valenza: Guerini, 1676): 423, "hundreds of other famous men, have said to me many times, that they had no other desire, or to come, or to return to Italy, than to see the Magliabechi". Born in Milan in 1630, Gregorio Leti, whose publications are all listed on the Index Librorum Prohibitorum, fled England in 1683 for Amsterdam, where he became the city historiographer in 1685 until his death in 1701. Magliabechi provided Leti with material for his publications, in particular for his *Italia Regnante*. The two maintained an extensive correspondence from 1672 until 1679, which is extensively described in Luigi Fassò, *Auventurieri della penna del Seicento: Gregorio Leti, Giovanni Gerolamo Arconati Lamberti, Tomaso Tomasi, Bernardo Guasconi* (F. Le Monnier, 1924). While Leti's stay in the Dutch Republic is understudied, his stay in England has received considerable scholarly attention, see for example, Stefano Villani, 'Encomi ''inglesi'' di Gregorio Leti', in *Forme e occasioni dell'Encomio tra Cinque e Seicento. Formes et occasions de la louange entre XVIe et XVIIe stècle*, ed. Danielle Boillet and Liliana Grassi (Lucca: Pacini Fazzi, 2011), 213–36. The correspondence between Leti and Magliabechi, consisting of 120 letters written by Leti from Genève, Paris, Lyon, London and Amsterdam, is extent in the National Library of Florence, Magl. VIII 752.

expression in 1668, when Cosimo decided to let Pieter act as his guide during his grand tour in the Dutch Republic. Pieter's stay in Florence must thus have been a crucial component in the creation of a friendship bond between Blaeu and the Medici court. The third and last phase, the 1670s, witnessed a boom of Dutch travelers to Florence. In the aftermath of Cosimo's visit in the Dutch Republic, the Dutch knew that they were welcomed by the Grand Duke and they benefitted from his hospitality. In addition, they valued the opportunity such a visit afforded to meet Magliabechi, under whose influence the Florentine collections became more accessible than ever before. Yet, Magliabechi was more than that. He appears to have shielded the Dutch from significant dangers at the time. Religious conversions and atrocities committed by evil custodians and invidious scholars were part of the daily life at the Medici court, and Magliabechi tried to do everything in his power to guarantee the Dutch an unconcerned stay in the Grand Duchy of Tuscany.

1. THE RISE OF ANTONIO MAGLIABECHI

At present, the secondary literature on Magliabechi's life and career had received considerable scholarly interest.³⁰⁷ The importance of Magliabechi's correspondence was already recognized in the early 1740s, when Giovanni Targioni Tozzetti (1712-1783), curator of the library of Magliabechi, edited and published a large number of the librarian's incoming correspondence.³⁰⁸ Since then, numerous articles and various editions of his correspondence were realized, which reached its peak with the publication of the most recent volume in 2018, which is entirely dedicated to the complex personality and activities of Magliabechi himself.³⁰⁹ The book attempts to critically rethink the role assigned to Magliabechi in European intellectual history, by placing him in the foreground as a major contributor to the early modern scholarly society, instead of viewing him as a secondary figure in the Republic of Letters. Although Magliabechi never wrote anything besides his letters, it were precisely these letters that kept the scholarly community going.³¹⁰ He acted as an important information-broker by introducing scholars to each other and by circulating information about who was doing what, where and when. His letters contained precise bibliographical reports, with which he informed his correspondents about the most recent publications, as well as his opinion on the contents and the authors of these books. In the sixth, and last chapter of this study, we will take a closer look at the role of these bibliographical reports in the scholarly exchange of the Florentine librarian. The following paragraph provides a brief biography of the Florentine librarian, showing why any discussion of intellectual contacts between the Dutch Republic and the Grand Duchy of Tuscany in the seventeenth century – probably even Italy – is incomplete without at least some mention of Magliabechi.

³⁰⁷ For a detailed bibliography of all studies regarding Magliaebechi, see Jean Boutier, 'Bibliografia Magliabechiana', in *Antonio Magliabechi nell'Europa dei saperi*, ed. Jean Boutier, Maria Pia Paoli, and Corrado Viola (Pisa: Scuola Normale Superiore, 2018), 469–83.

³⁰⁸ Tozzetti curated Magliabechi's incoming correspondence from Venice, the Low Countries and Germany: *Clarorum Venetorum ad Ant. Magliabechium nonnullosque alios Epistole. Ex Autographis in Biblioth. Magliabechiana, quae nunc Publica Florentinorum est, adservatis descriptae*, 2 vol. (Florentiae, Ex Typographia ad Insigne Apollonis in Platea, 1745-1746); *Clarorum Belgarum ad Ant. Magliabechium nonnullosque alios Epistole. Ex autographis in Biblioth. Magliabechiana, quae nunc Publica Florentinorum est, adservatis descriptae*, 2 vol. (Florentiae: Ex Typographia ad Insigne Apollonis in Platea, 1745: *Clarorum Germanorum ad Ant. Magliabechium nonnullosque alios Epistole. Ex Autographis in Biblioth. Magliabechiana, quae nunc Publica Florentinorum est, adservatis descriptae*, 2 vol. (Florentiae: Ex Typographia ad Insigne Apollonis in Platea, 1745: *Clarorum Germanorum ad Ant. Magliabechium nonnullosque alios Epistole. Ex Autographis in Biblioth. Magliabechiana, quae nunc Publica Florentinorum est, adservatis descriptae* (Florentiae, Ex Typographia ad Insigne Apollonis in Platea, 1745: *Clarorum Germanorum ad Ant. Magliabechium nonnullosque alios Epistole. Ex Autographis in Biblioth. Magliabechiana, quae nunc Publica Florentinorum est, adservatis descriptae* (Florentiae, Ex Typographia ad Insigne Apollonis in Platea, 1746).

³⁰⁹ Jean Boutier, Maria Pia Paoli, and Corrado Viola, eds., Antonio Magliabechi nell'Europa dei saperi.

³¹⁰ On this topic, see Corrado Viola, 'Magliabechi 'autore'', in Antonio Magliabechi nell'Europa dei saperi, 143-181.

1.1 MAGLIABECHI: A BRIEF BIOGRAPHY

Magliabechi was born in Florence on the 20th of October 1633.³¹¹ In his remarkable account of the early life of Magliabechi, Joseph Spence (1699-1768) portrays Magliabechi as an employee of a fruit vendor.³¹² Spence describes that, although Magliabechi had never learned to read, he was continuously looking at the leaves of the old books that were used to wrap the fruit. One day, a bookseller walked by and noticed this curious habit. Knowing that the boy could not read, he asked him why he stared so much on the printed paper. The young Magliabechi answered that he did not know exactly why, but that "he loved it of all things". Moreover, he answered, he would "be the happiest creature in the world, if he could live with him, who had always so many books with him".³¹³ The Florentine bookseller remained astonished with the answer of the child and agreed to employ him in his bookshop. This image of Magliabechi as described by Spence is certainly idyllic, yet substantially inconsistent with other, more reliable, accounts of Magliabechi's childhood. Anton Francesco Marmi (1665-1736), whose biography of Magliabechi has been recently edited by Corrado Viola, stated that Magliabechi was apprenticed to a goldsmith in Florence, which is the prevailing view we have of Magliabechi nowadays.³¹⁴ Out of his small resources, Magliabechi bought as many books as he could, reading them in his spare time. Likewise, Anton Maria Salvini, writer of the Delle lodi di Antonio Magliabechi in 1715, wrote that Magliabechi's true vocation was towards scholarship since childhood, which was so strong as a "calamita verso il polo" that in his spare time he pleased himself only with books which were his "compagni inseperabili".³¹⁵

The goldsmith's shop was frequented by leading scholars in Florence, including the priest Andrea Torsi da Bibbiena, who taught Magliabechi the Latin language, and Michele Ermini, librarian of Cardinal Giovan Carlo de' Medici (1611-1663). Ermini, impressed by the outstanding intellectual capacities and memory of Magliabechi, taught him Greek and Hebrew. In the 1650s, Ermini introduced Magliabechi into the company of other Tuscan scholars, including Carlo Dati (1619-1676), Andrea Cavalcanti (1610-1673), Lorenzo Panciatichi (1635-1676) and Lorenzo Pucci.³¹⁶ Dati, Cavalcanti and Pucci introduced Magliabechi to Leopoldo de' Medici (1617-1675), who decided to entrust him with the task of managing the collections of his own library, for which he also wrote a vast catalogue detailing the library of Leopoldo.³¹⁷ As such, Magliabechi started to buy book for Leopoldo's library, which brought him into contact with the leading representatives of the book trade in the 1660s. These include the Combi-La Noù family in Venice, the Borde-Arnaud family and the Anisson family in Lyon, the Huguetan family in Lyon

³¹¹ For the family context of Magliabechi, see Maria Pia Paoli, 'Antonio Magliabechi e Firenze: il contesto "familiare", in *Antonio Magliabechi nell'Europa dei saperi*, 19–61.

³¹² Joseph Spence, A Parallel; in the Manner of Plutarch: Between a Most Celebrated Man of Florence; and One, Scarce Ever Heard Of, in England (Strawberry-Hill: William Robindon, 1758): 6-7.

³¹³ Spence, 7-8.

³¹⁴ Corrado Viola, eds., 'Anton Francesco Marmi. Vita di Antonio Magliabechi', appendix to *Antonio Magliabechi nell'Europa dei saperi*, 41.

³¹⁵ Anton Maria Salvini, Delle lodi di Antonio Magliabechi orazione funerale del sig. abate Anton Maria Salvini detta da lui pubblicamente nell'Accademia fiorentina il di 23. di settembre dell'anno 1715 nel consolato dell'illustrissimo sig. abate Salvino Salvini (Florence: nella stamperia di S.A.R. per i Guiducci, e Franchi, 1715): cit. VII, "Magnet to its pole"; "inseperable comrades".

³¹⁶ Caroline Callard, 'Diogène au service des princes : Antonio Magliabechi à la cour de Toscane (1633-1714)', *Histoire, économie et société* 19, no. 1 (2000): 91.

³¹⁷ Alfonso Mirto, La biblioteca del cardinal Leopoldo de' Medici. Catalogo (Florence: Leo S. Olschki, 1990). For more about the relation between Magliabechi and Leopoldo de' Medici see, Alfonso Mirto, Lettere di Antonio Magliabechi a Leopoldo de' Medici (Rome: Aracne, 2012). For Magliabechi's role as a librarian, see Maria Mannelli Goggioli, 'Magliabechi, il bibliotecario', in Antonio Magliabechi nell'Europa dei saperi, 61–91; Ibidem, La biblioteca Magliabechiana. Libri, uomini, idee per la prima biblioteca a Firenze (Florence: Olschki, 2000); Jean Boutier and Maria Pia Paoli, 'Letterati cittadini e principi filosofi. I milieux intellettuali fiorentini tra Cinque e Settecento', in Naples, Rome, Florence: une histoire comparée des milieux intellectuels italiens, XVIIe-XVIIIe siècles, ed. Jean Boutier, Antonella Romano, Brigitte Marin (Rome: École française de Rome, 2005): 29-30, available at: http://books.openedition.org/efr/2310, last accessed 22 October 2018.

and later in Amsterdam, and the Blaeu family in the latter city.³¹⁸ As will be discussed in more detail below, the Amsterdam bookseller Pieter Blaeu visited Magliabechi in 1660 to promote his father's project on the Tuscan town atlas. This visit was the beginning of a long-standing epistolary exchange between Magliabechi and the Blaeus, that lasted from 1660 until 1705, which resulted in a continuous flow of books between Amsterdam and Florence in the second half of the seventeenth century.³¹⁹

When Cosimo left on his grand tour through Northern Europe in 1667, Magliabechi was already busy building his elaborate network of learned and literary contacts across Europe. Figure 2 gives a clear picture of the overall structure of Magliabechi's correspondence, by highlighting those cities that played a major role in his network.³²⁰ In these maps, the size of the nodes indicates the number of correspondents. As the map shows, Florence, Rome and Venice constitute the core of Magliabechi's network in Italy, while in Germany the cities of Leipzig, Nuremburg, Hamburg and Augsburg are of considerable importance.³²¹ His network of contacts in France is mainly concentrated in Paris and Lyon. As noted earlier, Magliabechi was in touch with many Lyons booksellers. In Paris, Magliabechi exchanged letters with several distinguished members of the Parisian scholarly community, including, amongst all, Emery Bigot (1626-1689), who became acquainted with Magliabechi during his stay in Florence in 1659-1661, and Gilles Ménage (1613-1692).³²² They, on discovering Magliabechi's valuable knowledge of books, introduced him to other scholars in France, Germany and the Dutch Republic. Consequently, his network grew in importance as more scholars joined his network over time. In 1671, for instance, Emery Bigot, introduced the Dutch philologist Nicolaas Heinsius to Magliabechi, and the two initiated a correspondence that would last until 1674.³²³

³¹⁸ Alfonso Mirto, 'Librai Veneziani Del Seicento: I Combi-La Noù Ed Il Commercio Librario Con Firenze', *La* Bibliofilía 94, no. 1 (1992): 61–88; Alfonso Mirto, *Stampatori, Editori, Librai Nella Seconda Metà Del Seicento*, vol. 1, 2 vols, Politica e Storia. Saggi e Testi 6 (Florence: Centro Editoriale Toscano, 1989).

³¹⁹ For the correspondence between Pieter Blaeu and the Medici court see Mirto and Van Veen, *Pieter Blaeu : Lettere Ai Fiorentini : Antonio Magliabechi, Leopoldo e Cosimo III de' Medici, e Altri, 1660-1705.* See also, Henk Th. van Veen, 'Pieter Blaeu and Antonio Magliabechi', *Quaerendo* 12 (1982): 130–58.

³²⁰ Magliabechi's, rather marginal correspondence network in England has been discussed by Luisa Simonutti, 'Prima osservazioni sulle *curiositates* magliabechiane d'Oltremanica', in *Antonio Magliabechi nell'Europa dei saperi*, 417.

³²¹ Magliabechi's network in Germany has been studied by Thomas Wallnig, '«Magna tua [...] in Germanos omnes benignitas»: Magliabechi e il mondo germanico.', in *Antonio Magliabechi nell'Europa dei saperi*, 379–93.

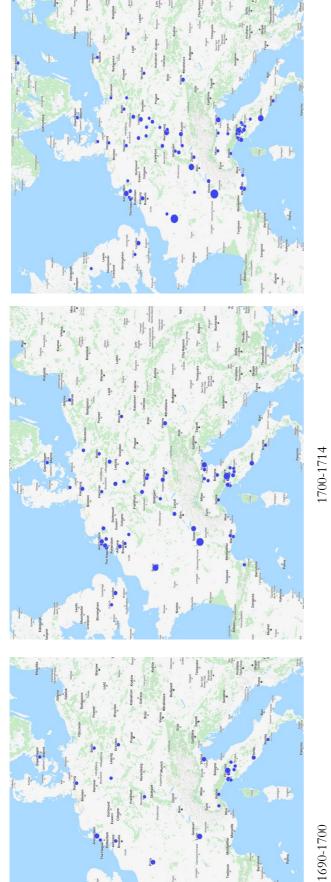
³²² For Magliabechi's network in France see, Jean Boutier, 'Le petit monde parisien de Magliabechi', in *Antonio Magliabechi nell'Europa dei saperi*, 333–79. For more about the early modern scholarly relations between France and Italy, see Françoise Waquet, *Le Modèle français et l'Italie savante. Conscience de soi et perception de l'autre dans la République des Lettres (1660-1750)*, vol. 117 (École Française de Rome, 1989).

³²³ For Bigot's introduction see Heinsius to Magliabechi, 15 December 1671, UBL, BUR F 1.



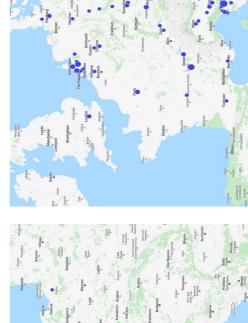
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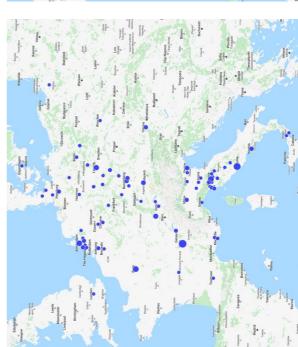
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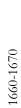
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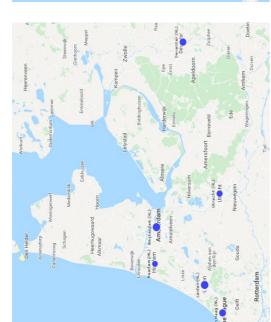
Fig. 2 Evolution of the epistolary network of Antonio Magliabechi. Maps created with nodegoat.

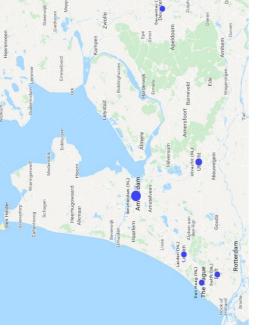














1700-1714

Fig. 3 Evolution of the epistolary network of Antonio Magliabechi in the Dutch Republic (see Appendix 1). Maps created with nodegoat.

While the epistolary networks between the Dutch Republic and the Grand Duchy of Tuscany reached across a vast geographic area, these networks themselves centered on certain people and cities. These people were almost always based in one of the main cities of the Republic of Letters – cities which afforded access to great libraries, to universities, to the patronage of wealthy benefactors, and to printing presses, the engines of early modern Europe.³²⁴ As shown by figure 3, Magliabechi's correspondence took off in Amsterdam in the 1660s, "which thanks to its flourishing bookselling and publishing activities was a crossroads in scholarly Europe during this period."³²⁵ In this year, he started to exchange letters with the Blaeu family. In the 1670s, university cities like Leiden and Utrecht contributed considerable to his network, where he found correspondents who were at least as beneficial to him as he was for them, including the scholars Jacob Gronovius, Laurens Gronovius (1648-1724), Coenraad Ruysch (1650-1731) in Leiden and Johannes Georgius Graevius (1632-1703) and Jacob Tollius (1633-1696) in Utrecht. The Hague, Deventer and Haarlem appear on the map in these years because of the presence there of Nicolaas Heinsius, Willem Goes (1610-1686), Rulaeus Phillipus (1640-?) and Gisbert Cuper. In the 1680s, Magliabechi established a relationship with the scientist Antoni van Leeuwenhoek (1632-1723) in Delft. In the same years, many French booksellers living in Amsterdam joined the network, including the Huguenot printers Henry Desbordes (1640-?) and Marc Huguetan (1655-1702) who had been forced to leave France after the Edict of Fontaineblaeu in 1685. This policy, issued by Louis XIV of France in 1685 made official the persecution of Protestants, who subsequently sought refuge in other nations. The 1690s is characterized by Magliabechi's correspondence with Pierre Bayle (1647-1706) in Rotterdam. In the last phase of Magliabechi's network, the 1700s, a whole new generation of scholars joined the network of Magliabechi, including the scholars Jean Le Clerc, Willem Surenhuis (1664-1729) and Henrik Brenkman (1681-736) in Amsterdam, Pieter Burman (1668-1741), Adriaan Reeland (1676-1718) and Abraham Cousson in Utrecht and Joannes Kool (1672-1712) in Amersfoort. A complete list of Magliabechi's correspondents is provided in Appendix 1. In the next chapter, we will look more closely at the way these correspondents joined the network of Magliabechi.

The maps in figure 2 and 3 show that Magliabechi's network took off at the moment when Cosimo entrusted Magliabechi with the custody of the Medici's Palatine library in the Pitti Palace in 1673. In this function, Magliabechi had to ensure that all books, which were scattered over the various parts of the palazzo and the Medici villas, were re-united and catalogued.³²⁶ Moreover, he began to organize Cosimo's library into an up-to-date information collection. According to Magliabechi, the library was to acquire all new publications, in particular "de' moderni" and he used his strong relations with the Dutch Republic to buy the missing volumes. For example, on the 20th of February 1673, Magliabechi wrote to the Dutch philologist Nicolaas Heinsius to inform him about Cosimo's plan to build a library in his

³²⁴ See Christian T. Callisen and Barbara A. Adkins, 'The old face of 'new' social networks: the republic of letters as a virtual community', unpublished paper presented at the 11th Annual Conference for the Association of Internet Researchers, 21-23 Oct 2010, Gothenburg. Retrieved from the QUT Digital Repository: http://eprints.qut.edu.au/, last accessed 1 April 2019. ³²⁵ A.H. Laeven, *The ''Acta eruditorum'' under the editorship of Otto Mencke (1644-1707): The history of an international learned journal*

between 1682 and 1707 (Amsterdam/Maarssen: APA-Holland University Press, 1990), cit. 167. Several studies have focused on Magliabechi's relationships with the Dutch Republic: Giuseppina Totaro, 'Libri e Circolazione Libraria Nelle Lettere Di Antonio Magliabechi a Corrispondenti Olandesi', LEXICON PHILOSOPHICUM. Quaderni Di Terminologia Filosofica e Storia Delle Idee. X (1999): 173–95; Ingeborg van Vugt, 'Using Multi-Layered Networks to Disclose Books in the Republic of Letters', Journal of Historical Network Research 1, no. 1 (14 October 2017): 25–51; Van Vugt, 'Geografie e storia di una rete epistolare. Contatti e mediazioni nell'epistolario di Antonio Magliabechi', in Antonio Magliabechi nell'Europa dei saperi, 259-293. Manuela Doni Garfagnini, Antonio Magliabechi Ed Il Suo Epistolario : La Corrispondenza Con Peter Burman, Filologo Di Utecht (Olschki: Florence, 1987). Mirto and Van Veen, Pieter Blaeu : Lettere Ai Fiorentini : Antonio Magliabechi, Leopoldo e Cosimo III de' Medici, e Altri, 1660-1705.

³²⁶ Cfr. Moorman, Discovering Rome through Joan Blaeu's Admiranda Urbis Roma: the creation of the town atlas of Rome (Amsterdam, 1663) in the light of Italian-Dutch relationships in the seventeenth century, 34. Moorman refers here to the Treccani entry on Magliabechi: http://www.treccani.it/enciclopedia/antonio-magliabechi_(Dizionario-Biografico)/, last accessed 1 April 2019.

palace, a desire he had formed right after his grand tour. Yet, these plans were delayed because of the sudden death of his father, Ferdinando II de' Medici, in 1670:

"Face fare un bellissimo vaso, con iscaffali, ecc., ma quando appunto aveva pensiero di empierlo di ottimi Libri, morì il <u>Serenissimo Gran Duca Ferdinando</u>, onde gli bisognò badare alle cose del governo. Il suo pensiero però è sempre stato, ed è, di accumulare un gran numero di Libri, come avrà dato qualche aggiustamento alle cose dello Stato. Qui inclusa troverà una piccola nota di alcuni pochi Libri, che con un numero innumerabile di altri gli mancano. De' moderni non ne ha quasi alcuno, e degli antichi gliene mancano moltissimi."³²⁷

Magliabechi continues this letter by saying that Cosimo III possessed few books because he was unwilling to buy any while on his grand tour without his advice.³²⁸ Cosimo appeared thus to have trusted his librarian completely.

The map in figure 2 underlines that beyond Magliabechi's local circles of learning in Florence, layed the Republic of Letters. Whilst his post as the custodian of the *Biblioteca Palatina* gave him considerable prominence and liberty at the court of the Medici family, he is remembered more for his contribution to the Republic of Letters, and most specifically for his prodigious memory and encyclopedic knowledge of each subject, "quasi come di Dittatore di tutta la Letterature europea de' suoi tempi", for which he was consulted "da tutti gli studiosi d'Europe come un oracolo".³²⁹ Besides the Grand ducal collections, Magliabechi had created his own book collection, which had become famous for both the quality and quality of manuscripts and printed works it contained.³³⁰ His collection of books was kept at his house in Via della Scale in Florence, primarily consisting of books that were donated and dedicated to him by (travelling) scholars from all over Europe.³³¹

To accumulate and read more and more books, Magliabechi was willing to make any sacrifice by leading a solitary and frugal life (sordid and miserable in the opinion of many of his contemporaries).³³²

³²⁷ Magliabechi to N. Heinsius, 20 February 1673, UBL, BUR F 8, f. 4, "[the Grand Duke] ordered to make a beautiful vessel, with shelves, etc. but when he was thinking about filling it with excellent books, the Serene Grand Duke Ferdinando died, upon which he needed to look after government affairs. His idea, however, has always been, and still is, to accumulate a large number of Books, after having made some adjustments to the matters of State. Here included you can find a small list including a few books, which, with an innumerable number of other books, he misses. He has almost no modern books, and he misses lots of antique books"

 ³²⁸ Ibidem, "Quando fu costà, in Francia, ed in altri luoghi, non volle comprar Libri, perché io non ero seco" [When the Grand Duke was there in the Dutch Republic, in France, and in other places, he did not want to buy books, because I was not there].
 ³²⁹ Giovanni Targioni Tozzetti, Notizie degli aggrandimenti delle Scienze Fisiche accaduti in Toscana nel corso di anni LX. del secolo XVII. Raccolte dal Dottore Gio. Targioni Tozzett, cit. 485.

³³⁰ Moorman, Discovering Rome through Joan Blaeu's Admiranda Urbis Roma: the creation of the town atlas of Rome (Amsterdam, 1663) in the light of Italian-Dutch relationships in the seventeenth century, 34.

³³¹ See also Giovanni Targioni Tozzetti, Notizie degli aggrandimenti delle Scienze Fisiche accaduti in Toscana nel corso di anni LX. del secolo XVII. Raccolte dal Dottore Gio. Targioni Tozzetti, tomo primo (Florence: Giuseppe Bouchard, 1780): 486, "Molto di questi più Dotti Viaggiatori egli gli presentava al Granduca, ed al Principe Leopoldo, e questi gli ricolmava di beneficenze, e gradiva di discorrere con loro di cose Letterarie, laonde tornato ai loro Paesi, non si saziavano di decantare le sue lodi, e si facevano pregio di dedicargli, o inviargli le loro Opera, e le più pregiabili rarità, che potessero incontrare, specialmente d'Antichità, e Libri si Manoscritti, che stampati.". For more about the role of Magliabechi in the Republic of Letters, see Françoise Waquet, "Faticare a benefizio della letteraria Repubblica": Magliabechi et la communication du savoir', in *Antonio Magliabechi nell'Europa dei saperi*, 181–201.

³³² On Magliabechi's atypical behavior at the court, see Callard, 'Diogène au service des princes: Antonio Magliabechi à la cour de Toscane (1633–1714)', 85–103; Curious is also the account of Magliabechi given by Isaac D'Israeli in his *Curiosities of Literature*, who defined Magliabechi as a "a living Cyclopaedia, though a dark lantern". In his account, D'Israeli follows the observations of the Dutch professor Johannes Heyman, who visited the library in Florence: "His habits of life were uniform. Ever among his books, he troubled himself with no other concern whatever; and the only interest he appeared to take for any living thing was his spiders. While sitting among his literary piles, he affected great sympathy for these weavers of webs, and perhaps in contempt of those whose curiosity appeared impertinent, he frequently cried out, "to take care not to hurt his spiders!" (Isaac D'Israeli, *Curiosities of Literature*, vol. 1 (London: Frederick Warne and co., 1881), 345–47.

He slept on his books, only ate eggs, chewed tobacco and was dressed in a sloppy manner. We will come across several examples of Magliabechi's eccentric life and behaviour in the following paragraphs, such as those reported in the travel diaries of several Dutch scholars who visited Magliabechi in Florence.

It does not appear that the librarian ever married and had children. He died at the age of 81, on the 4th of July 1714, at the monastery of *Santa Maria Novella*. According to his testament, with was carried about by Anton Francesco Marmi and the lawyer Lorenzo Comparini after the death of Magliabechi in 1714, it was Magliabechi's explicit wish to leave his entire collections of around 30.000 printed publications "a beneficio universale della città di Firenze".³³³ To organize all the books, the executors of Magliabechi's will, Marmi and Comparini, rented an old theatre, the *Teatro degli Istrioni* or *di Baldracca.*³³⁴ In 1747, during the reign of Francis I Stefano di Lorena (1708-1765), the *Magliabechiana* library was opened to the public, becoming Florence first public library, and an important meeting point for Florentine academics.³³⁵ Following the unification of Italy, the *Magliabechiana* provided the basis for what would be called today the *Biblioteca Nazionale Centrale Firenze*. Besides his book collections, also his correspondence is extent in the collections of the same library, amounting to 22.173 letters written by 2.262 Italian and European correspondents between the years 1652 and 1714. Details of his correspondence have been kept in a printed card catalogue, which has been digitized in 2013. In the following chapter of this study, this digitized card catalogue will be used to map the network of Antonio Magliabechi in the wider context of the Dutch Republic.

2. THE 1640s: THE FOUNDING FATHERS OF THE DUTCH-TUSCAN NETWORK

Years before Magliabechi's presence at the Medici court, Dutch interest in the Grand Duchy of Tuscany had already started to grow remarkably. During the 1640s, several Dutch scholars travelled to Florence with the prospect of collating manuscripts in the rich collections of the *Biblioteca Medicea Laurenziana* and the San Marco library.³³⁶ At the same time, they made sure to study the antiquities and the archaeological sites Italy had to offer. These journeys can be classified as a *peregrinatio academica*, a traditional scholarly pilgrimage for students and scholars, particularly in the seventeenth century, along the most prestigious libraries, universities and academies of southern Europe.³³⁷ It was a way of getting to known the scholarly

³³³ M. Mannelli Goggioli, La Biblioteca Magliabechiana. Libri, uomini, idee per la prima biblioteca publica a Firenze (Florence: Leo S. Olschki, 2000): 183-184.

³³⁴ About the foundation of the *Magliabechiana*, see Giuseppina Carla Romby, 'Da "teatro d'istioni" a "teatro di sapienza". L'architettura della pubblica Libreraia Magliabechiana tra decoro e ornamento.', in *Antonio Magliabechi nell'Europa dei saperi*, 429–43. For a general overview about role of public libraries in Florence in the eighteenth century see E. Chapron, *«Ad utilità pubblica». Politiques des bibliothèques et pratiques du livre aux XVIII^e siècle (Genève: Droz, 2009).*

³³⁵ Romby, 'Da "teatro d'istioni" a "teatro di sapienza". L'architettura della pubblica Libreraia Magliabechiana tra decoro e ornamento', 443.

³³⁶ Build in the cloister of the Medicean Basilica di San Lorenzo, and opened in 1571, the *Biblioteca Medicea Laurenziana* was designed by Michelangelo for the Medici Pope Clemente VII to store the private book and manuscript collections of the Medici family. See, James G. Cooper, 'Michelangelo's Laurentian Library: Drawings and Design Process', *Architectural History* 54, (2011): 49-90. The library at the Dominican convent of San Marco held the collections of the Florentine humanist Niccolò de' Niccoli (1364-1437) and opened to the public in 1444, the first public library in Italy. See, P. Nelles, 'Renaissance Libraries', in *International Dictionary of Library History*, ed. David H. Stam (Chicago/London: Fitzroy Dearborn Publishers, 2001), 151.

³³⁷ Brief overview of the literature on the grand tour and Italy see L. Schudt, *Italienreise im 17. und 18. Jahrhundert* (Wien/München: Schroll-Verlag, 1959); J. Black, *Italy and the Grand Tour* (New Haven/London: Yale University Press, 2003; Edward Chaney, *The Evolution of the Grand Tour. Anglo-Italian cultural relations since the Renaissance* (London: Routhledge, 1998); Paula Findlen, *Possessing Nature: Museums, Collecting, and Scientific Culture in Early Modern Italy* (Berkeley: University of California Press, 1994): 155–193. For a general discussion of Dutch on the grand tour see Frank-van Westrienen, *De Groote Tour: Tekening van de educatiereis der Nederlanders in de zeventiende eeuw*; Gerrit Verhoeven, *Europe Within Reach: Netherlandish Travellers on the Grand Tour and Beyond, 1585–1750*, trans. by Diana L. Webb (Leiden: Brill, 2015); Arthur Weststeijn, *Nederlanders in Rome* (Amsterdam: Prometheus, 2017). For a general overview of early modern travelling see Justin Stagl, A History of Curiosity: The Theory of Travel, 1550–1800 (Cluwer: Harwood Academic Publishers, 1995).

world, a formative experience that shaped future careers and networks. The Dutch philologists Johannes Fredericus Gronovius (1611-1671), Isaac Vossius (1618-1689) and Nicolaas Heinsius (1620-1681) were among the first to arrive in the city of Florence. They laid the groundwork for all future relations between the Dutch Republic and the Grand Duchy of Tuscany which reached their peak in Magliabechi's time. Therefore, in this paragraph, we will take a look at the travel itineraries of these three scholars – who can be considered as the founding fathers of the Dutch-Tuscan network.

Johannes Fredericus Gronovius was the first Dutch philologist to visit Florence, which was part of a greater tour he made to England, France, Germany and Italy from 1639 until 1642. Gronovius was born in Hamburg in 1611, where he remained during the first twenty years of his life. In 1633, he met the renowned legal scholar Hugo Grotius (1583-1645), who advised him to finish his studies in Holland.³³⁸ Armed with letters of recommendation from Grotius, he travelled to the Dutch Republic, where he came into contact with several scholars, including the renowned philologist Gerardus Johannes Vossius (1577-1649), the French theologian André Rivet (1572-1651) and Nicolaas Heinsius, with whom he became close friends.³³⁹ During his stay in the Republic, he became a preceptor to children of a wealthy Amsterdam family which enabled him in 1639 to embark on a *peregrinatio academica*.³⁴⁰ Together with his pupils he toured through Europe, buying books, transcribing manuscripts, visiting academies, and meeting as many leading scholars as they could.

Although Gronovius did not leave a travel account of his travels, his itinerary can be reconstructed by means of his correspondence, as has been done in the works of Paul Dibon and Françoise Waquet.³⁴¹ He went first to England, where he was granted an entrée to the Oxford libraries thanks to the recommendation letters of Gerardus Johannes Vossius and Franciscus Junius (1591-1677). From there, he crossed the North Sea and entered France, travelling to Paris and Angers, where he acquired a Doctor's degree in Law. In the fall of 1640, he crossed the Mediterranean to Italy, where he travelled to Pisa, Florence, Bologna, Padua and Venice, to ultimately arrive in Rome. During his stay in Rome, he was offered a professorship in history and eloquence at the Athenaeum in Deventer, upon which he decided to return home.³⁴² At the time of his visit to Florence, Ferdinando II de' Medici was Grand Duke. Under his reign, Florence blossomed once again after a long period of crisis caused by plague epidemics in the 1630s and massive depressions in the linen and wool industries.³⁴³ These favorable circumstances made Florence an attractive destination for foreign travelers, amongst whom Gronovius, who came to Florence to consult ancient manuscripts in the Medici libraries. Yet, he was greatly disappointed when this did not work out the way he had hoped. While he did not encounter any difficulties in obtaining permissions to enter the Parisian libraries, Gronovius lamented the accessibility of the Biblioteca Medicea Laurenziana.³⁴⁴ Here, he had to bribe the custodian to work on his collations. If someone other than the custodian entered the library, Gronovius had to hide his pencil and paper and

³³⁸ Hans De Waardt, 'Academic Careers and Scholarly Networks', in *The Early Enlightenment in the Dutch Republic, 1650-1750:* Selected Papers of a Conference, Held at the Herzog August Bibliothek, Wolfenbüttel 22-23 March 2001, ed. Wiep Van Bunge (Leiden/Boston: Brill Publishers, 2003), 19.

³³⁹ De Waardt, 20.

³⁴⁰ Ibidem.

³⁴¹ Paul Dibon and Françoise Waquet, Johannes Fredericus Gronovius, pélerin de la république des lettres: recherches sur le voyage savant au xviie siècle (Genève: Librairie Droz, 1984). For an inventory of the letters Gronovius exchanged during his travels see Paul Dibon, Hans Bots, and Eugenie Bots-Estourgie, Inventaire de La Correspondance de Johannes Fredericus Gronovius, (1631-1671) (The Hague: Martinus Nijhoff, 1974), 75–93.

³⁴² Dibon and Waquet, Johannes Fredericus Gronovius, pélerin de la république des lettres, 3–14.

³⁴³ Mario Bevilacqua, Firenze 1640: Architettura e Città', in Firenze Milleseicentoquaranta: Arti, Lettere, Musica, Scienza', ed. Elena Fumagalli, Alessandro Nova, and Massimiliano Rossi (Venice: Marsilio, 2010), 83–88.

³⁴⁴ Dibon and Waquet, 33-36.

pretend that he was just reading.³⁴⁵ Moreover, he could copy the manuscripts against payment of 6 *stuivers* per hour.³⁴⁶ Though Gronovius complained that Florentine librarians refused to assist him, he nevertheless established some valuable friendships, including the renowned Giovan Battista Doni (1593-1647), professor of rhetoric at the University of Pisa , Carlo Dati, the Florentine Latinst Jacopo Gaddi (c. 1600-after 1658), Paganino Gaudenzi (1595-1649), professor of *lettere umane* at the University of Pisa, and Carlo Strozzi (1587-1670).³⁴⁷

Because of the great difficulties Gronovius encountered in gaining permission to the Florentine libraries, he was left with a lasting impression of Italy as an intellectual backwater.³⁴⁸ However, his opinion was not altogether consistent, since even the University Library of Leiden was closed to foreigners in Gronovius' time.³⁴⁹ Moreover, the eminent scholar Daniel Heinsius (1580-1655), head of the University Library of Leiden from 1606 until 1653, appeared to have made the access to the library difficult for his enemies in the intellectual field. Claude Saumaise (1588-1653), for example, had to write letters of application and sign receipts of every book he wanted to consult. Heinsius, however, was not in a hurry to accept his competitor's applications, with the result that Saumaise complained of having to live in a country where all libraries were inaccessible.³⁵⁰ Besides Leiden, the Amsterdam municipal library was badly stocked and catalogued and, like many other local book collections, therefore hardly accessible.³⁵¹ This was a common problem in early modern Europe, argued Ann Blair, for the overload of books hampered access to library holdings. Most libraries "did not list all the copies of a work that the library owned and did not give any indication of how to locate a book in the library-actual access would have required consulting the librarian".³⁵² Once access was granted, the book would be usually chained to a reading table (as was the case in the Biblioteca Medicea Laurenziana), which often led to crowding when several readers had to stand side by side, at times reading from the same book.³⁵³

Those who followed Johannes Fredericus Gronovius to Florence had relatively less difficulty in gaining access to the Florentine libraries. Two years after Gronovius' visit in Florence, Isaac Vossius (1618-1689) visited the city. He arrived in Florence on the 21st of March 1642, after he had travelled extensively in England and France.³⁵⁴ During his travels, he did exactly what Gronovius had done before him: collating manuscripts. Though Vossius' entrance to the *Laurenziana* was nonetheless effortless, it was easier than it had been for Gronovius. Vossius was allowed to stay in the library for two hours a day during which he was permitted to take notes and make collations.³⁵⁵ Vossius also visited the library of San Marco and bought manuscripts there.³⁵⁶ During his stay in Florence, Vossius became acquainted with Giovan Battista Doni, Carlo Dati and Paganino Gaudenzi, both of whom, as we saw, had also befriended

 ³⁴⁵ Frans Felix Blok, Nicolaas Heinsius in Dienst van Christina van Zweden (Delft: Ursulapers, 1949), 156.
 ³⁴⁶ Ibidem.

³⁴⁷ Dibon and Waquet, Johannes Fredericus Gronovius, pélerin de la république des lettres, 163.

³⁴⁸ *Ibidem*, 33-36.

³⁴⁹ Van Veen and McCormich, cit. 28.

³⁵⁰ Elfriede Hulshoff Pol, The first century of Leiden University Library (Leiden: E.J. Brill, 1975), 431

³⁵¹ Dirk van Miert, Humanism in an age of Science. The Amsterdam Atheneum in the Golden Age, 1632-1704 (Leiden/Boston: Brill, 2009), 79.

³⁵² Ann Blair, *Too Much to Know. Managing Scholarly Information before the Modern Age* (New Haven/London: Yale University Press, 2010), 16-17.

³⁵³ About the practice of chaining books, see Blair, *Too much to known*, 118-119; Burnett Hillman Streeter, *The Chained Library:* A Survey of Four Centuries in the Evolution of the English Library (Cambridge: Cambridge University Press, 2011); Stuart A. P. Murray. *The Library* (New York: Skyhorse publishing, 2009), 174.

³⁵⁴ F.F. Blok and C.S.M. Rademaker, 'Isaac Vossius' Grand Tour, 1641-1644. The Correspondence between Isaac and His Parents', *Lias* 33, no. 2 (2006): 150–216. See also Tim Wauters, "'Libertinage Érudit' and Isaac Vossius: A Case Study', *Journal for Early Modern Cultural Studies* 12, no. 2 (2012): 37–53.

³⁵⁵ Y. H. Rogge, U. E. Dienstschuldige, and G. J. Vossius, 'De Reis Van Isaac Vossius', Oud Holland - *Quarterly for Dutch Art History* 18, no. 1 (1900): 11.

³⁵⁶ Van Veen and McCormick, *Tuscany and the Low Countries*, 71.

Gronovius.³⁵⁷ In addition, new contacts were added to the network during this period, including, amongst all, Agostino Coltellini (1613-1693), founder of the *Accademia degli Apatisti*, one of Florence's dominant literary academies of the seventeenth century.³⁵⁸

In 1646, it was the turn of the philologist Nicolaas Heinsius. After arriving by boat in Livorno in July, he travelled to Pisa with a letter of introduction from Johannes Fredericus Gronovius to Paganino Gaudenzi, who had remained in contact with Gronovius' after his return to the Dutch Republic.³⁵⁹ The recommendation secured Heinsius admission to the Biblioteca Laurenziana, where he consulted important manuscripts of, amongst others, Flaccus, Virgil, Claudian and Ovid, which appear to have been implicitly used in his later revised editions. Moreover, Heinsius was also admitted to the San Marco Library thanks to Doni. During the summer of 1652, Heinsius returned to Italy, this time in the service of Queen Christina of Sweden (1626-1689), to find and buy rare manuscripts for Christina's private library. It was Carlo Roberto Dati who assisted Heinsius during his second stay, granting him an audience by Prince Leopoldo de Medici and helping him to locate manuscripts for the Queen's library.³⁶⁰ During his second stay in Florence, Heinsius became member of the Accademia della Crusca and was elected president of the Accademia degli Apatisti.³⁶¹ This brought him in contact with a large portion of the intellectual life of the city, exponentially expanding the network his two predecessors had established. He became acquainted with, amongst all, Andrea Cavalcanti (1610-1672), Agostino Coltellini, Michele Ermini, Giovanni Filippo Marucelli (1628-1680), Jacopo Salviati, Valerio Chimentelli (1620-1668), Ferdinando del Maestro (1630-1665), Ottavio Falconieri (1636-1675) and Paolo Falconieri (1638-1704).³⁶² After his visits, Heinsius continued to correspond with most of the learned men he had met, becoming, in Gregorio Leti's (1630-1701) words, "Uno de' maggiori letterati dell'Universo".³⁶³

While in Florence, Heinsius could thus profit from the experience and network of Gronovius and Vossius. It was Gronovius who had advised him to spend more time in Florence because of the greater number of manuscripts there.³⁶⁴ The many Florentine contacts Heinsius inherited from Gronovius and Vossius made his stay in Florence easier, especially as compared to Rome where he had just been.³⁶⁵ For example, in 1652, Isaac Vossius wrote a letter to Nicolaas Heinsius to inform him that there were several important manuscripts in the collections of the *Biblioteca Altempsiana* in Rome. Yet, concluded Vossius, "this is all to no avail, for I fear you will not have access to that library".³⁶⁶ Heinsius, in fact, encountered great difficulties in gaining permission to enter this library, mostly because he did not trust anyone in Rome that could introduce him to the duke of Altemps. Initially, the Italian Latinist Vincenzo Noghera,

³⁵⁷ Van Veen and McCormick, 28.

³⁵⁸ The Accademia degli Apatisti was founded in 1631, see Alessandro Lazzeri, Intellettuali e consenso nella Toscana del Seicento. L'accademia degli Apatisti (Milan: Giuffrè, 1983).

³⁵⁹ A.H. Kan, 'Nicolaas Heinsius in Italie (1646-1648)', Onze Eeuw 14 (1914): 373.

³⁶⁰ On Heinsius role as book scout for Queen Christina of Sweden, see Frans F. Blok, *Nicolaas Heinsius in dienst van Christina van Zweden* (Delft: Ursulapers, 1949): 127-184. Remarkably, however, apart from this study, no other major study has so far been devoted to his varied scholarly and cultural activities.

³⁶¹ Van Veen and McCormick, *Tuscany and the Low Countries*, 29-30.

³⁶² Blok, Nicolaas Heinsius in Dienst van Christina van Zweden, 150-156.

³⁶³ Gregorio Leti to Nicolaas Heinsius, n.d., UBL, BUR F 7, "one of the major scholars of the Universe".

³⁶⁴ Gronovius wrote a letter to Nicolaas Heinsius to advise him about which Italian libraries he had to visit, see Dibon and Waquet, *Johannes Fredericus Gronovius, pélerin de la république des lettres*, 148.

³⁶⁵ In Rome, permissions to enter a library remained problematic throughout the 18th century.

³⁶⁶ Vossius to Heinsius, 26 November 1652, transcribed in Dirk van Miert, "The French Connection: From Casaubon and Scaliger, via Saumaise, to Isaac Vossius', in *Isaac Vossius (1618–1689) between Science and Scholarship*, ed. Dirk van Miert and Eric Jorink (Leiden/Boston: Brill Publishers, 2012), 38, "Quod si Romam denuo repetas, ut scribis, utinam possis accessum impetrare ad Bibliothecam Altemsianam. Exstant in ea Isidori Characeni Stathmi Parthici, cuius exiguum fragmentum edidit Hoeschelius. Exstant quoque ibi plura alia, quae frustra alibi quaeras, uti sunt Antonii Aureliani Architectura, Apollodori Atheniensis Grammatica, Censorinus De planetis, Manilius cum veteri Scholiaste. Exstat quoque ibi Spartianus manuscriptus. Verum haec frustra. Vereor enim ut tibi non pateat accessus ad illam."3/20/2019 2:41:00 PM

a friend and correspondent of Vossius, would introduce Heinsius, but this plan failed because Noghera ended up in prison.³⁶⁷ Moreover, Heinsius' other confident, the Roman antiquarian Cassiano dal Pozzo (1588-1657), had no connections with the duke.³⁶⁸ Eventually, Heinsius managed to get access to the *Biblioteca Altempsiana*, yet almost all the manuscripts he needed were stuffed in boxes, in which he was not allowed to take a look.³⁶⁹ In Florence, on the other hand, Heinsius spoke of the "amici propemodum innumeri" he had there, who consequently secured him admission to the collections of many Florentine libraries.³⁷⁰

3. THE 1660s: PIETER BLAEU AND THE TUSCAN ATLAS PROJECT

There is another traveler that needs to be mentioned in discussing the links between the Grand Duchy of Tuscany and the Dutch Republic: the Amsterdam bookseller and publisher Pieter Blaeu. In the 1660s, Pieter made various journeys throughout Italy which were directly connected to his father's project of the production of a series of "theatre" or books on the principal towns of Italian states.³⁷¹ His father, the cartographer Joan Blaeu (1596-1673), had commissioned Pieter to create a series of new potential markets and clients and to collect material to include in the town atlases of Italy. The trip marked the beginning of a long-standing relationship between Blaeu and the Tuscan court. After his return to Amsterdam, he remained in contact with Magliabechi, the Florentine bookseller Giovanni Gualberto Borghigiani, Carlo Dati, Michele Ermini and several members of the Medici family, including Leopoldo de' Medici and Cosimo III.³⁷²

Pieter had first travelled to southern Italy, where he visited Naples, and in the summer of 1660 he went to Rome and then to Florence.³⁷³ He arrived in Florence with a letter of recommendation to Magliabechi from a fellow Amsterdam bookseller, Andries Fries (1630-1675), who was the Dutch agent of the Venetian publishers Sebastian Combi and Giovanni La Noù.³⁷⁴ The friendship bond between Magliabechi and the Combi-La Noù family was quite a solid one, and dated back to the beginning of

³⁶⁷ Heinsius to Vossius, Rome, 30 June 1652, UBL, BUR F 11, f. 314, partly transcribed in Blok, *Nicolaas Heinsius in Dienst van Christina van Zweden*, 308 "Vincentium Nogheram in carcere detineri proxime monui, sine cuius opera in Altempsiano negotio nihil agi potest, cum aliis in hac urbe viris literatis minime fidam, qui videntur indignari in ultimum septemtrionem haec eruditionis instrumenta ablegari, ut illorum verbis utar".

³⁶⁸ Many letters between Heinsius and Dal Pozzo have survived in the collections of the University Library in Leiden and in the *Biblioteca Corsiniana* in Rome: UBL, Bur Q 16, nos. 1-106 (1649 to 1652); Rome, Biblioteca Corsiniana, Archivio dal Pozzo, ms XX, nos. 3-109 and ms. XXIX (26), Danielij Heinsij et Nicolaj eius filij Epistolae Equiti Comendatario atque Abbati Cassiano à Puteo, fol. 1-335 (1647-1656).

³⁶⁹ Blok, 150.

³⁷⁰ Heinsius to J. Gronovius, 16 November 1673, BUR Q 14, f. 264, partly transcribed in Blok, *Nicolaas Heinsius in Dienst van Christina van Zweden*, 311.

³⁷¹ See Moorman, 'Publishers at the Intersection of Cultures: The Significance of Italo-Dutch Contacts in the Creation Process of Joan Blaeu's Theatrum Italiae (1663)', cit. 73. The *Theatrum civitatum et admirandorum Italiae* is treated extensively in the work of Moorman. According to her, Joan Blaeu's project, the *Theatrum civitatum et admirandorum Italiae*, would treat the towns and monuments of Italy. It would consist of two parts, each consisting of five volumes. Blaeu envisaged that the first part would include the books on the towns "ruled by King Philip IV of Spain (1605-1665), king of Naples and Sicily, and Duke of Milan, on the Grand Duchy of Tuscany, on the Duchies of Mantua, Modena and Reggio, Parma and Piacenza, on the Republics of Venice, Genoa and Lucca, and lastly, on the Duchy of Piedmont and Savoy." The second part, Admiranda Urbis Romae, would be entirely dedicated to the city of Rome. Eventually, only three volumes were published in 1663. The first was dedicated to the Papal State, the second, though incomplete, to the cities of Naples and Sicily and the third to the city of Rome, consisting of one volume on the circuses, theatres and obelisks of Ancient Rome (*Ibidem*, 72).

³⁷² For the correspondence between Blaeu and Florence, see Mirto and van Veen, Pieter Blaeu: Lettere Ai Fiorentini: Antonio Magliabechi, Leopoldo e Cosimo III de' Medici, e Altri, 1660-1705.

³⁷³ Moorman, 'Publishers at the Intersection of Cultures: The Significance of Italo-Dutch Contacts in the Creation Process of Joan Blaeu's Theatrum Italiae (1663)', 73.

³⁷⁴ Alfonso Mirto, 'Lettere Di Andries Fries a Antonio Magliabechi, 1659-1675', Lias 14, no. 1 (1987): 62.

1657.³⁷⁵ After the introduction, Magliabechi ensured that Blaeu obtained an entrée to the Medici court. Here, Blaeu was able to make arrangements with Grand Duke Ferdinando II, his brother Leopoldo, and his son Cosimo, to plan the publication of the town atlas of the Grand Duchy of Tuscany.³⁷⁶ Although this plan was never finalized, preparations were carried out by prince Cosimo to gather accurate drawings and descriptions of the towns in Tuscany.

A document published by Van Veen sheds lights on the approach adopted by the Blaeus to gather material for the Tuscan town atlas. According to Van Veen the document concerns a draft memorandum for the Medici court which "was written shortly after Pieter's visit to Florence in connection with his urgent requests for drawings and descriptions of Tuscan cities."³⁷⁷ The memorandum provides guidelines as to how to gather the material orderly and methodically, showing that the production of the Tuscan town atlas was well-thought out and organized. This also seems the case: the first drawings arrived in Amsterdam in the winter of 1665, when Blaeu informed Magliabechi that he was eagerly awaiting for the first drawings "della Città de' quali il Serenissimo Principe di Toscana per mezzo suo si è compiaciuto favorirmi".³⁷⁸ In addition, the project was in full swing by May 1666, when Magliabechi informed Pieter that about twenty or thirty drawings of Tuscan cities were ready to be shipped to Amsterdam.³⁷⁹ Nevertheless, it soon appeared that the completion of the project of the Tuscan town atlas was too much for the Blaeu firm. In June 1666, Blaeu informed Magliabechi that the firm could not continue with the production of the book on Tuscan cities before having completed the volumes on Savoy and Piedmont. Since then, according to Van Veen, "nothing more was ever heard of the Tuscan volume".³⁰⁰

Yet, a newly discovered source sheds light on the, though short-lived, revival of the project. A year later, on the 12th of July 1667, Prince Cosimo de' Medici wrote to Bernardino de' Vecchi, a nobleman from Siena, that he desired to resume the gathering of descriptions and drawings of the town of Siena because the atlas of the Ecclesiastical State and the one of the Duchy of Piedmont were published:

"Essendo già usciti da' Torchi di Olanda i volumi che mostrano le Città, e luoghi dello Stato Ecclico, come pur del Piemonte, sollecitano adesso la stampa di quelle di Toscana, il che mi ha dato motivo di considerar nuovamente i Disegni, che di tutte le Città e Terre dello Stato di Siena."³⁸¹

While the *Civitates Status Ecclesiastici*, the first part of the *Theatrum civitatum et admirandorum Italiae* was published by the Blaeu family in 1663, the volume on the Duchy of Piedmont would only be published

³⁷⁵ Mirto, 'Librai Veneziani Del Seicento'.

³⁷⁶ Moorman, 'Publishers at the Intersection of Cultures The Significance of Italo-Dutch Contacts in the Creation Process of Joan Blaeu's Theatrum Italiae (1663)', 74.

³⁷⁷ Henk Th. van. Veen, 'A Tuscan Plan of Action for Joan Blaeu's Book of Italian Cities', Lias 18 (1991), cit. 223.

³⁷⁸ Blaeu to Magliabechi, Amsterdam-Florence, 2 October 1665, in Mirto and Van Veen, *Pieter Blaeu: Lettere Ai Fiorentini: Antonio Magliabechi, Leopoldo e Cosimo III de' Medici, e Altri*, 1660-1705, 141, "of the cities which, through the illustrious Prince of Tuscany, has pleased to do me the favor".

³⁷⁹ Mirto and van Veen, *Pieter Blaeu: Lettere Ai Fiorentini: Antonio Magliabechi, Leopoldo e Cosimo III de' Medici, e Altri, 1660-1705*, 148. See also, Veen, 'Pieter Blaeu and Antonio Magliabechi', 136.

³⁸⁰ Veen, 'A Tuscan Plan of Action for Joan Blaeu's Book of Italian Cities', 223.

³⁸¹ Cosimo to Bernardino de' Vecchi, 12 July 1667, ASF, MdP, 1562, f. 60. 16 other letters regarding the provision of drawings of Siena are extent in the "carteggio dei segretari" in the Medici epistolary archive in the State Archive of Florence (ASF, Mediceo del Principato, 1562 (altri luoghi della Toscana), ff. 46-47, 54-64, 76-80, 92). The letters are exchanged between Cosimo and various De' Vecchi family members (Bernardino, Ludovico and Leopoldo) from the 22th of June 1667 to the 9th of January 1668. "Since the volume that show the cities, and places of the Ecclesiastical State, as well as of Piedmont, have already come off the press, the Blaeu family now encourages the printing of the one one Tuscany, which has given me reason to consider again the drawings, of all the cities and surrounding of the State of Siena."

in 1682 by the next generation of Blaeu publishers.³⁸² This atlas, entitled *Theatrum statuum regiae celsitudinis Sabaudiae ducis*, included both the dominions of Savoy and Piedmont. If the atlas was only published in 1682, why did Cosimo refer to the Piedmont atlas as being published already in 1667? Did the Blaeus manage to complete an earlier copy of the Piedmont atlas? What precisely happened here is not entirely clear. A possible explanation is that the copies, together with the other drawings from 1665, were destroyed in the fire of 1672, which burned the entire shop of the Blaeu family to the ground.³⁸³ In any case, however, Cosimo desired to resume the project and he contacted Bernardino de' Vecchi to provide him with drawings of Siena. Importantly, added Cosimo, the drawings needed to include the "edifizij e cose più riguardevoli alla venustà detta, come sarebbe la Piazza, il Duomo e quel di più che secondo il discernimento di V.S. meriti esser esposto alla pubblica cognizione".³⁸⁴ From following letters, it appears that Bernardino de' Vecchi had dispatched the draughtsman and painter Antonio Ruggieri to depict the town of Siena as accurately as possible on the spot. Yet, the drawing that was produced by Ruggieri was not particularly liked by Cosimo, as he made very clear in a letter to De Vecchi from the 30th of August 1667:

"Non mi piace il disegno trasmessami da V.S. che ha fatto il Ruggieri per una veduta delle fabbriche di Siena, parendomi, che sia troppo secco, e che mostra troppo in piccola; onde approverei ciò, che V.S. reflette nel fine della sua lettera, di non abbracciar tanto paese in un foglio, ma segnare gli edifizzi notabili più distinti, e più grandi"³⁸⁵

To help Ruggieri adjust his drawings, Cosimo sent de' Vecchi the *Civitates Status Ecclesiastici*, which he had obtained from Pieter Blaeu, which included a city map from Bologna, that could serve him as a model:

"E perché V.S. possa vedere, come si sono contenuti in Olanda le mando il primo volume delle Città d'Italia uscito ultimamente ove osserverà particolarmente quella di Bologna con le sue fabbriche, che ho contrasegnate col foglio stesso del Ruggieri, parendomi che in quella forma dovessero delineate anche le nostre." ³⁸⁶

4. The 1670s: the rise of Dutch travelers to Tuscany

Magliabechi believed that foreign scholarship was to promote the Florentine collections, certainly more so than some local Florentines – the "ignoranti malignissimi" – were capable of. For instance, when the

³⁸² Moorman, 'A Changing Perspective on the Eternal City Revealed Blaeu's Admiranda Urbis Romae (1663) Compared to Later Editions of the Town Atlas of Rome', 111.

³⁸³ Van Veen already argued that the chances are high that the Tuscan drawings, if they ever had arrived in Amsterdam, were destroyed in the fire of 1672. See, Veen, 'Pieter Blaeu and Antonio Magliabechi', 136.

³⁸⁴ Cosimo to Bernardino de' Vecchi, 12 July 1667, ASF, MdP, 1562, f. 60, "buildings and things more relevant to the beauty [of that city], as would be the Piazza, the Duomo and more, which Your Illustrious Lordship finds worthwile to be exposed to public knowledge".

³⁸⁵ Cosimo to Bernardino de' Vecchi, 30 August 1667, ASF, MdP, 1562, f. 80, "I do not like the drawing Your Illustrious Lordship send to me which is made by Ruggieri, of a view of the buildings of Siena, which seems to me to be too defiled and small, whereby I agree to what Your Illustrious Lordship said at the end of your letter, that it is better not to embrace a lot of land in one sheet, but to indicate the most distinct and largest buildings". On the 21st of August 1667, De Vecchi asked in fact whether Ruggieri had to "proseguire l'altro [disegno] in questa forma, o pure con non includere tanto spatio di Paese in una istessa veduta, far dette fabbriche più grandi, e più distinte." B. de' Vecchi to Cosimo, Siena, 21 August 1667, ASF, MdP, 1562, f. 76, "continue the other drawings in this way, or not to include much land in the same view, making the building bigger and more distinct."

³⁸⁶ Cosimo to Bernardino de' Vecchi, 30 August 1667, ASF, MdP, 1562, f. 80, "So that Your Illustrious Lordship can see, how they are included in Holland I send you the first volume of the cities of Italy which was brought to light ultimately, in which you will observe in particular that one of Bologna with all its buildings, which I have marked with the same sheet of Ruggieri, which seems to me that in that form ours have to be laid out as well."

Dutch philologist Jacob Gronovius sent Magliabechi a draft of his Origenis Philosophumenôn fragmentum in 1674, product of his studies in the Laurentian library in Florence, Magliabechi immediately forwarded the work to Cosimo III in order to show him the value of the Dutch presence in his reign:

"Non le potrei poi ne meno con cento bocche, e mille penne, esprimere il contento, e l'allegrezza, che mi ha apportato quel suo dottissimo, eruditissimo e giudizziosissimo foglio. Domattina lo mostrerò al Padron Serenissimo, perché vegga tanto più chiaramente, che non questi ignoranti malignissimi ma i Forestieri dotti son quelli che fanno onore alla Bibliotheca Laurenziana."³⁸⁷

In the following paragraphs, six Dutch scholars who travelled to Florence during Cosimo's reign will be discussed. The itineraries of the travelers are primarily constructed by means of Magliabechi's letters to his Dutch correspondents. These letters cover a period from 1672 until 1712, which coincides with the most active period of Magliabechi's correspondence with the United Provinces. We will thus follow the whereabouts of these travelers through the eyes of Magliabechi, whilst discussing the most important contents of his communication with the Dutch Republic.

4.1. The travels of Jacob Gronovius (1645-1716)

In the spring of 1672, Jacob Gronovius embarked on a *peregrinatio academica* travelling through France to Spain and Italy to visit historical sites and to collate ancient manuscripts in the most prominent library collections. Jacob was born on the 10th of October 1645 in Deventer, the son of Johann Friedrich Gronovius, who, as shown before, was the first philologist to travel to Florence in 1641. He studied classical languages and law at the University of Leiden. In 1655, when the plague struck, his father sent Jacob to an uncle in Hamburg. He then continued his studies in England, visiting there the Universities of Oxford and Cambridge, where he remained until he returned to the Dutch Republic in 1671. The next year, Jacob left for France, Paris and Italy on his grand tour. During his travels in Spain and Italy, he kept a two-volume personal diary in which he daily recorded his activities, occupations and thoughts.³⁸⁸ In addition, he carefully kept track of the persons he met during his travels and with whom he exchanged letters. He corresponded, for example, with his brother Laurens about the events surrounding the brutal murder on Grand Pensionary Johan de Witt (1625-1672) in the Hague. As noted in the second chapter, considerable historical attention has been paid to the first volume of Jacob's diary, not merely for the account of his travels, but, as noted earlier, for a fragment that concerns the radical philosopher Baruch Spinoza, whose request to meet with Cosimo during his stay in the Dutch Republic was dismissed. In this paragraph, the focus will be on the second, rather neglected, volume of his diary, which concerns Jacob's stay in the Grand Duchy of Tuscany.

His diary begins in October 1672, when he arrived in Florence. Armed with a letter of recommendation of the Parisian scholar Jean Chapelain (1595-1674), Jacob presented himself to Magliabechi as a reputable scholar, vouched for by an illustrious learned man who stood also in contact

³⁸⁷ Magliabechi to J. Gronovius, l6 March 1674, LMU, Cod 4° Cod. Msc 777, f. 147, "I consequently could not express with hundred mouths and thousands pens my happiness, and joyfulness for receiving your very learned, erudite and sensible leaflet. Tomorrow morning I will show it to the Grand Duke so that he can clearly see that it are not those evil and ignorant [Florentines] who honor the Biblioteca Laurenziana but foreign scholars."

³⁸⁸ The two volumes, named "Dagverhaal eener reis naar Spanje en Italiën (1672 en 1673)" and "Journaal eener reis door Italië", are preserved in the collections of Leiden University Library (UBL), LTK 859 and LTK 860. Both volumes are digitized in 2017, and available at http://hdl.handle.net/1887.1/item:358090 and http://hdl.handle.net/1887.1/item:358148 [Last accessed 16 April 2018].

with the librarian. According to the scholarly *ethos* of reciprocity in the Republic of Letters, Magliabechi was now obliged to Jacob and assisted him throughout his stay in Florence.³⁸⁹ Magliabechi helped Gronovius by introducing him to the learned circles in Florence as well as arranging full access to the most prominent libraries, cloisters and churches. On his first days in Florence, Gronovius met, amongst many others, Carlo Dati, Lorenzo Bellini (1643-1704), professor of anatomy at the University of Pisa, Ferrante Capponi (1611-1689), general auditor of the universities of Pisa and Florence, the theologian Henry Noris (1631-1704), the literary critic Angelico Aprosio (1607-1681) and the physician Francesco Redi (1626-1697). Gronovius also made the acquaintance of the inquisitor of Florence, Francesco Antonio Triveri (1631-1697), who, notwithstanding his tarnished reputation, received Jacob in a very polite manner:

"Heb met mr. Maliab. wesen wandelen door de fiera (comme le foire de St. Laurens a Parijs) en besoght el Padre Inquisitidore, Prior van het St. Croces clooster, die maght heft om te doen branden, op de galey smeyten, onthoofden, gevangen nemen, sonder iemant daer van te spreecken. Heeft mij bejegent met bysondere civiliteyt, pratende prompt Latijn en met groot soetigheyt".³⁹⁰

Throughout his diary, Gronovius enthusiastically reports about the friendliness of the Florentines, who took an eager interest in his philological and classical knowledge, often inviting him over for dinner to discuss his work. Yet, it would not be long before Gronovius realized that his presence in the Grand Duchy of Tuscany posed a significant threat to many of them.

Magliabechi also arranged an audience with Cosimo III. The Grand Duke had already met his father during his Grand Tour in the Dutch Republic in 1667, where he paid a visit to the University of Leiden. On the occasion of Cosimo's visit, Johann Friedrich gave a solemn speech about the virtues of the Medici house, which was highly praised afterwards by prince Cosimo who gave him a precious ring in return. Johann Friedrich would have certainly had the occasion to introduce his two sons, Jacob and Laurens, to the Grand Duke. When Magliabechi introduced Jacob Gronovius to the Grand Duke, he was flattered by the attention he received, reporting that the Grand Duke was someone who "seer suet met mij praete" during their meeting.³⁹¹ Cosimo III's interest in Jacob Gronovius was such that he offered him, at the insistence of Magliabechi, a chair in Greek and rhetoric at the University of Pisa, which had remained vacant after the death of Valerio Chimentelli in 1668.³⁹² Gronovius gladly accepted the professorship in Pisa, much to the delight of Cosimo III, as shown by a letter that Cosimo wrote to Magliabechi, which is transcribed by Jacob in his diary:

"Io [Cosimo III] mi posso assicurare, che non potrei in questo mondo avere cosa di maggiore sodisfazzione quanto questa, di avere appresso di me, un virtuoso della sua condizzione, ed oltre a questo di un naturale così Angelico."³⁹³

³⁸⁹ Magliabechi to Heinsius, 15 February 1674, UBL, BUR F 7, f. 3: "Stimo che assolutamente V.S.Ill.ma abbia inteso, che capitò quà il Signor Iacopo Gronovio nel principio del mese di Ottobre, e mi portò una Lettera in sua raccomandazzione del Signor Giovanni Cappellano, amico anche di V.S.Ill.ma. Io l'ho servito in tutto quello che ho potuto, ed anche raccomandatolo caldamente a questi Serenissimi Padroni."

³⁹⁰ Travel diary of J. Gronovius, UBL, LTK 860, f. 3r. "I made a walk with mr. Magliabechi over the course of the fiera (like le foire of the St. Laurens in Paris) and visited father inquistiore, prior of the cloister of St. Croce, who has the power to burn, trow in the prison gallery, decapitate and capture, without needing somebody's consent. He had treated me with proper civility, promptly speaking latin, and with great sweetness."

³⁹¹ Travel diary of J. Gronovius, UBL, LTK 860, f. 2v, "who used sweet words".

³⁹² Ibidem, f. 2r.

³⁹³ *Ibidem*, f. 6r. "I am certain that I cannot have in this world more satisfaction than this, to have near me, a virtuous man of his condition, and besides that, of such an Angelic nature".

Gronovius held the appointment for only one year, after he felt forced to return to the Dutch Republic because of the vindictive harassments of those who were jealous of Cosimo's favors towards him. According to Magliabechi, the bullies wrote to the Roman Inquisition to inform them that it was out of the question that a Protestant scholar was lecturing at a Catholic university. Cosimo was subsequently summoned by the Vatican and informed Gronovius that he had to leave Tuscany if he was not willing to convert to Catholicism. This episode will be described in more detail in the fifth chapter of this study.

Jacob's meeting with Magliabechi was the beginning of a lasting friendship. Jacob stayed in touch with Magliabechi after leaving Tuscany, writing hundreds of letters until 1710. When he returned to the Dutch Republic, and became professor at the University of Leiden, Jacob spread word of Magliabechi in the Dutch academic circles. Consequently, it was through Jacob that Magliabechi's network of Dutch contacts continued to expand over the decades to come. Gronovius, for example, made sure that scholars such as Gisbert Cuper, Johannes Georgius Graevius and Anthonie van Leeuwenhoek began exchanging letters with Magliabechi.

4.2. THE TRAVELS OF COENRAAD RUYSCH (1650-1731)

Shortly after Jacob Gronovius was forced to resign from his position at the University of Pisa, the Dutch burgomaster Coenraad Ruysch arrived in Florence. In May 1674, Ruysch set off from Leiden for Hamburg in the company of his cousin Dirk van Hoogeveen. He crossed the northern regions of the Dutch Republic, journeyed into Germany, and travelled south to Italy.³⁹⁴ Once he entered Italy, he made multiple-day stops in Turin, Milan, Bologna and Livorno to ultimately arrive in Florence in November 1674. Not long after Ruysch reached Florence, he met the legendary Magliabechi who "onthaelde ons met extraordinare groote civiliteijt".³⁹⁵ On the 13th of December, Ruysch visited Magliabechi at his house in *Via della Scala*, where he found him "tot sijne ooren toe in de boeken" of which the number was incredible. His house was crammed with books, which were "confus op en door malkandere" stacked up to the ceiling.³⁹⁶ This apparent confusion, however, did not hinder Magliabechi from blindly finding the books one desired.³⁹⁷ In the following days, Magliabechi showed Ruysch the Medici's Palatine library in the Pitti palace – of which he was recently appointed custodian – and the apartment of Cardinal Francesco Nerli (1636-1708).³⁹⁸

Coenraad Ruysch had arrived in Florence with letters of recommendation from Nicolaas Heinsius to the most prominent men in Florence, including Carlo Dati and Lorenzo Panciatichi (1635-1676). Thanks to Carlo Dati, Ruysch was introduced to Cosimo III, who was more than willing to welcome the Dutchman in Tuscany, telling him that "hij een particuliere genegenheid voor ons lant ende natie hadde, spruytendede excessive beleeftheden dewelke hy aldaer genooten hadde".³⁹⁹ Ruysch also engaged in a polite conversation with the Grand Duke, discussing a wide variety of topics including "de inondatie van

³⁹⁴ Alan Moss, 'Comparing Ruins. National Trauma in Dutch Travel Accounts of the Seventeenth Century', in *The Roots of Nationalism*. National Identity Formation in Early Modern Europe, 1600-1815, ed. Lotte Jensen (Amsterdam: Amsterdam University Press, 2016), 217.

³⁹⁵ Ruysch, "Journaal van een reis naar Genève, Italië en Frankrijk van Coenraad Ruysch met zijn neef Dirck van Hoogeveen [called hereafter travel diary Ruysch]", 30r, "received us with extraordinary great civility".

³⁹⁶ Travel diary Ruysch, f. 30v, "to his ears in books"; "disordely mixed up".

³⁹⁷ *Ibidem*, "Hij leeft als de oude philosophen en sit tot sijne ooren toe in de boeken, dewelke met een ongeloofelijke quantiteijt syn gansche huys door seer confus op en door malkandere leggen, doch hij weet niet te min in een moment en gelijck als blindelinch te vinden t' geen iemand desireert te zien". Descriptions of the eccentric life of Magliabechi are very common in travel accounts of that time, see also the account of Joannes Kool in this chapter and *Isaac D'israeli, Curiosities of Literature: First Series* (W. Pearson & Company, 1835), 395–97.

³⁹⁸ Travel diary Ruysch, f. 32v.

³⁹⁹ Travel diary Ruysch, 31v., "he had a particular affection towards our country and nation, praising the excessive courtesies he received there"

een groot gedeelte van Holland tot bescherminge van de Republiek" and the "veele particuliere persoonen die syn hoocheid gekent hadden".⁴⁰⁰ Here, once again, Cosimo's interest and curiosity towards the Dutch Republic prevails.

Besides the recommendations to Panciatichi and Dati, Heinsius had also given Ruysch instructions as to which persons he needed to meet during his travels to Italy, mentioning more than "dugento persone" worthy of a visit in Florence. Among all these recommendations, Heinsius did not once mention Magliabechi.⁴⁰¹ The relationship between Heinsius and Magliabechi began to sour after Jacob Gronovius was forced to leave from the University of Tuscany. The conflict between Gronovius and the University of Pisa had caused serious concerns and disquiet by Gronovius' compatriot Nicolaas Heinsius, who was afraid that the conflict would negatively affect the relationship between the Dutch Republic and the Grand Duchy of Tuscany, putting at risk a long-standing rapport he had curated for almost three decades. Heinsius blamed Magliabechi for the emergence of the conflict, and broke off all contact with the librarian, with whom he maintained an epistolary relationship as early as 1671. The fact that Heinsius ignored Magliabechi in his recommendations to Ruysch, suggests that Heinsius had not intention of seeking peace with Magliabechi. As a result, Magliabechi did not want to get involved with Ruysch as much as he desired to, blaming Heinsius as "la cagione che io non vada mai dal detto signore".402 When Magliabechi confronted Heinsius with his behaviour, asking him straight out why he was left out from all his recommendations, Heinsius answered that he did not barely have the time to compile any letter, blaming the uncle of Ruysch for the fact that he had notified Ruysch' grand tour on such a short notice.⁴⁰³ Evidentially, Heinsius was making up an excuse, and Magliabechi knew that. Magliabechi, in fact, had other clues that convinced him about Heinsius' hostility towards him, as he wrote in his letter to Jacob Gronovius:

"Il fratello del signore Falconieri, il quale è qua in Corte, come V.S. Ill.ma sa, è stato a visitare il signore Ruyschio, in riguardo delle raccomandazzioni del signore Einsio. A me appena mi guarda in viso, il che tanto maggiormente mi fa credere, che il signore Einsio non abbia scritto benissimo a Monsignore suo Fratello, di V.S. Ill.ma, e di me."⁴⁰⁴

When Ruysch returned in Florence in April 1675, after a four-month long stay in Rome, Magliabechi, at Cosimo's request, showed Ruysch the famous Pandects manuscripts in the Biblioteca Medicea Laurenziana – the *Littera Florentina*.⁴⁰⁵ Though Ruysch was fascinated by the manuscript, he was unable

⁴⁰⁰ *Ibidem*, "the inundation of a large part of Holland to protect the Republic" and the "many individuals the Grand Duke has gotten to know [in the Dutch Republic]"

⁴⁰¹ Magliabechi to J. Gronovius, 11 December 1674, LMU, Cod 4° Cod.Msc 777, f. 155, "Il signore Einsio gli aveva dato Lettere pel S. Dati, e pel S. Panciatichi, ma di me ne anche gliene aveva scritta una sola parola, in una lunga Lettera, dove gli nominava dugento persone, o poco meno, che in Italia poteva cercar di vedere, e conoscere" [Sir Heinsius had given him letters for Dati, Panciatichi. About me he did not write one single word, in a long letter in which he mentioned two hundred persons, or a bit less, he could see and know in Italy".

⁴⁰² Magliabechi to J. Gronovius, 13 August 1675, LMU, Cod 4° Cod.Msc 778, f. 180.

⁴⁰³ N. Heinsius to Magliabechi, 28 February 1675, in Targioni Tozzetti, *Clarorum Belgarum (...) Tomus Primus*, 191: "Erant complura, de quibus in rem meam actum oportebat, quale illud, quod sine meis ad Te litteris Conradus Ruyschius venit, quodque in iis, quas ad ipsum illum dederam, nulla Tui mentio occurrebat. Quippe cum ille in procinctu me ex Allobrogibus admonuisset promissi super commendatitiis litteris, in summa festinatione, vix binas exarare licuit mihi Epistolas, praesertim ab avunculo eius Viro Ampl. Theod. Levio edoctus, transitum illi brevem per Civitatem vestram nunc fore."

⁴⁰⁴ Magliabechi to J. Gronovius, 6 May 1675, LMU, Cod 4° Cod.Msc 777, f. 171, "The brother of sir Falconieri, who is at the court, as Your Illustrious Lordship knows, came to visit Ruysch, because of the recommendations made by Heinsius. He barely looks me in the face, which makes me believe that Heinsius did not write anything good about me and you to the brother of Falconieri".

⁴⁰⁵ Magliabechi to J. Gronovius, undated, LMU, Cod 4° Cod.Msc 777, f. 129, "Ieri tornò di Roma il Signore Ruijsck e subito venne a favorirmi. Oggi ad esso, al Fratello del Signore Fontano, ed al Signore Vandain ho fatto vedere le Pandette e gli ho offerto di servirlo con sincerità di cuore". The *Pandettae Florentinae* or *Littera Florentina* (still today extent in the *Biblioteca Medicea*

to decipher it.⁴⁰⁶ On the 4th of May, Magliabechi and Ruysch met each other on another occasion. During this meeting, Magliabechi lamented the indifference of Heinsius towards him. Ruysch remarks upon this in a passage of his diary:

"Saeterdach den 4^{en} ginch ick kort aen den eeten de heer Malliabechi besoeken, die mij veel in defensie van Gronovius seijde tegens alle sijne benijders, soo hier als in Hollandt. Hij toonde sich gans niet satisfait over de heer Heinsius omtrent dese seak, seggende hij niet kost begrijpen hoe een wijs man sich soodaenich kost laeten abuseeren"⁴⁰⁷

4.3. THE TRAVELS OF LAURENS THEODOR GRONOVIUS (1648-1724)

Laurens was born in Deventer in 1648 and studied History at the University of Leiden in 1666. When his father, Johann Friedrich died in 1671, he decided to switch to law, which he finished in 1675, taking his doctorate in Franeker.⁴⁰⁸ In May 1679, at the age of 31, he went on an academic voyage to the foremost libraries, universities and academies of France and Italy, continuing a family tradition by following the footsteps of his father and brother Jacob. During his travel, Laurens remained in touch with the home front, keeping Jacob informed about his activities along the way.⁴⁰⁹ In Florence, Laurens planned to resume the study of the famous *Littera Florentina*, which, as noted before, was left unexplored after the visit of Ruysch in 1674. Gronovius first travelled to Paris, remaining there for four months, where he visited the Royal Library, the private library of Jean-Baptist Colbert and the library of Saint-Germain to collate manuscripts.⁴¹⁰. In September 1679, Laurens left Paris for Italy. He first arrived in Turin and from there he went to Milan, where he visited the *Biblioteca Ambrosiana*.⁴¹¹ Continuing his journey to Bologna, he arrived in Florence in November, where he spent more than two years living and working at his collations. Although Florence remained his place of residence, he left for several excursions across Italy, including Rome, Naples, Venice, Padua, Mantua, Genoa, Siena, Pisa and many more locations.⁴¹²

Laurenziana, fondo Pandette) was the most complete exemplar of the Digest in existence, a collection of juristic writings on classic Roman law created for the Eastern Roman emperor Justinian I in the 6th century. For a detailed decscribtion and history of the Littera Florentina see Enrico Spagnesi, Le Pandette di Giustiniano: storia e fortuna della 'Littera Florentina': mostra di codici documenti (Florence: Olschki, 1983); Davide Baldi, 'Il Codex Florentinus del Digesto e il Fondo Pandette della Biblioteca Laurenziana (con un'appendice di coumenti inediti),' Segno e Testo. International journal of manuscripts and text transmission 8 (2010): 99-186.

⁴⁰⁶ Anna Frank van Westrienen, De Groote Tour. Tekening van de Educatiereis Der Nederlanders in de Zeventiende Eeuw (Amsterdam: Noord-Hollandese uitgeversmaatschappij, 1983), 197.

⁴⁰⁷ Ruysch, "Journaal van een reis naar Geneve, Italië en Frankrijk van Coenraad Ruysch met zijn neef Dirck van Hoogeveen", f. 72r, "On saturday the 4th, before dinnertime, I paid a short visit to Magliabechi, who spoke to me in defense of Gronovius against all his enemies in Tuscany and Holland. He was not entirely satisfied with Heinsius regarding this case, saying that he could not understand how such as wise man could let himself mislead like that".

⁴⁰⁸ Tammo Wallinga, 'Laurentius Theodorus Gronovius (1648-1724) as a Traveller', Lias 24 (1997a): 246.

⁴⁰⁹ L. Gronovius to J. Gronovius, 9 June 1679 – 21 August 1681 (Rhenen, Private archives Van Asch vanWijck, 1272). Besides the letters from Laurentius to Jacob, the private archives of the noble family Van Asch van Wijck contain also two undiscussed letters from Magliabechi to Jacobus Gronovius, dated 15 June and 2 September 1681. I would like to thank Alan Moss for drawing my attention to these letters, as well as Vincent Klooster, archivist of the Van Asch van Wijck and Mrs. Van Asch van Wijck for their collaboration.

⁴¹⁰ The main source of information about the journey of Laurens Gronovius in Italy is his own travel account, nowadays held at the Royal Library in The Hague ('Itinerarium Laurentii Theodori Gronovii Qui A.C. MDCLXXIX Die III Maii Haga Comitum Profectus Iter Suscepit in Italiam et Lugdunum Batavorum Rediit Die XXI Aprilis A.C. MDCLXXXII', The Hague, Royal Dutch Library (called hereafter KB), KB 76 H 27), which has been extensively discussed by Wallinga, Hoogewerff and Leopold: Godefridus J. Hoogewerff and Hendrik M. R. Leopold, 'Laurentius Theodorus Gronovius En Zijn Reizen Naar Italië, 1680-82 En 1693-95', *Mededeelingen van Het Nederlands Historisch Instituut Te Rome* 1 (1942a): 35–56. Wallinga, 'Laurentius Theodorus Gronovius (1648-1724) as a Traveller'.

⁴¹¹ Tammo Wallinga, 'Laurentius Theodorus Gronovius ', *Tijdschrift voor Rechtsgeschiedenis* 459 (1997): 466.

⁴¹² Wallinga, 'Laurentius Theodorus Gronovius (1648-1724) as a Traveller', 251-255.

The excellent relations of his family with the Medici family ever since Cosimo's visit to Leiden in 1668 guaranteed Laurens the goodwill of the Grand Duke.⁴¹³ In addition, the good relations between his brother Jacob and Magliabechi, helped Laurens on his way in Florence. Four years prior to his travels, Laurens had already written a letter to Magliabechi to inform him about his plans to come to Florence to collate manuscripts. Magliabechi answered Laurens on the 8th of June 1675, expressing his excitement on the news – "oh che contento!" – ensuring him that the Grand Duke is open to his arrival in the Grand Duchy, because of the high esteem he held for his brother, which remained unchanged after the Gronovius-affair at the University of Pisa four years earlier.⁴¹⁴

Magliabechi was right. When Laurens arrived in Florence in the winter of 1679, he had the privilege of having his own room in *Palazzo Vecchio* for most of his stay in Florence. In addition, Gronovius was warmly welcomed at the Medici court. Soon after he arrived, on the 3th of December 1679, Magliabechi made sure that Gronovius had been given an audience by Cosimo. Instead of having to wait for his turn, Laurens was gladly welcomed by the Grand Duke, enthusiastically informing his brother Jacob that "d'andere Heerren mosten wagten en mij voor haer laten passeren".⁴¹⁵ During the meeting, Laurens offered the Grand Duke his father's and brother's edition of Livy.⁴¹⁶ The Grand Duke browsed through the Livy and when he saw the *Dedicatorium et Magliabecqui nomen*, he smiled and said: "patrono nostro".⁴¹⁷

Not only his stay in Florence, but also his access to the Florentine libraries was greatly facilitated by these relations.⁴¹⁸ In the winter of 1679, Laurens spent several months working in the *Biblioteca Laurenziana* under Magliabechi's guidance, who watched over Laurens day and night, making sure that he "would have no contact with any scoundrels".⁴¹⁹ Magliabechi showed him the treasures of the library collections, including the famous *Littera Florentina*, of which Gronovius was allowed to make a collation.⁴²⁰ Laurens decided to return to the Dutch Republic on the 13th of February 1682. A few years after his return to the Netherlands, in 1685, Laurens published his *Emendationes Pandectarum*.⁴²¹ Magliabechi and Gronovius briefly met on another occasion when Gronovius was making a tour of Italy with several of his students, including Andries Bicker van Swieten, a descendant from an Amsterdam family of magistrates. In November 1693, the company left Leiden to Cologne, Neurenberg, and Augsburg. They then crossed the Brenner Pass to Venice, were they enjoyed the carnival. In March 1694, they travelled along the Adriatic coast to Ferrara, Ravenna, Rimini and Loreto and headed to Rome. After a brief stop in Naples, they continued their journey north, to Pisa, Livorno and Florence where they arrived on the 21st of June 1694. Although they only stayed in Florence for a few days, Magliabechi managed to set up

⁴¹⁸ Wallinga, 'Laurentius Theodorus Gronovius ', 466.

⁴¹³ Wallinga, 'Laurentius Theodorus Gronovius ', 466.

⁴¹⁴ Magliabechi to L. Gronovius, 8 July 1675, , LMU, Cod 4° Cod. Msc 777, f. 251, "la stima grandissima, che S.AS. ha per esso, e per consequenza per V.S. Ill.ma, e per tutta la lor Casa".

⁴¹⁵ L. Gronovius to J. Gronovius, 5 December 1679, Rhenen, Family Archive van Asch van Wijck, 1272, c. 8, "the other gentlemen had to wait and let me pass in front of them".

⁴¹⁶ Gronovius refers to his father's notes on Livy, published and augmented by his brother in 1679: J.F. Gronovius and J. Gronovius, *Titi Livii Historiarum quod extat, cum L. Flori Epitome decadum XIV, et perpetuis Car. Sigonii et J.F. Gronovii notis. Jac. Gronovius probavit suasque et aliorum notas adjecit*, vol. 3 (Amsterdam: Daniel Elzevier, 1678-1679).

⁴¹⁷ L. Gronovius to J. Gronovius, 5 December 1679, Rhenen, Family Archive van Asch van Wijck, 1272, c. 8, "(...) in de Livius eenigsins bladende, en siende Dedicatorium et Magliabecqui nomen lagte S.G. en szijde de Patrono nostro".

⁴¹⁹ Wallinga, 'Laurentius Theodorus Gronovius (1648-1724) as a Traveller', 252.

⁴²⁰ These have been preserved in UBL, GRO 134, "L.Th. Gronovii Excerpta ex libris manuscriptis, quibus inter alia collationes codicum iuridicorum, glossarium iuridicum tractantur".

⁴²¹ Laurentii Theodori Io. Fr. F. Gronovi Emendationes Pandectarum, iuxta florentinum exemplar examinatae ad virum illustrissimum Antonium Magliabequium (Lugd. Batavor: Apud Danielem a Gaesbeeck, 1685).

a meeting with the Grand Duke. During the meeting, Gronovius offered Cosimo a copy of his brother's edition of Cicero.⁴²²

Gronovius' second stay in the Grand Duchy of Tuscany went flawless until the moment of his departure. They left Florence without thanking Cosimo III and asking for his permission to leave, something which was considered an enormous breach of protocol. Magliabechi, in his next letters to Laurens, added a separate leaflet to condemn his discourtesy.⁴²³ On the 30th of June 1694, Laurens immediately wrote back and apologized for his behaviour, blaming his travel companions Andries Bicker van Swieten and Van der Vinck, who had convinced him that there was no need to ask for permission to leave.⁴²⁴ Somehow, Magliabechi managed to restore the peace in Florence, and the Gronovius family and the Grand Duke were on good terms again. On the 25th of September 1694, in fact, Magliabechi acknowledged the receipt of a box of books, which he offered to Cosimo III, who happily received the gift and "ha parlato con somme lodi, sì di V.S. Ill.ma, come anche del Celeberrimo suo signor Fratello, e dell'Ill.mo signore Bicker van Zwierten".⁴²⁵ Once again, the Grand Duke never lost confidence in the Dutch. After Lauren's return to the Dutch Republic, Magliabechi remained in touch with him until 1707. They kept each other informed about the latest developments in the scholarly world, exchanging books and bibliographical information.

4.4. THE TRAVELS OF JACOB TOLLIUS (1633-1696)

In 1688, between Laurens' Gronovius first and second visits, the Utrecht scholar Jacob Tollius came to Florence. Yet, his story in Italy is, to put it mildly, rather inglorious when compared to that of the other travelers we have just discussed. After having studied letters and medicine in Harderwijk in 1654, Tollius held several offices in the Dutch Republic, including head of the Latin school in Gouda and rector in Leiden.⁴²⁶ He later moved to Germany, where he became professor at the University of Duisburg, but he resigned after converting to the Catholic faith.⁴²⁷ He then wandered through Europe, mostly in Germany and in Italy, spending his entire life searching for patronage. At present, very little is known about the wanderings of Tollius in Italy, but the correspondence of Magliabechi helps us to reconstruct fragments of his itinerary.

Magliabechi was well-known with the rather peculiar life of Tollius. In 1679, Pieter Blaeu informed Magliabechi that Tollius "nella Patria per certi avversarij o inimici suoi non ha potuto mai ottenere carica proportionata alla sua erudizione".⁴²⁸ Blaeu probably referred here to Tollius' quarrels with the Vossius family, who had accused him of theft while he was living in their home in the 1650s. These accusations had harmed Tollius' reputation to such an extent that Nicolaas Heinsius even refused to hire Tollius as his secretary.⁴²⁹ Blaeu was therefore very pleased to hear that Cosimo had commissioned

⁴²² Jacob Gronovius, M. Tullii Ciceronis Opera quae exstant omnia, denuo rec, 4 vols (Leyden: Elzevier, 1692).

⁴²³ Magliabechi to L. Gronovius, 26 June 1694, LMU, Cod 4° Cod. Msc 777, f. 270, "Sono restato ammiratissimo, ed il simile anno fatto universalmente tutti coloro che l'anno saputo, che V.S. Ill.ma si sia partita di Firenze, senza prima essere da S.A.R. per licenziarsi, e ringrazziarla. A me non tocca ad entrare, e ben lo so, nelle risoluzzioni di V.S.Ill.ma, onde la prego a perdonarmi il troppo ardire."

⁴²⁴ L. Gronovius to Magliabechi, 30 June 1694, BNCF, Magl. VIII, 552, f. 16.

⁴²⁵ Magliabechi to L. Gronovius, 25 September 1694, LMU, Cod 4° Cod. Msc 777, f. 273, "has spoken highly of Your Illustrious Lordship, and also of your dinstinguished brother, and of the Illustrious sir Bicker van Zwierten."

⁴²⁶ J.M. Blok, Jacob Tollius', in Nieuw Nederlandsch Biografisch Woordenboek (NNBW), vol. 5: 951.

⁴²⁷ Ibidem.

⁴²⁸ P. Blaeu to Magliabechi, 1 November 1679, transcribed in Mirto and Van Veen, *Pieter Blaeu : Lettere Ai Fiorentini : Antonio Magliabechi, Leopoldo e Cosimo III de' Medici, e Altri*, 1660-1705, 229 "in his homeland, because of his adversaries and enemies, he was never able to obtain an office proportionate to his erudition".

⁴²⁹ Blok, Nicolaas Heinsius in Dienst van Christina van Zweden, 102.

Tollius to "comprar per tutta l'Italia e Germania tutte le medaglie che mancano al cabinetto".⁴³⁰ At least, this is what is written in Blaeu's letters to Magliabechi. Whether the story is true or not, it does show that Tollius could rely on the support of Blaeu. As a matter of fact, Blaeu recommended Tollius to Magliabechi, hoping that he was willing to meet the Utrecht professor in Florence, and "di goder della sua amabilissima conversazione nel tempo che passarà a Firenze" just like he himself "hebbi quel contento e quel piacere, del che il riccordarmi anche mi dà gusto e gioia".⁴³¹

Magliabechi followed the advice of Blaeu and met Tollius during his stay in Florence. Yet, it did not take long before Tollius was forced to leave the Grand Duchy of Tuscany. There are several sources that inform us about the reason why Tollius suddenly had to leave, each telling us a different story about his unfortunate stay in Florence. According to the custodian of the *Laurenziana*, Francesco Ducci, Tollius had stolen the oldest Cicero manuscript in the library's collections, upon which he immediately had to leave Tuscany.⁴³² That Tollius was able to steal a valuable manuscript from the collection is quite suprising considering the fact that the books in the *Biblioteca Medicea Laurenziana* were chained to the desk to protect a book from being taken surreptitiously. The same story is confirmed by the Dutch scholar Joannes Kool, of whom more in the next paragraph, who lamented the malevolence of the Florentine custodians of the Medici library as derived from the thefts committed by Tollius:

"quaataardighijt heeft de Italianen ten meesten deeze gegeeven Tollius, die te Milanen, en hier te Florence Mss: uijt de Biblioteeq gestoolen heeft, waarom andere eerlijke nogh ten deezen daage leijden moeten"⁴³³

Without mentioning the name of the accused in his letters, even Magliabechi refered to the difficulties foreign scholars had to encounter in the *Laurenziana* arising from the theft. He considered Kool very lucky that Cosimo III was willing to grant him permission to enter the library "che fa a pocchissimi, in riguardo di un Libro, che questi Preti dicono che fosse rubato."⁴³⁴

Whether Tollius stole a manscript or not, Magliabechi comes up with another reason why Tollius was forced to leave Florence. Secretly he informed Jacob Gronovius about what extactly happened, asking him to "stracciare questa carta subito" after he had read it "perché mai in tempo alcuno possa esser veduta da anima vivente". That Tollius had to leave, he entirely brought on himself:

"Il signore T... con per dire così cento Lettere che scrisse, con tante raccomandazzioni, ebbe finalmente se non erro, cento piastre. Mostrava esso grandissima inclinazzione a farsi nostro Cattolico Romano, e questa fu la cagion principale che gli fece avere 'l detto danaro. Doppo, che con mille pregi, Lettere, come ho detto, ebbe il detto danaro, pensò se gli poteva riescire l'averne anche dal Serenissimo Principe di Toscana. Considerò che col signore Principe non si poteva andare con cabale di aver intenzione di farsi nostro Cattolico, e simili cose, onde

⁴³⁰ P. Blaeu to Magliabechi, 4 October 1686, in Mirto and Van Veen, *Pieter Blaeu: Lettere Ai Fiorentini: Antonio Magliabechi, Leopoldo e Cosimo III de' Medici, e Altri, 1660-1705*, 240, "to buy throughout Italy and Europe, medals that are missing in his cabinet".

⁴³¹ *Ibidem* "to enjoy his very lovely conversations while he stays in Florence"; "had this joy and that pleasure [of his conversation], just recalling it brings me relish and happiness".

⁴³² Niccolò Anziani and Luigi Crisostomo Ferrucci, *Della Biblioteca Mediceo-Laurenziana di Firenz*e (Florence: Typografia Tofani, 1872), 17: Francesco M. Ducci, custode per più anni della Biblioteca sulla fine del 600, lasciò scritto che l'olandese Iacopo Tollio portò via il codice più antico di Cicerone in caratteri capitali simili al Virgilio".

⁴³³ All passages of Koolus' diary reported in this study ("Journaal van een rijse gedaan door Italien & in den Jaare Anno 1698", Rome, Bibliotheca di Archeologia e Storia dell'Arte, Mss. 34) are transcribed in the forthcoming article: Koen Scholten and Asker Pelgrom, 'Scholarly Identity and Memory on a Grand Tour: The Travels of Joannes Kool and his Travel Journal (1698–1699) to Italy'. *LLAS: Journal of Early Modern Intellectual Culture and its Sources* (forthcoming). I would like to thank Dirk van Miert for bringing this manuscript to my attention, as well as Koen Scholten who generously provided me with transcriptions from the diary. "The malice of the Italians is primaily caused by Tollius, who, in Milan and here in Florence, has stolen manuscripts from the library, something from which every other honest man has to suffer to this very day". ⁴³⁴ Magliabechi to J. Gronovius, 8 September 1698, LMU, Cod 4° Cod. Msc 777, f. 147.

seco prese una altra invenzione, dicendo che aveva segreti ammirandi in materia Chimica. Il Serenissimo Principe gli disse, che facesse non so che esperienza, che esso l'avrebbe ella sua usanza ricompensato generosamente".⁴³⁵

From this letter it appears that Tollius converted to Catholicism in exchange for "cento piastre", thereby also confirming his reputation as described by Henry Desbordes in 1689. Desbordes, a Huguenot printer in Amsterdam, wrote about Tollius to Magliabechi, describing him as someone who is "capable de vendre sa religion pour de l'argent".⁴³⁶ After having written hundreds of letters to Cosimo III, showing his inclination towards the Catholic faith, the Grand Duke had finally given Tollius what he wanted. Consequently, Tollius thought that the same strategy would also work with Cosimo' oldest son, prince Ferdinando III de' Medici (1663-1713). Yet, the Tuscan prince was not impressed by his "cabale di aver intenzione di farsi nostro Cattolico" and Tollius needed to come up with another plan. He then pretended to have secret knowledge in alchemy, which aroused the interest of Ferdinando, who was willing to compensate him most liberally if he would carry his research successfully.⁴³⁷ Tollius, however, did not accomplish anything, with the result that the prince "non gli fecero dare mortificazzione alcuna, ma solo ordinò che fosse licenziato".⁴³⁸ Not willing to accept his resignation, Tollius went to the hairdresser (monsù Francesco) of Cosimo III, with whom he had discussed his "secrets", and demanded that the prince would give him a good amount of money. Upon hearing this, Cosimo's *parrucchiere* was ready to attack him, even murder him, but was held back by Magliabechi:

"Così andando di parola in parola, Monsù Francesco, se non ero io che lo tenessi, lo percuoteva omni pegori modi, e forse l'avrebbe ammazzato. Quando Monsù Francesco vedde di non poter dare al T..., perché io lo tenevo, disse ad un suo Garzone: Andate per i Sbirri, che piglino costui, e lo conducchino in prigione, come un impostore, ed un eccetera, che esso è. Il signore T... sentendo questo si partì, e continovamente si voltava a vedere se aveva dietro i Sbirri. Andò doppo alle stanze del Serenissimo Principe, ed avere Audienza, per dolersi del Parrucchiere, ma gli fu detto che S.A.S. non lo voleva né sentire, né vedere, e che però si partisse."⁴³⁹

⁴³⁵ Magliabechi to J. Gronovius, undated, LMU, Cod 4° Cod. Msc 778, f. 37, "Sir T.... wrote, so to say hundreds of letters, with many recommendations, that he was finally able to, if I am not mistaken, obtain 100 *piastre*. He showed a real propensity towards becoming a Catholic, and that was the main reason why he was given that money. After thousands of prayers, letters, as I have said, he received the money, and he thought that he could manage to have the same also from the Serene Prince of Tuscany. He considered that he could not use the same fanfare of showing his intentions to becoming a Catholic to the Prince, and other things, that he invented something else, saying that he had admiring secrets in chemical matters. The Serene Prince said to him, if he would perform any experiment, that he would, as he normally does, reward him generously".

⁴³⁶ H. Desbordes to Magliabechi, 20 September 1689, BNCF, Magl. VIII 1163, "capable of selling his religion for money." Carlo Ginzburg underlined that people dissimulated their confession and faith not only to fall into the hands of the persecuting institutions, but also for purposes of political and economic prosperity, see Carlo Ginzburg, *Il Nicodemismo: Simulazione e Dissimulazione Religiosa Nell'Europa Del '500.* (Turin: Giulio Einaudi Editore, 1970).

⁴³⁷ Magliabechi to J. Gronovius, undated, Florence, LMU, Cod 4° Cod. Msc 778, f. 37, "Considerò che col signore Principe non si poteva andare con cabale di aver intenzione di farsi nostro Cattolico, e simili cose, onde seco prese una altra invenzione, dicendo che aveva segreti ammirandi in materia Chimica. Il Serenissimo Principe gli disse, che facesse non so che esperienza, che esso l'avrebbe ella sua usanza ricompensato generosamente."

⁴³⁸ *Ibidem*, "did not give him any mortification, and only ordered that he would be dismissed".

⁴³⁹ *Ibidem*, "Thus, going word-for-word, sir Francesco, if I would not have held him back, would have slapped him in the worst way possible, and maybe he would have murdered him. When sir Francesco saw that the could not give to T[ollius] [what he deserved], because I held him, he said to his busboy: Go the the police, who will take him, and bring him in prison, for he is a fraud, etc., that he is a... Upon hearing this, Sir T[ollius] left, and continiously turned around to see if the police was after him. After that he went to the quarters of the Serene Prince, for an audience, lamenting about the hairdresser, but he was told that the Royal Higness did not want to hear or see him, and that he should leave".

After the confrontation, Tollius found shelter at the house of Magliabechi, who advised him to leave immediately and go to Rome, where he could rely on the help of Emmanuel Schelstrate (1649-1692), the Flemish librarian of the Vatican library. Magliabechi did thus everything that he reasonsably could do for Tollius, yet, as he wrote to Gronovius, "questo chiedere, e voler per forza danari così vilmente, è una baroneria troppo grande".⁴⁴⁰

Tollius did not go to Rome, as can be deduced from Magliabechi's letters to Gisbert Cuper. On the 8th of October, Magliabechi wrote to Cuper to inform him about the whereabouts of Tollius. After leaving Tuscany, Tollius started to wander throughout Italy and went to Padova, where he was employed by Cardinal Gregorio Barbarigo (1625-1697).441 Tollius left Padova shortly after his appointment, without saying goodbye or letting the Cardinal know, writing to Magliabechi that he "fu costretto a partirsi in quella maniera, per le persecussioni d'alcuni, che proccuravano il suo precipizzio".442 Cuper was grateful for the information, especially because he was convinced that Tollius was in England. Now, for the first time, he heard that Tollius was in Italy, and even in the service of Cardinal "Barbarino". Clearly Cuper had here mistaken the name of the Cardinal, yet the real mistake was committed by Tollius, who, according to Cuper, should not have left Padova without at least saying goodbye.443 In the months that follow, Magliabechi informed Cuper that he does not know "dove si trova ora" until in February 1691, when he received a letter from Tollius from Vienna, where he was busy to collate manuscripts in the Royal Library.⁴⁴⁴ After leaving Vienna, it appears that Tollius started to wander again. In the next year, Magliabechi reports that Tollius travelled to Rome (where he was unable to find any employment), Naples, Livorno, Parma and Milan.⁴⁴⁵ On the 26th of June 1692, Cuper informed Magliabechi that Tollius finally returned in the Dutch Republic, where he settled himself in Utrecht to work on his edition of the Greek text of 'Longinus' and his travel itinerary.⁴⁴⁶ Magliabechi responded Cuper on the 28th of October 1692, being relieved that Tollius was back in his own country. Although he had done everything to keep Tollius in Tuscany, and even tried to make him professor at the University of Pisa, to his great regret all his efforts were in vain "in riguardo della malignità di alcuni, che seminarono varie calunnie contro di esso".447 Well-aware of the friendship between Tollius and Cuper, Magliabechi deliberately concealed the real reasons why Tollius had to leave Tuscany, which he had entrusted to his friend Gronovius, and ordered him to keep that a secret. Tollius died in utterly misery in Utrecht in 1696.

4.5. THE TRAVELS OF JOANNES KOOL (1672-1712)

In 1698, not long after Jacob Tollius left Italy, the Utrecht-born lawyer Joannes Kool embarked on a grand tour together with his friend Lucas van Voorst (1670–1738).⁴⁴⁸ Travelling through France, they made major stops in Lyon and Genève. From France, they went to Italy, visiting Turin, Genoa, Milan,

⁴⁴⁰ Ibidem, "that asking, and wanting money in such a nasty manner, is a too big imposture".

⁴⁴¹ Magliabechi to G. Cuper, 8 October 1690, KB, KW 72 D 10, ff. 48-49.

⁴⁴² Magliabechi to G. Cuper, 19 December 1690, KB, KW 72 D 10, ff. 50-51, "he was forced to leave in that way because of the persecutions of others, who planned his downfall"

⁴⁴³ Cuper to Magliabechi, , November 1690, KB, Ms 72 D 11, f. 25.

⁴⁴⁴ Magliabechi to G. Cuper, 8 October 1690, KB, KW 72 D 10, ff. 48-49, "where he is"; Magliabechi to G. Cuper,

²⁶ February 1691, KB, KW 72 D 10, ff. 44-45.

⁴⁴⁵ Magliabechi to G. Cuper, 24 November 1691, KB, KW 72 D 10, ff. 58-61 (Rome and Naples); 8 December 1691, ff. 62-64 (Livorno), 12 April 1692, f. 68 (Parma and Milan).

⁴⁴⁶ Cuper to Magliabeci, 26 June 1692, KB, Ms 72 D 11, ff. 48-49.

⁴⁴⁷ Magliabechi to Cuper, Florence, 28 October 1692, KB, KW 72 D 10, ff. 80-81, "regarding the malice from others, who have sown various slanders against him".

⁴⁴⁸ Passages of Koolius' diary (see note 433) are transcribed in Scholten and Pelgrom, 'Scholarly Identity and Memory on a Grand Tour: The Travels of Joannes Kool and his Travel Journal (1698–1699) to Italy', *LLAS: Journal of Early Modern Intellectual Culture and its Sources* (forthcoming).

Bologna, to ultimately arrive in Florence in August 1698.⁴⁴⁹ On his first day in Florence, Kool directly went to the house of Magliabechi, carrying with him several books, including the *Manethonis Apotelesmaticorum* (1698) and the *Pomponii Melae* (1696) of Jacob Gronovius, which he presented to the librarian.⁴⁵⁰ The books which were "infinitamente desiderati" by Magliabechi opened the doors – literally and figuratively – for them:⁴⁵¹

"Als wij aan de deur geklopt hadden, zoo gebruijkten wij de voorsichtighijd van de boeken bloot te houden, dat Magliabechi die zien konde, om des te lichter acces te krijgen. Magliabechi zag aan de rechterhand van zijn deur door een vierkant gaas, dat in de muur is, om te zien, of de menschen, die voor de deur zijn hem ook aanstaan, dogh wij waaren welkom en riep van boove Adesso Signori, naa een wijnigh gewacht te hebben voor de deur, quam Magliabechi de deur opdoen."⁴⁵²

The moment they entered the house, they found Magliabechi amongst his books. All rooms were crowded with them, piled in heaps on the floor. At the entrance, Kool saw "een groote stapel met boeken, die aan Magliabechi gedediceert waaren".⁴⁵³ This was not all: the staircase from the top to the bottom was lined with books, so that is was difficult to walk upstairs. Reaching the second story, Kool saw with astonishment the other rooms, with were equally crowded with books and that also his bed was crammed with them. Magliabechi said to Kool that he therefore had no choice but to sleep on his books.⁴⁵⁴ During his visit, Kool also got an impression of the strange habits of Magliabechi, who explained to him that he only ate four eggs a day and went to sleep with his clothes on. When Kool offered Magliabechi some tobacco, he took a large amount of it, and stashed it under a book because "den groot Hartogh heeft het hem verboden".⁴⁵⁵ Kool then witnessed how Magliabechi took a great big sniff from the tabaco "dat die hem met proppen weder uijt the neus quam vallen."⁴⁵⁶ At the end of this rather strange visit, the two young men had earned the respect of the librarian. The following days, Magliabechi ensured that they were introduced to the Grand Duke, who warmly welcomed them at the Medici court and treated them with great deference. Like Laurens Gronovius, they did not have to wait in line:

"Arrivarono quà felicemente, i Nobilissimi, ed Eruditissimi Signori, Signore Kool, e signore Vorstio. Ebbi l'onore di condurgli dal Serenissimo Gran Duca, che ordinò che fossero introdotti alla sua Audienza subito che arrivarono, e prima di tutti gli altri, non ostante che vi

⁴⁴⁹ Scholten and Pelgrom, 5 (forthcoming).

⁴⁵⁰ Magliabechi to J. Gronovius, Florence, 8 September 1698, LMU, Cod 4° Cod. Msc 777, ff. 51-52.

⁴⁵¹ The importance of books as gifts as a social tie will be further featured in chapter 6 of his study.

⁴⁵² Travel diary Kool, vol. 2, ff. 344-345, 26 June 1692, "When we had knocked the door, we carefully hold the book in the open, so that Magliabechi could see them, to gain easier access. Magliabechi peered through a square of gauze, located in the wall on the right side of his door, to see whether the visitors, who were standing in front of his door, did please him. After we have waited little in front of his door, we were welcomed and from above he called "Adesso Signori" and he came to open the door", cited in Scholten and Pelgrom, *forthcoming*.

⁴⁵³ Ibidem, f. 346, 26 June 1692, "a big pile of books, which were dedicated to Magliabechi".

⁴⁵⁴ *Ibidem*, f. 347, "Aan de linkerhand van de deur als men inkomt lagh een groote stapel met boeken, die aan Magliabechi gedediceert waaren. Aan de rechterhand leijden eenige ongebonde boeken. Ten eerste verhaalde mij Magliabechi zijn manier van leeven. Hoe dat hij zigh noijt outkleede, maar altijd in zijn kleeren sliep, daar hij maar vier eijers daags aat, daarvan hij mij twee toonde, in een laaij van een oud vermolmde kast, boove op de kast stond een rond mandtje, daar zijn geld in leijde, als eenige testons en eenige gratien, daar neemt hij geld af als hij het van nooden heeft, hij slaept boove op de boeken, want hij heft wel een ledikant, maar dat leght vol boeken, zoo dat hij wel genootzaakt is op de boeken te slaapen. In dit huijs woont hij alleen zonder meijd of kneght, en zeijde dat hij geen dienstbooden wilde hebben, om dat die zijne boeken stoolen. Hij leijde ons benede door eenige kaamers, die zoo vol boeken, als men de trappen opgaat, zoo leggen de trappen zoo vol boeken dat men ter nauwer not naa boove kan gaan, daar zijn wederom eenige kaamers alle vol boeken."

⁴⁵⁵ *Ibidem*, "the Grand Duke had forbidden him [to take tobacco]".

⁴⁵⁶ *Ibidem*, f. 348, "which with cloths fell out of his nose".

fossero Signori, e Religiosi di non piccola conseguenza, che stavano aspettando, ed erano arrivati molto prima di essi."⁴⁵⁷

During the audience, the Grand Duke informed Kool and Van Voorst that they could collate and copy in the *Biblioteca Laurenziana* any manuscript they wanted. Yet, the Grand Duke's permission to let Kool and Van Voorst in the library, was not much appreciated by the custodians of the Laurenziana, who subsequently went to the Grand Duke to alter his mind, giving him the advice that it was better that a 'reformist' as Kool would not enter the library.⁴⁵⁸ In addition, as observed by Kool in his diary, this was not the only reason:

"Deeze suspicie vermenght met quaataardighijt heeft de Italianen ten meesten deeze gegeeven Tollius, die te Milanen, en hier te Florence Mss: uijt de Biblioteeq gestoolen heeft, waarom andere eerlijke nogh ten deezen daage leijden moeten. Maar ik geloof dat zelve de Heer Gronovius hier vaart gemaakt heeft, om dat hij met de geestelijke niet konde accordeeren."⁴⁵⁹

Their efforts had come to nothing. The same evening, Magliabechi received a letter from the Grand Duke, in which he gave his full consent to opening-up the Biblioteca Laurenziana for the two Dutchmen. As noted earlier, the Grand Duke showed here thus an extraordinary generosity towards the Dutchmen in light of the recent theft committed by Jacob Tollius. The next day, on the 30th of August 1698, Magliabechi accompanied Kool and Van Voorst to the library. Although the custodian of the library was ordered to open up the library, he did everything to give the scholars a hard time. According to Kools, he was locked up like a prisoner, being in a room so dark that he could barely see anything.⁴⁶⁰

Magliabechi might have felt hopeless and angry about the malice of the Florentine custodians and scholars. From his letters to Jacob Gronovius, it appears that he tried to protect Kool and Van Voorst with an almost fatherly concern, ensuring that they did not put their faith in the wrong people. For example, on the 8th of September 1698, Magliabechi wrote to Jacob that he was protecting Kool and Van Voorst against the dangers which had also affected Gronovius in the past. A certain Florentine scholar – Magliabechi does not disclose his identity, but the person in question might be the Danish Nicolas Stensen – had approached Kool and offered his help and support. Knowing the malevolence of the scholar, Magliabechi had advised Kool to "praticarlo il meno che gli sia possible" because sooner or later his intentions were to ruin him.⁴⁶¹ This information, Magliabechi stressed, was not supposed to go public, urging Gronovius to destroy the letter after reading it. To facilitate this, Magliabechi had attached the secret message in a seperate sheet, so that, had Gronovius decided to destroy it, the content of the main letter (which contained lists of bibliographical information) would not have gone lost.

⁴⁵⁸ Travel diary Kool, vol. 2, f. 381, "raatzaam was mij op de Biblioteeq te laaten door dien ik een gereformeerde was."

⁴⁵⁷ Magliabechi to J. Gronovius, 8 September 1698, LMU, Cod 4° Cod. Msc 777, ff. 51-52,, "arrive here happily, the very noble and learned men, sir Kool, and sir Voorst. I had the honor to introduce them to the Serene Grand Duke, who ordered them to enter his audience as soon as they arrived, and before everyone else, despite the fact that there were men, and religious men of not little importance, who were waiting, and had arrived before them."

⁴⁵⁹ *Ibidem*, "this suspicion, mixed with the malice, was mainly caused by Tollius, who, in Milan, and here in Florence, had stolen manscripts from the library, which is the reason why a honest man still has the suffer these days. However, I also believe that Sir Gronovius has accelerated this, because he could not agree with the clergy". This is probably Jacob Gronovius.

⁴⁶⁰ *Ibidem,* 30 August 1698, f. 383, "Deezen ochtent ben ik in de Bibliotheeq geweest. ik wierd opgeslooten en het was zoo donker, dat ik niet konde zien, en vorderde zeer wijnigh in het copieren van de Carmina Maximi poëtee".

⁴⁶¹ Magliabechi to J. Gronovius, 8 September 1698, LMU, Cod 4° Cod. Msc 777, f. 52. "Un altro similissimo al suddetto Pedagogo [Benedetto Menzini], e per ciò suo amicissimo, aveva cominciato ad andare attorno al nobilissimo, ed eruditissimo signore Kool, ma io che per molte esperienze sono consapevole della sua malignità, l'ho avvisato, che se ne guardi, e procuri di praticarlo il meno che gli sia possibile, perche non può far di meno, che o in un modo, o in un altro, non gli nuoca. Sono scioli, de' quali non potrei mai esprimerle la malignità contro de' dotti Forestieri, a' quali apparentemente mostrano ogni ossequio, per doppo lacerargli omni pejori modo."

4.6. THE TRAVELS OF HENRIK BRENKMAN (1681-1736)

Laurens Gronovius' study of the *Littera Florentina* was continued by the Rotterdam jurist Henrik Brenkman (1681-1736), who planned to make a critical edition of the manuscript.⁴⁶² Brenkman was born in Rotterdam in 1681 and studied law at the University of Leiden. In 1705, he obtained his doctorate and settled himself as a lawyer in The Hague. In 1709, Brenkman was determined to properly study the Pandects of Justinian and started to plan a trip to Florence where he would consult the closest survival to the official versions of the Pandects.⁴⁶³

Brenkman's intentions caused anxiety by Jacob Gronovius, who was afraid that Brenkman was to take all the credit of carrying out a project that, as noted before, his brother Laurens had already started, but not yet completed. Six years prior to Brenkman's arrival in Florence, Magliabechi had secretly informed Jacob Gronovius about the risk that someone might get to work on the Littera Florentina.⁴⁶⁴ Six years before Brenkman's arrival in Florence, he had found out that Jacob's enemies in Holland had approached Henry Newton (1651-1715), the British envoy of Cosimo III, out of revenge.⁴⁶⁵ Jacob's enemies had asked Newton whether the Grand Duke was willing to authorize another collation of the famous manuscript.466 If the Grand Duke was willing to grant his permission, they would have sent someone over to work on the manuscript as soon as possible. Initially, as Magliabechi wrote to Jacob, the Grand Duke appeared to be very reluctant to grant the permission because he had first given the honor to Laurens, who had toiled night after night in the Biblioteca Laurenziana to finish his transcriptions. To convince the Grand Duke, Newton replied that the work of Laurens "era stata affatto inutile, perché in tanti, e tanti anni, non l'aveva mai fata in luce, ne si vedeva speranza alcuna, che fosse per pubblicarla".⁴⁶⁷ Magliabechi believed that Newton – a "buonissimo signore" – had said this because he desired to do "un gran servizzio, a tutta la Repubblica Letteraria", unaware of the fact that he was deceived by the enemies of Gronovius, who had told him "bugie, e calunnie" about the progress of Laurens' work.⁴⁶⁸ The plot against the Gronovius' brother, however, was successful: worried over the prospect of Gronovius' unfinished project, the Grand Duke gave his permission to open up the doors of the Medici library. Magliabechi was completely left out in Cosimo's decision, as can be deduced from the following passage:

⁴⁶² For Brenkman's endeavours to publish a new critical edition of the Digest, see Bernard H. Stolte, *Henrik Brenkman, Jurist and Classicist. A Chapter from the History of Roman Law as Part of the Classical Tradition* (Groningen: Bouma's Boekhuis B.V., 1981). ⁴⁶³ Van Kuyk, 'Henrik Brenkman', in *Nieuw Nederlandsch Biografisch Woordenboek*, vol. 1: 460-462.

⁴⁶⁴Magliabechi to J. Gronovius, 1703, LMU, Cod 4° Cod. Msc 778, f. 30, "Per le viscere del signore Dio, e per tutte la sante leggi dell'amicizzia, prego V.S.Ill.ma a stracciare questo fogliaccio, subito che l'avrà letto, scrivendolelo io in estrema segretezza, e confidenza, perche mai in tempo alcuno possa esser veduto o letto da chi che sia."

⁴⁶⁵ For more information about Henry Newton, and more general information about the English correspondence network of Antonio Magliabechi, I would like to refer to Simonutti, 'Prima osservazioni sulle *curiositates* magliabechiane d'Oltremanica', 417.

⁴⁶⁶ Ibidem, "Qua in Firenze, il signore Inviato di Inghilterra, ha commercio di lettere, con diversi Letterati, e con altri Signori, di codeste parti. Da non so chi di essi, gli è stato scritto, ed insieme pregato, che voglia supplicare S.A. Reale, che voglia degnarsi, di concedere, a chi manderanno di costà, che possa collazzionare accuratissimamente il manoscritto delle Pandette".
⁴⁶⁷ Ibidem, "was nothing than useless, because in many, may years, he never brought something to light, and there was no hope that he was about the publish it".

⁴⁶⁸ Magliabechi to J. Gronovius, 1703, LMU, Cod 4° Cod. Msc 778, f. 16, "Il signore Inviato d'Inghilterra, è verissimo, che fu quello, che fece avere al s. Bremmanno, da S.A.R., la licenzia, di collazzionare le Pandette, ma lo fece, perché di costà, con Lettere, ne fu pregato, da alcuni emuli di V.S.Ill.ma, che scrissero ancora al detto signore Inviato, che 'l suo signore Fratello, non le avrebbe stampate mai, ed altre bugie, e calunnie. Il detto signore Inviato, che come V.S.Ill.ma costà vedrà, è un buonissimo signore, credette alle bugie che di costà gli erano state scritte, stimò di fare un gran servizzio, a tutta la Repubblica Letteraria, con operare che S.A.R. concedesse la licenzia al s. Bremmanno, di poter collazzionare quel manoscritto."

"Se S.A. Reale, me ne avesse parlato, io con più evidenti ragioni, l'avrei distolta, dal dare questa licenzia, di fare tal collazzione, ma non ne ha parlato che sappia io, se non col il signore Inviato d'Inghilterra"⁴⁶⁹

At the time, Magliabechi did not seem too concerned about someone actually coming to Florence and reassured Jacob Gronovius that the *Codex Florentinus* remained untouched.⁴⁷⁰ "Mandino pur chi si pare, che niuno avrà pazzienza, di usarci la diligenzia, che ci usò il suo Signore Fratello", he wrote to Jacob Gronovius in 1703.⁴⁷¹ He could not be more wrong. In 1709, the news broke that Brenkman was about to leave for Florence with the prospect of consulting the manuscript. Upon hearing this, Jacob Gronovius immediately wrote a letter of objection to Magliabechi to defend the rights of his brother, insinuating that it was better that Brenkman would immediately abandon the project.⁴⁷² Above all, as Gronovius communicated to Magliabechi, Brenkman was an ignorant of Greek, whose work would only bring discredit to the collections of the Grand Duke.⁴⁷³ Yet, Gronovius' efforts to impede Brenkman in his studies were in vain.

Brenkman arrived in Florence in October 1709. With the help of letters of recommendation from Domenico Silvio Passionei⁴⁷⁴ (1682-1761), Jean Le Clerc and Gisbert Cuper, and through the efforts of the British ambassador Henry Newton, Brenkman managed to see the *Littera Florentina* in the *Biblioteca Laurenziana*.⁴⁷⁵ In addition, Cosimo III decided that the Florentine Hellinist Anton Maria Salvini (1653-1729), who was given a sabbatical leave of three years, assisted Brenkmen in collating the text.⁴⁷⁶ Salvini helped Brenkman generously, and they succeeded to collate the entire text within three years. During that time, Magliabechi was kept at a distance, accusing Salvini of deception through falsely spreading rumors about him:

"Adesso, io più non lo veggo, si perche dee essere occupato in quella collazzione, come ancora, perché Dio sa qual che il Salvini gli avrà detto di me, essendo poco mio amico, benché si finga

⁴⁶⁹ Magliabechi to J. Gronovius, 16 Feburary 1703, LMU, Cod 4° Cod. Msc 777, f. 119, "if His Royal Highness has talked to me about it, I, with the clearest resons, would have kept him from giving the permission to make that collations, but he did not talk about it, as far as I knows, to someone other than with Henry Newton".

⁴⁷⁰ *Ibidem*, "Per quanto dice il signore Inviato, a Primavera, manderanno di costà uno, che faccia questa fatica, di collazzionare quel manoscritto. Io per me, non credo, che tal cosa sia per succedere, ma in caso che succedesse, avviserò di mano in mano il tutto, a V.S.Ill.ma".

⁴⁷¹ Magliabechi to J. Gronovius, 1703, LMU, Cod 4° Cod. Msc 778, f. 16, "They can send whoever they like, but no one would have the patience and diligence as your brother".

⁴⁷² J. Gronovius to Magliabechi, 24 January 1709, in Giovanni Targioni-Tozzetti, Clarorum Belgarum Ad Ant. Magliabechium Nonnullosque Alios Epistolae Ex Autographis in Biblioth. Magliabechiana Quae Nunc in Publica, Adservatis Descriptae, vol. 1, 231–34.

⁴⁷³ *Ibidem*, "Nunc igitur ut aperte loquar, iste iuvenis nulla amoenitate studiorum imbutus est, Graecis plane non experire, & deprehendes.

⁴⁷⁴ It is most likely that Brenkmen became acquainted with Domenico Silvio Passionei, future cardinal and librarian of the Vatican Library, during the latter's stay in the Netherlands, where he participated as official representative of the Holy See at the peace conferences of The Hague (1708) and later in Utrecht (1712), see Charles Herbermann, ed., 'Domenico Passionei', *Catholic Encyclopedia* (New York: Robert Appleton Company, 1913). See also, Alberto Caracciolo, *Domenico Passionei, tra Roma e la repubblica delle lettere* (Rome: Ed. di Storia e Letteratura, 1968).

⁴⁷⁵ J. Le Clerc to H. Newton, 3 September 1709, "Iter ergo ingrediatur, Florentiamque accedat, cum illi vobisque commodum videbitur, seque Operi demum accingat maximo praestantissimoque, inque ultima saecula sub Cosmi Tertii auspiciis ituro, Brencmannus Vestras, securus in hac parte Indulgentiae Gratiaeque Principis", transcribed in Maria Grazia Sini and Mario Sini, eds., J. Le Clerc: Epistolario, vol. 3 (1706-1718) (Florence: Leo S. Olschki Editore, 1987), 220.

⁴⁷⁶ Van den Bergh and Stolte, "The Unfinished Digest Edition of Henrik Brenkman (1681-1736). A Pilot-Survey and Edition of Digest 9.2 ad legem Aquiliam, *Tijdschrift Voor Rechtsgeschiedenis/The Legal History Review* 45, no. 3-4 (2014): 232. About the role of Antonio Maria Salvini in Florence, see Maria Pia Paoli, 'Anton Maria Salvini (1653-1729) Il ritratto di un «letterato» nella firenze di fine Seicento', in *Naples, Rome, Florence: une histoire comparée des milieux intellectuels italiens, XVIIe-XVIIIe siècles*, 501-544.

tale. Io non ho dubbio, che come tornerà costà, come il Copes, si riderà di me, ma questo poco, o nulla mi importo, potendo ogni sciolo ridersi di chi che sia."⁴⁷⁷

Magliabechi refers in this letter to the historian Henrik Copes (1650-1708) who travelled extensively in Italy in 1695-1696 to look at antiquities and study manuscripts.⁴⁷⁸ Magliabechi became acquainted with Copes during his stay in Florence and assisted him throughout his further stay in Italy by writing him letters of introduction to facilitate his research in the various cities he visited.⁴⁷⁹ In Milan, for instance, Magliabechi introduced Copes to the librarian of the *Biblioteca Ambrosiana*, Andrea Pusterla, asking him to "non tanto di vedere le mura della Città dove passa, quanto gli Uomini dotti che in esse si trovano, de' quali è codesta nobilissima Città abbondantissima".⁴⁸⁰ Magliabechi underlines here the fact that travel, more than anything, was a crucial means to establish a network abroad. As shown by this letter, Magliabechi was convinced that Copes, like Brenkman, was turned against him while travelling in Italy. As a result, the two did not remain in contact after Copes return in the Dutch Republic.⁴⁸¹ In 1703,

⁴⁷⁷ Magliabechi to G. Gronovius, 16 February 1709, LMU, Cod 4° Cod. Msc 777, f. 119, "Now, I do not see Brenkman anymore, both because he is busy to collate that manuscript, and, because of God knows what Salvini would have said him about me, being hardly my friend, even if he pretends to be one. I do not doubt, when he returns in the Dutch Republic, like Copes, he will make fun of me, but I do not care about that for every smartass can make fun of any man."

⁴⁷⁸ Magliabechi informed Jacob Gronovius about the arrival of Copes in Italy with a letter dated the 20th of August 1695, writing that he is working on a biography of *Giuseppe Ebreo* (LMU, Cod 4° Cod. Msc 777, f. 34). Then, on the 30th of December 1696, Magliabechi informs Jacob Gronovius that Copes "è fatto stimare, ed amare, per tutte le Città di Italia" during his travels (LMU, Cod 4° Cod.Msc 777, f. 38, "has made him appraised and loved in every city of Italy"). Copes' stay in Italy is also discussed by Magliabechi in a letter to Johannes Georgius Graevius of the 4th of August 1695 (KB, KW 72 C 16, f. 79). In this letter, Magliabechi reports about Copes' visit to the *Biblioteca Ambrosiana* in Milan and his meeting there with Antonio Ludovico Muratori. In addition, Magliabechi mentions that he gave Copes the book *De vita et victu populi Romani* of Francesco Robortello, which Copes would hand over to Graevius once he returned to the Dutch Republic.

⁴⁷⁹ 13 letters of Copes to Magliabechi are extent in the National Central Library Florence (BNCF, Magl. VIII 551), while 19 copies of Copes letters to Magliabechi can be found in the collections of the University Library of Leiden (UBL, LTK 1300). In the latter library, 1 letter from Magliabechi to Copes has survived, dated the 30th of August 1695 (LTK 1003). In addition, two introduction letters written by Magliabechi to Copes have survived in LTK 1300, dated the 30th of September 1695, and LKT 1003, dated the 28th of May 1696. The introduction letter extent in LTK 1003 is written to a unknown scholar in Pisa: "Presenterà a V.S.Ill.ma questa mia, l'Illustrissimo Signore Enrico Copes, Senatore di Bolduc, che alla Nobiltà della Nascita, hà congiunta una somma Dottrina, ed erudizzione, ed una infinita cortesia. Oltre al suo gran merito, ho ad esso cento obbligazzioni, e mi è stato raccomandato anche, da alcuni de' più celebri Letterato di questo tempo.Perché nell'brevissimo tempo che si tratterà costà in Pisa, possa vedere le cose più insigne di codesta Città, ho stimato mio debito l'accompagnarlo con questa mia, alla somma bontà, e cortesia, di V.S.Ill.ma." The second introduction letter is written to Andrea Pusterla in Milan (see note 480).

⁴⁸⁰ Magliabechi to Andrea Pusterla, 30 September 1695, UBL, LTK 1003, "Presenterà a V.S. questa mia, l'Illustrissimo Signore Senatore Enrico Copes, che alla nobiltà della Nascita, hà congiunta una somma cortesia, ed una infinita erudizzione. Già mi era noto il suo infinito merito, e da' Libri dell'eruditissimo Signore Cupero, che più volte in essi ne fà menzione; e dalle elegantissime, e giudizziosissime Lettere Latine che tal volta mi favoriva di scrivermi, mà dopo che hò avuto qua la fortuna di riverirlo, e di godere della sua dottissima, ed eruditissima Conversazzione, mi si è infinitamente accresciuta la stima che ne aveva, benché grandissima. [...] Proccura esso ne' suoi Viaggi, non tanto di vedere le mura della Città dove passa, quanto gli Uomini dotti che in esse si trovano, de' quali è codesta nobilissima Città abbondantissima. Per non caricarlo con tante Lettere, con iscrivere a tutti, ho stimato che serva l'accompagnarlo con questa mia, sapendo che la maggior parte di essi, bene spesso si trova nel negozzio di V.S., a Colloqui eruditi. La prego per tanto a riverirgli tutti in mio nome, e fargli conoscere questo degnissimo Signore; essendo certo, che tal cosa sarà ad essi di sommo contento. In the case Pusterla was not in Milan, Copes could show the letter to Antonio Albuzzi, successor of Pusterla as the librarian of the Biblioteca Ambrosiana (Magliabechi to Copes, 30 August 1695, UBL, LTK 1003, "Mi scordai sabato di scrivere a V.S.Ill.ma che potrebbe essere che V.S.Ill.ma non trovasse in Milano il Signore Pusterla, avendo esso avuto la Prepositura d'Abbiagrasso, conferitagli dal Sommo Pontefice. In tal caso, V.S.Ill.ma consegni la mia Lettera al suo degnissimo Successore nella Carico di Bibliotecario di quella insigne Libreria, con riverirlo in mio nome, che esso la favorirà nell'istesso modo. Non mi sorviene adesso del suo nome, mà è un Signore gentilissimo, e più volte mi hà onorato di farmi salutare in suo nome, dal Signore Pusterla.".

⁴⁸¹ Magliabechi to Cuper, 28 July 1696, KB, KW 72 D 10, f. 118-119, "Il signore Senator Copes, del quale V.S.Ill.ma mi scrive, nel suo ritorno di Roma, si trattenne qua in Firenze solamente circa a due giorni, onde con mio infinito dolore, non ebbi fortuna di servirlo [...]. Prima però che esso andasse a Roma, stetti in Firenze alcuni giorni, ed allora ebbi fortuna di godere della sua soavissima ed eruditissima conversazzione. Mi creda, che nel tornarsene alla Patria ha portato seco il Cuore di tutti i Letterati Italiani, che anno avuto fortuna di conoscerlo, e di riverirli, ed il mio più di quello di alcuno altro, benche per la mia

Magliabechi even asked Cuper to pass his greetings on to Copes, but a correspondence did not ever got off the ground .⁴⁸²

Notwithstanding the tensions between Salvini and Magliabechi, Brenkman presented his letter of recommendation from Le Clerc also to Magliabechi. Magliabechi thanked Le Clerc on the 26th of December 1709, promising him that he "non mancherò di servire" Brenkman "in tutto quello che si degnerà di comandarmi".⁴⁸³ While Brenkman was more than satisfied with his contact with Magliabechi, who provided him with the books he needed to carry out his research, he might not have known that Magliabechi had his own agenda. Under the guise of helping Brenkman out, Magliabechi managed to stay on top of his endeavors. This allowed him to carry on a secret, far more candid correspondence with Jacob Gronovius, to whom he forwarded any information that could be relevant to him. It was in these secret letters that, for example, Magliabechi informed Gronovius about the whereabouts of Brenkmen during his travels in Rome and Naples in 1711. Brenkman went here for a period of ten months in search of more Digest manuscripts. During his stay, he remained in touch with Magliabechi, informing him about the progress of his work and the scholars he had met. From these letters it appears that, like other Dutch scholars, Brenkman found it more difficult to gain access to libraries in those cities that he had in Florence.⁴⁸⁴ Knowing that Brenkman was planning to remain for two years in Rome, Magliabechi reported to Gronovius that his brother Laurens would have enough time to "stampare ciò che vuole, e di prevenirlo".⁴⁸⁵ On other occasions, Magliabechi informed Gronovius that Henry Newton, besides the collections of the Littera Florentina, had advised Brenkman and Salvini to work on the manuscripts of the Greek historian Herodotus (c. 484 BC – c. 425 BC).⁴⁸⁶ The only reason Newton ordered the collation of Herodotus is because someone - Magliabechi did not know who this might be - from the Dutch Republic had ordered him to do so.487 Moreover, Newton had commissioned Salvini to transcribe the letters of

ignoranza, non possa mettermi nel numero de' Letterati. Oltre a dottissimo, ed eruditissimo e anche onoratissimo, cortesissimo, sincerissimo, e l'istessa bontà." News about the death of Copes reached Magliabechi also through Cuper: "Non potrei esprimere a V.S.Ill.ma il dolore che mi ha apportato, la morte del signore senatore Copes. Oltre a dotto, ed erudito, era l'istessa bontà, e la medesima cortesia. De' suoi manoscritti, de' quali V.S.Ill.ma mi scrive, me ne aveva data notizzia esso medesimo. Se 'l Catalogo de' suoi libri fosse stampato, e fosse cosa piccola, di soli quattro, o cinque fogli, supplicherò V.S.Ill.ma a farmi grazzie, di mandarmelo in una lettera (Magliabechi to Cuper, 2 June 1708, KB, KW 72 D 12, f. 222)."

⁴⁸² Magliabechi to Cuper, 12 October 1703, KB, KW 72 D 12, ff. 31-32. "Non potrei esprimerle il contento che mi ha apportato, l'umanissima, ed al solito elegantissima ed eruditissima Lettera di V.S.Ill.ma, vedendo da essa, che ha goduto della dottissima conversazzione, del nobilissima, e cortesissimo signore Senatore Copes. Mi creda, che mi è stato più grato di qualsivoglia tesoro l'avero nuove di quel dottissimo signore, e di sentire che goda buona sanità. Io ho per esso una infinita stima, e gli sono anche infinitamente obbligato. Se fosse ancora da V.S.Ill.ma la prego a degnarsi di riverirlo con ogni maggiore affetto in mio nome. Continovamente, dagli amici dotti, con loro Lettere, mi vien domandato di esso, avendo lasciato in Italia, una memoria eterna, della sua virtù."

⁴⁸³ Magliabechi to J. Le Clerc, 26 December 1709, UBA, Special Collections, hs. C 87.

⁴⁸⁴ H. Brenkman to Magliabechi, Rome, 1 June 1712, BNCF, Magl. VIII.S.III.T.VI. Four letters in total, written by Brenkman to Magliabechi between 1712 and 1714, are extent in the collections of the National Library of Florence.

⁴⁸⁵ Magliabechi to J. Gronovius, 16 February 1709, LMU, Cod 4° Cod. Msc 777, f. 119, "Stimo che sarà una fatica qua assai lunga, e se vuole dopo stare due anni a Roma, in questo tempo, il suo dottissimo signore Fratello, avrà campo, di stampare ciò che vuole, e di prevenirlo" [I believe that it will be a very long fatigue [to collate the whole manuscripts in Florence], and if he would like to stay afterwards in Rome, in that time, your very learned brother, will have a clear run to printing everything he wants to in order to prevent him."

⁴⁸⁶ Newton probably refered here to Herodotus' *historía* on the origins of the Greco-Persian wars, which was written in 440 BC. Various manuscripts of the *historía* are extent in the *Biblioteca Medicea Laurenziana* (e.g. Plut.67.2 contains a Latin translation of the *historía* by Lorenzo Valla (1407-1547)).

⁴⁸⁷ Magliabechi to J. Gronovius, undated, LMU, Cod 4° Cod. Msc 778, f. 17, "Per le viscere del signore Dio, e per tutte le sante leggi dell'amicizia, prego V.S.Ill.ma a stracciare questo fogliaccio, subito che l'avrà letto, perché mai in tempo alcuno, possa essere veduto da anima vivente, scrivendolelo io, in estrema segretezza, e confidenza. Seguitono qua costoro, a collaccionare il manoscritto delle Pandette, e per quello che dicono sono vicini alla fine, avendo fatto, circa a tre quarti, della fatica. Stimo necessario l'avvisare a V.S.Ill.ma come collazzionano anche Erodoto, con i manoscritti della Biblioteca Medicea Laurenziana. Anche questa fatica la fanno i medesimi, cioè quel giovane Olandese, e il Salvini. La fa ad essi fare, il medesimo signore Inviato d'Inghilterra, al quale ne è stato scritto di costà."

bishop Ignatius Theophorus (c. 35-107).⁴⁸⁸ Remarkably, as noted Magliabechi, all these authors were already transcribed by Jacob and Laurens Gronovius during their stay in Florence:

"Par che abbiano preso di mira, di volere dare in luce tutte le fatiche fatte da V.S.III.ma, sopra di diversi Autori, prima che le faccia stampare ella. Stimo però, che a suo tempo, se ne abbiano a pentire, e che V.S.III.ma dopo che avranno stampato, abbia a far vedere al Mondo, la lor poca perizzia, e poca deligenza, nel maneggiare i manoscritti. Ad essi, mi presuppongo che basti, il dare a V.S.III.ma questo disgusto. Mi creda, che qua, a tutti i buoni, tal cosa non poco dispiace. Avendo V.S.III.ma dedicati qua, tanti suoi insigni, ed eruditissimi Libri, ed avendo fatto un così gran onore, a questo Biblioteca, non era dovere, il permettere, che altri, entrasse nelle sue fatiche, ed in quelle del suo signore Fratello."⁴⁸⁹

In October 1712, Brenkman returned to Florence to study the *Littera Florentina* once more. After this he went to Turin and Venice in order to inspect more manuscripts, and on his way back to Holland he stopped in Paris.⁴⁹⁰ After he had returned to Holland, he started working on his Digest edition on the basis of the Florentine manuscript. Afflicted by poor health, he was unable to publish his *Historia Pandectarum* before 1722, the first of six parts originally planned as merely an introduction to the edition.⁴⁹¹ Because of Brenkman's unexpected death in 1736, this was also the only part ever to appear in print. The publication of the *Historia* caused an uproar in Tuscany because the book claimed that the Pisans had plundered the manuscript in Amalfi in 1135, and done nothing with it afterwards. Scholars from Pisa took this as an insult, and the Pisan professor Guido Grandi published a counteroffensive in 1726 in which he denies the Amalfitan origins of the manuscript.⁴⁹² Brenkman responded to Grandi only in 1735 when tempers had already cooled down.⁴⁹³

5. The Dangers of travelling to Florence: Religious Conversions

Traveling was thought to present numerous trials to someone's faith, from distractions and temptations from all sorts to the possible influence of foreign religious opinions and practices.⁴⁹⁴ This concern was particularly strong when Dutch travelers visited Italy. Conversions, in fact, were not uncommon during the mid-seventeenth century, and especially the Grand Duchy of Tuscany pursued an active policy

⁴⁸⁸ *Ibidem*, "il medesimo signore Inviato, fece anche collazzionare al Salvini, le Lettere del suddetto S. Ignazio, che aveva già collazzionate V.S.Ill.ma." The letters of Ignatius Theopus are extent in Plut.57.7 of the *Biblioteca Medicea Laurenziana*.

⁴⁸⁹ In 1674, for instance, Jacob Gronovius has copied the manuscript of Herodotus' *historia* by Lorenzo Valla in the Biblioteca Medicea Laurenziana which appears to have been used in his later revised edition of 1715, three years after Brenkman's stay in Florence (Jacob Gronovius, *Herodoti Halicarnassei Historiarum libri IX Musarum nominibus inscripti* (Leiden: Samuelem Luchtmans, 1715). *Ibidem*, "it seems that they have targeted to bring to light every endeavors made by Your Illustrious Lordship, on various authors, before you are going to publish it. I believe, however, in due course, that they will regret that [because] Your Illustrious Lordship will show to the world their little expertise and diligence in handling the manuscripts after they publish these works. I assume that they are satisfied enough to bring you that disgust. Believe me, all the good men here are more than a little displeased about it. Because Your Illustrious Lordship has dedicated here, many of your eminent and learned books, and brought honor to this library, one should non have permitted that someone else would enter the business of you and your brother."

⁴⁹⁰ Govaert C.J.J. van den Bergh and Bernard H. Stolte, "The Unfinished Digest Edition of Henrik Brenkman (1681-1736)", *Tijdschrift Voor Rechtsgeschiedenis/The Legal History Review* 45, no. 3-4 (2014): 233.

⁴⁹¹ Brenkman informed Magliabechi about the delay because of his health concerns: H. Brenkman to Magliabechi, Rome, 2 May 1714, BNCF, Magl. VIII.S.III.T.VI, published in Targioni Tozzetti, *Clarorum Belgarum (...) Tomus Secundus*, 326-327.

⁴⁹² Guido Grandi, *Epistola de Pandectis Ad CL. Virum Josephum Averanium in Eadem Academia Juris Interpretem Celeberrimum* (Florentiae, Apus Tartinium & Franchium, 1727).

⁴⁹³ Mirto and Van Veen, Pieter Blaeu : Lettere Ai Fiorentini : Antonio Magliabechi, Leopoldo e Cosimo III de' Medici, e Altri, 1660-1705, 54.

⁴⁹⁴ On the phenomenon of conversion in the scholarly world, see Richard Kirwan, "The Conversion of Jacob Reihing: Academic Controversy and the Professorial Ideal in Confessional Germany', *German History* 36, no. 1: 1–20.

destined to win over Protestants to the Catholic faith.⁴⁹⁵ For example, earlier we have seen that Jacob Tollius received a compensation for giving up his Protestant faith from Cosimo III. In this context, the role of Nicolaas Stensen (1638-1686) is also pivotal.

Born in Copenhagen to a Lutheran family in 1638, Stensen studied anatomy in Amsterdam under the Dutch physician Gerard Blasius (1627-1682) and then moved to Leiden were he enrolled in the faculty of medicine. While studying in Leiden (1660-1663), Steno had embraced not just Cartesianism but also radical tensions and become a friend of Spinoza. As pointed out by Eric Jorink, Stensen was thus actively involved in a circle of rather unorthodox scholars who all tended to value the quest for knowledge higher than religious ideals.⁴⁹⁶ On settling in Florence in 1667, though, Stensen converted from Lutheranism to Catholicism and soon also discarded his Cartesianism. Stensen's conversion was "enthusiastically hailed as a success non only for the glory of the Medici dynasty, but also for the importance it had regarding the relationship between science and faith", as Stefano Miniati has underlined.⁴⁹⁷ In these years, he still closely followed philosophical developments and forged ahead with his scientific work. A few years later, after having travelled extensively in Europe, Stensen underwent a second conversion, and abandoned philosophy and science completely, distancing himself from his friends at Leiden University and their ideas. From that moment on, Stensen devoted himself to the task of converting as many people he could to Catholicism.⁴⁹⁸ On the 26th of March 1675, Magliabechi informed Gronovius that he was ordained priest, and Stensen rose to become one of the most influential ecclesiastics in the intellectual sphere in Catholic Europe.⁴⁹⁹ He is best remembered for his collaboration to condemn of Spinoza by the Church of Rome and the placing of his publications on the Index librorum prohibitorum.

Stensen's activities at the grand ducal court were closely followed by Magliabechi, who appears to be particularly critic about the Danish scholar. In his letters to his trusted friend Jacob Gronovius, he lamented the fact that Cosimo gave Stensen a warm welcome in Florence, while Gronovius "mai potette avere una miserabile stanza, non ostante che l'abbiano mille barone, e mille ignoranti" during his professorship at the University of Pisa.⁵⁰⁰ Moreover, he informed Jacob about the difficulties protestant scholars encountered while they stayed in Florence. In 1676, Magliabechi reports that the German mathematician Gerhard Meier came to Florence with the prospect of collating manuscripts in the *Biblioteca Laurenziana*. Upon his arrival, Magliabechi made sure that Meier was granted an audience by the Grand Duke, who gave his consent that the German scholar could "copiare quel che volesse."⁵⁰¹ When Magliabechi casually bumped into Stensen in the halls of the grand dual palace and shared with him the good news, Stensen immediately went to Cosimo III and told him that "non bisognava dar licenzia a Protestanti di copiar manoscritti in quella Libreria".⁵⁰² After this, Magliabechi had the hardest time to persuade Cosimo to keep his word, convincing that Meijer needed to work at the library.⁵⁰³

⁴⁹⁵ Mazur, Conversion to Catholicism in Early Modern Italy, 55-56.

 ⁴⁹⁶ Eric Jorink, 'Modus politicus vivendi: Nicolaus Steno and the Dutch (Swammerdam, Spinoza and Other Friends), 1660–1664', in *Steno and the Philosophers*, ed. Mogens Lærke and Raphaele Andrault (Leiden/Boston: Brill publishers, 2018), 14.
 ⁴⁹⁷ Stefano Miniati, *Nicholas Steno's Challenge for Truth. Reconciling Science and Faith* (Milan: FrancoAngeli, 2009), 190–91.

⁴⁹⁸ Miniati, 205.

⁴⁹⁹ Magliabechi to J. Gronovius, 26 March 1675, LMU, Cod 4° Cod. Msc 777, f. 149, "Lo Stenone qua si è fatto Prete". Israel, Radical Enlightenment, cit. 43.

⁵⁰⁰ Magliabechi to J. Gronovius, 30 May 1675, LMU, Cod 4° Cod. Msc 777, ff. 169-171, "Could never have one miserable room, despite the fact that thousands of rascals, and thousands of ignorant men have one".

⁵⁰¹ Magliabechi to J. Gronovius, January 1676, LMU, Cod 4° Cod. Msc 777, f. 157, "copy whatever he wants".

⁵⁰² *Ibidem*, "Pregai il Padrone Serenissimo a conceder Licenzia al signore Mejero che potesse in Libreria di S. Lorenzo copiare quel che volesse, ed esso subito al solito me ne fece la grazzia. Avendo detto questo allo Stenone, che a caso incontrai, andò subito a dire a S.A.S. che non bisognava dar Lincezia a Protestanti di copiar Manoscritti in quella Libreria, perche ecc. [he should not give permissions to Protestants to copy manuscripts in that library"].

⁵⁰³ *Ibidem*, "Mi bisognò per tanto riparlar di nuovo a S.A.S., ed ho durato fatica a spuntare che possa copiare come fa a dispetto di tutta l'invidia."

Another episode happened in 1682, when Magliabechi secretly informed Jacob Gronovius about the Polish engraver Teodor Lubieniecki (1654-1706), who had left Amsterdam for Florence to work at the Medici court. In Florence, Lubieniecki was "messo in Casa lo Stenone" so that he could indoctrinate the foreigner.⁵⁰⁴ A few days later, after he had tried everything he could possibly think of, Stensen became aware that it was impossible to convince Lubieniecki to become a Catholic. Consequently, "per mandarlo via di qua, l'anno accusato all'Inquisitore" and Lubieniecki, having received some money from the Grand Duke for his return journey, soon realized that it was better to leave.⁵⁰⁵ Magliabechi confessed that "essi si fosse fatto nostro Cattolico Romano", but he nonetheless protested strongly to the behaviour of Stensen, who had used "mezzi così indecenti per farlo partire, perché non voleva mutar Religione".⁵⁰⁶ After the debacle with Lubieniecki, Magliabechi wrote to Jacob Gronovius that no foreigner in Florence could avoid the indefatigable efforts that Stensen lavished on his anti-Protestantism campaign. He asserts that Protestant scholars can stay only a short time in Florence. Very soon after their arrival, they will be visited by Stensen, and anyone who had defied his attempts at conversion are forced to leave Tuscany:

"Adesso niun Protestante potrà tratternersi qua se non per brevissimo tempo, poiché se lo Stenone che va subito a trovargli, riferirà che non si voglino far nostri Cattolici Romani, certo che o in un modo, o nell'altro, bisognerà che se ne vadano omni pejori modo." ⁵⁰⁷

Aware of these dangers, Magliabechi appeared to have shielded the Dutch scholars from his religious influence, warning them about the dangers delineated by Stensen. When Laurens Gronovius was about to leave for Florence, Magliabechi wrote to his brother Jacob to advise him that, if Laurens was still willing to come to Florence, "se gli fingerò visceratissimo".⁵⁰⁸ In addition, when Magliabechi heared that Stensen was in the Dutch Repubic in the 1670s, he recommended Jacob "di parlargli il meno che sia mai possibile."⁵⁰⁹

There are several occasions in which Stensen succeeded in converting Protestants. He managed to convert Albert Burgh, the son of the treasurer of the United Provinces, to Catholicism.⁵¹⁰ Burgh was, like Stensen, a former acquaintance of Spinoza during his studies at the University of Leiden. At the time, he developed such an aversion to the Catholic faith that, during his travels to Italy, his fellow travel companions feared that he could not hide his anti-Catholic sympathies.⁵¹¹ The contrary happened: Burgh completely changed his perspective on Catholicism and when he reached Florence, in 1675, Stensen's influence on him was conclusive for his definite conversion.⁵¹² After his conversion, Albert Burgh went to Rome as a consultant to the court of the Holy Office with the name of Franciscus de Hollandia and

⁵¹¹ Kardel and Maquet, 334.

⁵⁰⁴ Magliabechi to J. Gronovius, undated (1682), LMU, Cod 4° Cod. Msc 777, f. 199, "placed in the house of Stensen". Magliabechi urged Gronovius to tear up this letter immediately after reading: "Mi onori di stracciar subito questo foglietto, che le scrivo in estrema segretezza, e confidenza".

⁵⁰⁵ *Ibidem*, "to send him way from here, they accused him by the Inquisitor"; "avendogli il Padron Serenissimo dati alcuni danari pel viaggio, gli è convenuto per i caldi eccessivo partirsi per costà".

⁵⁰⁶ *Ibidem*, "he would have become a Roman Catholic", "means so indecent to make him leave, only because he did not want to change religion".

⁵⁰⁷ *Ibidem*, "now no Protestant can remain here if not for a very short amount of time, because, when Stensen, who immediately visits them, refers that they do not want to became Roman Catholics, it is certain that, one way or another, they are forced to leave in the worst possible way".

⁵⁰⁸ Magliabechi to J. Gronovius, undated, LMU, Cod 4° Cod.Msc 778, f. 8, "will pretend to be very genuine to him".

⁵⁰⁹ Magliabechi to J. Gronovius, 1707, LMU, Cod 4° Cod. Msc 777, f. 130, "to speak to him less as possible".

⁵¹⁰ About Burgh's conversion, see Troels Kardel and Paul Maquet, *Nicolaus Steno: Biography and Original Papers of a 17th Century Scientist* (Berlin/Heidelberg: Springer, 2013, 334-338; P.A.M. Geurts, 'Niels Stensen en Albert Burgh, Archief voor de geschiedenis van de Katholieke Kerk in Nederland 2 (1960): 139-152; Leen Spruit and Giuseppina Totaro, *The Vatican Manuscript of Spinoza's Ethica* (Leiden/Boston: Brill publishers, 2011), 8-9.

⁵¹² Ibidem, 335.

continued to cooperate with Stensen in his evangelization activities.⁵¹³ According to Magliabechi, Cosimo III was planning to offer Burgh a chair at the University of Pisa, upon which he wrote a letter to Gronovius, exclaiming "è verissimo quel che cento volte le ho scritto cioè che non ci vogliono alcuno che sappia leggere".⁵¹⁴

Together, Burgh and Stensen tried to convert Conrad Ruysch, who, as we have seen before, travelled to Florence in 1675. On the 24th of June 1675, Burgh visited Ruysch and his friend Bruno van der Dussen to persuade them to the Catholic faith.⁵¹⁵ He started to tell his whole life story: how he had doubted his faith for more than a year, until Stensen "de leatste handt aen dit werck geleijt heeft" and convinced him to devote his life to the Roman Church, which was "de rechte kerck".⁵¹⁶ In the following days, Ruysch regularly received visits from both Burgh and Stensen who told him the same stories over and over again. Then, on the 30th of June, the Dutch consul Abraham de la Fontaine informed Ruysch and Van der Dussen that he had heard that not only Burgh was about to convert to Catholicism, but that they themselves too were determined to convert. Upon hearing this, Ruysch and Van der Dussen went straight to Magliabechi for "hem niet alleen van deze opinie te disabuseren, maer oock te versoeken dat hij den hartoch en ider een die hem daer van mocht spreeken het contrarie bekent soude gelieven te maeken".⁵¹⁷ Magliabechi answered with courtesy, saying that he would do everything to remedy the situation. He also told them that Stensen "wiens vrient hij gans niet is, veel minder van sijn pijlaer bysterij".⁵¹⁸ Burgh and Stensen, however, were not planning to give up. When Ruysch became gravely ill in August, they visited him at his bedside almost every day. Yet, their efforts where in vain, upon which Ruysch wrote that "doch alle discoursen by mij gecoupeert werden die daer naer toe mochten gaen, hebben sij geoordeelt aen mij niet te toornen was".⁵¹⁹

6. CORRESPONDING SCHOLARS

Travelling established the personal credit upon which international exchange could take place.⁵²⁰ During visits abroad, scholar not only traded knowledge, but primarily judged the scholar they met, deciding whether to trust one another or not.⁵²¹ For instance, the Dutch scholar Coenraad Ruysch changed his opinion about Magliabechi after he had met him personally in Florence. Before his grand tour, Nicolaas Heinsius, who was not on good terms with the librarian after the conflict over the forced departure of Jacob Gronovius from Pisa in 1674, had cast a negative light on the librarian:

"Il signore Corrado Ruysc si trova presentemente in Genievera, di dove mi ha scritta una gentilissima, e cortesissima Lettera. Se 'l signore Einsio domanderà di me al detto signore

⁵¹³ Giuseppina Totaro, 'On the Recently Discovered Vatican Manuscript of Spinoza's Ethics', *Journal of the History of Philosophy* 51, no. 3 (2013): 467-468.

⁵¹⁴ Magliabechi to J. Gronovius, 14 October 1675, LMU, Cod 4° Cod. Msc 777, f. 199, "it is so true what I have written you hundreds of times that they do not want someone who is able to lecture".

⁵¹⁵ Magliabechi to J. Gronovius, 13 August 1675, LMU, Cod 4° Cod.Msc 777, f. 180, "Lo Stenone, e Monsù Giovanni, son dietro insieme col signore Burg a vedere, che il signore Ruysk e Brunone si facciano de' nostri, e stimano che gli sia per riuscire".

⁵¹⁶ Travel diary Ruysch, 81v, "put the finishing touched to the job", "the right church".

⁵¹⁷ *Ibidem,* 83r, "to disabuse him from that opinion, but also to request that he would speak to the Grand Duke about that the contrary was true".

⁵¹⁸ Ibidem, 88r, "whose friend he is not, and especially not from his hypocrisy".

⁵¹⁹ Travel diary Ruysch, 83r-84v, "[because] I cut off every discourse that was headed in that way [conversion], they judged that they could not undermine me".

⁵²⁰ Lux and Cook, 'Closed Circles or Open Networks?: Communicating at a Distance during the Scientific Revolution', cit. 183.

⁵²¹ Ibidem, 183.

Ruysc, che mi ha benissimo conosciuto, e praticato, so che sentirà ch'io son diversissimo da quello che da questi infami maligni gli sono stato rappresentato."⁵²²

Likewise, the Dutch merchant Daniel Cousson, who visited Florence in the same year, vouched for Magliabechi after he had met him in person, as is shown by the following letter from the librarian to Jacob Gronovius:

"L'Einsio, e gl'altri che mi stimano un ignorantissimo come io sono, ne scrivino qua ad esso signore Cousson, che per qualche tempo mi ha praticato assai familiarmente, ed è in parte è informata della mia Vita, de' miei studi, ecc, e sentiranno che io non sono un casì cattivi uomo come che essi mi credono."⁵²³

Trust and credibility were thus best build on personal visits. Consequently, as pointed out by David S. Lux and Harold J. Cook, these personal meetings "established the weak ties upon which future correspondence could be established".⁵²⁴ The visitors to Florence discussed in this chapter, including the brothers Gronovius, Jacob Tollius, Coenraad Ruysch, Joannes Kool and Henrik Brenkman all remained in touch with Magliabechi after leaving the city, and in some cases frequently.

Was trust between correspondents established on the basis of these face-to-face meetings, or could someone be added to a communication chain on the basis of a recommendation? In the next chapter, we will see that, upon their return in the Dutch Republic, scholars like the Gronovius brothers became a channel through which Magliabechi could establish contact with other members of the Dutch scholarly community. As such, scholars who never met Magliabechi, like Gisbert Cuper, Johannes Georgius Graevius, Jacob Perizonius and Pierre Bayle undoubtedly began corresponding with Magliabechi through them. How could they trust each other? A long line of research in social network research has shown that there is an increased chance that if A trusts B, and B trust C, A will have the basis to trust C as well. This premise is based on the notion of triadic closure, which is a concept that will be discussed in more detail in the next chapter. Here, it is sufficient to know that people create networks of trust through mutual friends. This insight is fundamental to model why someone could be added to the communication chain on the basis of an introduction made by someone already present in the network. Triadic closure underlines thus the importance of introductions in the early modern scholarly community, and can focus our attention to these unique moments in a large set of data.

In the next chapter, we will observe in more detail how Dutch and Italian scholars managed their epistolary relationships and to what end. We will see that they self-consciously enacted their networks, moving between dense and open networks and struggled to find a balance between these two. On the one hand, they needed a network of densely connected contacts to establish and sustain a secure network abroad. As we have seen throughout this chapter, Dutch scholars brought with them many letters of introduction and book-gifts to come into contact with leading scholars abroad. These letters and books often emphasized their connections to mutual contacts who vouched for their scholarly merit and credibility. The sharing of mutual contacts was certainly reassuring, providing benefactors a reason to trust a foreigner, which was especially needed in times of religious disunity, when scholars needed to

⁵²² Magliabechi to J. Gronovius, 28 April 1676, LMU, Cod 4° Cod.Msc 777, f. 189, "Sir Conrad Ruysch presently resides in Genève, from where he has written me a very nice and polite letter. If sir Heinsius will ask Ruysch about me, who has become well-acquainted with me, I am sure that he will hear that I am different from what is represented by those despicable and evil men".

⁵²³ Magliabechi to J. Gronovius, 30 May 1675, LMU, Cod 4° Cod.Msc 777, f. 169, "Heinsius, and all the others who think of me as very ignorant as I am, write about this to sir Cousson, who stayed with me quite often, and is informed by my life and studies, etc, will hear that I am not such a mean man as they think I am".

⁵²⁴ Lux and Cook, 'Closed Circles or Open Networks?', cit. 183.

present themselves as credible and trustworthy scholars. Consequently, this reputation for being trustworthy made it possible to build bridges that would otherwise be too risky. These bridges allowed them to move outside their own circle of trust in order to collect innovative information from around the world, becoming a broker in the scholarly exchange between the Dutch Republic and the Grand Duchy of Tuscany. The key then to creating a secure cross-cultural network is combine closure with valuable bridge relations.

CHAPTER 4

The Grand Duchy of Tuscany and the Dutch Republic: a network-based approach

INTRODUCTION

The aim of this chapter is to look at the stories detailed in the previous chapters from another perspective, moving from a more qualitative perspective to a quantitative analysis that provides a statistical examination of the scholarly network and its potential impact on the exchange between the Grand Duchy of Tuscany and the Dutch Republic. This comparative analysis allows for a sharper focus on the differences and similarities these approaches share on how early modern scholars capitalized on opportunities in the social structure to which they were connected. Specifically, this chapter uses mathematical and computational techniques developed by social network scientists to reconstruct and analyze the social organization of the relations between the two respective societies during the reign of Cosimo III. Specifically, by data-mining two heterogeneous, but complementary datasets, a unified, systematized network representation has been created to better understand the way the scholars between these two societies were connected. This network has been further enriched with archival transcriptions of letters extent in various library and archival collections of the Netherlands, Germany and Italy, as well as with early printed correspondences.

What makes the statistical analysis of the social relations between early modern scholars indispensable nowadays? More and more libraries, archives and research institutions across Europe have started to digitalize their epistolary collections and catalogues, creating easily accessible online repositories and databases of early modern correspondence. In recent years, historians have increasingly seeked to develop and use visualization tools and methods for making sense of patterns in the sets of data contained in these repositories. Thanks to these developments, argues Yves Gingras, "we can now replace a purely metaphoric use of terms like "network" with a visible map of the intellectual relations between people".⁵²⁵ Moreover, well-defined calculations of the centrality of the positions of different actors in the network can be made.⁵²⁶ In light of this, numerous statements regarding the Republic of Letters, which are based on case studies that are often taken at face value, can be further substantiated. Anne Goldgar, for example, claimed that the "members of the Republic of Letters used social techniques to draw closer together", Paul Dibon argued that the early modern scholar was "bound to widen the range of his correspondence and bring new citizens into the circle" and Christiane Berkvens-Stevelink stated that "personnages appliquent une stratégie de transmission culturelle".⁵²⁷ Similarly, Maria Boas Hall has pointed out that the early modern scholar understood "the advantage, indeed the necessity, of instigating and maintaining exchange of letters with learned men in strategic parts of the world", while Harold J. Cook and David Lux suggested that "travel, more than any other activity, established the weak ties by which knowledge

⁵²⁵ Yves Gingras, 'Mapping the Structure of the Intellectual Field Using Citation and Co-Citation Analysis of Correspondences', 330

⁵²⁶ Ibidem, 339.

 ⁵²⁷ Goldgar, Impolite Learning, 8; Christiane Berkvens-Stevelinck, 'Introduction', in Les grands intermédiaires culturels de la République des Lettres, ed. Christiane Berkvens-Stevelinck and Hans Bots (Paris: Honoré Champion Éditeur, 2005), 19; Paul Dibon, 'Communication in the Respublica Literaria of the 17th Century', Res Publica Litterarum. Studies in the Classical Tradition 1 (1978): 46.

could be exchanged".⁵²⁸ The digital turn of the last two decades presents us with the unique opportunity to chart these classic statements, and to find structural patterns in a way that would be impossible from a close reading of the source itself. In this chapter, a set of principles will be discussed to capture the dynamics of these statements that goes beyond their metaphorical use.

How does one's position in the network affects power? The term power has become immensely popular across the social sciences of the last decade. It has been studied primarily to understand to what extent power is a property of the individual or rather a property of network structure. Is someone particularly powerful because of his intelligence or wealth, or because he holds a crucial position in the underlying network organization? Richard Emerson tackled this question and argued that power is a property of the social relations and not an attribute of the actor. According to him, "personal traits, skills or possessions (such as wealth) which might be relevant to power in one relation, are infinitely variable across the set of possible relations, and hence have no place in general theory."⁵²⁹ Following this line of thinking, we should, therefore, study the properties of the network to assess the importance of an individual rather than focus on his biography. Hence, by focusing on collectivity rather than individuality and on comprehensive structures rather than single biographies we might actually provide a more complete understanding of the scholarly exchange between the Dutch Republic and the Grand Duchy of Tuscany.

The following paragraphs turn from issues of data modelling and collection to structural measurement and analysis of the relationships between the Dutch Republic and the Grand Duchy of Tuscany and are structured as follows: the first paragraph provides an assessment of the state of the field, with a special emphasis on the use of network analysis that has influenced the ideas of the present research. In the second paragraph, we will take look at the potential of databases to generate histories. In the past years, a lot of data has been made online available. These data can be used in more sophisticated ways than just making use of them as an ordinary catalogue to query for results. Nevertheless, the step towards transforming these datasets into a model or network that we can use to run algorithms on, have been often overlooked, a black box that is often left unexplored. Therefore, in the second paragraph, a detailed account of the data contained in this study will be presented. Following that, we will address the question whether the scarcity of these data is sufficient to establish testable quantitative hypotheses. I prove that the answer is yes, and I will give explicit examples to show that the early modern network follows strict and generic laws that can be universally tested. I will then discuss some of the fundamental dynamics that take place in the network, focusing on the essential role of network closure and brokerage in the evolution of the relationships between the Dutch Republic and the Grand Duchy of Tuscany.

1. NETWORKS EVERYWHERE: STATE OF THE FIELD

One can choose from a whole range of tools and analyze the properties of networks. Yet, as Mark Newman remembers us, "certainly not all of them will give useful results – which measurements or calculations are useful for a particular system depends on what the system does and on what specific questions you are trying to answer about it".⁵³⁰ What are the most common used network approaches in historical studies? What are the kind of questions historians approach with network science? In this

⁵²⁸ Marie Boas Hall, 'The Royal Society's Role in the Diffusion of Information in the Seventeenth Century', *Notes and Records of the Royal Society of London* 29, no. 2 (1975): 176. David S. Lux and Harold J. Cook, 'Closed Circles or Open Networks?: Communicating at a Distance during the Scientific Revolution', 183.

⁵²⁹ Richard M. Emerson, 'Power-dependence relations', *American Sociological Review* 27 (1962): 32.

⁵³⁰ Mark E. J. Newman, Networks: An Introduction (Oxford: Oxford University Press, 2010), 2.

paragraph, several studies will be presented to address these type of questions. A special emphasis will be given to those studies that have influenced the present research.

First and foremost, this study draws heavily on the work carried out by Ruth Ahnert and Sebastian Ahnert. They have pioneered the application of network analysis tools to early modern sources, using quantitative network analysis to analyze the protestant networks that operated in England during the reign of Catholic Queen Mary I (1516-1558).⁵³¹ Based on metadata extracted from 289 letters written by or either received from Protestants living in England between 1553 and 1559, they demonstrated that, despite the systematic executions of Protestants, it was impossible to restore the Catholic faith. The Protestant religion persisted for the disappearance of key figures did not affect and fragment the protestant network, whose infrastructural backbone was held together by few well-connected figures that continued the flow of ideas. Through the analysis of hubs, eigenvector centrality and betweenness, they were able to shed light on the characteristics and identity of the infrastructural figures that had made the Protestant church so robust.⁵³²

Network analysis is often used with the explicit aim to re-evaluate the importance of forgotten figures. Evan Bourke, for instance, has used a computational approach to show how integral female members were to the information flow in the Hartlib circle, an intellectual correspondence network formed in London during the 1640s. Drawing on a network corpus of 1708 letters, his results revealed that women such as Dorothy Moore Dury (c. 1613-1664) and Katherine Jones were integral elements of the Hartlib Circle's core, while they have been largely overlooked in most scholarship on the Hartlib Circle.⁵³³ Similarly, Matthew D. Lincoln used network analysis to infer historical print production networks "from two large databases of existing prints in order to characterize whether and how centralization of printmaking networks changed over the course of this period, and how these changes may have influenced individual printmakers."⁵³⁴ This enabled him to highlight neglected artists like Jonas Suyderhoef, who has "played a far more important role in disseminating images through reproduction than has previously been acknowledged".⁵³⁵

It is also worth mentioning the work of Yves Gingras, who discussed the importance of cocitations to map the evolutions of cited persons in correspondence network. Co-citations appear when two persons are mentioned together in the same letter; if the number of these co-citations is high, that is if they are cited together in many letters, it suggests that there is a strong link between these persons. Using the case of Mersenne, Oldenburg and Darwin, Gingras showed in a concrete manner how a database could be "constructed and used in conjunction with techniques of bibliometric and social network analysis to visualize the evolving conversations involving the many thousands of persons mentioned in their letters".⁵³⁶ This method provides, according to Gingras, "a global representation of the evolving conversation going on in the Republic of Letters and in intellectual and scientific fields".⁵³⁷

⁵³¹ Ruth Ahnert and Sebastian E. Ahnert, 'Protestant Letter Networks in the Reign of Mary I: A Quantitative Approach', ELH 82, no. 1 (2015): 1–33. Ruth Ahnert and S. E. Ahnert, 'A Community Under Attack: Protestant Letter Networks in the Reign of Mary I', *Leonardo* 47, no. 3 (2014): 275. Ruth Ahnert, 'Maps versus Networks', in *News Networks in Early Modern Europe*, ed. Noah Moxham and Joad Raymond, Library of the Written Word 47 (Leiden/Boston: Brill Publishers, 2016), 130– 57.

⁵³² A glossary of these network concepts is provided at the beginning of this study.

⁵³³ Evan Bourke, 'Female Involvement, Membership, and Centrality: A Social Network Analysis of the Hartlib Circle', *Literature Compass* 14, no. 4 (2017): 1–17.

⁵³⁴ Matthew Lincoln, 'Social Network Centralization Dynamics in Print Production in the Low Countries, 1550-1750', *International Journal for Digital Art History* 2 (2016): 134.

⁵³⁵ Ibidem, 153.

⁵³⁶ Yves Gingras, 'Mapping the Structure of the Intellectual Field Using Citation and Co-Citation Analysis of Correspondences', 338

⁵³⁷ Ibidem, 330.

Originally, this analysis was used in the social sciences for identifying co-authorship in scientific papers in a specific research domain. In this case, a co-citation would appear if two references or authors appear in the same bibliography, identifying as such the existence of "invisible colleagues".⁵³⁸

Though not using data coming from early modern correspondence, the following research is worth mentioning here not only because it is a classic contribution to network analysis but, in accordance with the present study, it places the Medici family in the foreground. In 1993, John F. Padgett and Christopher K. Ansell collected data on nine types of relations among elite Florentine families in the fifteenth century, including intermarriage ties, patronage relationships, trading and business ties, and friendships.⁵³⁹ On the basis of these data, they showed how the Medici family used economic ties to secure political support from geographically neighboring families, and used marriage and friendship with more distant families to maintain their status. As such, Cosimo I de' Medici (1519-1574), the first Grand Duke of Tuscany, harnessed the power of the network to his advantage by isolating all Florentine families from one another and acting as the vital and only connection between them. "Cosimo did not create the Medici Party", argued Padgett and Ansell, "but he did shrewdly learn the rules of the networks around him".⁵⁴⁰

The significance of networks has been emphasized most prominently in the broader field of research on the Republic of Letters because it lends itself perfectly for getting to an abstract level for conceptualizing data structures and flow between its components. The Republic of Letters has been described as an early modern network of the learned whose connections transcended confessional and geographical boundaries. People became part of this community by the vary act of writing letters, which formed the actual link between the 'citizens'. In fact, those who failed or refused to establish sustained lines of communication, could not be reckoned as citizens of the Republic of Letters.⁵⁴¹ This description of the Republic of Letters offers itself very naturally to network analysis because it is relational in character. It implies the existence of individuals (nodes) connected to one another by letters (edges). It is therefore not by chance, as Daniel Stolzenberg has pointed out, that the historian's interest in the early modern concept of the Republic of Letters has grown in tandem with interest in social networks.⁵⁴²

Indeed, in the past decade, early modern historiography has seen a proliferation of digital network projects that have started to map sections of the Republic of Letters. Within this relatively small field, the best-known projects – including Six Degrees of Francis Bacon of the Carnegie Mellon University, Mapping the Republic of Letters of Stanford University, Circulation of Knowledge/ePistolarium of the Huygens Institute in Amsterdam and Cultures of Knowledge of Oxford University – all focus on connections between early modern scholars. The ePistolarium tool enables the user to visualize not only the traditional correspondence networks, but also co-citation networks. In this, the project builds further on the work of Yves Gingras who, as noted earlier, demonstrated the importance of co-citations to map the evolution of cited persons in early modern correspondence networks.

The aim of the Six Degrees of Francis Bacon project is to reconstruct the social network of early modern Britain from the sixteenth until the eighteenth century. For this purpose, natural language processing tools were used to capture relationships between scholars via co-mentions within biographies

⁵³⁸ Markus Gmür, 'Co-Citation Analysis and the Search for Invisible Colleges: A Methodological Evaluation', *Scientometrics* 57, no. 1 (2003): 27–57.

⁵³⁹ John F. Padgett and Christopher K. Ansell, 'Robust Action and the Rise of the Medici, 1400-1434', *American Journal of Sociology* 98, no. 6 (1993): 1265.

⁵⁴⁰ Padgett and Ansell, 1310.

⁵⁴¹ Van Miert, 'What Was the Republic of Letters? A Brief Introduction to a Long History (1417–2008)', cit. 270.

⁵⁴² Daniel Stolzenberg, 'A Spanner and His Works: Books, Letters, and Scholarly Communication Networks in Early Modern Europe', in *For the Sake of Learning: Essays in Honor of Anthony Grafton*, ed. Ann Blair and Anja-Silvia Goeing (Leiden & Boston: Brill, 2016), 158.

extracted from the *Oxford Dictionary of National Biography* (ODNB). Two people that are "mentioned together in numerous biographies is highly suggestive of the possibility that those two people may have come into contact with one another".⁵⁴³ The project is inspired by the popular trivia game The Six degrees of Kevin Bacon which was developed in the 1990s by three students who observed that every actor in Hollywood could be connected to Kevin Bacon with only a few links.⁵⁴⁴ In other words, it was a game of finding shortest paths from Kevin Bacon to any other actor. The *Six Degrees of Kevon Bacon* game follows the concept of "six degrees of separation", the theory that anybody in the world is not more than six relationship away from any other person in the world. In 1967, the theory was devised by the sociologist Stanley Milgram, who named the phenomenon "the small world problem".⁵⁴⁵ Milgram randomly selected people in the Midwest to send packages to two strangers, one residing in Massachusetts and one in Boston. The sender to send the package to a person he knew and who was most likely to know the recipient personally. It appears that it took on average between five and seven intermediaries for each package to be delivered successfully. The idea of the small-world will often come up throughout this chapter.

2. MINING DATASETS FOR HISTORICAL RESEARCH

To analyze the epistolary network between the Grand Duchy of Tuscany and the Dutch Republic, the archival documents must first be turned into meta-data. Metadata are the item-level descriptions of correspondence that contain basic descriptions of the archival source such as names of the sender and the recipient, the date of the letters, the number of letters exchanged, and the place of sending and reception. Two ways of extracting metadata are used in this study to reconstruct the epistolary network. The first is data-mining. One of the key drivers of this research, but of the Digital Humanities field in general, is the availability of large digital repositories within many areas of the Humanities. Research libraries and online repositories across the world possess ever more data relevant to our field of study. This availability prompts us to challenge the potential of these data for humanistic inquiry. Indeed, these repositories offer the prospect of applying computational visualizations that enables us to handle a large amount of data that traditional research fails to do. These data are subsequently enriched with archival research. In many cases, a correspondence in question has not been systematically digitized. This is for example the case with the correspondence of secretary Apollonio Bassetti extent in the State Archive of Florence. These data are manually created through the reading of his correspondence in loco sent between him and his correspondents in the Low Countries and recording the identities of the recipients and the characteristics of the correspondence (date, place, number of letters).⁵⁴⁶ The reconstruction of the network that is analyzed in this study required thus a combination of archival work and computational analysis.

⁵⁴³ Christopher N. Warren et al., 'Six Degrees of Francis Bacon: A Statistical Method for Reconstructing Large Historical Social Networks', *Digital Humanities Quarterly* 10, no. 3 (2016): 7.

⁵⁴⁴ Barabási, Linked: The Science of Networks, 85.

⁵⁴⁵ Stanley Milgram, "The Small-World Problem', *Psychology Today* 1, no. 1 (1967): 61–67.

⁵⁴⁶ I used the six *filze* labelled 'Fiandra ed Olanda' in the Fondo Mediceo del Principato of the Florentine State Archive (n. 4260, 4261, 4262, 4263, 4264, 4265). The spine of the filze reads the monogram CAB which stands for Canonico Apollonio Bassetti. The exceptionally rich series consists of hundreds of letters between Bassetti and the Dutch Republic from 1666 until 1699. Besides letters, the documents include numerous newsletters, bills, reports on negotiations, price lists and freight lists of the Dutch Each India company. As such, 68 contacts of Bassetti were included into his ego-network. These correspondences include the names of Cosimo's subjects living in Amsterdam, including, amongst all, the merchants, Francesco Feroni, Giovacchino Guasconi, Giovanni da Verrazzano and Giacinto del Vigna. This network was further increased by a number of Italian travelers to the Dutch Republic, like Lorenzo Magalotti and Pietro Guerrini. Bassetti had a number of Dutch informers as well, of whom the most important were Nicolaas Heinsius and Pieter Blaeu.

2.1. MINING MAGLIABECHI

The data for this study have been drawn from the card catalogue of the *Biblioteca Nazionale Centrale di Firenze* (hereafter called CCF). The CCF, compiled in the nineteenth century, captures on one index card per correspondence the basic metadata for a large portion of the holdings of the National Library of Florence, including the names of the sender and the recipient, the year, the shelf mark required for retrieval, the number of letters exchanged and the location it was sent from. The card catalogue has been digitized in 2013 and is nowadays publicly consultable through the website of the Central Institute for the Union Catalogue of Italian Libraries and Bibliographic Information.⁵⁴⁷ This catalogue is amenable to computational processing. A considerable part of the CCF consists of the metadata of the letters that were sent to Antonio Magliabechi. Upon his death in 1714, Magliabechi left his entire collection of around 30.000 printed books and his entire correspondence to the people of the city of Florence. This donation led to the foundation of Florence's first public library, the *Magliabechiana*, which forms the central core of today's National Library of Florence.

The first step was the transformation of the card catalogue into structured data ready for analysis. With the help of standardized script that can parse an html file into a csv format, the data contained in the card catalogue has been transformed into a csv file, which is a format ready for network analysis. Specifically, Python script (the algorithms contained in the Beautiful Soup library) has helped me to pull particular content from the online card catalogue, remove the HTML mark-up, and save the information.⁵⁴⁸ After data-extraction and thorough cleaning, the network includes 2.134 connections between Magliabechi and his first-degree correspondents. These data have been complemented with archival research and secondary material that gave rise to a network featuring 2.262 correspondents (see figure 4).⁵⁴⁹ The resulting network is Magliabechi's ego-network and, because the major part of the correspondence is dated, it can be visualized over time. In the case the correspondence was not dated, the years of the beginning of Magliabechi's correspondence (1654) and the death of Magliabechi (1714) has been applied.

⁵⁴⁷ 'Biblioteca Nazionale Centrale Di Firenze - Catalogo Dei Carteggi - I Cataloghi Storici Digitalizzati Dell'ICCU', last accessed 18 October 2018, http://cataloghistorici.bdi.sbn.it/dett_catalogo.php?IDCAT=10.

⁵⁴⁸ I would like to thank Matthew L. Lavin from the University of Pittsburgh for helping me with this script.

⁵⁴⁹ I have primarily consulted the monumental work of Manuela Doni Garfagnini, who has curated an inventory of letters to Magliabechi preserved in the Biblioteca Nazionale di Firenze, see *Lettere e carte Magliabechi. Inventario cronologico* (Rome: Istituto Storico Italiano per l'Età Moderna e Contemporanea, 1988); *Lettere e carte Magliabechi.* Regesto, 2 vols. (Rome: Istituto Storico Italiano per l'Età moderna e contemporanea, 1981). Her inventory comprises 22.173 letters written to Magliabechi, linked to 2.262 correspondents. There is thus a slight discrepancy in the number of correspondents used in this study (2.244) and the ones recorded by Doni Garfagnani. This difference can be explained by the fact that in this study unknown addressees as well as unidentified sigles listed by Doni Garfagnani as "A.P.", "C.D.", "C.P. frate" have been omitted.

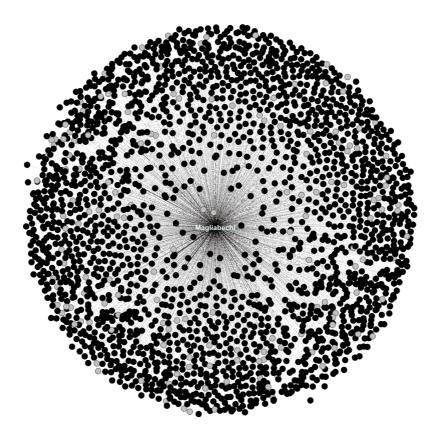


Fig. 4 Ego-network of Antonio Magliabechi (in the center of the visualization). The black nodes correspond to a correspondence of which the date is known, while the grey nodes represent an undated correspondence. Network created with Gephi.

Magliabechi's vast correspondence is one of the richest letter collections in Europe that has come down to us. The number far exceeds other letter-collections in Europe, including the correspondence of Gottfried Wilhelm Leibniz (1100 correspondents), Johannes Fredericus Gronovius (565), Lodovico Antonio Muratori (2.052), Nicolas-Claude Fabri de Peiresc (793) and Hugo Grotius (396).⁵⁵⁰ Even Magliabechi lost sight of the bulk of letters he received every day. This is apparent from the many references he made in his writings. In a letter from the 25th of January 1706, Magliabechi confessed to Jacob Gronovius that he was unable to find his latest letter "nel caos dei miei fogli" and because of this, he did not remember to whom he had to give his latest edition of Aulus Gellius.⁵⁵¹ Then again, in 1702,

⁵⁵⁰ Peter N. Miller, 'Nicolas-Claude Fabri de Peiresc and the Mediterranean World: Mechanics', in *Les Grands Intermédiaires de La République Des Lettres*, ed. Christiane Berkvens-Stevelinck, Hans Bots, and Jens Häseler (Paris: Honoré Champion Éditeur, 2005), 107. Henk J. M. Nellen, 'Correspondence of Hugo Grotius', in *Les Grands Intermédiaires de La République Des Lettres*, ed. Christiane Berkvens-Stevelinck, Hans Bots, and Jens Häseler (Paris: Honoré Champion Éditeur, 2005), 131. Nora Gädeke, 'Gottfried Wilhelm Leibniz', in *Les Grands Intermédiaires de La République Des Lettres*, ed. Christiane Berkvens-Stevelinck, Hans Bots, and Jens Häseler (Paris: Honoré Champion Éditeur, 2005), 131. Nora Gädeke, 'Gottfried Wilhelm Leibniz', in *Les Grands Intermédiaires de La République Des Lettres*, ed. Christiane Berkvens-Stevelinck, Hans Bots, and Jens Häseler (Paris: Honoré Champion Éditeur, 2005), 265. Dibon, Bots, and Bots-Estourgie, *Inventaire de La Correspondance de Johannes Fredericus Gronovius, (1631-1671). Edizione Nazionale Del Carteggio Di L.A. Muratori*, Centro di studi muratoriani e dell'alta cultura del primo Settecento, 46 vols (Florence: Olschki, 1975).

⁵⁵¹ Magliabechi to J. Gronovius, 25 January 1706, LMU, Cod 4° Cod. Msc 777, f. 109, "Non ritrovo, nel caos de' miei fogli, l'ultima lettera di V.S. Ill.ma, e non mi sovviene per l'appunto, come Ella mi ordinasse, che io disponessi, di questi sei esemplari, del suo Aulo Gellio". Translation: I cannot recover, within the chaos of my papers, the latest letter of Your Illustrious Lordship, and I do not remember precisely to whom, as you ordered me, I have to provide the six exemplars of your Aulus Gellius".

Magliabechi could not find a letter of the Dutch merchant Daniel Cousson because he did not know "dove nel caos de' miei fogli l'abbia messa".⁵⁵²

On the basis of the letters which have survived, the Dutch Republic has outweighed the number of foreign correspondents (see table 1). If one looks at the developments in Magliabechi's epistolary activity, one can note that the number of letters written to Magliabechi is considerably higher than that of the letters he wrote himself. To a large extent, this dissimilarity is due to the fact that, while the letters written to Magliabechi are all concentrated in the collections of the National Library of Florence, the letters written by Magliabechi are scattered in various libraries and archives throughout Europe. 599 letters written by the Dutch are extent in the National Library of Florence, while, until now, I have identified 395 letters written by Magliabechi to his correspondents living in the Dutch Republic (see Appendix 1).

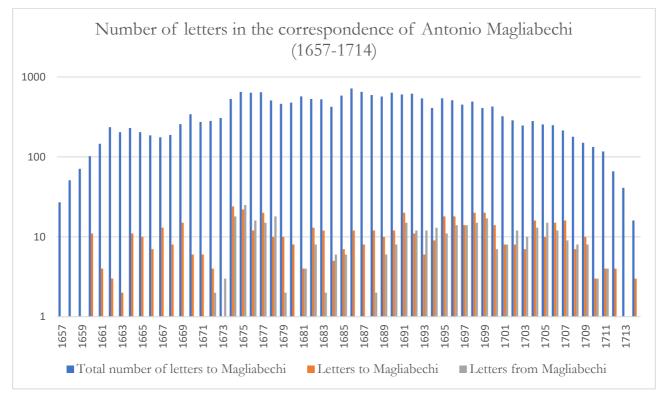


Table 1 The total number of letters (represented in blue) takes into account the entire pan-European and Italian correspondence of Magliabechi. The orange bars regards the number of letters sent by Magliabechi's correspondents in the Dutch Republic, while the grey bars considers Magliabechi's letters to his correspondents in the Dutch Republic.

2.2. MINING THE CATALOGUS EPISTULARUM NEERLANDICARUM

Network analysis is based on more than two mutually linked nodes. This means that the next step is to expand the ego-perspective of Magliabechi's network to the analysis of networks build up in basic units of least three mutually linked nodes, so called triads. To do so, the *Catalogus Epistularum Neerlandicarum*

⁵⁵² Magliabechi to J. Gronovius, 25 January 1706, LMU, Cod 4° Cod. Msc 778, f. 9, "La Lettera del suddetto signore Cosson, io non l'ho a mano, e non so dove nel caos de' miei fogli l'abbia messa". Translation: the letter of the said Cousson I do not have at hand, and I do not know where I have left it in the chaos of my papers".

(CEN) was used to contextualize Magliabechi's network and explore its significance in the Dutch scholarly community. The CEN is a Dutch national database that is only accessible from within the Netherlands for members of affiliated institutions or via local terminals. The collection consists of circa 500.000 metadata of single letters and parts of correspondence from 1500 to present held at several Dutch institutions, among which are the National Library of the Netherlands and the University libraries of Leiden, Utrecht, Groningen and Amsterdam. In total, the CEN provides information about more than 2 million letters, whereof circa 50.000 are written before 1800. The Royal Dutch Library kindly provided me with access to the XML files of the Catalogus Epistularum Neerlandicarum for this study, which allowed me to crawl the records looking for letters written between 1650 and 1714. I extracted the following information by using the same method I used for the CCF: name of sender, name of recipient, date and place of writing. This information provided me with a series of nodes and edges (the senders and the recipients) that formed the foundation of the network. Naturally, this process required a lot of 'datacleaning'. Datasets that are pulled from online archives often contain inconsistencies and mistakes, which is an outstanding problem in the digital humanities research, and is commonly referred to as 'dirty data'. Disambiguation was needed to eradicate spelling variations and entries like "Monday evening" needed to be filtered out. After this cleaning process, a network consisting of 10.211 correspondences was created.

Consequently, the CEN and the CCF were combined to compute the overlap in data between every correspondent present in the two datasets. The resulting network consists of 11.871 edges connecting 11.171 nodes. Initially, the graph consists of one giant connected component, meaning that the network is dominated by a significant fraction of nodes that are all connected to each other, and several free-standing groups and nodes. This is a structure that is common to large, complex networks.⁵⁵³ From the perspective of network analysis, however, the large number of isolated groups distort the data significantly. Therefore, all isolates have been filtered out and the result is a more compact and more easily legible network that contains 10.226 edges and 8.230 nodes. As a result, the ego-network of Magliabechi expanded from its Italian origins to become a highly significant connected network in the Dutch Republic, allowing us to monitoring up to his fourth-degree connections in the Dutch Republic (see figure 5).

One of the most important questions which concerns historians is whether quantitative methods should be used in history. Indeed, the biased, ambiguous and incomplete nature of historical data have often undermined quantitative approaches within history. For example, Jeanine de Landtsheer and Henk J. M. Nellen have argued that the contingency of the transmission of early modern letters weakens the trustworthiness of quantitative approaches.⁵⁵⁴ Are the data of the present study fit to network analysis using methods of network science? If they are, the claims of qualitative research based on extrapolations of interpretation using small data sets could be put to test.

⁵⁵³ Easley and Kleinberg, Networks, Crowds, and Markets, 27.

⁵⁵⁴ Jeanine de Landtsheer and Henk J. M. Nellen, eds., 'Introduction', in *Between Scylla and Charybdis: Learned Letter Writers Navigating the Reefs of Religious and Political Controversy in Early Modern Europe*, Brill's Studies in Intellectual History 192 (Leiden/Boston: Brill Publishers, 2011), 384.

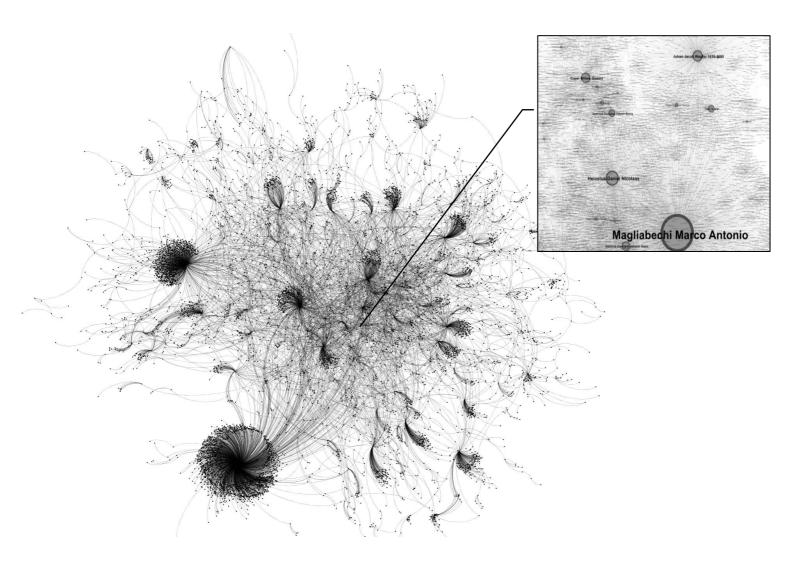


Fig. 5 Network consisting of data from the CEN, the correspondence Apollonio Bassetti and Antonio Magliabechi (CCF). Network created with Gephi.

3. POWER-LAWS AND THE INCOMPLETENESS OF HISTORICAL DATA

Now that the mass digitization of archival documents has begun, one of the main questions from a historical point of view is how to articulate and analyze the structures out of these data, especially considering the fact that historical data are incomplete, complex, ambiguous and uncertain.⁵⁵⁵ How far can we apply the logic of social networks to certain periods of the past with the same information density we experience in social networks of the present? Does enough data of the past exist to apply the same algorithms and methods used to analyze networks in contemporary scholarship?⁵⁵⁶

The introduction of this chapter displayed that the use of formal network methods from the field called Social Network Analysis has emerged as a persuasive concept for thinking beyond the purely metaphorical use of the concepts of networks in traditional historical scholarship. In social network analysis, the metaphor of the network is rather used as a powerful analytical tool because it reduces a complex system to an abstract structure capturing only the basics of connection patterns. It takes, in fact, as "its starting point the premise that social life is created primarily and most importantly by relations

⁵⁵⁵ See Frédéric Kaplan and Isabella di Lenardo, 'Big Data of the Past', Frontiers in Digital Humanities 4 (2017), cit. 1.

⁵⁵⁶ Kaplan and Di Lenardo listed these fundamental questions in *Ibidem*, 1-2.

and the patterns formed by these relations".⁵⁵⁷ A network, in the most basic sense, is thus a collection of connected objects.⁵⁵⁸ We normally refer to the objects as nodes and their relationships as edges or ties. This definition is very flexible, depending on one's research question many different forms of nodes and edges can be used to model a network. Because of this flexibility, it is easy to find networks in many domains.⁵⁵⁹ In the worldwide web, the web pages would be the nodes and the hyperlink edges; in a neural network, each node represents a neuron and an edge represents a connection from the output of one neuron to the input of another; in a social network, the people are the nodes and the relationship between them the edge; in a co-citation network the nodes are the authors while an edge represents an instance of co-citation based on all published articles together.

Thus, a network is a simplified representation of a complex system. Because of this, they all can be analyzed using the same mathematical rules, algorithms and models. This idea was a breakthrough in the 1990s. The network scientists Duncan Watts, Steven Strogatz and Albert-Lázsló Barábasi were among the first who have demonstrated that, despite the divergent nature of real-world systems, each system shares un underlying order and follows stable laws.⁵⁶⁰ Studying the structure of the World Wide Web, Barábasi has shown that the number of links on a Webpage did not follow a peaked distribution, telling us that most documents are about equally popular, but that the distribution of links on various Webpages precisely follows a mathematical expression called a power law.⁵⁶¹ Power laws formulate the fact that in most real networks the majority of the nodes have only a few edges and that these numerous tiny nodes coexist with a few big hubs, i.e. "nodes with an anomalously high number of edges".⁵⁶² Soon Barábasi realized that the Web was not the only network described by a power law. The power law also operated in the cell, in the network of molecules connected by chemical reaction. The actor network behind Hollywood followed the power law, as well as the air traffic system, in which a large number of small airports across the world are connected to each other via a few major hubs. So, networks, ranging from the World Wide Web to the networks within a cell, are governed by a power law. Following this line of thinking, if power laws are a universal signature of most, if not all, networks, could it be that this law equally characterizes the network between the Dutch Republic and the Grand Duchy of Tuscany? More generally, are there laws behind historical networks?

Based on the data extracted from two online letter-collections – the *Catalogus Epistularum Neerlandicarum* and the Card Catalogue of the National Library of Florence, which are enriched with archival research, a network has been created of 11.871 correspondences. Considering that these data-collections are historically biased and incomplete, either because of missing data or insufficient metadata (earlier, for instance, we have seen that there is a large variety in the number of incoming and outgoing correspondence), is the data quality sufficient to allow for a statistical analysis? As shown by figure 6, the degree distribution of this network is characterized by a power law distribution, telling us that most nodes

⁵⁵⁷ Alexandra Marina and Barry Wellmon, 'Social Network Analysis: An Introduction', in John Scott and Peter J. Carrington, eds., *The SAGE Handbook of Social Network Analysis* (London: SAGE Publications, 2011), cit. 11.

⁵⁵⁸ Easley and Kleinberg, 2.

⁵⁵⁹ Ibidem, cit. 2.

⁵⁶⁰ Duncan Watts and Steven Strogatz, 'Collective Dynamics of "Small-world" Networks', Nature 393 (1998): 440-442.

⁵⁶¹ Albert-Lázsló Barábasi and Reká Albert, 'Emergence of Scaling in Random Networks', *Science* 286 (1999): 509–12; Reká Albert and Albert-Lázsló Barábasi, 'Statistical Mechanics of Complex Networks', *Review of Modern Physics* 74 (2002): 47–97. Barábasi distances himself here from the work of Lawrence Lessig, who, in his *Code and Other Laws of Cyberspace* (New York: Basic Books, 1999) argues that "code is law" and that the freedom found in the web's early years is only due to choices made by those architecting it. According to Lessig, code can enforce legal directives (as in the case, for instance, of the French court's order in 2000 that Yahoo must block French citizens from navigating to neo-Nazi websites) while Barábasi maintains that the navigability of the Web is a function of collective human actions using code (Barabási, *Linked: The Science of Networks*, 174).

⁵⁶² Ahnert and Ahnert, 'Protestant Letter Networks in the Reign of Mary I: A Quantitative Approach', cit. 6.

have only a few links, held together by a few highly-connected hubs. This means thus that this network behaves similarly as most networks, and can be analyzed using the same mathematical principles and algorithms. In my opinion, this insight has a huge potential to change our ways of interpreting and explaining historical bias.

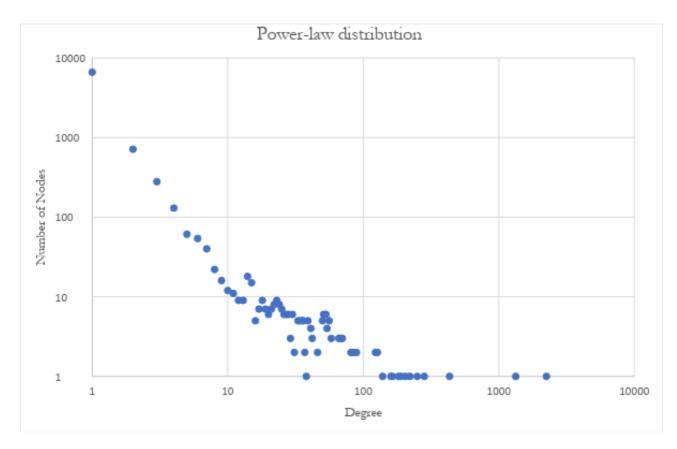


Fig. 6 The power-law distribution of the Dutch-Tuscan network predict that most nodes have only a few links, held together by a few highly connected hubs.

Yet, if we are going to accept that power laws are characteristic for the Dutch-Tuscan network, we also need a simple explanation for what is causing them. For example, it is striking how closely the plot in figure 6 follows a power law for much of the distribution, especially considering how many utterly uncontrollable factors come into play in the formation of this structure: uncertain and incomplete data from the CEN and the CCF underlie the network.⁵⁶³ What underlying process is causing this network structure? Networks develop over time, and when they grow, they establish more connections. When a person desired to join the network, it is more likely that he establishes a connection with a person that is already well-connected. This phenomenon is also labelled as preferential attachment.⁵⁶⁴ Preferential attachment, or the richer-get-richer effect, implies that nodes prefer to link to the more connected nodes. Consequently, this means that the hubs in a network will grow faster than their less-connected peers. As more and more nodes arrive and keep picking the more connected nodes to link to, the hubs will inevitably acquire a very large number of links, which results in an increasing disparity between the number of connections these nodes in the network have. This fact caused the power-law distribution in this network. So, who were the hubs that dominated this network?

⁵⁶³ Cfr. Easley and Kleinberg, Networks, Crowds, and Markets, 482.

⁵⁶⁴ Ibidem, 483.

Name	Degree
Magliabechi Marco Antonio	2262
Constantijn Huygens	1333
Nicolaas Heinsius	433
Gisbert Cuper	282
Isaac Vossius	250
Pieter Burman	221
Jean Le Clerc	205
Theodorus Janssonius van Almeloveen	191
Fredericus Ruysch	182
Christiaan Huygens	164

Table 2 Top-10 hubs network CEN+CCF (Magliabechi) + Bassetti

The top 10 hubs in table 2 have a significant impact on the structure of the network: without them it would have looked very different (see also appendix 2).⁵⁶⁵ The names in the table are all quite unsurprising to historians familiar with the Republic of Letters. Contemporary sources testify to the fact that these scholars were considered the Dutch Republic's foremost scholars, as well as central figures of the European world of learning. We can also see it by some extent by flicking through archival collections and catalogues where we keep hitting their names. Yet, as argued by Ruth and Sebastian Ahnert, "it is extremely important that the method confirms what we already know because it means that it works, and it means that we can put some trust in it".⁵⁶⁶ Similarly, Yves Gingras has shown that these types of confirmation should be more than welcome: if the results obtained from a quantitative analysis "are consistent with what we know, one can be confident that applied to less well-known periods and corpus of letters, these methods will also produce robust and meaningful results."⁵⁶⁷

Next to Magliabechi, who dominates the network structure with 2.262 connections, appears the name of Constantijn Huygens (1596-1687), the famous secretary to the two princes of Orange, Frederick Henry (1584-1647) and William II (1626-1650). The numerous accounts of his life and contacts confirm his presence in this ranking, which includes 1.333 correspondents.⁵⁶⁸ Among these correspondents, the names of Florentine scholars are remarkable absent. Unlike Huygens, the Dutch philologist Nicolaas Heinsius maintained an extensive network of contacts in Italy, especially with the Grand Duchy of Tuscany where he had 21 correspondents, 5 % of his total number of correspondents in Europe.⁵⁶⁹ Third

⁵⁶⁵ Cfr. Ahnert and Ahnert, 'Protestant Letter Networks in the Reign of Mary I: A Quantitative Approach', 7. In Appendix 2 more detailed information about the hubs in the network are provided, focusing on the first 50 hubs in the network. ⁵⁶⁶ *Ibidem*, 7.

⁵⁶⁷ Gingras, 'Mapping the Structure of the Intellectual Field Using Citation and Co-Citation Analysis of Correspondences', 339.

⁵⁶⁸ The correspondence of Constantijn Huygens can be accessed through a database, developed by the Huygens Institute for the History of the Netherlands: Briefwisseling van Constantijn Huygens 1607-1687', Huygens Project, 11 February 2019, http://resources.huygens.knaw.nl/briefwisselingconstantijnhuygens.

⁵⁶⁹ The correspondence of Nicolaas Heinsius has not been extensively studied and most of his letters remain unedited. W.R. Veder, ed., Brieven van Daniël Elsevier Aan Nicolaas Heinsius (9 Mei 1675-1 Juli 1679). Volgens Het Handschrift, Bewaard Ter Universiteits-Bibliotheek Te Utrecht, Met Enkele Aanteekeningen Uitgegeven Door de Vereeniging Ter Bevordering van de Belangen Des Boekhandels (Amsterdam: P.N. Van Kampen & Zoon, 1890); Frank Tichelman, ed., Henrick Ploos van Amstel & Nicolaes Heinsius, Brieven 1635-1637 (Woubrugge: Avalon Pers, 2007); Bots, ed., Correspondance de Jacques Dupuy et de Nicolas Heinsius (1646-1656). Bernard Bray, ed., Jean Chapelain, Les Lettres Authentiques à Nicolas Heinsius (1649-1672): Une Amitié Érudite Entre France et Hollande,

most connected is the Dutch professor and burgomaster Gisbert Cuper, who, like Heinsius, is one of the most central figures in this study, whose correspondence in the CEN features 282 contacts. The next in line is the well-known Dutch scholar Isaac Vossius (1629-1695), also in contact with Magliabechi, who is remembered predominantly for his magnificent library and his philological studies. The network of Vossius was mainly concentrated in England, where he was elected fellow of the Royal Society. The archenemies Pieter Burman (1668-1741) and Jean Le Clerc (1657-1736) were hubs too, having over 200 contacts in the Republic of Letters. Theodorus Janssonius van Almeloveen (1657-1712) was a Dutch physician, whose extensive network of contacts has been discussed by Saskia Stegeman.⁵⁷⁰ The Dutch botanist Frederich Ruysch (1638-1731), whose famous cabinet of curiosities was visited by Cosimo III, occupied a central position in the network, as well as the mathematician Christiaan Huygens (1629-1695), who was in contact with the *Accademia del Cimento* in Florence.⁵⁷¹

Magliabechi actively looked for key figures in the Dutch Republic where he himself could not go and who could find further contact from him. Magliabechi surely knew how to pick the right contacts in the Dutch Republic: he was in contact with no less than 5 of these key figures: Heinsius, Cuper, Vossius, Burman and Le Clerc. Apollonio Bassetti was in touch with Nicolaas Heinsius as well, who informed him about the latest developments in the Dutch Republic. In his quality as a hub, Heinsius was perfectly fit to fulfil his role as Bassetti's informer. As noted earlier, this is a common network strategy known as preferential attachment: people commonly prefer to link to the most-connected people.

The hubs in this network enable connections to be established between any two nodes through a small number of stages.⁵⁷² This means that they make it possible to contact a stranger with surprisingly few intermediaries.⁵⁷³ Accordingly, these crucial hubs closed the gap between the Dutch Republic and the Grand Duchy of Tuscany, making this particular epistolary community very dense. They become a small world. This small world effect is also known as "six degrees of separation. It entails that we are all linked by short chains of acquaintances (i.e. max six on average). That the network under study, which consists of 11.871 edges connecting 11.171 nodes, is indeed a small-world is confirmed by the low average path length of 4,246. This means that is only takes on average 4 steps to reach everyone in the network. This result fits into the broader framework of small-world phenomena that span many domains in network science.⁵⁷⁴

4. THE ROLE OF BROKERAGE IN THE EARLY MODERN NETWORK

Until now, the discussion treated networks largely as static structures: we take a snapshot of the network, and then we ask about degree, hubs, shortest paths and so on. While this style of analysis forms the

ed. Bernard Bray (Paris: Honoré Champion Éditeur, 2005). Bernard Bray, ed., Jean Chapelain. Soixante-Dix-Sept Lettres Inédités à Nicolas Heinsins (1649-1658) (The Hague: Martinus Nijhoff, 1966).

⁵⁷⁰ Saskia Stegeman, 'How to set up a scholarly correspondence. Theodorus Janssonius van Almeloven (1657-1712) aspires to membership of the Republic of Letters', *LIAS* XX, (1993): 227-243; Saskia Stegeman, *Patronage and services in the Republic of Letters : the network of Theodorus Janssonius van Almeloven (1657-1712)* (Amsterdam: APA-Holland University Press, 2005).

⁵⁷¹ Edwin van Meerkerk, 'Correspondence Network of Christiaan Huygens (1629-1695)', in Les Grands Intermédiaires de La République Des Lettres, ed. Christiane Berkvens-Stevelinck, Hans Bots, and Jens Häseler (Paris: Honoré Champion Éditeur, 2005), 211–29. About the Accademia del Cimento, see P. Galluzi, 'L'accademia del Cimento: « gusti » del principe, filosofia e ideologia dell'esperimento', Quaderni storici XVI, no. 48 (1981): 788-844; W. E. Knowles Middleton, The Experimenters. A Study of the Accademia del Cimento (Baltimore: John Hopkins Press, 1971); U. Baldini, '«La scuola galileiana», Scienza e tecnica nella cultura e nella società dal Rinascimento a oggi, ed. G. Micheli, Storia d'Italia, Annali 3 (Torino: Einaudi, 1980): 381-463.

 ⁵⁷² Joad Raymond, 'News Networks: Putting the 'News' and 'Networks' Back in', in *News Networks in Early Modern Europe*, ed. Noah Moxham and Joad Raymond, Library of the Written Word 47 (Leiden/Boston: Brill Publishers, 2016), 115.
 ⁵⁷³ *Ibidem*, 115.

⁵⁷⁴ Easley and Kleinberg, 36.

foundation for thinking about networks, one needs to understand how a network evolves over time.⁵⁷⁵ In particular, it may be worth asking when nodes join the network, when they disappear and what this means for their position in the network at large. In fact, the appreciation of historical networks remains fundamentally weak because just by reading social relations of network patterns one ignores how people got into (and out of) relationships either or not influenced by external factors. Indeed, as has been pointed out by Paul D. Mclean, network analysis treats network ties as static, without examining how they become constituted and how they are negotiated over time. "Networks", according to Mclean, "are places where actions are happening not where it has already happened".⁵⁷⁶ We have to think, therefore, about networks dynamically where each achieved position in a network might be derived from an underlying network strategy or historical event. Networks, in fact, are never static: they grow and shrink, merge and split. In the next paragraphs, we will follow the evolving dynamics of a network in flux. Specifically, we will look at the crucial roles played by brokers in the exchange between the Dutch Republic and the Grand Duchy of Tuscany. These brokers occupied a critical position in the network for they were instrumental in defining and maintaining the purported boundaries between the Dutch Republic and the Grand Duchy of Tuscany. But before discussing the role of brokerage in the Dutch-Tuscan network, we will take a look at how the concept of brokerage is approached differently in historical scholarship when compared to the social sciences.

4.1 DEFINING HISTORICAL BROKERAGE

The concept of broker or mediator is well accepted in historical scholarship.⁵⁷⁷ Hans Bots and Christiane Berkvens-Stevelinck have defined a cultural mediator as a member of the Republic of letters who considers himself as a link between different cultural spheres, whether these are countries, languages, milieus, religious or philosophical spaces. A mediator is thus someone who transmits the cultural values of one sphere to another and is entirely aware of what he is doing. A special role has been recognized for those who did not produce a large oeuvre of publications, but put themselves at the service of the scholarly community by providing others with the books, contacts, and information they needed to carry out their research.⁵⁷⁸ Christiane Berkvens-Stevelinck and Hans Bots also called them "secrétaires" of the scholarly society. Without necessarily being innovators, "ils constituaient des nœuds de communication en n'hésitant pas à server de lien entre different savants qui travaillaient sur un même sujet ou dans un même domaine".⁵⁷⁹ A scholar who matches this description is Antonio Magliabechi, whose intermediary role has been acknowledged in several studies. Mario Rosa, for example, claimed that Magliabechi was the "meilleur représentant sans doute des bibliothécaires italiens et européens au moment où cette fonction touche à son apogée dans la République des Lettres", placing him into the broader framework

⁵⁷⁵ *Ibidem*, cit. 44.

⁵⁷⁶ Paul D. McLean, The Art of the Network: Strategic Interaction and Patronage in Renaissance Florence (Durham: Duke Univ Pr, 2007), cit. 16.

⁵⁷⁷ For an extensive account on the role of political and cultural brokerage in early modern Europe, see Keblusek and Noldus, *Double Agents: Cultural and Political Brokerage in Early Modern Europe*; Badeloch, Keblusek, and Cools, *Your Humble Servant. Agents in Early Modern Europe*; Simon Schaffer, ed., *The Brokered World: Go-Betweens and Global Intelligence, 1770-1820* (Sagamore Beach: Science History Publications/USA, 2009). See also, Janie Cole, 'Cultural Clientelism and Brokerage Networks in Early Modern Florence and Rome: New Correspondence between the Barberini and Michelangelo Buonarroti the Younger', *Renaissance Quarterly* 60, no. 3 (2007): 729–788. Janie Cole, *Music, Spectacle and Cultural Brokerage in Early Modern Italy: Michelangelo Buonarroti Il Giovane* (Florence: Olschki, 2011); Angelika Corbineau-Hoffmann and Werner Frick, eds., *Renaissance Go-Betweens* (Berlin/New York: Walter de Gruyter, 2005); Elisa Goudriaan, *Florentine Patricians and Their Networks. Structures Behind the Cultural Success and the Political Representation of the Medici Court (1600-1660)* (Leiden/Boston: Brill publishers, 2007).

⁵⁷⁸ Bianca Chen, 'Digging for Antiquities with Diplomats: Gisbert Cuper (1644-1716) and His Social Capital', Republics of Letters: A Journal for the Study of Knowledge, Politics, and the Arts 1, no. 1 (2009): cit. 7.

of the critical, yet underappreciated, role of librarians as important intermediaries in the Republic of Letters.⁵⁸⁰ Other librarians, like the brothers Pierre (1582-1651) and Jacques Dupuy (1586-1657), keepers of the library of King Louis XIV of France, were considered information-brokers too⁵⁸¹

Within the network of correspondence in the Republic of Letters, Bianca Chen has argued that men like Cuper can also be thought of as "information-brokers, agents, middlemen, or mediators".⁵⁸² Regardless of the value of his limited scholarly output, Cuper's merits as a scholar were based on his capacity to manage strategically his correspondence network for the sake of learning. By receiving, storing, and assessing as much knowledge he could, and including in his network experts of different fields to whom he could turn for help, he communicated the latest events from the European scholarly and political stage to his colleagues and correspondents.⁵⁸³

Another example of an information-broker is the mathematician Marin Mersenne (1588-1648), also known as the "mailbox of Europe" and the "secrétaire général de la République des Lettres".⁵⁸⁴ In his proper entitled article "Small skills, big networks", Justin Grosslight argued that Mersenne's was an indefatigable network building, which was a sign of the limitation of his own mathematical skills.⁵⁸⁵ Once Mersenne garnered sufficient mathematical interest, "he manipulated his correspondents into sharing their claims with him, thereby forcing a dependency upon him to circulate information. Consequently, knowing other peoples' mathematical ideas made Mersenne appear mathematically adept — even when he was not".⁵⁸⁶

Peter Burke argued that cultural brokers emerge in the early-modern period as a distinct social category and that they acted as information-brokers because they put scholars in different places in touch with another. He mentions Henry Oldenburg (1618-1677), the secretary of the Royal Society, as a typical knowledge broker.⁵⁸⁷ Likewise, Jean Pierre Vittu labelled Oldenburg as a "grand intermédiare".⁵⁸⁸ Other scholars who have been labelled as information-brokers are the French antiquary Nicolas Claude Fabri

⁵⁸⁰ Mario Rosa, 'Un "médiateur" dans la République des Lettres: le bibliothécaire', in *Commercium Litterarium. La communication dans La République des Letters. Forms of communication in the Republic of Letters 1600-1750*, 90–91. A similar argument has been provided by Marika Keblusek in 'Book Agents, Intermediaries in the Early Modern World of Books', in *Your Humble Servant. Agents in Early Modern Europe, ed. Marika Keblusek, Badeloch Vera Noldus, and Hans Cools* (Hilversum: Uitgeverij Verloren, 2006), 107. Moreover, Nina Lamal and Emma Grootveld, argued that Magliabechi "was an important mediator between Dutch correpondents and Italian intellectuals for he "played a key role in the transmission of knowledge and news on newly published Italian books to intellectuals abroad" (Nina Lamal and Emma Grootveld, 'Cultural Translations and Glocal Dynamics between Italy and the Low Countries during the Sixteenth and Seventeenth Century', *Incontri - Rivista Di Studi Italo-Nederlandesi* 30, no. 2 (2015): 12).

⁵⁸¹ Jérôme Delatour, 'Les Frères Dupuy et Leurs Correspondences', in *Les Grands Intermédiaires de La République Des Lettres*, ed. Christiane Berkvens-Stevelinck, Hans Bots, and Jens Häseler (Paris: Honoré Champion Éditeur, 2005), 62–70.

⁵⁸² Chen, 'Digging for Antiquities with Diplomats: Gisbert Cuper (1644-1716) and His Social Capital', 1–18.

⁵⁸³ Ibidem, 9-10. See also, Bianca Chen, 'Politics & letters: Cuper as a servant of two republics', in *Double Agents: Cultural and Political Brokerage in Early Modern Europe*, ed. Marika Keblusek and Badeloch Vera Noldus (Leiden/Boston: Brill Publishers, 2011): 71-93.

⁵⁸⁴ Robert A. Hatch, "Between erudition and science: The archive and correspondence network of Ismaël Boulliau", in Michael Hunter (ed.), *Archives of the scientific revolution: The formation and exchange of ideas in seventeenth-century Europe* (Woodbridge: Boydell & Brewer, 1998), 62. Hans Bots, 'Marin Mersenne, "secrétaire Général" de La République Des Lettres, 1620–1648', in *Les Grands Intermédiaires de La République Des Lettres*, ed. Christiane Berkvens-Stevelinck, Hans Bots, and Jens Häseler (Paris: Honoré Champion Éditeur, 2005), 165.

⁵⁸⁵ Justin Grosslight, 'Small Skills, Big Networks: Marin Mersenne as Mathematical Intelligencer', *History of Science* 51, no. 3 (2013): 337–374.

⁵⁸⁶ Ibidem, 360.

⁵⁸⁷ Peter Burke, A Social History of Knowledge (Cambridge: Polity Press, 2008), 25.

⁵⁸⁸ Jean-Pierre Vittu, 'Henry Oldenburg 'Grand Intermédiaire', in *Les Grands Intermédiaires de La République Des Lettres*, ed. Christiane Berkvens-Stevelinck, Hans Bots, and Jens Häseler (Paris: Honoré Champion Éditeur, 2005), 183.

de Peiresc (1580-1637), whose correspondence extended well-beyond France, Italy, England, Belgium, Germany, and the Netherlands to Egypt and the further reaches of the Levant.⁵⁸⁹

Besides intellectual brokerage, the concept of commercial brokerage has attracted much scholarly attention.⁵⁹⁰ Francesca Trivellato, in particular, has questioned how merchants across the globe were able to negotiate, secure credit, and establish durable commercial relations despite the difference in language, religious rites, social customs and economic activities.⁵⁹¹ Trivellato describes the tensions that existed between the internal solidarity of a group of Sephardic merchants and its cosmopolitan openness to relations with others. She focused on the Livorno Sephardim as practitioners of a "communitarian cosmopolitanism", in which it was precisely the strength of their corporate ties as a community that enforced commercial probity within their community and made is secure enough to then build bridges of trust and credits to communities beyond their own, even with Hindu merchants in faraway Goa.⁵⁹² As we will see, similar dynamics between closure and openness are characteristic for the Republic of Letters, in which its citizens raised bridges across the most profound ideological and theological gaps, while building trust relationships through personal encounters. Or, in the words of Anthony Grafton "the citizens of the early modern Republic of Letters created a virtual community not of those who shared beliefs, but of those who differed."⁵⁹³ These differences strengthened rather than weakened communities.

4.2. DEFINING SOCIAL BROKERAGE

Many historians have insisted on the importance of using methods of the social sciences to enrich our understanding of the past. Maarten Ultee, for instance, has already argued in 1987 that historians can make more exact predictions about the Republic of Letters if they apply the techniques of social history to surviving correspondence. According to him, the vast quantity of historical material available requires serial treatment – statistics, tables and graphs.⁵⁹⁴ Moreover, Francesca Trivellato used social network theory as an analytical tool (rather than a mathematical measure) in order to demonstrate its usefulness for the study of trust in cross-cultural commercial exchange in Sephardic communities. According to Trivellato, "social network analysis permits us to understand cooperation in business as the result of a calculative evaluation of an agent's proficiency and trustworthiness rather than a perceived sense of his sameness."⁵⁹⁵ Building further on the work of Ultee and Trivellato, my ambition is to go beyond the metaphorical and static uses of the concept of brokerage to perform a network analysis which potentially offers a new perspective on the role and nature of brokerage in early modern society. The main question then is, how are we to theorize the practice of brokering in a social network?

The idea of brokerage has a very long tradition in social network analysis. Granovetter's study on the strength of weak ties and the work that followed by various authors demonstrated that being in a position of control over bridging edges empowers individuals. Granovetter stressed the critical role that

⁵⁸⁹ Peter N. Miller, *Peiresc's Mediterranean World* (Cambridge/London: Harvard University Press, 2015); Peter N. Miller, 'Nicolas-Claude Fabri de Peiresc and the Mediterranean World: Mechanics', in *Les Grands Intermédiaires de La République Des Lettres*, ed. Christiane Berkvens-Stevelinck, Hans Bots, and Jens Häseler (Paris: Honoré Champion Éditeur, 2005), 103–25.

⁵⁹⁰ On this subject, see Marika Keblusek, Badeloch Vera Noldus, and Hans Cools, eds., 'Mercator Sapiens: Merchants as Cultural Entrepeneurs', in *Double Agents: Cultural and Political Brokerage in Early Modern Europe*, 95–111. Cools, 'Francesco Feroni, 1614/16–1696. Broker in Cereals, Slaves and Works of Art', 39-50 E. Natalie Rothman, *Brokering Empire: Trans-Imperial Subjects Between Venice and Istanbul* (Ithaka/London: Cornell University Press, 2012).

⁵⁹¹ Francesca Trivellato, *The Familiarity of Strangers. The Sephardic Diaspora, Livorno, and Cross-Cultural Trade in the Early Modern Period* (New Haven & London: Yale University Press, 2009), 62.

⁵⁹² Trivellato, 70.

⁵⁹³ Grafton, 'A Sketch Map of a Lost Continent: The Republic of Letters', 17.

⁵⁹⁴ Maarten Ultee, 'The Republic of Letters: Learned Correspondence, 1580-1720', *The Seventeenth Century* 2, no. 1 (1987): 96. ⁵⁹⁵ Trivellato, 146.

weak ties play in information access and flow.⁵⁹⁶ According to him, weak ties (corresponding to acquaintances) function as bridges between distinct tightly-knit communities for a faster distribution of ideas across the entire network. When two scholars have a strong tie they generally know the same people and have access to the same information. Weak ties, on the other hand, connect distant scholarly communities and move in different circles. As a result, an individual who has many weak ties is more likely to be dynamic and innovative. Because weak ties serve to link together different tightly-knit communities they can also be defined as brokers. This idea mainly influenced the way people get a new job opportunity. In a random sample of recent job changers living in Boston, Granovetter asked how often they were in contact with the persons who passed on job information to them. He found out that in many cases the contacts with someone who was only marginally included in the current network of contacts of the persons who were looking for a job: the weak ties.⁵⁹⁷ The weak ties moved outside the core networks of the job seekers, forming bridges to other networks that have access to new and unique information – like a job opening. That weak ties offer a useful theoretical lens for understanding the dynamics of the Republic of Letters is shown by David Lux and Harold Cook who have argued that the success of the natural philosophy in the Dutch Republic depended on the proliferation of weak ties. They suggested that the nature of the weak tie indicates why scholars in the Dutch Republic were capable of doing excellent natural philosophy without having to be formally associated to a scientific society. 598 While societies were characterized by their strong and robust ties between individuals - a closed circle weak ties opened up the network to strangers, which required a minimal level of personal relationship. Fundamental in the creation of these weak ties was travel. Travel, "more than any other activity, established the weak ties by which knowledge could be exchanged".⁵⁹⁹ Following the work of Lux and Cook, Huib Zuivervaart investigated the nature of the contacts of Dutch astronomers from the 18th century on the basis of the concept of weak ties. He concluded that weak ties indeed lay the foundation for foreign correspondence but, in contrast to the findings of Lux and Cook, these weak ties were not formed by travel. According to Zuidervaart, the weak ties were primarily established by other means, like scholarly publications, recommendations or a connection with a scientific society.⁶⁰⁰

The idea behind the weak tie theory is relatively close to the structural hole theory, famously developed by Ronald S. Burt.⁶⁰¹ The only difference is that the structural hole theory is not about the strength of the relationship between two entities but rather about the lack of edges between these entities. A structural hole can be understood as a missing link between two individuals who have complementary sources to information. Consequently, someone who occupies a structural hole in a network, that is, someone who is a broker between otherwise not connected individuals, has the opportunity to control

⁵⁹⁶ Granovetter, 'The Strength of Weak Ties'.

⁵⁹⁷ Mark S. Granovetter, 'The Strength of Weak Ties', 1360–80.

⁵⁹⁸ David S. Lux and Harold J. Cook, 'Closed Circles or Open Networks?: Communicating at a Distance during the Scientific Revolution', 202.

⁵⁹⁹ Lux and Cook, cit. 183.

⁶⁰⁰ Huib J. Zuidervaart, "'The Latest News about the Heavens": The European Contact- and Correspondence-Network of Dutch Astronomers in Mid-18th Century', in *The Global and the Local: The History of Science and the Cultural Integration of Europe. Proceedings of the 2nd ICESHS* (Cracow, Poland, September 6-9, 2006), ed. Michal Kokowski (Cracow: The Press of of the Polish Academy of Arts and Sciences, 2007), 825–37.

⁶⁰¹ Ronald S. Burt, *Structural Holes. The Social Structure of Competition* (Cambridge: Harvard University Press, 1992). See also Ronald S. Burt, 'Structural Holes versus Network Closure as Social Capital', in *Social Capital: Theory and Research*, ed. Nan Lin, Karen S. Cook, and Ronald S. Burt (New Brunswick/New Jersey: Transaction Publishers, 2001), 31–56; Ronald S. Burt, *Brokerage and Closure an Introduction to Social Capital* (Oxford/New York: Oxford University Press, 2005).

the flow of information between these people, and control the projects that they bring together from the opposite sides of the hole.⁶⁰²

Structural holes arise in an open network structure. Most social structures, however, tend to be characterized by dense clusters of strong connections, also known as network closure. While an open network consists of linkages with ties outside a social group, a closed network emphasizes internal cohesion - that is to say a network in which everyone is closely connected to one another. According to James. S. Coleman, a closed network is a benefit to social capital for two reasons.⁶⁰³ First, it increases access to accurate information by reducing the number of intermediaries through which communication has to pass. Second, closure facilitates sanctions that make it less risky for people in the network to trust each other. The more closed a network, the more likely that misbehaviour will be detected. The presence of mutual friends puts the interactions on display, such that no one can escape the notice of others. In the event of misbehaviour by someone in the group, "there is the potential for social sanctions and reputational consequences from their mutual friends".⁶⁰⁴ Coleman's closure argument is not alone in predicting that clustered network facilitate trust and social control. Granovetter has argued that the threat of social control makes trust more likely between people who have mutual friends. He also calls this structural embeddedness: "My mortification at cheating a friend of long standing may be substantial even when undiscovered. It may increase when a friend becomes aware of it. But it may become even more unbearable when our mutual friends uncover the deceit and tell one another".⁶⁰⁵ Similarly, Sally Engle Merry argued that gossip and scandal flourish whenever they occur in close-knit social networks.⁶⁰⁶

Although dense connected networks facilitate trust, they are isolated networks. If two people share a connection with the same figures, than they are likely to have information in common.⁶⁰⁷ Open networks, on the other hand, promote the dissemination of new information and creativity, but they pose a risk of betrayal and conflict.⁶⁰⁸ Rather than seeing them as competing networks, Burt argued that they are complementary to the extent that holes and closure are both fundamental features in the performance of a network. They are complements because they augment one another in creating social capital, in which "advantage is greatest when closure within a group occurs with brokerage beyond the group".⁶⁰⁹

Brokerage and closure are thus two fundamental features in the structure of a network. But what are the measures by which we can define these two concepts? One of the ways of finding brokerage in the network is based on a measure called betweenness centrality. The idea of using betweenness to identify brokers draws on a long history in sociology. Its first explicit articulation has been attributed to the sociologist Linton C. Freeman, who proposed in 1977 the concept of betweenness centrality to measure the shortest path that pass through a particular node.⁶¹⁰ For any two nodes in a network, there

⁶⁰² I borrowed this definition from Paul R. Sparrow and Werner Braun, 'Human Resource Strategy in the International Context', in *Handbook of Research in International Human Resource Management*, ed. Michael M. Harris (New York/London: Taylor & Francis, 2008), cit. 91.

⁶⁰³ James S. Coleman, 'Social Capital in the Creation of Human Capital', American Journal of Sociology 94 (1988): 95–120.

⁶⁰⁴ Easley and Kleinberg, cit. 59. Easley and Kleinberg follow here the work of Mark Granovetter, 'Problems of Explanation in Economic Sociology', in *Networks and Organizations: Structure, Form, Action* ed. Nitin Nohria and Robert Eccles (Boston: Harvard Business School Press, 1992): 29-56.

⁶⁰⁵ Granovetter, 'Problems of Explanation in Economic Sociology', 44. See also Mark Granovetter, 'Economic Action and Social Structure: The Problem of Embeddedness', *American Journal of Sociology* 91, no. 3 (1985): 481–510.

⁶⁰⁶ Sally Engle Merry, 'Rethinking Gossip and Scandal', in *Toward a General Theory of Social Control*, ed. Donald Black (London: Academic Press, 1984), 271.

⁶⁰⁷ Burt, Structural Holes. The Social Structure of Competition, 19.

⁶⁰⁸ Burt, 'Structural Holes versus Network Closure as Social Capital', 52.

⁶⁰⁹ Ronald S Burt, Brokerage and Closure an Introduction to Social Capital, 225.

⁶¹⁰ Linton C. Freeman, 'A Set of Measures of Centrality Based on Betweenness', *Sociometry* 40, no. 1 (1977): 35–41. As shown earlier, the shortest path calculates the shortest possible series of nodes that stand between two other nodes. As shown earlier, the concept of shortest path is also the basic principle of the well-known Six Degrees of Kevin Bacon game, which established

is a shortest path between them, and betweenness measures how many of these shortest paths go through a certain node.⁶¹¹ Betweenness is thus a measure of influence a node has over the spread of information through the network. A node with a high betweenness occupies a critical role in the network structure for it carries a large amount of flow which suggests a position at the interface between tightly-knit groups.⁶¹² In other words, betweenness centrality shows those nodes that connect two otherwise disparate parts of a network, by counting the amount of structural holes to which someone has exclusive access. The higher someone's betweenness centrality, the better someone occupies a bridging position in the network.

One of the basic principles to define network closure is based on the notion of triadic closure i.e. the closed connection between at least three nodes. A long line of research in sociology has argued that "if two people in a social network have a friend in common, then there is an increased likelihood that they will become friends themselves at some point in the future".⁶¹³ The most common way to measuring the prevalence of triadic closure in a network is based on the measure clustering coefficient. The clustering coefficient quantifies the abundance of connected triads in a network. In paragraph 5.1 we will turn to the specifics of network closure and the clustering coefficient.

5. TOWARDS A DYNAMIC DEFINITION OF BROKERAGE

The discussion in the previous paragraph has articulated a way of thinking about networks in terms of their tightly-knit communities and the brokers that link them together. I have formulated precise definitions for some of the underlying concepts, such as the definition of betweenness centrality and the clustering coefficient. Using these definitions, we can formulate some fundamental quantitative questions based on Burt's theoretical predictions that network closure and openness are two complementary paradigms in creating a harmonious structure in the network. Networks with closure – that is to say, networks in which everyone is connected to each other – facilitate coordination within the group, increase trust, confidentiality and are less likely to be infiltrated by outsiders. The presence of mutual friends puts the interactions between two people "on display" [...]: in the event of misbehavior by one of the two parties, there is the potential for social sanctions and reputational consequences from their mutual friends".⁶¹⁴ Yet, if people move in the same circles and know the same people, it is very likely that they have access to the same resources and information. Access to innovative information is produced by open networks. Open networks represent opportunities for brokerage to have unique access to information and contacts. Although open networks promote the dissemination of new information, they pose a higher risk of betraval and infiltration. Following this line of thinking, we might argue that the cross-cultural exchanges between the Grand Duchy of Tuscany and the Dutch Republic are characterized by moments of openness and closure. On the one hand, the early modern scholar needed to have access to innovative information. This means that he needed to get involved with scholars from outside his own circle of trust, reaching out to individuals who could provide him with new information and recently published books. On the other hand, he needed to guarantee that his network was secure and trustworthy, especially in a time in which the freedom of communication was not always guaranteed, which is

that the shortest path from Kevin Bacon to any other actor in the world is 6 meaning that every actor is only six or fewer acquaintances removed from Bacon.

⁶¹¹ This definition is borrowed from Ruth Ahnert in 'Maps versus Networks', cit. 134.

⁶¹² This definition is used by Easley and Kleinberg on page 67.

⁶¹³ Easley and Kleinberg, cit. 44, referring to the work of Anatole Rapoport, 'Spread of information through a population with socio-structural bias I: Assumption of transitivity', *Bulletin of Mathematical Biophysics* 15, no. 4 (1953): 523-533.

⁶¹⁴ *Ibidem*, cit. 59.

characterized by internal cohesion. The systematic analysis of networks helps to understand how Dutch and Italian scholars moved between open and closed circles within their network.

Furthermore, the value of this research lies in the use of dynamic network analysis. As noted in paragraph 4.1, the concept of brokerage is now generally accepted in traditional historical scholarship. Bianca Chen, for instance, has argued how Cuper ensured *his rise* in politics by becoming a powerful information-broker, to which his correspondence network was fundamental.⁶¹⁵ Yet, beyond this kind of use, the term brokerage has little substance. Indeed, it is a static term used to refer explicitly to the end-stage or outcome of Cuper's rise to fame, while ignoring the fact that Cuper had sure come a long way to reach this position, with successes and failures along the way. Exactly because Cuper's correspondence network was fundamental in his brokerage position, we need to go beyond the static use of these concepts. Within a correspondence network, individual correspondents come and go through time, continuously affecting someone's intermediary position in the network. In addition, networks change over time because everyone is vying for a brokerage position, as in the case of Cuper.⁶¹⁶ This case is also interesting in the context of the claim put forward by Peter Burke who argued that cultural brokers *emerged* in the early-modern period as a distinct social category, acting as information-brokers. It underlines the fact that brokerage has a temporal component, which however has been completely overlooked in historical scholarship. In short, we need to go beyond the static use of the term brokerage.

Based on the network extracted from the CEN and CCF datasets, I produced a subnetwork that consists of the 2nd degree connections of Magliabechi and Bassetti. The 2nd degree connections are directly connected to Magliabechi's and Bassetti's direct correspondents, resulting in a network diameter of 5 (2-1-0-1-2). This network consists of 3.818 nodes and 4.556 edges and covers the period from 1660 until 1714. In order to model the emergence and disappearance of brokers in the structure of the network, the 2nd degree network has been divided into six time-frames of ten years (Appendix 3). Each time-frame sheds light on a particular period in the dynamics of the relationships between the Grand Duchy of Tuscany and the Dutch Republic. As such, each period will highlight how central a particular node is to the network's organization, and how important it is in connecting others. Furthermore, changing dynamics in the structure of the network will emphasize moments when someone strengthens or loses his brokerage position in the network.

The results of the following paragraphs are empirically driven, and supported wholly by data which is for the greater part generated by the *Catalogus Epistularum Neerlandicarum* – a national union catalogue of correspondences held in various Dutch archives and libraries – and the digitized card catalogue of the correspondence of Antonio Magliabechi. This means that 4.556 correspondences underlie each single result. This data-driven approach which consisted in the combination of different and independently developed datasets, supports the objectivity of the results themselves. Furthermore, the alignment between the results shown in the following paragraphs, and the claims made in the first two introductory chapters of this study, indicates that those initial claims were not only mere generalizations, but are substantiated by a large amount of data.

⁶¹⁵ Chen, 'Digging for Antiquities with Diplomats: Gisbert Cuper (1644-1716) and His Social Capital', 6.

⁶¹⁶ Vincent Buskens and Arnout Van de Rijt, 'Dynamics of Networks If Everyone Strives for Structural Holes', *American Journal of Sociology* 114, no. 2 (2008): 371–407. Jon Kleinberg et al., 'Strategic Network Formation with Structural Holes', *ACM SIGecom Exchanges* 7, no. 3 (2008): 2.

5.1. NETWORKS OF TRUST: SETTING UP A CORRESPONDENCE NETWORK

Dense structures and closure in networks facilitate trust and social control and ties between otherwise unconnected groups – spanning so-called structural holes – benefit brokers.⁶¹⁷ Figure 7 shows the dynamics between closure and brokerage in Magliabechi's epistolary network from 1660 until his death in 1714. These dynamics are produced by the changing social relations in which he was embedded. Relationships underwent profound alternations throughout the epistolary career of Magliabechi. Indeed, as Paula Findlen observed, networks are a "history of partial success, if not abject failure, since the web of relations binding people together was a fragile, indeed tenuous connection" and "in need of constant maintenance to be truly productive".⁶¹⁸ New generations of scholars entered the network of Magliabechi, while old generations gradually faded away. Friendly relationships turned hostile, while disputes were settled. Each change determined the degree of closure and openness in his network. Findlen's statement is thus literary mapped out here before our eyes.

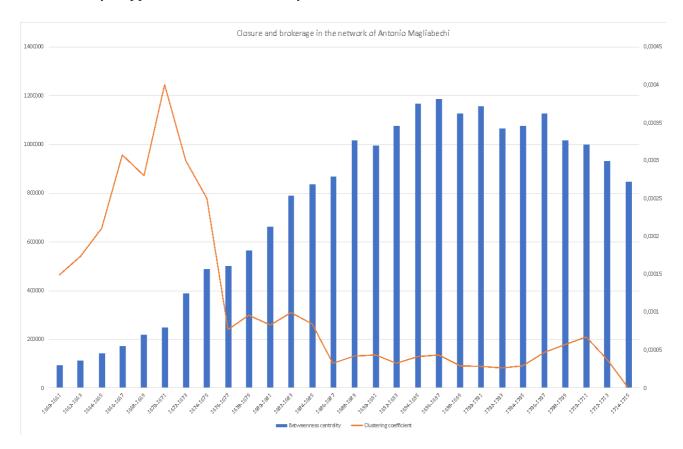


Fig. 7 Closure and brokerage in the network of Antonio Magliabechi.

What does this graph show? We can immediately see that the graph starts with a very high clustering coefficient and a low betweenness centrality. As noted earlier, betweenness centrality shows how significant a node is to the overall structure of the network, and how integral that node is in connecting others. In other words, betweenness centrality indicates the degree of brokerage of a node in the network. On the basis of the clustering coefficient, we can look how closely knit the circles of each correspondent

⁶¹⁷ This clear description is borrowed from Buskens and Van de Rijt, 371-372.

⁶¹⁸ Paula Findlen, 'Introduction', in *Empires of Knowledge. Scientific Networks in the Early Modern World.*, ed. Paula Findlen (London/New York: Routledge, 2019), cit. 5 and 9.

are in the network under study. This helps us to define the exact moments when scholars strived for closure. Perhaps we should make this concrete, by taking a close look at the concept of closure in the literature regarding the Republic of Letters.

The role of closure in a network is central in the research of Franz Mauelshagen. In his study "Networks of Trust", Mauelshagen demonstrated that "trust played a decisive part in building up, continuing and widening relationships through correspondence networks."⁶¹⁹ According to him, networks of trust would not have been developed and maintained without adequate substitutes for personal meetings and the immediate individual experiences that they enabled. In other words, a relationship of trust needed to be established through personal acquaintances which followed a formalized procedure, "beginning with an indispensable letter of introduction, which served to link new acquaintances with existing ones."⁶²⁰ As correspondents become part of an epistolary exchange, they did so not in some ideal egalitarian society, where anyone could join simply by writing a letter, but in a world regulated by codes of polite interaction that needed to be carefully approached.⁶²¹ Introductions were needed. Likewise, books could not be simply dispatched to any scholar deemed important and when it came to making contacts while traveling, one could not simply go to someone's door and knock. One needed channels and acquaintances before any communication could proceed. Specifically, as argued by Saskia Stegeman, one has a "better chance of success by having 'a mutual contact put in a good word' with the desired contact".⁶²²

Because introductions from mutual acquaintances were essential mechanisms in shaping the network between the Dutch Republic and the Grand Duchy of Tuscany, this definition invites us to look at introductions from a network perspective. Introductions imply, in fact, that the network was generated through some sort of transitive property. Introductions highlight the construction of triadic closure – the transition from two ties to three among three nodes – which implies that if two individuals share mutual friends, then there is a high possibility that they become friends too. If Magliabechi regularly corresponds with both X and Y, then the formation of an edge between X and Y is very likely because there is an increased chance that Magliabechi will eventually introduce X and Y to each other. Moreover, the fact that each of X and Y are correspondents of Magliabechi gives them a basis for trusting each other. The term 'triadic' originates from the fact that Magliabechi, who has two correspondents in common, has the ability of *closing* the third edge of the triangle".⁶²³ In other words, as a broker, Magliabechi has the choice (or rather was obliged if he were to follow the ethos of the Republic of Letters) to introduce his mutual contacts to each other. If he decides to introduce his correspondents to each other, triadic closure operates: his dyads become a triad.

A network with many triads (X is connected to Magliabechi, Magliabechi to C, and X to C) is considered to be very clustered. According to Albert-Lázsló Barabasi clustering in a network is something we understand intuitively. Humans "have an inborn desire to form cliques and clusters that offer familiarity, safety, and intimacy."⁶²⁴ Like the power-law distribution, clustering is thus a generic property of a complex network. This means that it can be measured. The extent to which a network is clustered, is measured by the clustering coefficient. The clustering coefficient measures the probability that two random correspondents of an individual are in contact with each other. In general, the clustering coefficient of a node ranges from 0 (when none of the correspondents of Magliabechi are

⁶¹⁹ Mauelshagen, 'Networks of Trust: Scholarly Correspondence and Scientific Exchange in Early Modern Europe', cit. 2.

⁶²⁰ Mauelshagen, 'Networks of Trust: Scholarly Correspondence and Scientific Exchange in Early Modern Europe', 10.

⁶²¹ Van den Heuvel et al., 'Circles of Confidence in Correspondence', cit. 95.

⁶²² Saskia Stegeman, 'How to set up a scholarly correspondence: Theodorus Janssonius van Almeloveen (1657-1712) aspires to membership in the Republic of Letters', 227-43.

⁶²³ Easley and Kleinberg, cit. 87.

⁶²⁴ Barabási, Linked: The Science of Networks, 67.

correspondents) to 1 (when all the correspondents of Magliabechi are in contact with each other). Nicolaas Heinsius, for example, has an average clustering coefficient of 0,0022 in the period 1660-1670 (see Appendix 3, table 1) which is obtained by dividing the number of actual links between his correspondents by the number of links that he could have if they were all in contact with each other. This implies that of the total possible connections the people who corresponded with Heinsius could have with each other, only 0.22% of them are actually realized.

Following this line of thinking, let's return to figure 7. The high clustering coefficient in the first stage of the graph implies that, in the beginning of his epistolary career, Magliabechi's network was characterized by internal cohesion. He strived for closure, choosing friends of friends as new contacts, whom he knew he could trust. The high clustering coefficient confirms thus that introductions from mutual contacts were an important driving mechanism in the shaping of Magliabechi's network. Numerous examples from the correspondence of Magliabechi underline this. For example, in 1660, Magliabechi started to correspond with Pieter Blaeu. In the previous chapter we have seen that the Amsterdam bookseller Pieter Blaeu headed to Florence in 1660 for the sake of promoting his father's Joan's plan to publish a series of engravings of Tuscan cities. In Florence, he presented Magliabechi with a letter of recommendation from the bookseller Andries Fries, who was the Dutch agent of the Venetian publishers Sebastian Combi and Giovanni La Noù. The friendship bond between Magliabechi, the Combi-La Noù family and Fries was quite a solid one, and dated back to the beginning of 1657 and 1659, respectively. Because Fries vouched for Blaeu, and Magliabechi trusted Fries, Magliabechi knew that he could trust Blaeu as well.

So, friends encourage their friends to become friends with their other friends; two correspondents of the same person are perforce correspondents themselves. People outside these connections would not have these opportunities. This is evident from Magliabechi's reaction to a recommendation he received from Henrik Brenkman. When Henrik Brenkman arrived in Florence in 1709 with a letter of recommendation from Domenico Passionei (1682-1761), the official representative of the Holy See in the Dutch Republic, Magliabechi expressed his dismay because Passionei "non mi ha mai scritto, se non la detta lettera". Magliabechi's relationship with Passionei was evidently not close enough to accept the introduction. On the contrary, when Brenkman presented Magliabechi a letter from Jean Le Clerc, one of Magliabechi's correspondents, the librarian answered that he "non mancherò di servire il suddetto dotto, e gentilissimo Signore, in tutto quello che si degnerà di comandarmi".⁶²⁵

Network closure means that everyone keeps an eye on each other, and hence helps to protect the integrity of social and economic transactions in a network. Because no behavior goes unnoticed, a closed network helps to build a reputation.⁶²⁶ Network closure puts thus the interactions between people "on display" in a social sense, where there is no place for misbehavior because everyone knows each other. This is also a reason why network closure plays a fundamental role during travel. The home front was eager to learn about the whereabouts of their family and colleagues travelling abroad. Moreover, they wanted to be sure that they were safe and behaving well during their sojourn. Jacob Tollius is an instructive example. In the previous chapter, Tollius' rather inglorious behavior during his visit in Florence was discussed. After being admitted in the *Biblioteca Medicea Laurenziana*, he stole the oldest Cicero manuscript. In addition, he converted to Catholicism with the sole purpose to receive money

⁶²⁵ Magliabechi to J. Le Clerc, 26 December 1709, Amsterdam University Library, hs. C 87, "I will not fail to serve this learned and very gentle man, in everything he deigns to commands me". A correspondence between Jean Le Clerc and Magliabechi dated back to 1706. See also Le Clerc to Magliabechi, 10 October 1709, BNCF, Magl. VIII, 1117 (30), f. 31v, "Hodie accepi, Vir Illustrissime, litteras tuas 10 Septembris datas quibus, pro innata tibi humanitate et benevolentia erga litteratos, et summo litteras iuvandi studio, quod tibi sempiternam famam peperit, etiam apud gentes a quibus sol aversus equos iungit, ut Virgilii verbis utar, omnimodum favorem Brencmanno polliceris, cum Florentiam venerit, Cod. Mediceum Pandectarum collaturus." ⁶²⁶ Burt, *Brokerage and Closure an Introduction to Social Capital*, 95.

from the Medici family. Consequently, he was banned from Florence and forced to wander through Italy in search of new patrons. During this time, Magliabechi secretly kept Gisbert Cuper and Jacob Gronovius up-to-date about the whereabouts of Tollius – a clear instance of social control and mistrust. The high clustering coefficient in the network of Jacob Tollius (figure 8) was thus working against him instead of helping him to establish a network abroad.

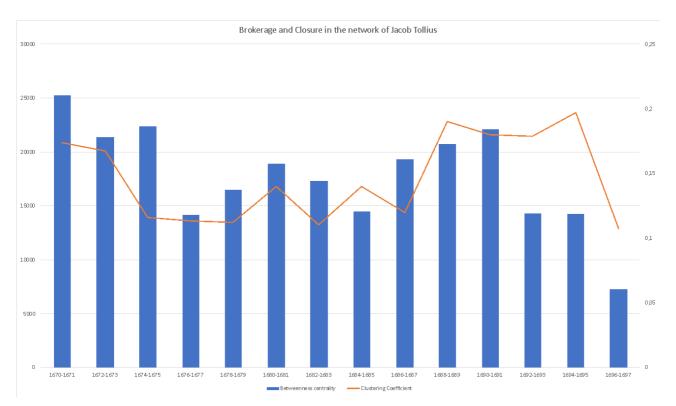


Fig. 8 Closure and brokerage in the network of Jacob Tollius

Figure 9 shows an example of the secret messages Magliabechi sent to Jacob Gronovius during Tollius' stay in Italy. Sometimes it was necessary to make a note so small that is could be smuggled to the Netherlands inside books or letters.

Roma mà non s' averdo en fortuna te ne andato alladori rego VT: Ama carbuccio chele ter bourd non to serie anena anivato Mi serisse & Roma Confestion nature che se non incont norsa ever n rip in Padova vole Tollie i fee nortro Catolie Briselles. Le ne ando Si qui a Vienna. in Provena ma i incontro Disgraphe. Litrasteri

Fig. 9 Magliabechi's secret messages to Jacob Gronovius regarding the stay of Jacob Tollius in Italy (LMU, Cod 4° Cod. Msc 778, f. 25).

Closed circles enhanced trust, social control and helped to build up a reputation, which were essential features in the early career of Magliabechi. He needed to prove himself as a trustworthy and valuable correspondent in order to build an extensive cross-cultural network that posed more risks as to the integrity of the communications and exchanges that took place in that network. In order not to lose his standing, he had to establish his name in the wider Republic of Letters. He could do so by becoming an intermediary between the Dutch Republic and the Grand Duchy of Tuscany. This was an empowering role, to which his correspondence network with the Dutch Republic was fundamental.⁶²⁷ In the next paragraph, we will see how Magliabechi obtained his brokerage role between the Dutch and Tuscan society.

5.2. REACHING OUTWARDS

A higher density of relations within a network means that information circulated more within than between groups of people.⁶²⁸ Yet, variation and innovative ideas develop between different groups and countries. In the words of Burt, "people here do it differently than people over there".⁶²⁹ In fact, in-group communication, measured by a high clustering coefficient in the early career of Magliabechi, can create barriers to new information and contacts. Magliabechi talked and corresponded with the same colleagues, learning about the same people, ideas and books all over again. In other words, the network dynamics that are characteristic for the early career of Magliabechi represent an island of opinions, behavior and knowledge. As his career progressed, he needed new knowledge about the scholarly world to strengthen his position in the Republic of Letters. To obtain this knowledge, he had to reach out to information that flowed between different networks. He needed to create ties between unconnected others, striving for new knowledge and books, or otherwise the people in his network began to languish. In social network terms, we say also that Magliabechi needed to fill structural holes. Indeed, Burt found that people who stand near these holes are in a better position of having good ideas, opinion and behavior.⁶³⁰ As will turn out from the next paragraph, Magliabechi was able to fill these structural holes in the 1670s, when he took over the network of an entire generation of Florentine scholars.

5.2.1. GENERATIONS COME, GENERATIONS GO

Figure 7 shows that from the 1670s onwards, Magliabechi started to reach out to scholars outside his local network, which is confirmed by an increasing betweenness centrality in the graph. In 1671, a renowned Dutch scholar joined the network of Magliabechi: the philologist Nicolaas Heinsius. Nicolaas Heinsius never met Magliabechi personally, but began corresponding with Magliabechi through the French scholar Emery Bigot who had become acquainted with him in Florence in 1660. Moreover, the professional background, reputation and network of Heinsius was certainly a decisive factor as to why a correspondence between him and Magliabechi could take off. Magliabechi, in fact, had nurtured the desire to establish a relationship which Heinsius for many years, as becomes clear from his first letter to Heinsius dated the 9th of October 1671:

"Io per la mia parte con ogni maggiore ingenuità le confesso, che sono molti anni che nutrivo un ardentissimo desiderio di dedicarmele servidore con la penna, come le sono stato sempre col cuore, da quel tempo, che essendo piccol fanciullo, per mia buona sorte, mi capitarono

⁶²⁷ Cfr. Chen, 'Digging for Antiquities with Diplomats: Gisbert Cuper (1644-1716) and His Social Capital', 6.

⁶²⁸ Burt, Brokerage and Closure. An Introduction to Social Capital, 15.

⁶²⁹ Ibidem, 15.

⁶³⁰ Ibidem, 59.

non so come alle mani, le sue bellissime, e Latinissime Poesie, le qual non mi sazziavo di leggere, scoprendo sempre in esse nuove bellezze"⁶³¹

Nicolaas Heinsius was no stranger to the Tuscan court. He was among the first to travel to Florence with the prospect of consulting manuscripts in the rich collections of the Medici libraries. During his two visits in Florence in 1648 and 1652, he took part in the intellectual life of the city, meeting as much as leading scholars as he could. It were Johannes Fredericus Gronovius and Isaac Vossius, who had travelled to Florence in 1641 and 1643, respectively, who paved the way for Heinsius to get acquainted with the members of the Florentine scholarly society. Heinsius travelled to Florence with a letter of introduction from Gronovius to the Swiss scholar Paganino Gaudenzio, who lived in Pisa, while Isaac Vossius introduced Heinsius to the Florentine scholars Carlo Dati and Agostino Coltellini. Heinsius profited thus from the brokerage network of his predecessors. Appendix 3 (table 1) shows that the brokerage position of Gronovius and Vossius was still strong throughout the 1660s, who are both ranked in the top-3 betweenness.

During his stay in Florence, Heinsius did not only exchange knowledge with his new acquaintances, but they sized each other up and decided whether to trust one another or not. From these personal encounters grew in turn the networks of correspondence that sustained their relationships over longer stretches of time and place. When Heinsius returned to The Hague after his second stay in Florence in 1652, he brought his Italian network with him, maintaining close contact with, amongst all, Carlo Dati, Leopoldo de' Medici, Andrea Cavalcanti, Valerio Chimentelli, Agostino Coltellini, Angelico Aprosio, and Ottavio Falconieri, exchanging hundreds of letters that kept them informed about the scholarly activities in their respective countries. As such, Heinsius and his Florentine contacts became brokers in the networks between the cultural centers of Florence and the Dutch Republic, as is confirmed by the metrics in Appendix 3, table 1. Specifically, Nicolaas Heinsius appears to be the most connected node in the network under study, maintaining contact with 257 scholars (table 1). Earlier we have seen that nodes as Heinsius are also called hubs – "nodes with an anomalously large number of edges".⁶³² Because of his large number of edges, "it makes it also very likely that a shortest path will travel through him".⁶³³ Consequently, besides being a hub, Heinsius appears to be an important broker in the network, which in turn is measured by a high betweenness score in the network.

The disappearance of this generation of Florentine scholars in the 1670s seriously broke the chain of communications based in weak ties that had allowed Heinsius' communications with Tuscany. In 1667, Leopoldo de' Medici was elected Cardinal and left Florence for Rome. This resulted in the dissolution of the *Accademia del Cimento* which caused that the Florentine network for gathering and exchanging scientific information in the Dutch Republic – which had strongly characterized the 1660s – gradually evaporated. The subsequent death of Leopoldo in 1675 contributed to the intellectual decline of Florence in the second half of the seventeenth century. This decline was further increased by the death of Carlo Dati in 1676, Andrea Cavalcanti in 1673, Lorenzo Panciatichi in 1676 and Lorenzo Pucci in 1675. The experience of Antonio Magliabechi seems to corroborate this. In his letters to his Dutch correspondents he continuously lamented the scarcity of books that circulated in Florence and the lack of competent scholars:

⁶³¹ Magliabechi to N. Heinsius, 9 October 1671, UBL, Bur F 8, "Oh! I was so glad that I received your most kind, most humble and most elegant letter from your Illustrious Lordship of the 15th past, which I have read, read again, kissed, kissed again and held with affection to my chest. Many years I have nurtured the desire to dedicate myself to be a servant of the pen, which deep in my heart I have always been. From being a little child, I don't know how, I was fortunate to have your beautiful Latin poetry at hand. I was never tired of reading them, always discovering new beauties within them."

⁶³² Ahnert and Ahnert, 'Protestant Letter Networks in the Reign of Mary I: A Quantitative Approach', cit. 6.

⁶³³ Ahnert, 'Maps versus Networks', cit. 136.

"Erano qua il signore Carlo Dati, il signore Canonico Lorenzo Panciatichi amici di V.S. Ill.ma, il signore Andrea Cavalcanti, il signore Lorenzo Pucci, ed altri signori Eruditi, che procuravano di vedere i Libri nuovi, facendogli venire di dove erano stampati, ma doppo loro morte, se non arriva qualche Libro a me, non ci è più modo di veder cosa alcuna di nuovo."⁶³⁴

The marginal position of the old generation of Florentines is underlined by Appendix 3. Leopoldo de' Medici dropped 8 places in the top betweenness list in the period 1670-1680, while the name of Carlo Dati disappeared completely after 1670.

Heinsius soon realized that he needed someone to replace his old network. He needed someone who could give him broad access to the Italian scholarly community. In light of what we have seen so far, it may be no coincidence that this place was taken by Magliabechi. Heinsius was already familiar with Magliabechi as early as 1659, when word of his presence reached him through Carlo Dati. On the 11th of November 1659, Dati informed Heinsius that he could sent him a list of every book he desired from Italy, "essendo qui in Fiorenza un giovane studiosissimo, e intelligentissimo di libri chiamato Antonio Magliabechi che si esibisce a trovarne la maggior parte".⁶³⁵ Now that the brokerage position of Dati hit rock bottom, Heinsius wished to correspond with Magliabechi directly. Magliabechi was the one who could fill the structural hole left behind by Dati. Thanks to Magliabechi, Heinsius' brokerage position strengthened, as is shown by an increasing betweenness in his network from the 1670s onwards (figure 10). This might also explain why the Dutch philologist Isaac Vossius contacted Magliabechi in 1682. In chapter 3 we have seen that Isaac Vossius visited Florence in 1643, which brought him in contact with a large portion of the intellectual life of the city, including Carlo Dati with whom he remained in contact.⁶³⁶ Almost forty years after his visit, he decided to reach out to Magliabechi, for the network he had built up during his stay in Florence had completely vanished.⁶³⁷

⁶³⁴ Magliabechi to Cuper, 2 February 1693, KB, KW 72 D 10, f. 92-93, "there were here sir Carlo Dati, sir Canon Lorenzo Panciatichi, friends of Your Illustrious Lordship, sir Andrea Cavalcanti, sir Lorenzo Pucci, and other erudite men, who procured new books to be seen, making them come from where they were printed, but after their death, if a books does not arrive to me, there is no way to see something knew". Other examples include Magliabechi's letters to Jacob Gronovius: "Se V.S. Ill.ma tornasse qua, non riconoscerebbe punto questi Città. Non solamente il Popolo, per lo più è miserabile, ma gli studi, e le Lettere, sono per terra affatto, per non ci essere, o premio, o onore alcuno" (Magliabechi to J. Gronovius, undated, LMU, Cod 4° Cod.Msc 778, f. 17). Similar expressions can be found in Magliabechi's letters to Nicolaas Heinsius were written "più con le lacrime, che con l'inchiostro" because "qua non ci è si può dire alcuno che studi per la vera strada" (Magliabechi to Heinsius, 28 July 1674, UBL, BUR F 8).

⁶³⁵ Dati to Heinsius, 8 November 1652, Leiden University Library, BUR F 7, f. 44, "there is here in Florence a young man, very learned and intelligent with books, named Antonio Magliabechi who is busy to find the most part of it"

⁶³⁶ The correspondence between Carlo Dati and Isaac Vossius (1647-1648) is extent in UBL, BUR F 11.

⁶³⁷ Four letters between Magliabechi and Isaac Vossius (1682-1684) are extent in UBL, BUR F 11, fols. 88-103. Copies of these letters are to be found in the collections of the University Library of Amsterdam, hs. III E 10:67; hs. III E 10:64; hs. III E 10:58; hs. III E 10:35.

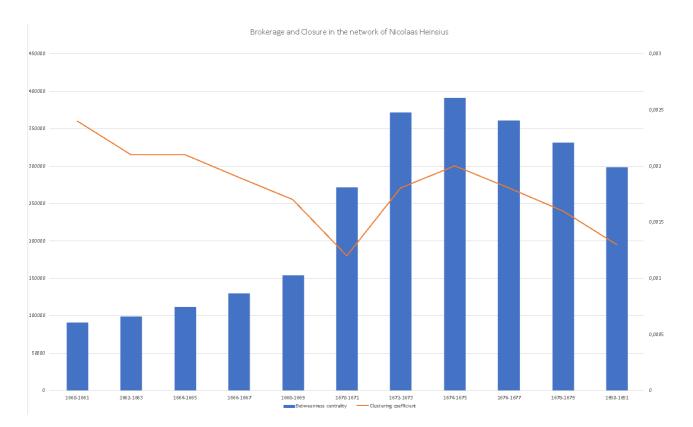


Fig. 10 Closure and brokerage in the network of Nicolaas Heinsius

5.3. TRAVEL AND BROKERAGE

Davis S. Lux and Harold J. Cook have pioneered the insight of the act of travel as a social practice. Lux and Cook explored the working and "significance of weak ties in the international exchange of scientific information during the late seventeenth-century".⁶³⁸ They borrowed the concept of weak ties from Nick Granovetter, who, as noted earlier, wrote about the value of weak ties for the spread of information through social networks. While strong ties are characterized as deep affinity, for example family, friends of colleagues, weak ties, in contrast, might be acquaintances.⁶³⁹ Granovetter's insight was that people with weak ties outside the core network are bridges to other networks. Those bridges have access to new and unique information – like job openings in the study of Granovetter – relative to other members of the network who have only strong ties. Granovetter analogized weak ties thus to being bridges which allow us to disseminate and get access to information that we might not otherwise have access to. Further elaborating on this concept, Lux and Cook have argued that the complex networks of early modern correspondence were established through the proliferation of weak ties, which were founded on personal encounters that developed from geographical mobility.

The theory of Lux and Cook offers a convincing narrative behind why the network of Magliabechi, particularly his brokerage position, grew quickly in the mid-17th century. In these years, the Medici court attracted many Dutch philologists, who knew that Cosimo III was glad to have them come. Moreover, they valued the opportunity such a visit to Florence afforded to meet Magliabechi. It was all but impossible to come to Florence and not come into contact with him, especially after he had been

 ⁶³⁸ Lux and Cook, 'Closed Circles or Open Networks?: Communicating at a Distance during the Scientific Revolution', 182.
 ⁶³⁹ Everett Harper, 'Weak ties matter'', *Techerunch*, retrieved online: https://techcrunch.com/2016/04/26/weak-ties-matter/, last accessed 3 April 2019.

made librarian of the Biblioteca Palatina by Grand Duke Cosimo III in 1673. During their stay, Magliabechi guaranteed them access to the Florentine libraries and introduced them to other key figures in Italy. Visitors to Florence, such as Jacob Gronovius, Laurens Theodor Gronovius, Joannes Kool, Jacob Tollius and Hendrik Brenkman all correspond with him after leaving Florence. Magliabechi not only supplied them with a continuous flow of information and books from Italy, but he was also a channel through which they could establish contact with the Italian scholarly community. Vice versa, the Dutch scholars kept Magliabechi updated about the developments in the Dutch society and introduced him to other scholars in the Dutch Republic. As such, Magliabechi's position as a broker in the scholarly relations between the Grand Duchy of Tuscany increased over time.

Before the 1670s, Magliabechi relied on the intermediation of the Amsterdam bookseller Pieter Blaeu. In the previous chapter we have seen that the Amsterdam bookseller Pieter Blaeu headed to Florence in 1660 for the sake of promoting his father's Joan's plan to publish a series of engravings of Tuscan cities. When Blaeu arrived in Florence, Magliabechi was gradually building his elaborate network of contacts in Italy and in Europe. He immediately recognized Blaeu as his contact in the Dutch Republic, and the two remained in close contact after Pieter's return in the Dutch Republic. For the decade to come, Blaeu would supply Magliabechi and the Tuscan court with a continuous flow of letters, books and news. He informed Magliabechi about the publications that came recently off the press, including prohibited ones, and occasionally sent them to Florence. On the 7th of February 1670, for instance, Blaeu informed Magliabechi that he sent him a box of books, including a publication that "è prohibito qui, ed anche in Italia come lo sa".⁶⁴⁰

Magliabechi introduced Blaeu to the Medici family and helped him to acquire an entire circle of Tuscan clients. Vice versa, Blaeu was the channel par excellence through which Magliabechi could reach the Dutch scholarly society. The metrics in Appendix 3, table 1 provide a solid argument in favor of Blaeu's intermediary position in the network. Despite the fact that Blaeu had only 7 correspondents (Magliabechi, Apollonio Bassetti, the Florentine bookseller Giovanni Gualberto Borghigiani, Carlo Dati, Michele Ermini, Leopoldo de' Medici and Cosimo III), he appears to have a relatively high betweenness centrality (5.500). This means that someone does not has to be a hub – having many correspondents – to be indispensable for the structure of a network. One just needs to have the right contacts. These results are also interesting in the context of the claims put forwards by Henk Th. van Veen and Alfonso Mirto, editors of the correspondence of Pieter Blaeu. They observed that "historians have often neglected to acknowledge Pieter's importance". In fact he was to use their words the "cultural mediator between the Republic and Italy". This claim of Blaeu's importance based on a qualitative close reading approach of his letters could be underpinned by connecting his correspondence to the two national catalogues – the CEN and the CCF. The correspondence network that resulted from that combination of datasets underlined Blaeu's significance in the relationship between the Dutch Republic and the Grand Duchy of Tuscany, something that previously could only be alleged by a close reading approach of his letters alone. Specifically, networks change the more metaphorical use of the concept "intermediary" – by Van Veen and Mirto – to a more tangible concept that can be statistically measured and contextualized.

In 1673, Magliabechi's became acquainted with Jacob Gronovius. Like Nicolaas Heinsius, Jacob Gronovius came to Florence to study manuscripts. Once he arrived in Florence, he immediately headed to the house of Magliabechi with a letter of recommendation from the French scholar Jean Chapelain, who had an epistolary relationship with Magliabechi as early as 1663. The prominent brokerage position of Chapelain (see Appendix 3, table 1) gave the Frenchmen thus the status necessary to ask Magliabechi

⁶⁴⁰ "is prohibited here, as well as in Italy as you know". This might be the *Tractatus Theologico-Politicus* (TTP) of Baruch Spinoza, which was published anomously in Amsterdam in 1670.

for his service to help Gronovius throughout his stay in Florence. Moreover, the local learned circles around Jacob Gronovius in the Dutch Republic increased the credibility of Jacob as a trusted scholar. He was the son of the renowned scholar Johannes Fredericus Gronovius and a good friend of Nicolaas Heinsius. In fact, Magliabechi instantly wrote to Heinsius with the news of the arrival of Gronovius, promising Heinsius that he would do everything to assist Gronovius throughout his stay in Italy.

While in Florence, Gronovius visited Magliabechi almost every day. During these visits, the two not only traded information and books, but sized each other up and decided whether to trust one another or not. These personal visits were the beginning of a lasting friendship. When Gronovius returned to the Dutch Republic, his contact with Magliabechi turned into a correspondence, exchanging letters during a period of thirty-eight years. From that moment on Gronovius formed a bridge between his Dutch network of contacts and the vast network of contacts of Magliabechi. These dynamics are visible in figure 11, in which we can see that his brokerage position exponentially increases after his return in the Dutch Republic in 1675. Moreover, the metrics in Appendix 3 show that Gronovius' brokerage role in the overall network increases in the aftermath of their travels: he moves up 9 spots in betweenness centrality (rising from the 22nd place in the 1660-1670 to the 13th place in 1670-1680). The dynamics in the network of Jacob Gronovius are thus a living proof of Lux's and Cook's hypothesis.

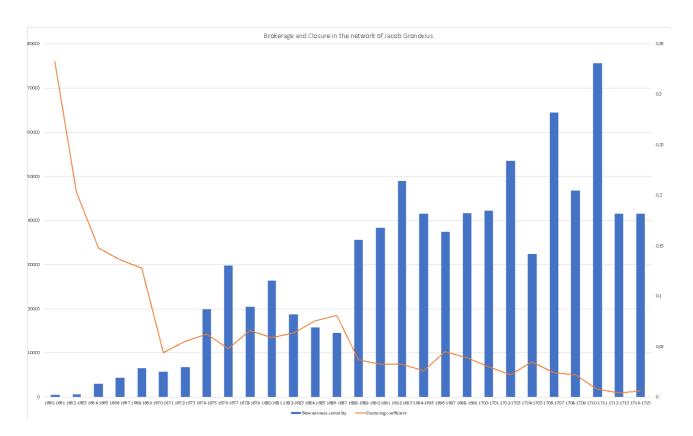


Fig. 11 Closure and brokerage in the network of Jacob Gronovius.

Figure 11 shows the emergence of Jacob Gronovius as a broker in the network, tracing the pathway of his epistolary career. Isolated groups of close-knit scholarly networks that slowly generated new scholars are a characteristic feature in the early career of Jacob Gronovius – as shown by a high clustering coefficient in the first stage of the network. He began to correspond with the friends of his own friends, establishing a local network of contacts in the Dutch Republic. As such, he could gradually build up a reputation in the scholarly world. Through travel, Gronovius could build an internationally connected

network that kept growing in contacts, which shrunk the social distance between the Dutch Republic and the Grand Duchy of Tuscany. When Gronovius returned in the Dutch Republic he brought his Italian network with him, thus acting as a broker between the two societies. As such, he could guarantee his contacts an entrée into his extensive networks of contacts in Italy, reinforcing the concept of the Republic of Letters as an ever-growing community.

Jacob's visit in Florence paved the way for many other Dutch scholars who visited the Grand Duchy of Tuscany after him and desired to meet Magliabechi. This is corroborated by a letter Magliabechi wrote to Jacob Gronovius on the 6th of May 1675, a few months after the latter returned to the Dutch Republic:

"[...] per sapere ch'io lo son tanto, e tanto servidore, il che è cosa tanto nota appresso tutti, che il signore Berkelio come le accennai, scrisse al signore Cousson, che per impetrare tutto quello che avesse desiderato, serviva che mi nominasse V.S.Ill.ma.".⁶⁴¹

Daniel Cousson, who visited Florence in 1675, only needed to drop the name of Gronovius and Magliabechi was ready to assist him.

In 1679, Laurens Theodor Gronovius embarked on a *peregrinatio academica*. As the son of Johannes Fredericus Gronovius and brother of Jacob, Laurens was treated with great deference in Florence and befriended Magliabechi. After returning to the Republic in 1682, he thanked Magliabechi effusively for his help, initiating what would become a regular correspondence. Magliabechi and Laurens met briefly on another occasion, in 1694, when Laurens travelled in Italy with several of his students. Laurens' travels allowed him to establish an international network of contacts abroad, thereby increasing his brokerage position in the network, as shown by figure 12. In addition, appendix 3 (table 4, 5 6) characterize the centrality of Laurens with respect to the overall network, showing that his managed to maintain his intermediary position for at least three decades (1680-1720).

⁶⁴¹ Magliabechi to J. Gronovius, 6 May 1675, LMU, Cod 4° Cod. Msc 777, ff. 171-174, "In order to let you know that I am a very, very servant of you, which is something that is known to everyone, Sir Berkelio [Abraham van Berkel] wrote to sir Cosson [Daniel Cousson] that he only needed to mention the name of Your Illustrious Lordship to obtain everything he desired.

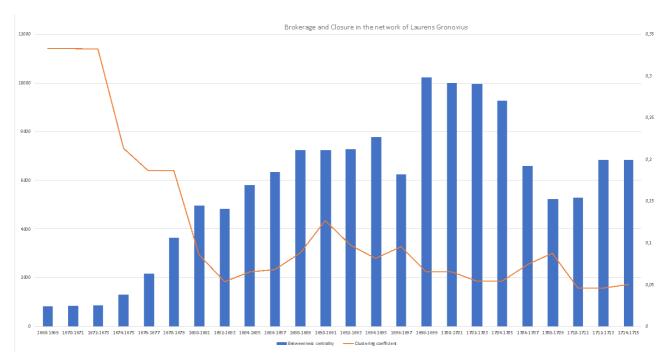


Fig. 12 Closure and brokerage in the network of Laurens Theodor Gronovius

Once they returned to the Dutch Republic, the Gronovius brothers were in three ways advantaged by their position in the network: firstly, they had access to a wider diversity of information and contacts, secondly they could immediately reach out to that information, and finally, it enabled them control over information diffusion to their colleagues in the Dutch Republic. As such, the Gronovius brothers were positioned at a crossroads in the flow of information between the Dutch Republic and the Grand Duchy of Tuscany. Their diverse Italian and Dutch contacts also meant that they were more likely to become a candidate for inclusion in new opportunities and book publications because their early access to diverse sources of information and to new contacts made them more attractive as contacts to other people in their own network. In 1690, for instance, Magliabechi introduced the Florentine scholar Federico Nomi to Jacob Gronovius. Magliabechi hoped that Gronovius would help Nomi to publish his work in Amsterdam, which will be discussed in more detail in the sixth chapter of this study. Consequently, their brokerage position in the network continued to grow in the aftermath of their grand tour. Besides having access to innovative information, their gate-keeping role enabled them to control the bringing together of people from opposite sides of the hole. Back home, they were the ones who could introduce their colleagues to the scholars they had met abroad, inducing them to further expand the scholarly network.

The metrics in Appendix 3 give a broad account of the network positions of several other Dutch scholars that travelled to Florence in the second half of the seventeenth century, providing more information about Jacob Tollius, Joannes Kool and Henrik Brenkman in the scholarly network. As noted earlier, Tollius' stay in Italy was rather inglorious as compared to his contemporaries. To recap, he travelled to Florence in 1688 and became acquainted with Magliabechi through the intermediation of Pieter Blaeu. Tollius, however, was forced to leave Florence almost immediately after his arrival. All sorts of wild stories were circulating in Florence regarding the reason why Tollius had to leave. According to Magliabechi, Tollius had repeatedly deceived the Medici family for money, while others believed that Tollius had stolen the oldest Cicero manuscript from the collections of the *Biblioteca Laurenziana*. His unsuccessful stay in Italy is confirmed by his marginal centrality in the network after his return in the

Dutch Republic in 1692. Table 3 and 4 in Appendix 3 show that he lost his brokerage position in the network: he dropped down no less than 3 positions in betweenness in the aftermath of his travels (from 19.721 (1680-1690) to 14.226 (1690-1700)). The same dynamics are visible in figure 8.

In 1698, Joannes Kool arrived at the house of Magliabechi with books on behalf of Jacob Gronovius and Johannes Georgius Graevius, both correspondents of Magliabechi. Kool presented himself thus as a reputable scholar, vouched for by Magliabechi's own contacts, which increased the probability that Magliabechi could trust him and open the door for him. In fact, upon seeing the books, Magliabechi treated Kool with great deference and welcomed him in Florence. As shown by table 4 and 5, Kool climbed 15 spots in the betweenness ranking in the aftermath of his travels (from the 28th place in 1690-1700 to the 13th place in 1700-1710).

Henrik Brenkman travelled to Florence in 1709, where he planned to make a critical edition of the Pandects, a project that Laurens Gronovius had started in the 1670s. Because Jacob Gronovius was afraid that Brenkman would win the glory for carrying out a project that his brother had begun, he urged Magliabechi to withdraw Cosimo's permission to study the manuscript. Magliabechi, however, was unable to interfere with Cosimo's decision. Magliabechi's position was threatened by the Florentine scholar Anton Maria Salvini, who helped Brenkman throughout his stay. Salvini gradually took over Magliabechi's brokerage position, making his appearance as a broker at the beginning of the eighteenth century (Appendix 3, table 6). In 1713, Brenkman returned to the Dutch Republic to work on his *Historia Pandectarum*, and stayed in contact with Salvini until well into the 1720s. The close ties with Salvini made Brenkman an important broker in the network, as confirmed by his high betweenness centrality in table 6. Brenkman was not the only Dutch scholar who received his aid. Gisbert Cuper, Jean Le Clerc, Jacob Tollius and Adriaan Reeland, former correspondents of Magliabechi, also began to correspond with Salvini. In light of what we have seen before, Salvini filled the structural hole as Magliabechi reached the end of his life. New generations took over the network of the old generation.

The only Dutch traveler mentioned in the previous chapter whose name does not appear in Appendix 3 is Coenraad Ruysch. His absence in the network can be explained by a complete lack of data on his epistolary relationships in the *Catalogus Epistolarum Neerlandicarum*. This highlights thus the need for qualitative methods to amplify and clarify the results of quantitative techniques to consider the complex relationships that shaped the interactions between the Dutch Republic and the Grand Duchy of Tuscany. The need for qualitative methods does not exclude the use of quantitative methods and vice versa.

5.4. EXPANDING THE NETWORK

While trust between correspondents was established on the basis of face-to-face meetings, someone could be also added to a communication chain by a recommendation from someone already present in the network. Saskia Stegeman, for instance, has noted that the physician Theodorus Janssonius van Almeloveen (1657-1712) "was able to establish a rich correspondence network without personal travels only by deploying a whole network of acquaintances and family ties who prepared his way".⁶⁴² The metrics in Appendix 3 show that his network of acquaintances enabled him to become a major node in the scholarly network throughout the second half of the seventeenth century. In the years 1690-1700, he occupied the second place in the ranking, after Magliabechi. Although it seems that Van Almeloveen

⁶⁴² Stegeman, 'How to set up a scholarly correspondence: Theodorus Janssonius van Almeloveen (1657-1712) aspires to membership in the Republic of Letters', 233.

desired to establish contact with Magliabechi in 1695, a correspondence between the two never got off the ground.⁶⁴³

Most of Magliabechi's correspondents have never met him personally, but began corresponding with him through others who had become acquainted with him in Florence. Magliabechi's extensive network was thus in large part a legacy of contacts established by previous generations of scholars who had visited him in Florence. Scholars such as Nicolaas Heinsius, Isaac Vossius, Gisbert Cuper, Johannes Georgius Graevius, Pieter Burman, Pierre Bayle, Jean Le Clerc, Adriaan Reland, Phillipus Rulaeus, Carolus Crucius, Jacob Perizonius and Antoni van Leeuwenhoek, began corresponding with Magliabechi through others that had become acquainted with him in Florence. This means that personal acquaintance and trust could be transmitted through introductions that stressed the credibility of a person. We have seen before, for instance, that Nicolaas Heinsius could begin corresponding with Magliabechi through Emery Bigot, who had become acquainted with Magliabechi during his stay in Florence in 1660.

In the 1670s, it was Jacob Gronovius in particular who paved the way for his colleagues to get acquainted with Magliabechi. When he visited Magliabechi in Florence in 1673, he helped him in his search for new correspondents in the Dutch Republic where Magliabechi himself would never go. During their meetings, Gronovius vouched for the credibility of other scholars, introducing Magliabechi into his closed circles of friends in the Dutch Republic: This is shown by the following letter from Magliabechi to the Dutch scholar Gisbert Cuper dated the 31st of August 1677:

"Il nostro eruditissimo, e cortesissimo Signore Gronovio, so che appresso di V.S. Ill.ma mi potrà far chiarissima testimonianza di questo, poiché con l'occasione dell'aver onorato per qualche tempo la nostra Città, ha benissimo veduto, che io non mi curo di niuna altra cosa, fuor che degli Studi, de' Letterati, e de' Libri, benché per mia disgrazzia, abbia ne' detti Studi fatto pochissimo profitto. È ben vero però, che se l'amicizzia de' Letterati, e padronanza sopra di me di essi mi è universalmente gratissima; gratissima sopra quella di ogni altri mi è stata quella di V.S. Ill.ma, della quale ho letti gl'eruditissimi Libri, e tante en tante volte parlatomene con infinita lode qua, e scritto di costà, il suddetto dottissimo Gronovio."⁶⁴⁴

Vice versa, back home, Gronovius presented Magliabechi's credentials as a citizen committed to the ideal of the Republic of Letters. These mutual recommendations encouraged Cuper to reach out to Magliabechi on the 19th of July 1677.⁶⁴⁵ Consequently, Cuper became one of Magliabechi's most important contacts in the Dutch Republic, exchanging hundreds of letters and books from 1677 until 1712.

Figure 13 shows the emergence of Cuper as a broker. The visualization traces the pathway of his academic career. The graph represents the same dynamics of the network we have encountered before. Like Magliabechi and the Gronovius brothers, Cuper is surrounded by a dense cluster of mutual contacts in the beginning of his epistolary career. This closed network helped him to build up a reputation in the scholarly world, which served in the practice of seeking introductions. Consequently, his reputation for being trustworthy made it possible to build safe bridges that would otherwise be too risky. As his career

⁶⁴³ In 1695, Theodorus Janssonius van Almeloveen wrote a letter of praise to Magliabechi, yet a correspondence between the two never got off the ground (Utrecht University Library, Hs 995, IV, ff. 92r-93r (copy)). The original letter is not extent in the National Central Library of Florence.

⁶⁴⁴ Magliabechi to Cuper, 31 August 1677, KB, KW 72 D 10, ff. 14-15, "Our very learned and gentle sir Gronovius, I know that he could clearly testify about this, because with the occasion of having honored our city for several times, he had seen very well, that I do not take care of anything else beyond scholarship, scholars and books, despite the fact that, to my disgrace, I do not have much profit in doing that. It is however true that I am universally grateful for the friendship of scholars and the mastery of them on me, and especially grateful I am for that of Your Illustrious Lordship, from whom I have read your very learned books, and many times Gronovius has talked about it with infinite praise when he was here in Florence."

advanced, he could move outside his own circle of trust, reaching for individuals who were far removed from his local network. Magliabechi was the obvious choice to fulfil these ambitions. By being introduced to Magliabechi by the mutual contact Jacob Gronovius, Cuper not only opened himself up to additional sources of information and scholarship, but also to the correspondence network emanating from Magliabechi.

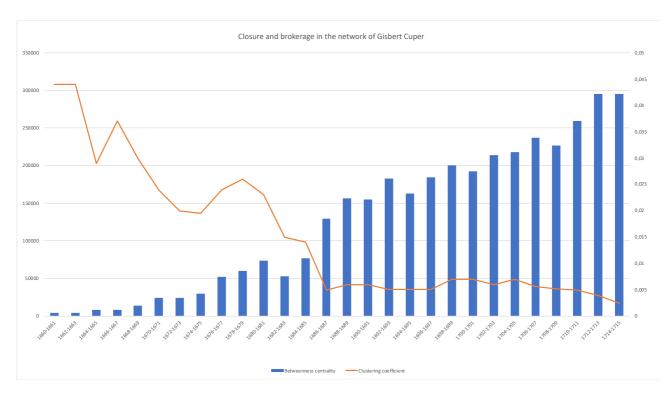


Fig. 13 Closure and brokerage in the network of Gisbert Cuper

Cuper's brokerage position exponentially increased when he began corresponding with Magliabechi in 1677. Magliabechi's confidentiality with Cuper became such, fueled by the reciprocal exchange of letters, books and other gifts, that Magliabechi granted Cuper an entrée in his network, introducing him to key figures in Italy, almost all of them ecclesiastics, or at least affiliated with the clergy. An illustration of this process can be seen in figure 14.

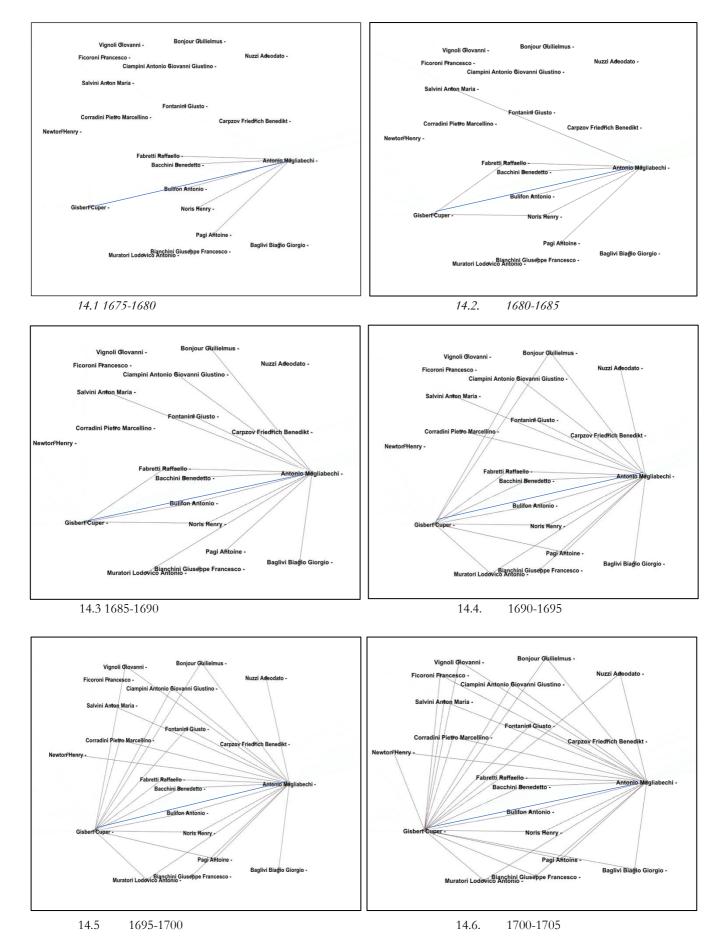


Fig. 14 Triadic closure in the epistolary network Magliabechi-Cuper over time. Network created with Gephi.

If we observe snapshots of Magliabechi's and Cuper's networks over time, it is possible to follow the formation of new edges through triadic closure.⁶⁴⁶ The first network shows the moment when Cuper and Magliabechi started to correspond with each other in 1677. At that moment, Magliabechi was already in contact with Raffaello Fabretti, Benedetto Bacchini, Antonio Bulifon, Henry Noris and Antoine Pagi. Fig. 14.2 shows the new edge we see from watching the network in fig. 14.1 over a long time span (1680-1685). In these years, Magliabechi introduced Cuper to his contacts Raffaele Fabretti, the papal antiquarian, and Enrico Noris, Cosimo's theologian, each of which resulted in a correspondence. More contacts join the network of Magliabechi in the successive phases, which will eventually become correspondents of Cuper as well (fig. 14.3-14.6).

Cuper tended to trust the recommendations made by Magliabechi. By propagating trust throughout a social network of acquaintances Cuper was able to infer more trusted persons and hence improve the performance of his own network. At the same time, through these contacts, his brokerage position between the Dutch Republic and Italy grew, which is clearly reflected by the growing importance of Cuper throughout these years. This is not only visible in the dynamics in figure 13, but also in Appendix 3. Cuper gained 6 spots in his brokerage position, from tenth in the period 1660-1670 (table 1) to fourth in the period 1670-1680 (table 2). After 1690, Cuper's list of acquaintances in Italy grew, contributing to his increasing brokerage position in these years (table 3-5). On the 16th of June 1696, for instance, Cuper reached out to Giovanni Giustino Ciampini (1633-1698) about the possibility to become a corresponding member of his *Accademia Fisicomatematica* in Rome.⁶⁴⁷ He contacted Ciampini after informing himself about the reputations of the Italian academies.⁶⁴⁸ In April 1692, Cuper asked Magliabechi what the origins of the strange names of the academies were. He was struck by what he had read in the *Nouveau voyage d'Italie* of François Maximilien Misson that the peculiar names of the Italian academies were worthy of horses rather than scholars:

"La Bizarrerie des noms, que ces gens la affectent, est une chose toute particuliere. En France nos Ecuiers en donnent a peu pres semblables a leurs chevaux de manege. Je vous nommeray seulement une douzaine de ces Academies. Les Addormentati de Genes; les Ardenti de Naple, les Immobili d' Alexandrie, les Fantastici de Rome."⁶⁴⁹

Cuper contacted Magliabechi for further explanation in this respect. On the 12th of April, Magliabechi answered Cuper that, although the names of the Italian academies seemed "poco onorevole", membership was "con tutto ciò onorevolissimo".⁶⁵⁰ The *Accademia della Crusca*, for instance, was so named because its members separated the wheat from the chaff, giving the Accademia the purpose of separating the good language from the bad language. With these words, Magliabechi had provoked Cuper's interest, who decided to contact the Roman academician Ciampino in 1696.⁶⁵¹ Besides Ciampini, he began to exchange letters with Gian Domenico Passionei, a Papal diplomat who visited Cuper in Deventer when he resided in the Dutch Republic to observe the peace negotiations leading up to the Treaty of Utrecht in 1713 and the scientist Francesco Bianchini (1662-1729), who worked for the papal curia and was

⁶⁴⁶ This approach is developed by Easley and Kleinberg, 44.

⁶⁴⁷ On Ciampini and his academy, see W.E. Knowles Middleton, 'Science in Rome', 1675-1700, and the Accademia Fisicomatematica of Giovanni Giustino Ciampini', *The British Journal for the History of Science*, 8 (1975): 138-154.

⁶⁴⁸ Jetze Touber, "I am happy that Italy fosters such exquisite minds' Gijsbert Cuper (1644-1716) and intellectual life on the Italian peninsula', *Incontri* 30, no. 2 (2015): 92-94.

⁶⁴⁹ François Maximilien Misson, *Nouveau voyage d'Italie, fait en L'année 1688*, 2 vols. (The Hague, H. van Bulderen, 1691), 216, transcribed in Touber, 93.

⁶⁵⁰ Magliabechi to G. Cuper, 12 April 1692, KB, KW 72 D 10, ff. 68-69, "not so honorable", "with everything very honorable".
⁶⁵¹ One letter from Cuper and Ciampini, written on the 16th of June 1696, is extent in the National Library of the Netherlands, KW 72 D 3.

celebrated for his astronomical and antiquarian investigations.⁶⁵² In 1705, he corresponded with the Roman curial official Giusto Fontanini (1666-1736), professor of eloquence at La Sapienza in Rome and librarian of Cardinal Giuseppe Renato Imperiali (1651-1737), and maintained contact with Fontanini's rival Ludovico Antonio Muratori.⁶⁵³ It was through the intermediation of Antonio Magliabechi that Cuper came into contact with most of these scholars.

In 1701, Magliabechi forwarded Cuper's letters to Fontanini. Since Cuper had praised the *Omelie del Sommo Pontefice* in his letter, Magliabechi hoped that Fontanini would show his letters to the famous antiquarian Francesco Bianchini. Fontanini, however, did not show the letter only to Bianchini, he also gave the letter to Pope Clement XI "che le ha vedute, e lette, con molta sodisfazzione, e di sua propria mano, copiate le notizzie, e novità Letterarie, che sono in esse".⁶⁵⁴ In addition, Clement XI told Fontanino that he would be glad to receive other letters of Cuper. Cuper was delighted with this news and bragged about it to his colleagues. When Zacharius von Uffenbach visited Cuper in Deventer in 1711, as part of his tour of the principal cabinets and libraries of England, Germany and the Dutch Republic, he expressed his skeptism when Cuper boasted that the Pope was so charmed by Cuper's letter that even the letters he wrote to others had to be read to him.⁶⁵⁵ Uffenback replied: "Ob ich nun gleich dieses alles wohl glaube, so liess es doch nicht wohl, so etwas von sich, zumal auf die Manier, wi e es geschage, vorzubringen."⁶⁵⁶

It was not only Magliabechi who played the role of recommender between the Dutch Republic and Italy. Jacob Gronovius did the same. Through the intermediation of Jacob Gronovius, Johannes Georgius Graevius came into contact with the librarian, which led to an elaborate correspondence that lasted from 1675 until 1702 (figure 15). Likewise, it was through Jacob Gronovius that the Dutch scientist Antoni van Leeuwenhoek and Magliabechi began exchanging letters (figure 16).⁶⁵⁷ Magliabechi informed Leeuwenhoek about the publications that came recently off the press in Italy. In 1695, Leeuwenhoek expressed his admiration for Magliabechi and dedicated his Latin version of the *Arcana Naturae Detecta* to Magliabechi "in order that scholars both in Italy and elsewhere may become acquainted with my trifling labors".⁶⁵⁸ Leeuwenhoek did not maintain an extensive network of contacts in Italy, but relied exclusively on the intermediation of Magliabechi. This example shows that Leeuwenhoek was aware that the best way to distribute his books in Italy was to dedicate his publications to bridging figures like Magliabechi. Last but not least, amongst de people who were introduced to Magliabechi, there was also the famous Pierre Bayle who came into contact with Magliabechi in 1697 through the intermediation of Laurens and Jacob Gronovius (figure 17).⁶⁵⁹

⁶⁵² The correspondence between Bianchini and Cuper, which lasted from 1709 until 1716, can be consulted in the National Library of the Netherlands, KW 72 G 23. The letters between Passionei and Cuper, written between 1670 until 1716, are extent in that same library, 72 H 14.

⁶⁵³ The correspondence between Fontanini and Cuper, which lasted from 1705 until 1715, can be consulted in the National Library of the Netherlands, KW 72 G 23. The letters between Muratori and Cuper, written between 1696 and 1714, are extent in that same library, KW 72 D 3.

⁶⁵⁴ Magliabechi to Cuper, 28 October 1702, KB, KW 72 D 12, f. 41, "has seen them, read them, with great satisfaction, and by his own hand, copied the reports, and literary news, in them."

⁶⁵⁵ Touber, "I am happy that Italy fosters such exquisite minds' Gijsbert Cuper (1644-1716) and intellectual life on the Italian peninsula', 94. Touber refers here to the work of M. Peters, 'Nicolaes Witsen and Gijsbert Cuper: Two Seventeenth-Century Dutch Burgomasters and Their Gordian Knot' (see note 656).

⁶⁵⁶ M. Peters, 'Nicolaes Witsen and Gijsbert Cuper: Two Seventeenth-Century Dutch Burgomasters and Their Gordian Knot,' *Lias: Sources and Documents Relating to the Early Modern History of Ideas* 16, no. 1 (1989): 111–150 (cit. Uffenbach, 116).

⁶⁵⁷ Eighteen of the letters that Leeuwenhoek wrote to Magliabechi have survived, and published in *Anthoni van Leeuwenhoek, Alle de brieven.* 15 vols (Amsterdam/Lisse: N.V. Swets & Zeitlinger, 1939-1999).

⁶⁵⁸ L.C. Palm, *Anthoni van Leeuwenhoek, Alle de brieven. Deel 11: 1695-1696*, vol. 11 (Amsterdam/Lisse: N.V. Swets & Zeitlinger), 51.

⁶⁵⁹ Magliabechi to L. Gronovius, 22-12-1697, LMU, Cod 4° Cod. Msc 777, f. 25. See also Magliabechi to J. Gronovius, 22 October 1697, LMU, Cod 4° Cod. Msc 777, f. 44, "Perché so che 'l dottissimo, ed eruditissimo Signore Baillio, è grande amico

The networks of Graevius, Leeuwenhoek and Bayle are consistent with the dynamics of closure and brokerage: we see that they first engaged in a network of trust and security before reaching out to more risky connections that allowed them to receive new and innovative knowledge from outside his local network (fig 15-17). In addition, their brokerage position increased after they became acquainted with Magliabechi, which enabled them to have access to unique information from Italy.

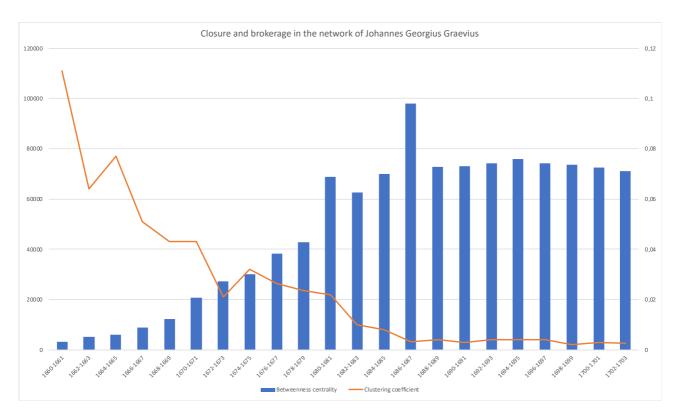


Fig. 15 Closure and brokerage in the network of Johannes Georgius Graevius

di V.S.Ill.ma, e del suo Signore Fratello, sono a supplicarle reverentemente de' loro favori. Da molti amici a Roma mi viene scritto, che nella detta Città di Roma, alle settimane passate, arrivarono molti esemplari del suo Lessico Critico, che subito però furono comprati. Mi soggiungono i detti amici, che anno veduto, che 'l signore Baillio, mi ha per sua bontà onorato, di nominarmi in esso più volte con lode, onore da ma per capo alcuno non meritato. Le prego per tanto a degnarsi di riverire in mio nome il suddetto dottissimo Signore, e rendergli da mia parte grazzie immortali di una sì eccessiva cortesia, usata con me, suo inutile Servo, non avendo io mai avuto fortuna di servirlo di cosa alcuna." The relationship between Magliabechi and Pierre Bayle will be discussed in Chapter 6.

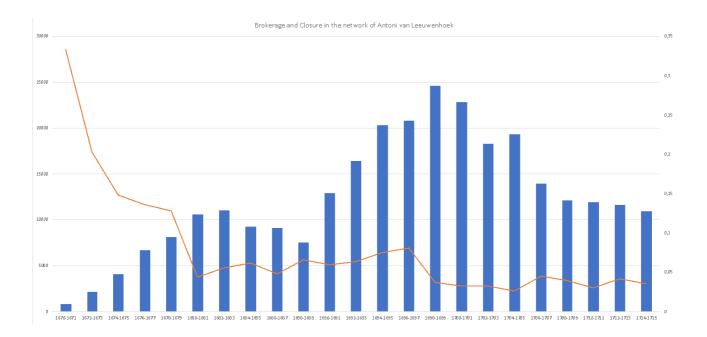


Fig. 16 Closure and brokerage in the network of Antoni van Leeuwenhoek

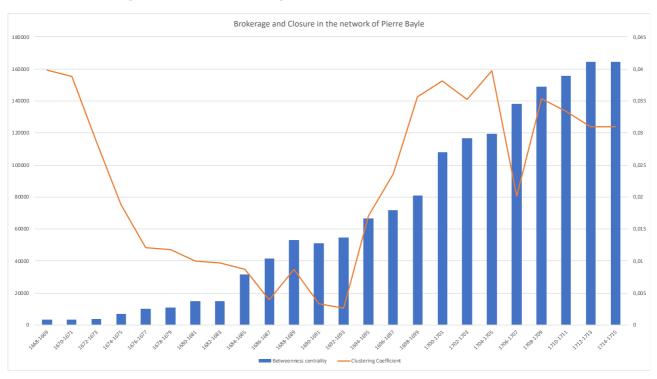


Fig. 17 Closure and brokerage in the network of Pierre Bayle

5.5. The introduction letter as currency

When acting as an intermediary, and particularly as a recommender, a scholar provided two acquaintances with a new contact, thereby drawing more people into the ever-expanding society of the Republic of Letters. At the same time, this suggests also the principle that, as the network becomes more richly

connected, individuals have less and less power over others.⁶⁶⁰ To make this more concrete, let us take a look at the network of Jacob Gronovius, *the* gatekeeper between Magliabechi and the Dutch scholarly society. Specifically, fig. 11 shows that Jacob Gronovius lost his brokerage role after he introduced Antoni van Leeuwenhoek to Magliabechi in 1685. When he joined the network of Magliabechi, Gronovius' betweenness in the network declined, while his clustering coefficient increased. Likewise, in 1697 Laurens Theodor Gronovius (figure 12) introduced Pierre Bayle to Magliabechi, which resulted in the loss of his brokerage position between Bayle and Magliabechi. This means that the structural hole between the Dutch Republic and the Grand Duchy of Tuscany occupied by Laurens and Jacob collapsed as other scholars entered the network of Magliabechi by establishing their own links to the Florentine librarian. The same dynamics are visible in the network of Magliabechi himself, who began to lose his centrality in the network after the 1700s. In these years, he introduced Gisbert Cuper to many key figures in Italy.

Following this line of thinking, this means that introductions imply that the recommender serving as the bridge will lose his brokerage affordances, i.e. his information and control advantage. If A brings two of his own contacts, B and C, in touch, A will lose his gate-keeping position between B and C. In fact, B can now contact C directly. These dynamics can be implemented using a specific economic metaphor: currency. Introductions are the currency of the social transactions in the epistolary network that can only be 'spend' only once. After having introduced a person, the transaction cannot be longer repeated and the social capital of the recommender is reduced permanently. It is in this respect that introductions need to be considered as the social costs of the Republic of Letters as well as a moral obligation.

This explains also why Jacob Gronovius denied the delivery of Magliabechi's letters to his opponents. For example, in 1674, Magliabechi wrote a letter to Jacob in which he set out his arguments as to why Gronovius should forward his letters to the Dutch classical scholar Abraham van Berkel. Gronovius' however, who was involved in a conflict with Van Berkel, refused to forward Magliabechi's letters to Van Berkel. Similarly, in 1698, Magliabechi received several books from the Utrecht scholar Ludolf Küster (1670-1716). According to the scholarly ideals of reciprocity in the Republic of Letters, Magliabechi was now obliged to Küster. Magliabechi could fulfil his obligation by writing him a letter to thank him for his gift:

"Il signore Neocoro io non lo conoscevo niente. Mi scrisse, e mi mandò a donare i suoi Libri, onde ogni convenienza voleva che io gli rispondessi"⁶⁶¹

Magliabechi asked Jacob Gronovius to deliver his letters to Küster, but Gronovius refused to collaborate. These examples, which will be discussed in more detail in the next chapter, show that Gronovius impeded the direct communication between Magliabechi and his opponents, hence maintaining his gate-keeping role between Magliabechi and the Dutch Republic.

5.6. CONFLICTS IN THE NETWORK

In 1675, Nicolaas Heinsius broke off all contact with Magliabechi. Nicolaas Heinsius held Magliabechi responsible for the onset of a conflict between Jacob Gronovius and the University of Pisa, which will be discussed in more detail in the next chapter. Because of this, Jacob Gronovius was ordered by Cosimo III to leave the Grand Duchy of Tuscany as soon as possible and Heinsius was afraid that this would

⁶⁶⁰ Easley and Kleinberg, cit. 295.

⁶⁶¹ Magliabechi to J. Gronovius, undated, LMU, Cod 4° Cod. Msc 778, f. 6, "Sir Neocoro I did not know at all. He wrote to me, and he gifted his books to him, and because of this I have to answer him."

have damaged the Dutch relations with the Medici family. Angry that Magliabechi did not do anything to resolve the conflict between Gronovius and his enemies, Heinsius never wrote a letter to the librarian again. Heinsius' decision to throw Magliabechi out of his network negatively affected the brokerage role of Magliabechi, whose betweenness centrality did not increase so steeply as in previous years (see figure 6). Yet, Heinsius did not only disadvantage Magliabechi, he undermined his own position as well. In fig. 6, we can see that the brokerage position in the network of Heinsius decreases after 1675. From that moment on, it became more difficult for Heinsius to obtain news and books from Italy, who merely had to rely on the intermediation of Apollonio Bassetti to circulate his books in Italy. Heinsius had met Bassetti in the Dutch Republic, when the latter accompanied Cosimo III on his grand tour, and had stayed in touch with him ever since.

While the betweenness of Magliabechi and Heinsius is negatively correlated with the quarrel, the betweenness centrality of their mutual correspondents is going in the opposite direction. Fig. 14 shows that the betweenness centrality of Apollonio Bassetti increased in the aftermath of the clash in 1675. Likewise, the betweenness centrality of Jacob Gronovius and Johannes Georgius Graevius underwent similar dynamics (fig. 11 and 15). This implies that Bassetti, Gronovius and Graevius obtained a brokerage position between Magliabechi and Heinsius, filling the structural hole between them. A close reading of the letters written by Magliabechi illustrate the intermediary, rather arbitral, role occupied by Gronovius and Graevius in these years:

"Io mi maraviglio che 'l signore E.... [Heinsius] abbia avuto cuora di salutarmi per mezzo del signore Grevio. Io per vulpinar con la volpe lo reggo a rendergli da mia parte saluti."⁶⁶²

Figure 6 shows that it will not be long before Magliabechi was able to reassess his position in the network. In fact, if one looks at the developments in Magliabechi's epistolary activity (table 1), we can see that the number of correspondents practically explodes after 1675, from 2 to an average of 11 correspondents each year. For Magliabechi, these contacts filled the void left behind by Heinsius. This enabled him to restore his intermediary position in the network. In other words, Magliabechi's capacity to occupy structural holes in the network, which is about the value of increasing variation in a network with new generations of scholars, allowed him to become and remain one of the leading players in the Republic of Letters for more than 40 years.

5.7. INWARD-LOOKING DYNAMICS IN THE NETWORK OF BASSETTI

While the previous discussions revolved around scholars who strived for closure in the beginning of their career and then reached out to contacts outside their network of trust to obtain new and recent knowledge, the metrics regarding the network of Apollonio Bassetti show exactly the opposite. Fig. 18 shows how the grand ducal secretary Apollonio Bassetti moved between open and closed network throughout the course of his career. We see that his brokerage position rapidly increased at the time of his stay in the Dutch Republic in 1667-1668. During his travels, Bassetti actively looked for key figures who could provide him, once he returned to Florence, with detailed information about the latest developments in the Dutch society. He sure knew how to pick the right contact in the Dutch Republic: it was *the* hub and broker Nicolaas Heinsius who became his most important informer.⁶⁶³ Their

⁶⁶² Magliabechi to J. Gronovius, undated (1675), Cod 4° Cod. Msc 777, f. 132, "I am surprised that sir E[insio] has had the guts to greet me by way of sir Graevius. I, behaving like a fox, ask you to pass on my greetings to him".

⁶⁶³ The correspondence between Nicolaas Heinsius and Apollonio Bassetti is extent in the State Archive of Florence, Mediceo del Principato, no. 4261-4263.

correspondence lasted until the death of Heinsius in 1681. Besides receiving news of the Dutch Republic from Heinsius, Bassetti occasionally received news from Pieter Blaeu and from his network of subjects living in Amsterdam, of whom the most important were the Florentine merchants Francesco Feroni, Giovacchino Guasconi, Giovanna da Verrazzano and Giacinta del Vigna. The importance of Bassetti's brokerage position between the Grand Duchy of Tuscany and the Dutch Republic is also underlined by his appearance in Appendix 3 (table 1 and 2), in which Bassetti ranks in the seventh place during the 1660s and 1670s.

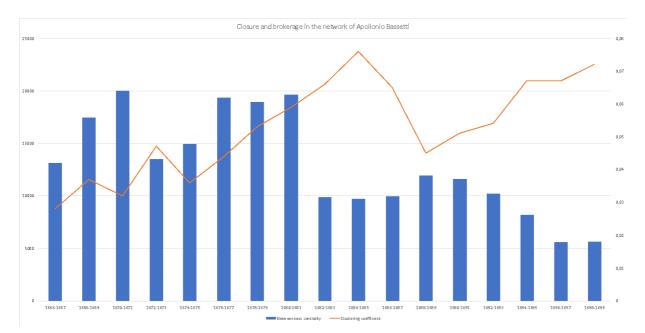


Fig. 18 Closure and brokerage in the network of Apollonio Bassetti

Apparently, however, Bassetti did not manage to keep this up: a decreasing betweenness centrality between 1672 and 1673 implies that he lost his brokerage position (see figure 14). This decline is certainly not a good sign, especially considering the fact that this moment coincides with Bassetti's first days in the office as the *Segretario della Cifra* (1670) of Grand Duke Cosimo III, which may be defined, as a modern-day equivalent, as the Secretary of State. The explanation for his demise is apparent: it was caused by Magliabechi. In 1671, Antonio Magliabechi began to exchange letters and books with Nicolaas Heinsius on a regular basis. Consequently, the correspondence between Heinsius and Magliabechi undermined the position of Bassetti in the network, who lost his exclusive access to Heinsius.

Yet, figure 13 shows that Bassetti managed to pull himself together. He regains his intermediary position in the period 1674-1681. In these years, Heinsius and Magliabechi were in a middle of a dispute, which, as we shall see in the next chapter, resulted in the dismantling of their correspondence in 1675. The missing link between Heinsius and Magliabechi allowed Bassetti to function as a broker between them, as is illustrated by the correspondence between him and Guasconi. On the 19th of June 1679, for instance, Guasconi informed Bassetti that Heinsius had sent him a box of recently published editions of his Virgil.⁶⁶⁴ Together with his trusted publisher Daniel Elzevier, Heinsius had addressed the books to

⁶⁶⁴ Guasconi to Bassetti, 19 June 1697, ASF, MdP, 4263 (XII), c. 587, "Dell'pacchetto libri accennatoli con la mia della passata ingiunto con questa glene mando la polizza di carico che si compiacerà servirsene per farne all'arrivo della nave in Livorno per curar la riceuta servendoli che il suo contenuto consiste in sei pieghetti appartenenti alle persone che ciascheduto pieghetto sta soprascritto cioè: 1 pieghetto per il Serenissimo GranDuca nostro Padrone; 1 detto per l'Emenisimo signore cardinale

Bassetti "soo dat niet twyffele ofte sullen wel te recht koomen".⁶⁶⁵ In October 1680, Bassetti informed Heinsius that the books had arrived in Tuscany.⁶⁶⁶

The intermediary role of Elzevier is supported by the metrics in Appendix 3 in which the name of Elzevier appears in the 18th place in table 2. Bassetti was commissioned to deliver the books to other leading scholars in Florence, including Antonio Magliabechi. Despite the difficult relationship between Magliabechi and Heinsius, the latter continued to send his books to the librarian. The intermediary role of Bassetti enabled Heinsius to do so while keeping a safe distance from Magliabechi.

Figure 18 shows that the position of Bassetti follows a downward trend in the 1680s which implies that he lost his intermediary position again. The death of Nicolaas Heinsius in 1681 laid the seeds of this demise. Consequently, Bassetti's network turned inwards, as is shown by a high clustering coefficient and a low betweenness centrality score from the 1680s onwards. In these years, he primarily maintained contact with the tightly-knit merchant communities in Amsterdam. This closed network enabled Bassetti to exercise control over his own subjects. The example of the Florentine engineer Pietro Guerrini is illustrative in this respect. As has been discussed in the previous chapter, Guerrini travelled to the Dutch Republic from 1682 until 1684 to spy on the latest technological innovations. Throughout his stay in the Dutch Republic, Guerrini received assistance from Pieter Blaeu and Giovacchino Guasconi, as ordered by Apollonio Bassetti. His decision to put his most loyal correspondents in the service of Guerrini was an informed and strategic choice: through them he could control the young Guerrini, as is shown by the letters Guasconi sent to Bassetti. In these letters, Guasconi informed Bassetti about the whereabouts of Guerrini. On the 7th of July 1684, for example, Guasconi reported that Guerrini had become victim of a serious disease that obstructed him to continue his espionage activities.⁶⁶⁷ Yet, he soon found out that Guerrini was faking his illness so he could stay longer in the company of a Flemish woman "che lo ispiri diversamente".668

The death of Heinsius caused Bassetti to look inward rather than outward. He interacted more and more with his own agents and less and less with outsiders. As the secretary of state, Bassetti was responsible for the reputation of Cosimo III, and therefore had to be prudent in the exchanges in which he was involved. This might have been the reason why he did not want to take any risks, preferring to have long-standing relationships with persons from whom he knew that he could trust them. Such a closed circle of contacts enabled him to receive and exchange confidential knowledge, maybe even state

Barberini; 1 detto per Vostra Signoria illustrissima; 1 detto per il signore cavaliere dall'Pozzo; 1 detto per il signore abbate Gradi; 1 detto per il signore Antonio Magliabechi".

⁶⁶⁵ Veder, ed., Brieven van Daniel Elzevier aan Nicolaas Heinsius (9 mei 1675-1 juli 1679), volgens het handschrift bewaard ter Universiteitsbibliotheek te Utrecht, met enkele aantekeningen uitgegeven, 492, "There is no doubt that they will reach [Florence] safely".

⁶⁶⁶ Bassetti to N. Heinsius, 10 October 1680, UBL, BUR F 7, "Sono anch'io impaziente d'aver sotto gli occhi l'erudite fatiche, fatte da Vostra Signoria sopra Vergilio, ma il Dono ch'ella me ne trasmesse un pezzo fà è capitato solo ultimamente à Livorno, e sta ora purgandosi da'i rispetti di sanità in quei lazzeretti, onde non potrà tardar molto à pervenirmi". The appreciation of Heinsius' Virgil by Cosimo III is expressed in his letter to N. Heinsius, 7 November 1680, BUR F 7, "L'invitto nome del Re Xpmo, che Vostra Signoria pose in fronte al suo vergilio, conviene mirabilmente al merito dell'Autore, e dell'opera, mentre riprodotta alla publica luce dalla fatiche illustri di sua nobil penna nel bel candore dell'antica purità, ben richiedeva la tutela d'un Eroe, non meno Augusto del primo. Io però tengo in sommo pregio l'accettissimo dono che Vostra Signoria ha voluto farmene, e sarà custodito tra i volumi più riguardati del mio Gabinetto, anche come argumento della singolare stima ch'io porto alla di Lei virtù; che in questo senso deve interpretarsi la memoria fatta di me troppo onorevolmente nella prefazione. E ringraziandola al più vivo segno di tanti, e tanti effetti dell'amor suo, ch'ogni giorno in abbondano, Le confermo l'ottima legge, che Le sarà mai sempre osservata dal mio, e pieno disparzialità cordialissima auguro à Vostra Signoria dal Cielo consolazioni, e salute perfetta."

⁶⁶⁷ Guasconi to Bassetti, 7 July 1684, ASF, MdP, 4263, f. 768, "Questa settimana io ricevo lettera dell'signore Pietro Guerrini di Ipri che mi dice andava sempre pi. (ma lentamente) avanzando nell'recupero di sua pristina sanità, ma la forza ne i piedi era dice ostinata nell'ritornare".

⁶⁶⁸ Bassetti to Guerrini, 29 August 1684, in Francesco Martelli, *Il Viaggio in Europa Di Pietro Guerrini (1682-1686): Edizione Della* Corrispondenza e Dei Disegni Di Un Inviato Di Cosimo III Dei Medici, vol. 1), LXXVIII.

secrets (like the secret newsletters of the diplomat Abraham de Wicquefort), that needed to be kept hidden from outsiders.

Bassetti held on to his familiar and conservative network of Tuscan merchants during his entire career, in particular with the Amsterdam based Florentine merchant Giovacchino Guasconi who served the Medici court from 1673 until 1682. Guasconi's chief responsibilities were to fill Bassetti's orders for all sorts of imports from the East and the Orient. After the death of Nicolaas Heinsius it seems that Guasconi also took over his role, informing the Grand Duchy about the scholarly developments of the Dutch society. In the 1680s, for instance, he began to send several literary journals to Bassetti, including copies of the *Bibliotheca Universale* and Pierre Bayle's *Nouvelles de la République des Lettres*. On the 23rd of August 1686, for instance, Guasconi informed Bassetti that he had sent the 21 previous issues of the *Nouvelles de la République des Lettres*, which were published monthly in Amsterdam.⁶⁶⁹ Once these issues arrived in Florence, Bassetti was said to be 21 months behind!

Retrieving up-to-date information is an essential feature to run a state. Clearly, Bassetti did not manage to keep up with the scholarly developments in the Republic of Letters. This is exemplified by the tightly-knit network structure from the 1680s onwards as shown in figure 18, which formed an insuperable barrier for the flow of recent and innovative information in his network. He was not able to fill the structural holes left by the absence of Heinsius, unlike Magliabechi who continuously reached out to new generations of correspondents in the Dutch Republic, providing him with varied information and news about recently published books. A way to overcome his difficulties, without relinquishing control over the security of his own network, might have been a collaboration with Magliabechi, whose expertise and network could have served him to obtain every information he needed. Magliabechi, in fact, maintained direct contact with the editors and publishers of the *Nouvelles del la République des Lettres*, including Pierre Bayle, Henry Desbordes and Jean Le Clerc. Yet, it seems that Magliabechi and Bassetti were working completely independently of each other. Various examples throughout this study have also shed light on the hatred and distrust towards each other, which undoubtedly contributed to the apparently missing cooperation between the two. The clumsy collaboration is exemplified by the following case regarding the purchase of books from the *Biblioteca Heinsiana*.

In the memory of Heinsius, Cosimo III desired to purchase a number of valuable books from Heinsius' library, which was going to be auctioned off in Leiden in 1683. Initially, the complete collection of Nicolaas Heinsius was meant to be bought by the Leiden University Library. However, because of budgetary constraints the library was unable to acquire the collection. Therefore, soon after the death of Nicolaas Heinsius, Johannes du Vivié (1655-1733), a Leiden bookseller and auctioneer, was commissioned to compile a catalogue of the circa 13.000 books contained in Heinsius' library. A year later, Du Vivié had finished the catalogue and asked Abraham Elzevier to print 350 to 400 copies, which were subsequently distributed across Europe. On the 10th of February 1683, Magliabechi informed Bassetti that Carolus Crucius, one of Magliabechi's new additions to his network, had sent him the catalogue "nel quale sono certo i più prezziosi, ed i più rari Libri, che possano mai trovarsi".⁶⁷⁰ Because

⁶⁶⁹ Guasconi to Bassetti, 23 August 1686, ASF, MdP, 4264, f. 123, "Comprendo dalla gentilissima di V.S.ill.ma 6 dell'corrente la riceuta dell'libretto intitolatolo Memorie della repubblica di letterati quale secondo che ogni mese verrà dato in luce glene anderò continuando l'invio e li precedenti numero 21 già stampati come dice tutti insieme per via di mare in congentura di altre robbe, a prima congentura gli trasmetterò con portarglene l'avviso". From later letters it appears that it concerns the *Nouvelles del la République des Lettres* edited by Pierre Bayle and published by the Huguenot printer Henry Desbordes from 1684 until 1687 in Amsterdam. About this, see Hubert Bost, *Un "intellectuel" avant la lettre: le journaliste Pierre Bayle, 1647-1706: l'actualité religieuse dans les nouvelles de la République des lettres, 1684-1687 (Amsterdam: APA-Holland University Press, 1994). See also, Koen Vermeir, 'The Dustbin of the Republic of Letters. Pierre Bayle's "Dictionaire" as an encyclopedic palimpsest of errors', <i>Journal of Early Modern Studies* 1, no 1 (2012): 109-149.

⁶⁷⁰ Three letters from Crucius to Magliabechi have survived in the National Library of Florence, Fondo Magliabechiano, VIII 270. They were all written in 1683. Magliabechi to Bassetti, 10 February 1683, ASF, MdP, Carteggi dei Segretari, 1528, "Il

Heinsius had been a "si gran Servidore" of the Grand Duke and a "si caro Amico" of Bassetti, Magliabechi was convinced that Cosimo III was interested in buying several books from the auction. On the 17th of February, Bassetti confirmed that he received the catalogue, but that he is unable to return it to Magliabechi because the Grand Duke "vuole scorrerlo un altro poco"⁶⁷¹ On the 5th of March, Magliabechi urged Bassetti to return the catalogue because he had heard from Crucius that the sale had already taken place. In addition, many others, like Prince Francesco Maria de' Medici and Pietro Maria Cavina (1637-1690) desired to see the catalogue as soon as possible.⁶⁷² Bassetti answered Magliabechi three days later that the Grand Duke "volveva vederlo un altro poco".⁶⁷³ More than one month later, long past the auction, Magliabechi sent the catalogue to his friend in Siena, Filippo d'Elci, now that the Grand Duke had finally seen the catalogue.⁶⁷⁴ Two months after the auction, on the 14th of April 1683, Magliabechi commissioned Pieter Blaeu to buy several books from the *Biblioteca Heinsiana* for Prince Francesco Maria de' Medici. Pieter Blaeu answered Magliabechi on the 11th of June 1683 with bad news:

"Mi è pervenuta la nota d'alcuni libri estratti dal Catalogo della libreria del Sig.re Heinsio che desiderebbe il Ser.mo Principle Francesco di Toscana: non ho mancato di far vedere et essaminar la detta nota da' librari principali di questa Città, li quali hanno fatto comprar, secondo mi dicono, parecchi libri nella vendita della detta Libraria, e tuttavia mi sono accorto che da tutti questi librai non potrò havere se non cinque o sei libri della detta nota al più e non de' più grandi ma de' mediori e ciò a prezzo rigorosi, però mi è parso bene di non comprar quelli pochi: questi librai mi hanno dato per risposta che li libri della detta nota sono li più rari di tutta la detta Libreria quantonque non sono li più grandi e grossi: mi dispaice fuor di modo che in questa occurenza non posso havere la fortuna di poter servire il detto Ser.mo Sig.re Principe."675

gentilissimo, ed eruditissimo signore Crucio, Parente stretto del signore Einsio, che fu si gran Servidore di S.A.S., e si caro Amico di V.S.Ill.ma, mi ha mandato per la Posta l'Indice de' Libri del detto signore Einsio, che si vedranno spezzatamente a 15 del seguente mese. Mi scrice come vedrà, che me lo manda per la posta, perche S.A.S. possa vedere se vi è cosa alcuna che brami. So che S.A.S. impiegata sempre in affati importantissimi, gravissimi, e santissimi, non può perder tempo in tal cosa, ma con tutto ciò, per non defraudar quel cortesissimo signore manderò quell'Indice a V.S.Ill.ma. Sapevo che il signore Einsio aveva una delle più insigne Librerie di Europa, ma con tutti ciò mai mi sarei presupposto che fosse tanto prezziosa, come veramente è. Sono in essa i migliori, e più vari Libri del Mondo. Io ne ho qualcuno, e con tutto ciò, se avessi danari, ne comprerei per cinque o sei mila scudi."; Magliabechi to Bassetti, 13 February 1683, ASF Mediceo del Principato, Carteggi dei segretari, 1528, "Eccole il Catalogo della Libreria del signore Einsio, già così suo caro Amico, nel quale sono certo i più prezziosi, ed i più rari Libri, che possano mai trovarsi".

⁶⁷¹ Bassetti to Magliabechi, 17 February 1683, BNCF, Magl. VIII 425, f. 36, "Colla seconda sua lettera ricevette l'indice della Biblioteca Heinsiana, qual posi nelle mani di S.A. nostro signore con dirli ciò ch'ella mi scriveva del pregio che merita una scelta di si esquisiti volumi in ogni genere di disciplina, e credevo d'averlo a poter rimandare a V.S.Ill.ma questa sera, con le risposte dell'A.S, ma non sarà vero per che S.A. vuole scorrerlo un altro poco".

⁶⁷² Magliabechi to Bassetti, 5 March 1673, ASF, MdP, Carteggi dei Segretari, 1528, "Mi muovo solamente a scriverle, e pregarla, mentre che S.A.S. le avesse restituito l'Indice de' Libri del signore Einsio, a favorirmene, poiche come puù vedere dall'inclusa del signore Crucio, i Libri son cominciati a vendersi., e mi fanno instanza di vedere il detto Indice, non solo alcuni qua, ma me ne è anche scritto di fuora, come dal sinore Cavina, e da molti altri."

⁶⁷³ Bassetti to Magliabechi, 8 March 1673, BNCF, Magl. VIII 425, f. 40, "Non solamente il Padrone Serenissimo non mi restituij l'Indice Heinsiano, ma questo giorno avendone io motivato a S.A. qualche cosa con buon modo, m'ha detto, che voleva vederlo un'altro poco, ond'a V.S.Ill.ma dice mia colpa d'aver trasgredito i suoi ordini

⁶⁷⁴ Magliabechi to d'Elci, 14 April 1683, MdP, 5575a, ins. 1, f. 4, "Ha finalmente veduto il Serenissimo Principe nostro signore il catalogo delli libri del signore Einsio che qui aggiunto rimando a V.S.Ill.ma".

⁶⁷⁵ Blaeu to Magliabechi, 22 June 1683, in Alfonso Mirto and Henk Th. van Veen, *Pieter Blaeu : Lettere Ai Fiorentini: Antonio Magliabechi, Leopoldo e Cosimo III de' Medici, e Altri, 1660-1705*, 235, "I received the list with several books extracted from the catalogue of the library of sir Heinsius desired by Prince Francesco of Tuscany: I did not fail to show and let examine that list to the principal booksellers in this city, who have bought, at least this is what they said to me, many books during the selling of that library. Yet, I noticed that I can only have maximum five or six books from the list from all these booksellers, and not even the biggest books, but the mediocre ones and that at high prices, for which I thought it would be right not to buy these few books. These booksellers have answered me that the books in that list are the rarest of the entire library, even though they are not the biggest and the largest ones. I am very sorry that I cannot have the fortune to serve the Prince in this."

Meanwhile, Bassetti took the lead on his own, ordering books for the Grand Duke without giving any notice to Magliabechi, who continued to believe that the Grand Duke was still browsing the catalogue, deciding which books to buy. On the 22nd of February 1683, so 5 days after Bassetti received the catalogue from Magliabechi, Bassetti informed Guasconi in Amsterdam that the Grand Duke desired to purchase a number of valuable books from Heinsius' library ."Per mezzo di qualche amico intelligente", Guasconi needed to do everything he could to obtain the following books: an Islandic Bible, mentioned on the first page under number 9 of the catalogue's section "Theology in folio' and *S.Remigij explanationes epistolarum B. Pauli Apostoli, Mogunt 1514*.⁶⁷⁶

Bassetti's letter, however, arrived too late in Amsterdam and Guasconi notified Bassetti that the books he ordered for Cosimo had already been sold. Jansonius, the principal bookseller of Amsterdam, had informed Guasconi that there is also an Islandic Bible in Hamburg and he promised to write to his friends there to sell him the book at a modest price. Moreover, Guasconi visited Johannes Di Vivié in Leiden, who had supervised the sale of the Bibliotheca Heinsiana to ask him who had bought the books. If Guasconi would know the names of the buyers, he maybe could buy the books at a higher price. On the 2nd of April 1683, Guasconi informed Bassetti that he was able to identify the owner of the book San Remigij explanationes epistolarum and convinced him to sell him the book for five florins.⁶⁷⁷ The islandic Bible, however, was bought during a secret auction of the Bibliotheca Heinsiana by an English minister who lived in Leiden. He does not want to sell the books, for which he had paid 10 Florins. Besides the Grand Duke, a person in the service of the Vatican Library in Rome had offered him 46 florins, but the minister did not want to sell the bible. Meanwhile, Guasconi had not heard yet from Jansonius, who was trying to buy a similar Icelandic bible in Hamburg. Then, on the 30th of April 1683, Guasconi informed Bassetti that it was also impossible to find the Icelandic Bible in Hamburg, because the book which the bookseller Jansonius had in mind had already been sold.⁶⁷⁸ Bassetti was left empty-handed. This was certainly his own mistake if we consider his marginal position in the network of these years. If he would have relied on the help of Magliabechi who, with his relations, could get better hold of books than the Tuscan merchants in Amsterdam, he would have had a greater chance to obtain what he needed.

The failed dynamics between Bassetti and Magliabechi are in sharp contrast with the informationhandling techniques adopted by the successful French secretary of state Jean-Baptiste Colbert, who operated in about the same period. More than Bassetti, Colbert understood the value of librarians, and of the Republic of Letters in general, to receive the information that was needed to run a government. Jacob Soll has argued that the case of Colbert's information systems shows the extent to which the Republic of Letters coexisted in a symbiotic relationship with the growing sphere of state information and knowledge. Colbert sought out the services of Don Jean Mabillon (1632-1707), librarian of the Abbey of Saint-Germain-des-Prés in Paris to look for documents relative to the rights of the Gallican church, which were central to fortifying Louis's power and claims over ecclesiastical benefices.⁶⁷⁹ In 1663, Colbert

⁶⁷⁶ Bassetti to Guasconi, 22 February 1683, ASF, MdP, 4263, f. 693, "By means of an intelligent friend"

⁶⁷⁷ Bassetti to Guasconi, 2 April 1683, ASF, MdP, 4263, f. 699, "Circa la bibbia in lingua islandica questa fu comprata alla vendita segreta della libreria Heinsiana da un predicante inglese dimorante in Leijden che sento non la vuole vendere, a lui è costato circa fiorini 10 e dopoi persona che gle la ha richiesta per commissione teneva di Rome dicono per servitio della Biblioteca Vaticana gli ha presentato fiorini 46, ma il detto predicante per non darli subito occasione di maggior retinenza e pretensione. Questo libraio Jansonio che mi haveva dato intenzione di una simile bibbia dice non tener ancora risposta di Hamburgho di dove l'attendeva che non so quello sia per seguirne".

⁶⁷⁸ Bassetti to Guasconi, 30 April 1683, ASF, MdP, 4263, f. 703, "Circa la Biblia Islandica ne anco in Hamburgho si hebbe fortuna ritrovarla già che quella che in detto luogho credeva ancora ritrovarsi questo signore Jansonius libraro era stata venduta".

⁶⁷⁹ Soll, The Information Master. Jean-Baptiste Colbert's Secret State Intelligence System, cit. 121.

names his own librarian, the mathematician Pierre de Carcavy (1600–1684), royal librarian to consolidate the link between his private collection and the Royal Library.⁶⁸⁰ In addition, the librarian Étienne Baluze helped Colbert to manage historical documents for his daily political uses. Colbert insisted that his collection needed to be up-to date and Baluze was responsible for this, being commissioned to acquire all new publications and archival discoveries.⁶⁸¹

5.7. WITH GREAT POWER, COMES GREAT DANGER

Brokers as Magliabechi could use their centrality in a network – their "betweenness" – to engage in a strategic behavior as entrepreneurs. This granted them access to powerful positions in the network, that is, having exclusively access to information and people. The wider the network of a scholar, the greater his status, both because he clearly had the respect and confidence of many other colleagues, and because his extensive network of contacts allowed him to procure exclusively assistance to others.⁶⁸² Magliabechi's large network of contacts put him in the unique position to transmit bibliographical news, books and ideas from one person to another. Besides knowledge, Magliabechi could lend scholars contacts. He could guarantee aspiring scholars an entry into his trans-European network and introduce scholars to each other who were working in the same field. We have seen, for example, how he guaranteed Cuper and entrée in his extensive network of Italian contacts, introducing him to key figures in Italy. This web of socially dependent connections allowed Magliabechi to become and remain one of the leading players in the Republic of Letters for more than 20 years, despite the waning glory of Florence around that time.

At the same time, his brokerage position in the network posed a significant threat to others. Because Magliabechi had access to a wide variety of information, he was often subject of effective targeted 'attacks' by his enemies who sought to discover what he was up to. It is therefore not by chance that the letters of Antonio Magliabechi were opened, read and sometimes even deciphered by persons who were eager to know what information he received from the farthest reaches of Europe. A letter from the 25th of September 1674, for instance, shows that Magliabechi urged Heinsius to be careful what he wrote in his letter to him because the letters risked interception by secretary Apollonio Bassetti, who controlled all his incoming mail from the Dutch Republic:

"Odiandomi pertanto a morte, il detto Segretario, [...] certo che mi apriranno tutte le lettere, che mi saranno mandate da costà. Per questo la supplico a non mi mandar nel piego di S.A.S. se non le lettere contenenti novità letterarie, o simili cose che possano essere vedute da tutti. Le altre, nelle quali V.S. si degnasse di scrivermi qualcosa che avesse caso che fosse segreta, mi onori di mandarmela a dirittura per la posta."⁶⁸³

To cover himself against the threat of his letters being intercepted, Magliabechi often had to resort to measures of secrecy, something which I have discussed in detail in the introduction of this study. We have seen that, in many cases, he was self-censoring by way of vague allusions and omissions, he wrote confidential information on tiny little papers that could be easily hidden and urged his correspondents to destroy his letters immediately after reading, in an attempt to make the information contained in his

⁶⁸⁰ Soll, 99.

⁶⁸¹ Soll, 122.

⁶⁸² Goldgar, Impolite Learning, cit. 30.

⁶⁸³ Magliabechi to N. Heinsius, 29 September 1674, UBL, BUR F 8, "Because that secretary [Bassetti] hates me to death, off course they will open all my letters, that will be sent to me from there [the Dutch Republic]. Therefore, I beg you to send only those letters that contain literary news, or such things that can be seen by everyone, in your mail to Cosimo III. The other letters, in which Your Illustrious Lordship deigns to write me something that you would like to keep secret, you honor me to send them to me immediately by mail."

letters inaccessible for outsiders. He also protected other important brokers in the network, like Giusto Fontanino (see Appendix 3, table 5), who sent Gisbert Cuper's letters to Pope Clement XI, simply referring to him as the "amico di Roma" and urged Cuper to tear the letter apart immediately after reading "perché mai in tempo alcuno possa esser veduta da anima vivente, scrivendolela io, in estrema segretezza, e confidenza".⁶⁸⁴

⁶⁸⁴ Magliabechi to G. Cuper, 28 October 1702, KB, KB, KW 72 D 12, f. 41, "the friend of Rome", because no single living soul can ever see this, as I write this in extreme secrecy and confidentiality."

CHAPTER 5

Keeping the Balance

The management of negativity in the early modern scholarly network

INTRODUCTION

"Il vedere la gran malignità che è, e qua, ed anche in buona parte costà, come V.S. Ill.ma avrà veduto dalle mie Lettere, onde non solo non mi par bene che ci tiriamo addosso gl'altri nemici, ma in oltre stimo necessario il farci più amici che possiamo, per far tanto maggiormente scoppiar d'invidia i maligni."⁶⁸⁵

Antonio Magliabechi to Jacob Gronovius, March 26, 1675

In the eyes of librarian Antonio Magliabechi, the only way to respond to malice is through the accumulation of friends. On the fact of it, that is what is being constructed in the letter of Magliabechi, written to Jacob Gronovius on the 26th of March 1675, that begins this chapter. Friendship is seen here in the context of the Republic of Letters. Magliabechi is referring to the moral foundations of the Republic of Letters in which bonds of friendship and a shared commitment to the common good linked early modern scholars in a collaborative search for knowledge.⁶⁸⁶ The more these bonds were strengthened, the better they could operate against their enemies, who sought to ruin their reputation and career, thereby threatening the very expansion of the Republic of Letters. The question, then, that arises from this is how did Magliabechi regulate and manage the mix of friendly and hostile relationships that took place within his network?

In most studies that map the Republic of Letters digitally, the edges of the network carry a positive meaning and are commonly interpreted as a collaboration, a membership, or the transmission of information. In many contexts, however, the edges may also be associated with negative sentiments. In fact, the network of Magliabechi was regularly beset by controversy, jealousy, disagreement, and sometimes even outright conflict. Therefore, this chapter emphasizes the importance of negative edges, showing how negativity plays a constitutive role in the very concept of the networked structure of the Republic of Letters. Specifically, the aim of this chapter is to shed light on the interplay between negative and positive connections in the network, thereby adding a new dimension to understand how the network between the Dutch Republic and the Grand Duchy of Tuscany actually took shape.

⁶⁸⁵ Magliabechi to Gronovius, 26 March 1675, LMU, Cod 4° Cod. Msc 777, f. 123, "seeing the great evilness that reigns here, and also to a large extent there, as Your Illustrious Lordship has seen from my letters, whereby I believe that it is not good that we pull ourselves other enemies, but I deem necessary that we make us as many friends we can, so that evil persons burst with envy even more."

⁶⁸⁶ This definition of the moral foundation of the Republic of Letters comes from Florence Hsia, 'Athanasius Kircher's *China Illustrata*', in *Athanasius Kircher: The Last Man Who Knew Everything*, ed. Paula Findlen (New York/London: Routhledge, 2004), 394.

The previous chapter showed how Magliabechi cultivated a vast epistolary network that stretched across Europe throughout the entire second half of the seventeenth century. This network was modelled using an undirected and unsigned graph were an edge between two nodes represents a letter communication between two individuals. In such a representation of a network, the edges carry a positive meaning, creating a dense network of well-connected correspondents. Nevertheless, Magliabechi's enormous epistolary reach exposed him to the endless conflicts of others, in addition to the ones he caused himself. Within the dynamics of cross-cultural exchanges between the Dutch Republic and the Grand Duchy of Tuscany, Magliabechi had to deal with many tensions arising from the opposing political, social and religious realities. These tensions ranged from restrictions imposed by the *Sant'Uffizio* to scholarly rivalries and jealousy. The feelings that accompanied these tensions and the ways Magliabechi tried to cope with these might have influenced the choices he adopted in the formation of his network.

How should we reason about the presence of both positive and negative relationships within a network? In this chapter, I will describe a rich part of social network theory, the structural balance theory, that involves the annotation of the edges in the network with positive or negative signs.⁶⁸⁷ In general, this conveys to the idea that certain edges represent friendship while other edges represent antagonism. The notion of structural balance offers thus to capture positive and negative signs between the nodes in the network to understand the tensions between these two forces. For instance, when X and Y trust each other and Y distrusts Z, we might expect that Z and X will distrust each other as well. This rule is commonly exemplified in the balance theory by the phrase "you cannot be friends with your friend's enemy".

This chapter explores how the notion of structural balance can be used to reason about how fissures in an epistolary network may arise from the dynamics of conflicts, disagreement and antagonism between corresponding scholars. In particular, balance theoretic ideas are used to shed light on the following questions: How did hostile relationships affect the formation of the early modern scholarly network? Did early modern scholars strive for balance in their network? In addressing these questions, this chapter will develop as follows. In the first paragraph, we will see that in most approaches that map the Republic of Letters digitally, the edges have a rather positive meaning. Such representations reinforce the idea that the Republic of Letters was an ideal community of peaceful co-existence between intellectuals. Nevertheless, traditional literature has taught us that the harmony of the ideal of the Republic of Letters was rarely achieved in reality.⁶⁸⁸ In most settings, there were also negative forces at work, such as jealousy, antagonism, coercion, or even outright conflict. In this respect, the digital lags behind the traditional, ignoring the scope and significance of the phenomenon of polemics, quarrels and controversies upon the formation of the early scholarly network.⁶⁸⁹ In addition, the discussions in the first paragraph also serve a methodological purpose: it explores the dynamics between macroscopic and microscopic network properties. For example, a disagreement that begins between two people can affect others that were not initially involved in the quarrel. I will thus discuss the way in which the local can

⁶⁸⁷ For a clear definition of the structural balance theory, see Easley and Kleinberg, 107.

⁶⁸⁸ For this point, see Dániel Margócsy, 'A Long History of Breakdowns: A Historiographical Review', *Social Studies of Science* 47, no. 3 (2017): 307–325; Lorraine Daston, 'The Ideal and Reality of the Republic of Letters in the Enlightenment', *Science in context* 4 (1991): 367-386; Hans Bots, *Republiek der Letteren. Ideaal en werkelijkbeid* (Amsterdam: APA–Holland Universiteit Pers, 1977); Hans Bots, *De Republiek der Letteren. De Europese intellectuale wereld* 1500-1760 (Nijmegen: Uitgeverij Vantilt, 2018): 63-68.

⁶⁸⁹ This argument is central to the research paper of Marcelo Dascal and Cristina Marras, "The Republique des Letters: a Republic of Quarrels?", retrieved from https://m.tau.ac.il/humanities/philos/dascal/papers/republic1.html , last accessed 3 April 2019.

have an impact on the ramifications on the rest of a social network, a theme that is of maximal importance in the analysis of networks.

The second paragraph provides an outline of the structural balance theory that informs this study. The structural balance theory, which was originally developed by the psychologist Fritz Heider in the 1950s, has shaped the field of today's cognitive psychology and the social sciences.⁶⁹⁰ By contrast, in the humanities, the theory has not yet been established. Therefore, this paragraph shows how the model of structural balance provides us an interesting tool to reason about the dynamics of historical networks with positive and negative labelled edges. Importantly, the validation of this model is verified by a close reading of the letters themselves.

The third paragraph explains how the structural balance theory can be used to analyze change in networks. According to the structural balance theory, people continually reassess their likes and dislikes of others as they strive for balance and stability.⁶⁹¹ In order to explain how these dynamics work, in this paragraph a brief overview will be given of the balance theory in a dynamic context. Following that, the fourth paragraph expounds the state of the art of the structural balance theory.

The fifth paragraph focuses on the description of the data that constitutes the framework – the backbone – of this chapter. Reconstructing the signed network required a combination of archival work and computational analysis. A detailed account of my method of data curation and statistical analysis will be given here.

The remaining two paragraphs present measures of balance and imbalance through time along with discussions of them. These discussions will evolve around case studies from the correspondence of Antonio Magliabechi. Specifically, the most detailed case, presented in the seventh paragraph, will revolve around a conflict that happened between the Dutch scholar Jacob Gronovius and the University of Pisa.

1. ONE BIG HAPPY CONNECTED FAMILY?

In the previous chapter, we have seen that the application of computational methods from the fields of network science allows us both to visually map the structure of the scholarly network and to measure the relative centrality of each of its members using a range of different mathematical tools. The analysis of the structure of networks offers insights in the underlying relationships and reveals global phenomena at scales that may be hard to detect when looking at the individual correspondences. In more general terms, this approach focused on the macroscopic properties of the networks as a whole, summarizing the network in terms of its structure, size and connectivity.

At the same time, however, there is an ongoing challenge in adopting these kinds of network approaches to the study of – past and present-day – society.⁶⁹² People develop rich relationships with one another in many different settings, while network analysis generally reduces these relationships to simple pairwise edges. In the previous chapter, for example, the network of Magliabechi was modelled by simply encoding whether an epistolary relationships existed of not. These relationships are restricted to positive values alone in which the edges are translated in terms of memberships in the Republic of Letters.

Yet, knowing just the nodes and edges of a network is not enough to understand the full picture of the dynamics of early modern society. Only by reading social relations of network patterns one ignores the importance of more personal features that make the network properties evolve in a certain direction.

⁶⁹⁰ Anthony G. Greenwald et al., 'A Unified Theory of Implicit Attitudes, Stereotypes, Self-Esteem, and Self-Concept', *Psychological Review* 109, no. 1 (2002): 3.

⁶⁹¹ Easley and Kleinberg, 113.

⁶⁹² Leskovec, Huttenlocher and Kleinberg, 'Signed Networks in Social Media', 1.

Behind every network there are individuals who coordinate their relations to others in accordance with their own sentiments and opinions. These sentiments – either positive or negative – have strongly influenced the nature of their relationships: some relations are friendly, while others are hostile. Network annotations thus provide a next level of detail in describing the microscopic structure of the nodes and edges are the constituent of a complete network, annotations at a microscopic level will increase the overall accuracy at a macroscopic level as well.

In historical research, the question as to how the structure of the network interrelates with the potential of individual agency is hardly theorized and relatively unexplored. Specific decisions and strategies of individual nodes which lead to either the creation of a network in the first instance or how a network which is latent in terms of its awareness evolves into a network on which individual behavior and sentiments are actually reflected have been largely overlooked.⁶⁹³ These dynamics, though, are vital to understand how early modern scholars interacted in the creation and destruction of their network. These ideas are central in the study of April Shelford, who has argued that each individual created his own Republic of Letters through his own efforts:

"This does not invalidate more general characterizations of the Republic of Letters, but a focus on the experience of one individual clarifies important aspects of the republic that are frequently obscured by its citizen's own universalizing rhetoric. The Republic writ large existed only at the sum of its member's social gestures and collaborative output. Organic and dynamic, it lacked a fixed shape. Its internal configurations constantly shift as individuals made new connections or as internal dysfunctions (like quarrels) and external phenomena (like war) disrupted them. Each individual created his own Republic of Letters."⁶⁹⁴.

According to Ronald S. Burt, it is analytically more useful when considering the cessation of contact between two actors as a disengagement rather than the disappearance of an edge. Two individuals who once had a connection do not revert to being two people without a connection. They have a history together and the question as to why their interactions have irreversibly altered needs to be considered to understand their choices and behavior in their future relationships. Burt argues that these choices are deliberately and thoughtfully made: people often *disengage* from negative relationships in favor of more positive connections.⁶⁹⁵ Thus, as Burt argues, the dynamics of a network can best be explained by the existence of hidden, negative, edges rather than highlighting the absence of an edge. Similarly, Xenofontas Dimitropoulos and Dmitri Krioukov have argued that the inaccuracies associated with representing complex network topologies as simple undirected unweighted graphs "come not only from potential sampling biases in topology measurements, but also from neglecting link and node annotations."⁶⁹⁶ In short, we need to annotate the edges of the network with additional information to understand why people form, end and change their relationships over time. In other words, we need to create a signed network.

⁶⁹³ Andrew P. Roach and Paul Ormerod, 'Emergent Scale-free Social Networks in History: Burning and the Rise of English Protestantism', *Cultural Science Journal* 1, no. 1 (2008): 2.

Moreover, despite the fact that sentiment mining is one of the most active research areas in natural language processing, historians of emotions tend to choose more traditional methods of research. For more information about this topic, see Inger Leemans, 'Large Data Set Mining', in *Early Modern Emotions. An Introduction*, ed. Susan Broomhall (London/New York: Routledge, 2017), 27–33.

⁶⁹⁴ April Shelford, *Transforming the Republic of Letters: Pierre-Daniel Huet and European Intellectual Life, 1650-1720* (University Rochester Press, 2007), 5.

⁶⁹⁵ Ronald S. Burt, 'Decay Functions', Social Networks 22, no. 1 (2000): 2.

⁶⁹⁶ Xenofontas Dimitropoulos et al., 'Graph Annotations in Modeling Complex Network Topologies', ACM Transactions on Modeling and Computer Simulation 19, no. 4 (2009): 1.

In contrast to signed networks, unsigned networks are the most common representations in network studies. They embody the idea that connectivity is key in understanding how the early modern world worked, showing how dense and well-connected everything was. Nevertheless, unsigned networks create a fundamental gap between the richness of relationships and the stylized nature of network representation of these relationships.⁶⁹⁷ In other words, most studies represent only successful and ideal networks – the network seen as one big happy connected family. Yet, besides positive connections, in many contexts, the social network is highly affected by the impact of negative sentiments which have strongly affected the structure of the social network.

Although unsigned networks conform to the Republic of Letters seen as an ideal society, they are not suitable to map its reality. If the network had only positive edges, then the Republic of Letters would be one of peaceful coexistence. This adheres to the ideal that, in the Republic of Letters, scholars engaged with each other in polite conversation to share knowledge. Many studies emphasized these idealistic and utopian properties. Hans Bots called it an "ideal state" and Anthony Grafton named it "Europe's first egalitarian society".⁶⁹⁸ Yet, scholars as Ann Goldgar and Paul Dibon have taught us that not everything was so harmonic and idyllic as it seems. According to Ann Goldgar "the harmony of the ideal was rarely achieved in reality" and Paul Dibon argued that the Republic of Letters "ideal as it may be, is in no way utopian but it takes form in the old human flesh where good and evil mix".⁶⁹⁹ The ideal of the Republic of Letters was thus intertwined with a harder reality in which people were concerned with negative effects that arose in 17th-century interpersonal contacts, such as antagonism, jealousy, or even outright conflict. These tensions have dictated the decisions and choices early scholars had to make in the formation of their network, explaining why in some case they were forced to end a relationship with another person.

Signed networks are unique from unsigned network due to the increased complexity added to the network by having a sign associated with every edge. In general, historical studies on negative relationships are rare, likely because of the difficulty of collecting empirical data to examine such relationships. Huge repositories have been made available that enable us to digitally analyze the networks of the Republic of Letters. Early Modern Letters Online (EMLO), for example, is collecting metadata of correspondence from the fifteenth until the eighteenth century, enabling scholars to navigate the ocean of correspondence from that period.⁷⁰⁰ The Italian Academies project completed a list of memberships of the Italian Academies from 1525-1700, drawing on books published by the *Accademie* in the cities of Bologna, Naples, Padua and Siena.⁷⁰¹ These are databases that represent the material present in the archive, which result in network data that carry a positive meaning, translated in terms of collaboration, exchanges and memberships.

In spite of their relative rarity, negative ties are more likely to drive attitudes, behaviors, and consequences, including network change, as compared to more frequently observed positive ties and need to be increasingly incorporated into our work.⁷⁰² Positive relations are formed by support, endorsement and friendship and thus, create a network of well-connected scholars whereas negative

⁶⁹⁷ Jure Leskovec, Daniel Huttenlocher, and Jon Kleinberg, 'Signed Networks in Social Media', *Proceedings of the SIGCHI* Conference on Human Factors in Computing Systems, 2010, 1361.

⁶⁹⁸ Grafton, 'A Sketch Map of a Lost Continent: The Republic of Letters', 1; Hans Bots and Françoise Waquet, La République Des Lettres, 8.

⁶⁹⁹ Goldgar, 8. Paul Dibon, 'L'Université de Leyde et La République Des Lettres Au 17e Siècle', *Quaerendo* 5, no. 1 (1975): 6, "tout ideal qu'il soit, n'est nullement utopique, mais qu'il prend forme dans la vieille pate humaine qui mele le bon et le mauvais".

⁷⁰⁰ 'Early Modern Letters Online', last accessed 24 November 2018, http://emlo.bodleian.ox.ac.uk.

 ⁷⁰¹ 'Database of Italian Academies', last accessed 24 November 2018, http://www.bl.uk/catalogues/ItalianAcademies/.
 ⁷⁰² This argument can be found in 'Negative and Signed Tie Networks: Special Issue of Social Networks', retrieved online: http://www.socialcapitalgateway.org/content/call/negative-and-signed-tie-networks-special-issue-social-networks, last accessed 4 April 2019.

relations are a result of opposition, distrust and avoidance.⁷⁰³ Negative relationships break the network down, create highly disconnected networks.⁷⁰⁴ Following this reasoning, it is fundamental not only to investigate how humans interact in the creation of their network, but also in the destruction of it. Recent work of Dániel Margócsy has drawn attention to the importance, yet unacknowledged role, of network breakdowns on the shaping of early modern society. According to Margócsy the vast majority of network studies has focused on beginnings and growth, rather than on endings. Yet, "endings are just as important as beginnings".⁷⁰⁵ Rather than focusing on breakdowns as a negative element in history, he gives a positive account of the relevance of breakdowns as a pathway to success. Sometimes, it is necessary to break collaborations to achieve breakthroughs and to form a stronger identity. Galileo's (1564-1642) decision, for example, to break with the Aristotelian terminology of the Jesuits, helped him to establish the identity of his own research paradigm.⁷⁰⁶ In addition, networking is time-consuming and, while it naturally has beneficial effects, it can also take a scholar away from work. Margócsy gives the example of René Descartes (1596-1650), who decided to selectively withdraw from contemporary network of correspondence, distancing himself from competing versions of scholarly thinking, in order to establish himself as the modern philosopher.⁷⁰⁷ The formation and breaking down of the scholarly network are thus the result of a strategic career management of early modern scholars. The structural balance theory is one of the frameworks to reason about why people strategically end their relationships, providing valuable navigation for close reading.

2. THE STRUCTURAL BALANCE THEORY

References to balance and equilibrium are common place in studies about the Republic of Letters. Jeanine de Landtheer and Henk Nellen, for example, have discussed how personal doubts, frictions and discontent with political and religious events are reflected in the correspondences of learned letter-writers of the sixteenth and early seventeenth century. According to them, negative expressions affected and afflicted the lives of numerous men of learning, who could not shy away from these tensions, which were impossible to ignore, "not even in the virtual space of the Republic of Letters".⁷⁰⁸ So how did they cope with these tensions? De Landtheer and Nellen provide the following answer:

"Loath to play a marginal role in society, they fervently engaged in a struggle for a better, more harmonious world".⁷⁰⁹

Similarly, Françoise Waquet argued that scholars from different background engaged in polite conversation with each other "pour atteindre une nouvelle harmonie".⁷¹⁰ Following these definitions, it seems that balance is a way to confront negative tensions in the Republic of Letters. To substantiate these

⁷⁰³ Mankarit Kaur and Sarbjeet Singh, 'Analyzing negative ties in social networks: A survey', *Egyptian Informatics Journal* 17, no. 1 (2016): 21.

⁷⁰⁴ For a classical network study that focuses on how conflicts break up the network see Wayne W. Zachary, 'An Information Flow Model for Conflict and Fission in Small Groups', *Journal of Anthropological Research* 33, no. 4 (1977): 452–73.

⁷⁰⁵ Dániel Margócsy, 'A Long History of Breakdowns: A Historiographical Review', *Social Studies of Science* 47, no. 3 (1 June 2017): 309.

⁷⁰⁶ Margócsy, 310.

⁷⁰⁷ Margócsy, 311.

⁷⁰⁸ Jeanine de Landtsheer and Henk J. M. Nellen, eds., 'Introduction', in *Between Scylla and Charybdis: Learned Letter Writers Navigating the Reefs of Religious and Political Controversy in Early Modern Europe*, Brill's Studies in Intellectual History 192 (Leiden/Boston: Brill Publishers, 2011), xxiii.

⁷⁰⁹ De Landtsheer and Nellen, xxiii.

⁷¹⁰ Françoise Waquet, 'Qu'est-ce que la République des Lettres ? Essai de sémantique historique', 495.

statements, we need to have a precise model to test the dynamics of balance. The structural balance theory is one of the basic frameworks for doing this.

The structural balance theory was originally introduced by the Austrian psychologist Fritz Heider (1896-1988) in the 1940s.⁷¹¹ The principle underlying his theory is based on the assumption that certain combinations of relationships are more natural for psychological reasons. Specifically, people have an innate tendency towards balanced structures that are stabilized by the relations among individuals based on sentiments. These sentiments are either positive or negative: positive relationships are representative of friendship, while negative relationships indicate hostility between people. The essential idea of the structural balance theory is that people strive for balance between these positive and negative forces in the network.

Heider's analysis is based upon what he calls a P-O-X unit, in which P is a person, O is another person and X is conceived as an impersonal entity (another person, a situation, an event, an idea, or a thing).⁷¹² Each relation in the unit is reliant on each other: if P has a good relationship with O, and O likes X, then there will be a tendency for P to like X as well. On the other hand, in the event that P disliked X, the whole P-O-X unit will be placed in a state of psychological imbalance, and pressure will arise to change its state towards balanced. This means that P is motivated to restore the balance by changing the relation of affection with X, or to avoid X and O entirely to lessen the tension created by the state of imbalance.⁷¹³ Heider's model of social balance theory provides thus a way to systematically analyze how a social group evolves to a possible, and desired, state of balance.

In the 1950's Heider's theory of balance was translated into a network model in the work of the sociologists Dorwin Cartwright and Frank Harary. They developed a generalization of Heider's theory of balance by use of concepts from the mathematical theory of linear graphs in order to extend the concept of balance to larger networks.⁷¹⁴ This means that they adopted Heider's theory of micro-structures (triads) to macro-structures (entire networks). Moreover, they generalized Heider's psychological theory of balance in units of sentiments to a sociological theory of signed graphs. A signed graph is a network in which every edge is designated to be either positive or negative. These edges are also called signed edges. Since Cartwright and Harary, the structural balance theory has become a sub-branch of social network theory.⁷¹⁵ How is the structural balance theory explained by means of a network?

The structural balance theory is primarily focused on the perception of relationships in the form of a triad of three mutually linked nodes.⁷¹⁶ A triadic relationship between these three people can take four possibilities, in which negative and positive relationships tend to decide whether the triad is balanced or not. These four possibilities are represented in figure 19. In each triad, consisting of three nodes A, B and C, a positive relationship like friendship is marked by a plus (+) while a negative relationship like hostility is represented by a minus (-).

⁷¹¹ Fritz Heider, 'Attitudes and Cognitive Organization.', Journal of Psychology 22 (1 January 1946): 107.

⁷¹² Heider, 107.

⁷¹³ Heider, 108.

⁷¹⁴ Dorwin Cartwright and Frank Harary, 'Structural Balance: A Generalization of Heider's Theory', *Psychological Review* 63, no. 5 (1956): 277–293.

⁷¹⁵ Graham Alexander Sack, 'Character Networks for Narrative Generation: Structural Balance Theory and the Emergence of Proto-Narratives', in *Complexity and the Human Experience: Modeling Complexity in the Humanities and Social Sciences*, ed. Paul A. Youngman and Mirsad Hadzikadic (Boca Raton: CRC Press, 2014), 88.

⁷¹⁶ Charles Kadushin, Understanding Social Networks: Theories, Concepts, and Findings (Oxford University Press, 2012), 22.

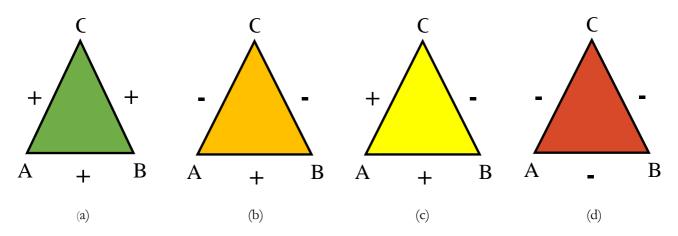


Fig. 19 The four configurations of structural balance. (a) balanced (b) balanced (c) unbalanced (d) balanced/unbalanced

The first figure, figure 19a, represent a balanced network for all relationships are signed a positive. This responds to a very natural situation in which three people are mutual friends from each other. This situation is commonly simplified with the sentence: A friend of a friend is a friend. Positive triads are formed by trust, support, endorsement and friendship and thus create a network of well-connected nodes which is beneficial for the promotion and circulation of information. This type of network was central in the previous chapter on the importance of introductions and trust in the scholarly network.

A second example of a balanced network is represented in figure 19b, which consists of one positive relationship and two negative relationships. This network represents a situation in which two of the three people in the network, so A and B, are friends that have a mutual enemy, C, in common. This situation can be expressed as: an enemy of a friend is an enemy. It is thus a stable network: A and B agree over their dislike towards C, and C hates both of them.

The other two possible triangles, so figure 19c and 19d, introduce some amount of psychological stress or instability into the relationships present in the triad. The triad with two positive relationships and one negative relationship, shown in figure 19c, corresponds to a person A who is friends with B and C, but B and C do not get along with each other. As a consequence, A will be pressured to pick a side, and therefore the triad is unstable. This situation is also known as the imperative: you cannot be friends with your friend's enemy. The last example of an unbalanced triangle is figure 19d, in which all the relationships are signed as negative. This configuration is somehow ambiguous. On the one hand, this network might seem balanced for it represents a similar configuration as the network shown in figure 1a. In this case, it consists of three people who all dislike each other, so no one is in doubt about where they stand: everyone just hates everyone else.⁷¹⁷ On the other hand, the enemy of my enemy does not apply here. A and B might form an alliance in recognition of their joint dislike towards C, but find it hard to do so because they also hate each other. In many settings, this causes tensions for there is always the opportunity that one of the pairs in the triad become friends, teaming up against the common enemy. As a result, each individual in the triad is constantly suspicious of the other, not knowing when his enemies decide to collude. This rule can be summarized as: my enemy's enemy is my friend. Whether this triad is balanced of not, it is definitely a configuration that is unstable. In fact, there is no reason for A, B and C

⁷¹⁷ Marc Newman, Networks: An Introduction (Oxford/New York: OUP Oxford, 2010), 207.

to relate to one other when none of them likes each other. In real life settings, we might assume that the three enemies would simply sever their edges and go their separate ways.⁷¹⁸

The equilibrium of three mutually connected nodes is simple to define, but its complexity increases in case more nodes are added in order to create a larger graph with many interdependent triads. In other words, the complexity reached by society goes beyond triads alone. Frank Harary and Dorwin Cartwright have extended Heider's model in order to study a network with any number of nodes and edge, as long as their edges are signed either positive or negative. Their definition of balance for a complete graph can be stated in the following way. The balance of a signed graph depends on the signs of its cycles. The sign of a cycle is calculated by the product of the positive and negative edges that comprise the triad. Taking the four possible configurations of Heider's balance and imbalance, Cartwright and Harary consider figure 19a as a positive cycle for the product of the three positive relationships in the triad equals +, which can be represented schematically as (+ + + = +). Similarly, figure 19b contains a positive cycle (+ - - = +) while the other configurations contain negative cycles: (+ + - = -) and (- - - = +)-=). Following the definition developed by Cartwright and Harary, the graph is balanced only if every cycle in the network is signed as positive (universal harmony) or if there are two fractions of friends with complete antagonism between them (bi-polar fractions).719 In other words, it is widely assumed in social network theory that networks tend to form into groups such that everyone likes each other within their groups and dislike those in other groups.⁷²⁰ The balance of a signed graph depends thus on the sign of its cycles.

So, the definition provided by Cartwright and Harary allows us to move beyond triads, assessing the balance of a social network consisting of any number of nodes and edges. As a result, the theory can be used to explain how the feelings, attitudes and believes of an individual towards others promotes the formation of a balanced or unbalanced network. The structural balance theory can thus explain how the sentiments at the level of the individual nodes can have a radical impact on the macroscopic structure of the network. The theory connects the local and the global: a local view as a condition of each triangle of the network and a global view as a requirement that the world can be divided into two mutually opposed sets of friends.⁷²¹

Moreover, the structural balance theory allows us to analyze negative tensions in the network of the Republic of Letters by a purely mathematical analysis. The advantages of such a 'pure' analysis is favored by Matteo Valleriani, who recently has argued that the amount of sources now available to the historian asks for a more sophisticated approach. According to Valleriani, a historian needs to join forces with sociology to mathematically analyze large historical data sets.⁷²²

3. CHANGING DYNAMICS IN BALANCE

If we systematically analyze negative relationships in network models, we can obtain a better understanding of the evolution of the social network. The modelling of network dynamics is actually one of the greatest difficulties historical network research has to face. According to Johanna Drucker, for instance, the level of complexity necessary to model dynamic systems introduces a challenge into the

⁷¹⁸ Ibidem, 207.

⁷¹⁹ Frank Harary, 'On the Notion of Balance of a Signed Graph.', Michigan Math. J. 2, no. 2 (1953): 144.

⁷²⁰ Newman, Networks: An Introduction, 210.

⁷²¹ Easley and Kleinberg, Networks, Crowds, and Markets, 119.

⁷²² Matteo Valleriani, 'Maths Is Revolutionising the Study of History – Here's How', The Conversation, last accessed 3 May 2018, http://theconversation.com/maths-is-revolutionising-the-study-of-history-heres-how-85710.

analysis and visualization of networks.⁷²³ The inclusion of negative relationships into our network models might constitute an important step for exploring the dynamic evolution of network structures. Relationships are never static: people can change their sentiments towards others. Relating to one person or another is an on-going process made up of uncertain and ever-shifting edges. Trust can turn into distrust, friends can become foes and conflicts between people can be resolved.

As touched upon earlier, a fundamental claim of the structural balance theory is that only balanced triads can be stable while unbalanced triads have the tendency to decay or to change into a balanced status. Heider postulated that in unbalanced triads forces occur which determine the change of the triad: if a network is unbalanced then we have the tendency to increase balance by adapting our edges. In other words, when we feel 'out of balance', then we are motivated to restore a position of balance in our network.

Following this reasoning, we can expect that the triads as shown in figure 19a and figure 19b remain unchanged, while the ones shown in figure 19c and 19d are subject to change. For example, if the network starts as the unbalanced triad represented in figure 19c, balance might be achieved by either making the negative edge positive or by making one of the positive edges negative.⁷²⁴ In the first case, this means that A can relieve his stress when he manages to lure B and C into friendship, transforming his network into the triad as shown in figure 19a. Another possibility for A is to transform his network to the one shown in figure 19b. In this case, A decides to side with either B or C, turning one of the edges into negative. In many real-life situations of this kind, the tension would be resolved by one of the acquaintances (B or C) to be broken.⁷²⁵ In this case, the edge would be removed altogether. For instance, perhaps A would simply decide to stop talking to one of his friends.

For a triad with all negative edges, as illustrated in figure 1d, there is the possibility that two individuals collude against the third party so that the triad take the same shape as the network represented in figure 19b. Of course, this mechanism is not inevitable, the actor can actively resist these forces, but he will be subject under a large amount of pressure.⁷²⁶

This essential notion of the structural balance theory can also be applied to more complex networks since every social network can be understood as composed of triads. One changing edge can induce the changing balance of other triads, and consequently modify the whole system step by step. Sociologists are particularly interested in this phenomenon. J. Antal et al., for instance have designed models to test how long it takes for an initially unbalanced network to reach a balanced state via these changing dynamics. They randomly selected unbalanced triads and flipped the sign of the relationships from positive to negative or vice versa to restore the triad to balance.⁷²⁷ This change was made regardless of whether the other triads become unbalanced in order to reflect a real-world system in which people often change their relationships without considering the consequences on the rest of their social network.⁷²⁸ Here again, the importance of the correlation between the micro- and macro properties of a network is apparent.

⁷²³ Johanna Drucker, 'Graphical Approaches to the Digital Humanities', in *A New Companion to Digital Humanities*, ed. Susan Schreibman, Ray Siemens, and John Unsworth (Chichester, UK: John Wiley & Sons, Ltd, 2015), 241.

⁷²⁴ Easley and Kleinberg, Networks, Crowds, and Markets, 108.

⁷²⁵ Newman, Networks: An Introduction, 206-207.

⁷²⁶ Easley and Kleinberg, Networks, Crowds, and Markets, 109.

⁷²⁷ T. Antal, P. L. Krapivsky, and S. Redner, 'Social Balance on Networks: The Dynamics of Friendship and Enmity', *Physica D: Nonlinear Phenomena* 224, no. 1 (2006) and T. Antal, P. L. Krapivsky, and S. Redner, 'Dynamics of Social Balance on Networks', *Physical Review E* 72, no. 3 (2005).

⁷²⁸ Antal, Krapivsky, and Redner, 'Social Balance on Networks', 131.

4. THE STRUCTURAL BALANCE THEORY IN CONTEXT

In studying models of structural balance, many scholars have formulated alternative notions of balance and imbalance in the network, by revisiting the original assumptions made by Heider, Harary and Cartwright. Although this chapter will mainly adhere to the original ideas of balance, the following studies provide crucial insights about the possibilities and liberty this theory offers to scholars interested in studying the dynamics of early modern society.

4.1. REVISION OF THE STRUCTURAL BALANCE THEORY

Several scholars have argued that the original definition of imbalance is to deterministic. Specifically, the only network configurations that are structurally balanced, as proposed by Harary and Cartwright, are the ones in which either all the nodes are friends or the network can be divided into two distinct sets of mutual friends, also called clusters, with complete mutual antagonism between the two cliques. Realistically, drawing from this definition, a network will never be balanced. For this reason, Davis has proposed a more relaxed version of structural balance in which the all-negative triad (- - -) should not be considered unbalanced. According to Davis, it is more likely that friends of friends are trying to reconcile their differences, resolving the lack of balance present in figure 19c, than two of three mutual enemies to become friendly. It is therefore more natural to ask what kind of structural properties arise when we allow triangles with three negative edges to be present in the network. As such, he showed that, when the model allows for these all-negative triads, graphs may consist of multiple clusters.⁷²⁹

While Davis' theory imposes less of a restriction on what the network can look like, other studies have argued that the nature of a relationship cannot be considered as black and white as originally proposed by Heider. In real settings, there are shades of grey as well. One might expect, for example, that the relationships and the trust level between people vary considerably. An acquaintance may not result in the same type of structural constraints as a close friendship. A possible way to tackle this challenge is proposed by Yi Qian and Sibel Ali who have applied structural balance to networks in which the nodes have different strengths of relationships, ranging from strong to weak.⁷³⁰ This is a theme that has come up already in our discussion of Granovetter's theory on the strength of weak ties in the third chapter of this study.⁷³¹ Granovetter used the term weak tie to define a relationship that is an acquaintance, not a close friend. According to him, acquaintances are beneficial to the circulation of knowledge in the network for they have access to less privileged information than close friends.

The point made by Qian and Ali has to be kept in mind when we consider the dynamics of early modern exchange. The relationships between early modern scholars are not easy to categorize in terms of positive and negative edges alone. As shown by the introduction of this study, early modern scholars were masters of the art of dissimulation and hypocrisy and had no difficulties in maintaining a prolonged and apparently extreme friendly correspondence with persons whom they mention in their letters to others with hostility and distrust. Johan Nordström, for instance, has shown that Magliabechi was hardly a genuine friend to Niels Stensen, despite the superficial friendliness he showed him in person and in his correspondence.⁷³² Yet, we should not forget that the structural balance theory is a model of distant

⁷³¹ Mark S. Granovetter, 'The Strength of Weak Ties', 1360-80.

⁷²⁹ James A. Davis, 'Clustering and Structural Balance in Graphs', Human Relations 20, no. 2 (1967): 181–187.

⁷³⁰ Sibel Yi Qian and Sibel Adali, 'Extended Structural Balance Theory for Modeling Trust in Social Networks', in 2013 Eleventh Annual Conference on Privacy, Security and Trust (IEEE, 2013), 283–290.

⁷³² Johan Nordström, Antonio Magliabechi Och Nicolaus Steno: Ur Magliabechis Brev till Jacob Gronovius (Uppsala: Almqvist & Wiksells Boktryckeru, 1963), 43. For the correspondence between Stensen and Magliabechi, see also Gustav Scherz, Niels Stensen und Antonio Magliabechi, Sudhoffs Archiv für Gesch. der Medizin under der Naturwissenschaften 45 (1961): 23-33.

reading to find patterns in our data that require localized attention and close reading. Hence, disclose reading is needed to enrich our perception of conflicts and balance in the early modern society.

In stark contrast to the structural balance argument that people favor balanced networks, Georg Simmel (1858-1918), pioneer of social network theory, has argued that we would benefit more from exchanges when one is friends with two parties that are in a negative relationship (- + +). In this case, the two parties might compete with one other by showing off their support and affection towards the ego. This form of competition will create the opportunity for the ego of the network to exploit those who are involved in the negative tie.⁷³³ As a result, he suggests that individuals would intentionally befriend those in conflict for their own benefit. In other words, they would intentionally profit from unbalanced triads for their own self-interest.

As in the case of edges, the structural balance theory also assumes equality of nodes. Nevertheless, each individual is unique, and their similarities and differences in age, religion, sex, or views may affect their relationships. Homophily is one of the most basic notions that governs the structure of the social network. It is the principle that we tend to be similar to our friends, meaning that it is more likely that one establishes a relationship with someone who possesses the same attributes.⁷³⁴ Marcus W. Feldman et al. have proposed a method to optimize the structural balance theory for fully signed networks, taking into consideration the attributes of the nodes. They took homophily as their criterion: a fully signed network is balanced, if every pair of nodes with the same sign is connected by a positive edge, while every pair of nodes with different signs is connected by a negative edge.⁷³⁵

The structural balance theory requires that every sign in a network carries a positive or negative meaning. In many contexts however, especially when dealing with historical data, we need to deal with missing and incomplete values. Sometimes it is just not possible to express the nature of a relationship between two people. Therefore, many studies have considered neutral relationships to define non-negative and non-positive relationships.⁷³⁶ Moreover, David Easley and Jon Kleinberg have proposed a definition of structural balance which can be applied to arbitrary, non-complete networks. In this definition, they treat balance for non-complete networks as a problem of filling in the missing values. If the network can be considered by filling in the missing values to produce a balanced graph, the complete network can be considered balanced.⁷³⁷ The structural balance theory can thus be used to predict the sign of edges in cases where it is not known or cannot be assessed directly. This feature is of great importance to the study of history for it provides a way to deal with incomplete data, characteristic for that field.

4.2. APPLICATIONS OF THE STRUCTURAL BALANCE THEORY

Scholarly interactions between the structural balance theory and history are not very common. To date, only Robert Gramsch has attempted to use the theory of structural balance to substantially analyze history. In particular, he raised the question whether the structural balance theory is a meaningful historical tool. In order to answer this question, Gramsch studied the conflict that arose between the years 1225 and 1235 in Germany. He showed how a conflict between the Emperor Frederich II and his heir, Henry VII, over some disputes with the Pope, led to an expanding chasm amongst the prince-electors: some continued to support Emperor Frederick II while others decided to back his heir. To

⁷³⁴ This definition of homophily can be found in Easley and Kleinberg, 77.

⁷³³ Georg Simmel, The Sociology Of Georg Simmel, trans. Kurt H. Wolf (Glencoe: The Free Press, 1950), 154.

⁷³⁵ Haifeng Du, Xiaochen He, and Marcus W. Feldman, 'Structural Balance in Fully Signed Networks', *Complexity* 21, no. S1 (2016): 497–511.

⁷³⁶ Yi Qian and Adali, 'Extended Structural Balance Theory for Modeling Trust in Social Networks', 285.

⁷³⁷ Easley and Kleinberg, Networks, Crowds, and Markets, 120.

underline the role of the coalitions that underlie the conflict, Gramsch investigated a network composed of 68 actors, as well as the political relations between them from 1225 to 1235. On the basis of the principles of the structural balance, this network was divided into clusters of people which are internally free of conflicts. As such, Gramsch could identify which actors stayed together in one cluster and which one had changed political coalition. He observed that, in 1232, the two factions were indeed supported by either Frederick II or Henry VII, while between 1232 and 1234, when Frederick II decided to disavow and imprison his son to restore the balance of power in his empire, the two antagonistic fractions initiated to decay in 1233, and disappeared almost completely by the year 1235.⁷³⁸

In his study, Gramsch concluded that alliances and rivalries can be retrodicted using Fritz Heider's balance theory and concludes that such a network perspective can lead to a better understanding of how conflicts arise, and if they could be avoided. Yet, are there other ways to detect these type of communities in the network? In a subsequent article, Gramsch collaborated with a physicist and a computer scientist to verify the usability of the structural balance theory to detect communities in historical networks. In particular, they used a spin-glass-based community detections algorithm to see how good this method is in detecting the rift between Frederich II and Henry VII, and compare the results with the analysis performed by Gramsch using social balance theory. Their results showed that the spin-glass algorithm detects the same patterns as the analysis performed by Gramsch.⁷³⁹

Ralph Kenna and Pádraig MacCarron have analyzed the network structures of four iconic European tales: the Icelandic *Njáls saga*, the Greek *Iliad*, the Anglo-Saxon *Beonulf*, and the Irish *Táin Bó Cuailnge*. By carefully reading each of the narratives they entered characters' names into a database and listed the character they interacted with. They defined links as positive, or friendly, when two characters know each other, are related, speak to one another, or appear in a small congregation together. Links were signed negative, or hostile, in the case that two characters meet in combat.⁷⁴⁰ Analysing the signed network of the tales, they concluded that the full networks were all structurally balanced with a minority of triangles containing an odd number of negative edges. The networks extracted from the European tales echoes thus the properties of many real-world networks. This result supported their claim that the stories in the tales were primarily driven by positive interactions between characters.⁷⁴¹ Likewise, Graham Alexander Sack has used the balance theory to understand the narrative structure of Cervantes's *Don Quixote de la Mancha*, Charles Dickens's *David Copperfield* and Virginia Woolf's *Mrs. Dalloway*.⁷⁴²

Structural balance has been analyzed in different areas in the social sciences, to understand, for example, how people cooperate and why nations fight wars. One of the most common applications for social balance ideas is to international relations, which represent a setting in which it is natural to assume that a collection of nodes all have opinions – either positive or negative – about each other. In such a setting, the nodes are the nations, and the signed edges indicate alliance or enmity. Studies in political science have used the balance theory to offer an effective explanation for the behavior of nations during conflicts and crises. Tibor Antal, Paul Krapivsky, and Sidney Redner, for example, used the shifting alliances preceding World War I as a case to consider the role of balance theory in international relations.

⁷³⁸ Robert Gramsch, Das Reich Als Netzwerk Der Fürsten: Politische Strukturen Unter Dem Doppelkönigtum Friedrichs II. Und Heinrichs (VII.) 1225 - 1235, Mittelalter-Forschungen 40 (Ostfildern: Jan Thorbecke Verlag, 2013).

⁷³⁹ S. R. Dahmen, A. L. C. Bazzan, and R. Gramsch, 'Community Detection in the Network of German Princes in 1225: A Case Study', in *Complex Networks VIII*, Springer Proceedings in Complexity (Workshop on Complex Networks CompleNet, Springer, Cham, 2017), 193–200.

⁷⁴⁰ Pádraig MacCarron and Ralph Kenna, 'A Networks Approach to Mythological Epics', in *Maths Meets Myths: Quantitative Approaches to Ancient Narratives*, ed. Ralph Kenna, Máirín MacCarron, and Pádraig MacCarron (Cham: Springer International Publishing, 2017), 30–31.

⁷⁴¹ MacCarron and Kenna, 41.

⁷⁴² Sack, 'Character Networks for Narrative Generation: Structural Balance Theory and the Emergence of Proto-Narratives'.

They studied the evolution of the major relationship changes between the protagonists of World War I from 1872–1907 and concluded that these relationship changes gradually led to a reorganization of the relations between European nations into a socially balanced state.⁷⁴³

Another area in which the ideas of structural balance are relevant comes from user communities on the World Wide Web. Here, users can express positive or negative opinions about each other. Jon Kleinberg et al., for example, have investigated the social network structure from three web sites: Epinions, Slashdot and Wikipedia.⁷⁴⁴ In the online product-rating site Epinions, users can evaluate different products and also express trust or distrust of other users. The second website they analyzed was the technology blog Slashdot, where users designate others as friends and foes. The third network was defined by the votes for Wikipedia admin candidates. When a Wikipedia user is considered for a promotion to the status of an admin, the Wikipedia community is able to cast public votes in favor or against his or her promotion. They concluded that the network derived from these three social media platforms were consistent with the model of structural balance.

While structural balance is primarily shown in human social networks, Amiyaal Ilany et al. have analyzed empirical data from an animal social network to determine whether or not structural balance is present in a population of wild rock hyraxes.⁷⁴⁵ They found that, in a rock hyrax social network, balanced triads were more common, while unbalanced triads were less common. In addition, they have also shown that triads tend to change over time according to structural balance and that a rock hyrax's sex can affect that change.

5. RECONSTRUCTING THE BALANCE NETWORK

The structural balance theory provides a way to systematically analyze data coming from early modern correspondence. To test this, we need to reconstruct a signed network in which changeable social relationships are represented as exactly as possible. In this paragraph, I start with discussing the framework of data – coming from both archival sources as online repositories – that constitutes the basis for this analysis, and I end up with explaining the computational script that enables us to extract signed networks of balance and imbalance from these data.

The fundamental unit of analysis in the structural balance theory, and of network analysis in general, is a triad of three mutually linked nodes. As shown by the previous chapter, these triads are created through the combination of two different datasets, the *Catalogus Epistularum Neerlandicarum* (CEN) and the digitized card catalogue of the correspondence of Antonio Magliabechi held at the National Library of Florence (CCF). In the initial stage, each edge in the network was labelled positive. These positive edges take the form of memberships in the Republic of Letters. At this stage, the network is a stacked representation of a balanced network, which will be used as the background (the input-layer) of the analysis. On top of this network, layers of data will be placed that will change the sign of the edges to negative. These layers can thus be imagined like the transparent plastic sheets used to make cartoons, in which each subsequent layer after the input layer used the output of the previous layers as its input.

The next step in creating the balance network was to transform the network consisting of triads into a signed network of positive and negative relationships, defined in terms of pluses (+) and minuses (-). The assignment of the negative edges was harvested by carefully reading each letter and entering person's names into a database, meticulously listing the people on which Magliabechi expressed a negative opinion. In case of doubt, the sign of a relationship remained unchanged. In particular, 395 letters written

⁷⁴³ Antal, Krapivsky, and Redner, 'Social Balance on Networks', 135.

⁷⁴⁴ Leskovec, Huttenlocher, and Kleinberg, 'Signed Networks in Social Media', 1.

⁷⁴⁵ Amiyaal Ilany et al., 'Structural Balance in the Social Networks of a Wild Mammal', *Animal Behaviour* 85 (2013): 1397–1405.

by Magliabechi to his correspondents in the Dutch Republic served as a test-bed to study to which degree his network conforms to the structural balance theory.⁷⁴⁶ These letters are scattered through various archives and libraries in the Netherlands, Germany and Italy and cover a period of 39 years (written between 1672 and 1711).

What is a negative tie? This judgement is often affected by the attitude Magliabechi held towards the ideals and working practices of the Republic of Letters, which rested on the imperative of sharing knowledge and mutual support. In the eyes of Magliabechi, it was the duty of each member of the Republic of Letters to support this ideal. To denote this, he praised the ones who contributed to this ideal, while he despised those who worked against it. The relationships in which Magliabechi implicitly expresses his aversion towards others have been labelled as negative. These relationships include feelings of betrayal, indifference, disapproval, distrust, hate, envy and jealousy towards others. Besides his own opinion, Magliabechi also describes relationships between others. If these relationships adhere to my definition of ideal and reality, then these were included in the analysis as well.

At last, a total number of 87 nodes was included in the analysis. This dataset is large enough to provide meaningful statistical results. In fact, according to David Easley and John Kleinberg, the structural balance model makes only sense for small groups because if applies only to signed networks.⁷⁴⁷ This means that each pair needs to be connected by an edge that expresses either a positive or negative relationship. The negative relations and interactions between them (according to Magliabechi) over a period of 39 years were translated into dyads. A dyad is the smallest social structure in which a node can be embedded, that is, a pair of two nodes. In order to model the changing dynamics of balance, the network was divided into seven time-frames of five years: 1672-1677 (89 dyads), 1678-1683 (98), 1684-1689 (113), 1690-1695 (122 dyads), 1696-1701 (123 dyads), 1702-1707 (126 dyads), 1708-1713 (135 dyads). For each time-frame, every dyad is a unique connection between two nodes. A dyad is generated from the first negative mention made by Magliabechi and continues until proven otherwise.

This is best illustrated by an example. On the 1st of January 1674, Magliabechi expressed for the first time his anger about the physician Giovanni Andrea Moniglia. In this letter, Magliabechi warned Gronovius against Moniglia, arguing that "quest'empio medico" is willing to do anything to get ahead.⁷⁴⁸ Following this first mention, Magliabechi negatively refers to Moniglia for no less than 48 times in his letters to Jacob Gronovius, Nicolaas Heinsius and Gisbert Cuper from 1674 until 1703. The fact that Magliabechi mentions Moniglia even after the death of the latter is significant for our network model. In 1703, three years after the death of Moniglia, Magliabechi remembers him as "tanto asino, e così ignorante, che ne meno sapeva mettere insieme, due parole Latine".⁷⁴⁹ Because Magliabechi remembers and avenges his enemies even after their death, these relationship continue to affect his network and are thus included in the overall analysis.

There are of course limitations and challenges to these data. Letters contain unknown or anonymous recipients, mentioned persons and/or are undated. This is especially the case for letters in which confidential information was shared. Since the focus of this chapter is on the network's internal workings – the contents – Magliabechi's letters in which the recipient is anonymous or unidentified are included as well. Indeed, we can capture other social links deriving from the contents of these letters. Thus, the data gathered for this chapter include anonymous letters that were excluded from the analysis of the networks in the previous chapter that focused on the connections between senders and recipients.

⁷⁴⁶ For the letters Magliabechi wrote to the Dutch Republic, see Appendix 1

⁷⁴⁷ Easley and Kleinberg, Networks, Crowds, and Markets, 108.

⁷⁴⁸ Magliabechi to J. Gronovius, 1 January 1674, LMU, Cod 4° Cod.Msc 777, f. 137, "that evil physician".

⁷⁴⁹ Magliabechi to J. Gronovius, 1703, LMU, Cod 4° Cod. Msc 778, f. 12, "an ass, so ignorant that he did not even know how to bring two words of Latin together".

This underlines the importance of using multiple methods in the Digital humanities, each of which draws our attention to different types of data. As such, we are able to cope with the uncertainty and incompleteness of historical data. On the other hand, if I was unable to identify a person mentioned in his letters, this information has been omitted from the analysis.

In addition, a large part of the letters is undated. In many cases, from the contents of the letter, a year or period could be assigned. Since the analysis of this chapter includes a time-frame of five years, most letters could be placed in a particular time-frame. Nevertheless, in some cases it was impossible to assign a letter to a time-frame. In this case, the letter appears in the analysis of each time-frame.

Once each edge in the network had been given a positive or negative sign, python code – more specifically the algorithms contained in the Python NetworkX library – was used to create the four configurations of balance and imbalance from a signed network.⁷⁵⁰ The python program first established the total number of closed triads each node in the graph is part of. A closed triad pertains when all three nodes are linked pairwise. The number of closed triads Magliabechi is part of is reproduced in figure 20, showing that the number of triads in which he was involved grew from 350 to 378 triads during the period 1672-1713. It is important to notice here that the formation of these triads from a list of dyadic relationships would have been impossible by a close-reading approach alone. We just do not have the capacity to process all involved information at once. Following that, the script counted how many of these triads are balanced or unbalanced according to the four configurations as proposed by Fritz Heider. These four signed subnetworks are also summarized in figure 20. The table includes also the percentage each triad contributed to the total number of triads in the network. The following paragraph will discuss this table in more detail.

6. MAGLIABECHI'S NETWORK AND THE STRUCTURAL BALANCE THEORY

If there is a universal tendency towards balance, it is reasonable to expect that unbalanced triads will become less frequent over time, while balanced triads will become more frequent. Unbalanced triads will engender unease among the nodes and, as a consequence, it will eventually move to a balanced state by changing the sign of a relationship. The changing of relationships follows entirely intuitive rules: an individual tends to be friends with a friend's friend (+ + +), distrusts a friend's enemy (- +) and befriend an enemy's enemy (- - -). These formations mean that the balance theory promotes thus the formation, but not necessarily conflict free, of stable social groups over time. Does the network of Magliabechi conforms to this tendency? Is Magliabechi to control the balance in his network? In order to answer these questions, the next paragraphs individually discuss the first three configurations in figure 20. In the third chapter of this study we have already focused on the last configuration (+ + +) in the context of triadic closure and the importance of introductions in the scholarly network.

⁷⁵⁰ Dr. Sebastian Ahnert deserves many thanks for helping me to design the algorithm to calculate the dynamics of balance in the network of Antonio Magliabechi.

Structural Balance and Antonio Magliabechi (1633-1714)									
	Total		%		%		%		%
	closed								
Year	triads			+		- + +		+ + +	
1672-1677	350	4	1,14	45	12,86	87	24,86	214	61,14
1678-1683	355	4	1,13	50	14,08	88	24,79	213	60,00
1684-1689	364	4	1,10	57	15,66	89	24,45	214	58,79
1690-1695	372	4	1,08	62	16,67	92	24,73	214	57,53
1696-1701	373	4	1,07	63	16,89	92	24,66	214	57,37
1702-1707	374	4	1,07	64	17,11	93	24,87	213	56,95
1708-1713	378	4	1,06	66	17,46	96	25,40	212	56,08

Fig. 20 The four configurations of balance and imbalance in the network of Antonio Magliabechi.

6.1. TRIANGLE OF IMBALANCE (- - -)

Figure 20 considers the structural changes in the network of Magliabechi across seven successive fiveyear periods. From the analysis, it appears that the all-negative triads (- - -) are underrepresented to a much lesser degree than the other types of relationships. The reason for this is that the formation of an all-negative triad is very complex. In his letters, Magliabechi needs to express his dislike of two persons and, on top of that, he also needs to specify that these two persons dislike each other. In this respect, the four discovered triads acquire a greater importance for there is a slim chance to detect such a triad in hundreds of letters. Digital methods help us to highlight the finest details we otherwise might have overlooked. Although the all-negative triad does not contribute significantly to the overall network structure, their relative presence in the network, which remains stable over time, declines over time with 0,05 percent.

The all-negative triad is definitely a configuration that evokes tension. An example of such a triad involves the Florentine satirist Benedetto Menzini (1646-1704).⁷⁵¹ In 1681, Menzini failed to obtain the chair of Greek and Rhetoric at the University of Pisa, which had remained vacant after the departure of Jacob Gronovius in 1674. He did not get hired partly because of the jealousy of other scholars, in particular Giovanni Andrea Moniglia and partly because of the insults he constantly used in his writings.⁷⁵² Although Magliabechi detested Moniglia, he must have agreed with his decision to stop Menzini from obtaining a professorship. From the letters of Magliabechi to Jacob Gronovius it turns out that Menzini resented the fact that Magliabechi did not put in a good word for him by the Grand Duke.⁷⁵³ According

⁷⁵¹ C.A. Girotto, 'Menzini, Benedetto', http://www.treccani.it/enciclopedia/benedetto-menzini, Treccani, last accessed 16 January 2019.

⁷⁵² In his most important work, the *Satire*, Menzini assailed in harsh terms the hypocrisy prevailing in the Grand Duchy of Tuscany, making fun of several key figures at the court of Cosimo III, including, Moniglia, Magliabechi and Bassetti. Although the Satire was only published posthumously in 1718, the manuscripts enjoyed a wide circulation in the Florentine and Roman scholarly communities throughout the seventeenth century. The *Satire* was published after Menzini's death in 1718 under the false imprint of Amsterdam.

⁷⁵³ Magliabechi to J. Gronovius, undated, LMU, Cod 4° Cod. Msc 778, f. 28, "Questo infame [Menzini] avrebbe voluto che a S.A.S. io avessi parlato di esso."

to Magliabechi, Menzini was not worthy enough to occupy such an important position, especially because "per professione come bene V.S. Ill.ma sa, è un Pedante effettivo, e per Lettere un asino naturale."⁷⁵⁴ The mutual hostility between Magliabechi, Moniglia and Menzini gives rise to an all-negative triad (see figure 21).

The distrust Magliabechi showed towards Menzini brought further reverberations upon his network. On the one hand, he needed to make sure that his own correspondents did not become entangled in the tricks of Menzini, while on the other hand, he needed to safeguard his own equilibrium in his network. In the event that one of his correspondents makes contact with Menzini, a layer of tension would have been added to his network in the form of an unbalanced triad (figure 21, - - +). As a result, on the 10th of December 1675, Magliabechi expressively urged Jacob Gronovius not to answer the letters of Menzini. In order to not get into trouble, he advised Gronovius to dissimulate and hide that he had received a letter from Menzini:

"Adesso mi avveggo che quell'infame mi ha più volte domandato come doveva fare a scrivere a V.S. Ill.ma, ed a chi doveva indirizzare le Lettere. [...] È ben necessario che V.S. Ill.ma non gli risponda, perché o in una maniera, o nell'altra, che V.S. Ill.ma gli scrivesse, sempre se ne servirebbe esso per male come può presupporsi. Acciò La supplico con la maggior caldezza che so, e che posso, a dissimulare, ed a fingere o di non ne saper nulla, o di credere che esso abbia scritto a V.S. Ill.ma."755

As shown by this example, moments of tension in the network forge dissimulation and secrecy, and the structural balance theory highlights and enriches these moments for us.

⁷⁵⁴ *Ibidem,* "by profession, as Your Illustriour Lordship knows well, he is just a pedante (=someone who ostentatiously exhibts academix knowledge, just a schoolmaster), and he is a genuine ass in literature".

⁷⁵⁵ Magliabechi to J. Gronovius, 10 December 1675, LMU, Cod 4° Cod. Msc 777, f. 166, "Now it happens to me that that fool has repeatedly asked me how he could write to your Illustrious Lordship, and to whom he could address his letters. It is very necessary that Your Illustrious Lordship does not answer him, because in one way or another, if Your Illustrious Lordship writes to hem, he will always use it for something bad, as you might assume. Therefore, I beg you with much affection I have and can, to dissumulate, or pretend not to know anything, or to believe that, he had written to Your Illustrious Lordship".

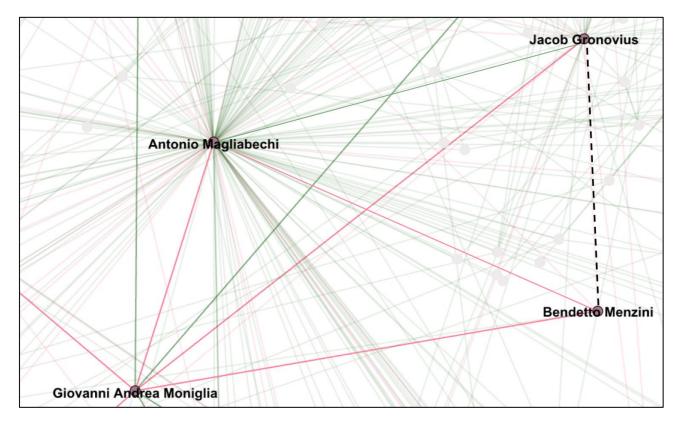


Fig. 21 The balance network around Benedetto Menzini. Network created with Gephi.

6.2. TRIANGLE OF BALANCE (--+)

The second type of relationship is a triad with one positive edge and two negative edges (- +). This is an example of a balanced triad in which two of the three are friends with a mutual enemy in the third. As stated before, relationships do eventually tend towards balance through a process whereby relationships change from positive to negative and vice versa. Figure 20 shows that the (- +) triads in the network of Magliabechi conform to the structural balance theory. The formation of balanced triads increases with 4,6 % during the period 1672-1713.

A balanced triad (- +) can either evolve from a (- -) unbalanced triad or a (- + +) unbalanced triad. While the correspondence of Magliabechi does not provide any example of a reconciliation in an all-negative triad, the following example shows how Magliabechi seeks for balance in a (- + +) triad. In 1675, Magliabechi wrote a long letter to Jacob Gronovius, in which he set out his arguments as to why Gronovius should forward his letters to the classical scholar Abraham van Berkel (1639-1686). He used the following arguments to encourage Gronovius to forward his letters to Van Berkel:

"Io ho stimato bene lo scrivergli per tre capi. Il primo perché esso mi ha fatti altri favori pel passato, e pare la mia la maggiore asinità del Mondo, mentre che a tanta cortesia, ne anche lo ringrazzio con un solo verso. Il secondo, perché ho con mio estremo contento veduto, che il detto signore Berckelio, parla nelle note con gran lode meritamente di V.S. Ill.ma. Il terzo capo che mi ha fatto scrivergli si è, il vedere la gran malignità che è, e qua, ed anche in buona parte costà, come V.S. Ill.ma avrà veduto dalle mie Lettere, onde non solo non mi par bene che ci tiriamo addosso egl'altri nemici, ma in oltre stimo necessario il farci più amici che possiamo, per far tanto maggiormente scoppiar d'invidia i maligni."⁷⁵⁶

⁷⁵⁶ Magliabechi to J. Gronovius, Florence, 26 March 1675, LMU, Cod 4° Cod. Msc 777, ff. 149-150, "I deemed necessary to write him [Van Berkel] for three reasons. Firstly, he has done me other favors in the past, and it is the most idiot thing that I

The first argument denotes one of the vital principles of the Republic of Letters: reciprocity. Although reciprocity was not always guaranteed in the Republic of Letters, it was a least expected that favors were returned.⁷⁵⁷ Failure to do so was associated with bad manners, resulting often in an unnecessary conflict between people. In Magliabechi's own words, it would be a "maggiore asinità del mondo" not to respond to the letters of Van Berkel, who recently had also donated his recently published edition of Stephanus Byzantius, *De urbibus et populis fragmenta*, to Magliabechi.⁷⁵⁸

In 1674, Abraham van Berkel gave this edition to the merchant-scholar Daniel Cousson (1648-1688) who was on his way to the Grand Duchy of Tuscany. The edition was not intended for Magliabechi but was meant to be a gift for Jacob Gronovius who was at the time professor at the University of Pisa. However, by the time Couson arrived in Florence, Gronovius had already left Pisa. Not knowing what to do with the book, Couson asked Van Berkel for further instructions and he was ordered to donate the book to Magliabechi instead. After having delivered the books to Magliabechi, Cousson advised Magliabechi to thank Van Berkel for his gift. He did not have to say it twice: Magliabechi knew very wel that gifts needed a return – one of the unwritten rules that kept the Republic of Letters together. On the 26th of March 1675, Magliabechi informed Cousson that he would send his reply to Van Berkel to Jacob Gronovius:

"Il signore Cousson mi prega a ringrazziare il signore Berckelio. Stimo infinitamente i consigli di V.S.Ill.ma, e ricordandomi che già mi ordinò che io non iscriversi ad alcuno che non mi avesse ben praticato, mando la Lettera a V.S.Ill.ma, perché se ella non istima bene al dargliela, la stracci, già che mi rimetto liberamente in lei. Non so, se intenda la lingua Italiana, ma V.S.Ill.ma se stimerà bene il dargliela, potrò spiegargliela nella Latina."⁷⁵⁹

Cousson was certainly not pleased with Magliabechi's decision to sent the letter to Gronovius first, and not without reason. From the correspondence between him and Magliabechi we discover that Gronovius never forwarded Magliabechi's letter to Van Berkel:

"Ho ricevuto hieri una Lettera dal Sig. Berkelio, che riverisce V.S. Illustrissima e si duole molto del Sig. Gronovio, che nega haver la lettera, che V.S. Illustrissima si è degnata di scrivere al predetto Sig. Berkelio tutto sconsolato per vedersi privo de' vostri favori tanto da se desiderati. Veda V.S. Illustrissima che mala bestia sia l'invidia."⁷⁶⁰

have never thanked him with one single verse to this very kindness. Secondly, I have seen that sir Berkel, and I blush for it, has spoken with a lot of praise in his notes of Your Illustrious Lordship. The third reason why I want to write him, is because of the great malice that is here, and also to a large extent there, as Your Illustrious Lordship has seen from my letters, whereby I believe that it is not good that we pull ourselves other enemies, but I value that it is necessary that we make us as many friends we can, so that evil persons burst with envy even more."

⁷⁵⁷ Van den Heuvel et al., 'Circles of Confidence in Correspondence. Modeling Confidentiality and Secrecy in Knowledge Exchange Networks of Letters and Drawings in the Early Modern Period', cit. 89.

⁷⁵⁸ Abraham van Berkel, *Genuina Stephani Byzantini De urbibus et populis fragmenta* (Lugduni in Batavis: apud Danielem a Gaesbeeck, 1674).

⁷⁵⁹ Magliabechi to Gronovius, 26 March 1675, "Sir Cousson begs me that I need to thank sir Berckelio. I value the advice of Your Illustrious Lordship, and remembering that you commissioned me not to write to anyone who is not close to me, I send the letter to Your Illustrious Lordship, in case you consider that you do not want to give it to him, you can tear it apart. You already know that I completely refer to your decision. I do not know if he understands the Italian language, but if Your Illustrious Lordship considers that it is good to give it to him, you can explain it in Latin."

⁷⁶⁰ D. Cousson to Magliabechi, 22 May 1675, BNCF, Magl. VIII 274, cc. 108-109, "Yesterday I have received a letter from sir Berckelio, who revers Your Illustrious Lordship and complains a lot about sir Gronovius, who denies to have the letter, which Your Illustrious Lordship deigned to write to sir Berkelio who is very devastated to be deprived from your, very desired, favors. You see, Your Illustrious Lordship, envy is a bad beast."

So, Gronovius refused to forward Magliabechi's letters to Van Berkel, impeding any form of communication between the two, and he continues to do so. Even four years later, on the 18th of May 1679, Cousson informs Magliabechi that Berkel deeply regrets that "Gronovio gl'impedisce la corrispondenza con V.S. Illustrissima."⁷⁶¹

To convince Gronovius that he had to forward his letters to Van Berkel, Magliabechi also argued that he had considered it to be "necessary to make as many friends we can so that evil men will burst with envy even more".⁷⁶² Here, Magliabechi deliberately asked Gronovius to put his hostile relationship with Van Berkel aside for a greater good. The more friends they had, argued Magliabechi, the better they could respond to the hostilities present in both the Dutch Republic and the Grand Duchy of Tuscany. It was all about the right balance between friendly and hostile fractions in the network.

From a later letter to Magliabechi, it appears that Jacob Gronovius was not on good terms with Van Berkel. According to Gronovius, Van Berkel only owed his renown and success to his father, Johann Friedrich Gronovius (1611-1671) and to the scholar Isaac Vossius (1618-1689). Instead of thanking them as they deserved, argued Gronovius, Van Berkel had made the mistake to dedicate the *De urbibus et populis fragmenta* to the French scholar Emery Bigot.⁷⁶³

How can we explain this case in light of the balance theory? The case of Gronovius and Van Berkel shows what happened when someone tries to join a network in which there is existing friendship and hostility. Abraham van Berkel wants to join the network of Antonio Magliabechi, and establish either positive or negative relations with the existing nodes in that network. When we thinks in terms of structural balance, Van Berkel needs to do this in such a way that he does not become involved in any unbalanced triangle that disrupts the balance in the scholarly network. This means that it would be impossible for Van Berkel to join the network of Magliabechi without becoming involved in any unbalanced triangles caused of his feud with Gronovius. Figure 22 shows a schematic illustration of this case. It is impossible for Van Berkel to join the network of Magliabechi, thus creating a positive edge with him, without becoming involved in an unbalanced triangle (- + +).

⁷⁶¹ D. Cousson to Magliabechi, 18 May 1679, BNCF, Magl. VIII 274, c. 120, "Gronovius impedes the correspondence with Your Illustrious Lordship".

⁷⁶² See note 685.

⁷⁶³ Gronovius to Magliabechi, undated but after 1674, BNCF, Magl. VIII. 771. A synopsis of this letter can be found in *Lettere e carte Magliabechi*. *Regesto*, ed. M. Doni Garfagnini, 694.

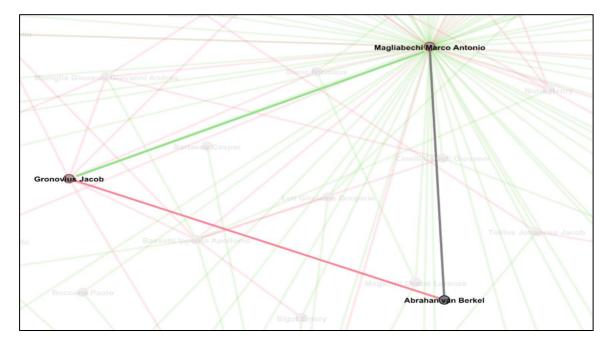


Fig. 22 A triad with one negative and one positive relationships. Van Berkel cannot join the network of Magliabechi without becoming involved in an unbalance triad (- - +). Network created with Gephi.

Van Berkel's book-gift puts Magliabechi thus in a difficult position with Gronovius if he decides to establish a positive connection with Van Berkel: in fact, you cannot be friends with you friend's enemy. Not willing to jeopardize his relationships with Gronovius, Magliabechi asked for Gronovius' permission before reaching out to Van Berkel. Gronovius decided not to give Van Berkel Magliabechi's letter, and Magliabechi never attempted to write Van Berkel again in order to sustain his relationship with Gronovius, maintaining the overall balance in his network by ignoring a relationship with Van Berkel. So, while the (- - +) triad is a natural, balanced outcome, it is not necessarily the preferable one.

6.3. TRIANGLE OF IMBALANCE (- + +)

As previously stated, the argument of structural balance is that unbalanced triangles are sources of stress and psychological dissonance. As a result, people strive to minimize them in their network, and hence they will be less abundant in social settings than balanced triads.⁷⁶⁴ In other words, because people strive for balance the total number of unbalanced triads should decrease over time. Yet, as shown by figure 20, the number of unbalanced triads in the network of Magliabechi gradually increases over time, which provides thus a counter-example to the definition of structural balance. This strongly suggest that Magliabechi was continuously busy to keep putting out fires as they came up, which is an argument that often comes up in his letters.

Which are the kind of situations that placed Magliabechi in a difficult situation? The (- + +) triad represents a situation in which one is on good terms with two people who are enemies with one another. As a consequence, he will be pressured to pick a side, which causes him stress in deciding, for example, to which friend to share private information or to which friends to give books. Moreover, he would experience stress because he wants to stay loyal to both sides, but he cannot publicly support one side over the other. Consequently, Magliabechi had to rely often on measures of secrecy in order to conceal his involvement with the foes of his friends.

⁷⁶⁴ Easley and Kleinberg, 109.

For example, in 1698, the Utrecht scholar Ludolph Küster (1670-1716) desired to establish a correspondence with Magliabechi, sending the librarian several of his own publications. Magliabechi, however, did not answer Küster instantly, but first wrote a letter to Jacob Gronovius, telling him that he was "costretto a rispondergli, per non fare una malacreanza, e rendermi odioso".⁷⁶⁵ It seems here that Magliabechi desired that Gronovius gave his blessing to initiate a correspondence with Küster, like he had tried to do with Van Berkel. In fact, as noted earlier, Gronovius, as a true gate-keeper, had commissioned Magliabechi not to write to anyone who was not close enough to him.⁷⁶⁶ Certainly, Gronovius did not want that his opponents benefitted from a fruitful exchange with his most important contact in Italy. It must not have been easy for Magliabechi to avoid contact with the opponents of Gronovius, who was known to be one of the most prolific and quarrelsome scholars in the seventeenth century that "render'd him odious to most Learned men".⁷⁶⁷

Gronovius, in fact, also came into conflict with Küster several times in the course of his career. He therefore did not accept Magliabechi's correspondence with Küster, as is shown by the correspondence between the merchant Abraham Cousson, brother of Daniel, and Magliabechi. On the 11th of September 1699, Cousson wrote Magliabechi the following:

"Non so capire per qual cagione il detto signore non voglia che V.S. Illustrissima scriva al suddetto signore Neocoro. La lettera per il signore Neocoro ho fatto indirizzare con la dovuta confidenza e segretezza."⁷⁶⁸

Magliabechi became involved in two unbalanced triads with Küster, Cousson and Gronovius. This situation of tension as shown in figure 23 exerted pressure on Magliabechi who had to sneak around Gronovius' back to reach his foes. He secretly sent his letters to Cousson who promised him to send his letters to Küster with "la dovuta confidenza e segretezza" so that Jacob would not find out that Magliabechi maintained contact with Küster. Interestingly, these examples show thus that secrecy and confidentiality prevail in unbalanced triads, in which moments of tensions figure prominently.

⁷⁶⁵ Magliabechi to J. Gronovius, LMU, Cod 4° Cod. Msc 778, f. 6, "obliged to answer him, for not making me uncivilized and hated."

⁷⁶⁶ See note 759.

⁷⁶⁷ Joseph M. Levine, *Dr. Woodward's Shield: History, Science, and Satire in Augustan England* (Ithaka/London: Cornell University Press, 1991), 161, quoting Lodewijk Caspar Valkenaer (1715-1785).

⁷⁶⁸ A. Cousson to Magliabechi, BNCF, Magl. VIII 1356, c. 41, "I do not understand the reason why that Sir [Gronovius] dies not want that Your Illustrious Lordship writes to sir Neocoro [Küster] I have addressed the letter for sir Neocoro with the neccessary confidentiality and secrecy."

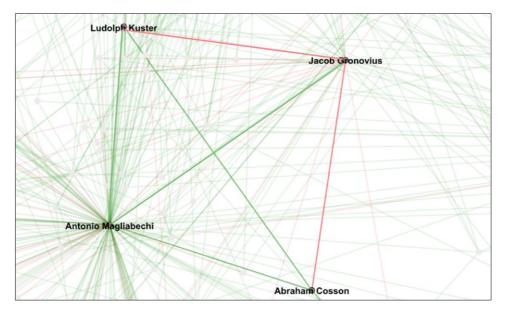


Fig. 23 This network consists of two balanced and two imbalanced triads. Two triads with one negative and two positive relationships (Küster-Gronovius-Magliabechi and Magliabechi-Gronovius-Cousson): not balanced. A triad with two negative relationships and one positive relationship (Gronovius-Küster-Cousson): balanced. One triad with three positive relationships (Magliabechi-Cousson-Küster): balanced. Network created with Gephi.

A similar example regards the relationships between Magliabechi, Johannes Georgius Graevius and Jacob Gronovius. As shown by the previous chapters, the relationships between Magliabechi and Jacob Gronovius dates back to the years 1673, when the latter travelled to Florence as part of his *peregrinatio academica*. During his stay in Florence, Jacob passed on a letter from his colleague Johannes Georgius Graevius to Magliabechi. In this letter, Graevius asked for Magliabechi's help for the preparation of his edition of Cicero, commenting that he lacked books and manuscripts from Italy. Magliabechi replied Gronovius that he was more than happy to assist Graevius in his studies.⁷⁶⁹ From that moment on, Graevius and Magliabechi started a regular correspondence, sending each other letters through the intermediation of Gronovius.⁷⁷⁰

On the 12th of October 1681, Magliabechi asked the grand ducal secretary, Apollonio Bassetti, to take care of his letters to Graevius. Usually, wrote Magliabechi to Bassetti, he would have sent his letter through the intermediation of Jacob Gronovius, but a recent argument between the two philologists complicated the delivery of his letters:

⁷⁶⁹ Magliabechi to J. Gronovius, 6 March 1674, LMU, Cod 4° Cod.Msc 777, ff. 147-148, Le rendo poi un milione di grazzie della Lettera che mi ha trasmessa del dottissimo signore Grevio, riconoscendo da V.S.Ill.ma interamente questo onore singolarissimo, da me in niun conto non meritato. Oltre a elegantissima, è anche piena di curiosissime notizzie, onde son certo che la leggeranno con gusto grandissimo, anche questi serenissimi Padroni. In essa mi scrive, come vuole ogni ragione, con gran lode di V.S.Ill.ma, come ella vedrà, giàche in fine di questa le copierò quella parte nella quale mi parla di Lei. Da questo veggo, che oltre a dotto, e anche candido, e non invidioso come quell'altro. Mi accenna tra l'altre cose, di bramare ardentissimamente pel suo Cicerone, e più di tutti gl'altri, tre Libri, che gli mandrò, benché ve ne sieno due rarissime, avendogli tutti a tre nella mia piccola Libreria. In uno di esso però, stimo che assolutamente esso pigli errore, come V.S.Ill.ma vedrà dalla mia risposta. Benché brami quei tre sopra di ogni altra cosa, per quanto mi scrive, gliene mancano ancora alcuni altri, che pel medesimo suo Cicerone gli sarebbero necessari. Io di buona voglia glieli manderò, bramando sommamente di contribuire qualche pietruzza, a così nobile, e bella fabbrica".

⁷⁷⁰ 27 letters written by Graevius to Magliabechi from 1675 until 1699 are extent in the National Central Library of Florence (Magl. VIII 296 and Magl. S. IV. T. IX). The letters from Magliabechi to Graevius are to be found in the Royal National Library of the Netherlands (8 letters in KW 72 C 16, ff. 77-94) and the University Library of the Ludwig Maximilian University of Munich (3 letters in Cod 4° Cod.Msc 777, ff. 143-144, 168, 175).

"Adesso son costretto a raccomandarla l'inclusa Letterina, come fo con ogni caldezza, per l'eruditissimo signore Grevio. Io volevo indirizzarle a Leida al signore Gronovio, che le faceva avere al signore Grevio sicurissime, ma adesso, per quel che veggo, le cose anno mutato faccia, e d'amicizzia, son diventati con mio dolore nemici. [...] L'infinita cortesia, nel primo luogo, da me più volte esperimentata di V.S. Ill.ma, mi da animo a darle questo incommodo, e spesa, e me ne sforza la necessità, non sapendo a chi altri indirizzarla, perché arrivi sicura alle mani del signore Grevio".⁷⁷¹

The conflict between Graevius and Gronovius evidentially caused discomfort by Magliabechi. On the one hand, he wanted to remain loyal to his trusted friend Gronovius who was his most important contact in the Dutch Republic. On the other hand, Graevius was a highly respected scholar, whose work continued to make a substantial contribution to the Republic of Letters. Now, Magliabechi was entwined in a conflict and felt pressured to pick a side. He could not remain friends with his friend's enemy.

If Magliabechi wanted to remain friends with both Gronovius and Graevius he needed to change this initially unbalanced triad (- + +) into a balanced triad that consists of three positive relationships (++ +). One way to do that is to lure Graevius and Gronovius into friendship. As such he would restore the balance in this particular triad (see figure 24). From the answer of Bassetti to Magliabechi, we learn that this is exactly the kind of strategy Magliabechi attempted to adopt. On the 9th of February 1682, Bassetti confirms the receipt of Magliabechi's mail, acknowledging the delivery of a letter destined to Graevius. From this letter, we learn that the letter from Magliabechi to Graevius was indeed meant to solve the conflict between Graevius and Gronovius:

"Mi pare che fusse per il signore Grevio una lettera, che già mi fu da V.S. Ill.ma vivamente raccomandata per il recapito, e conteneva, se non erro, certo uffizio di buona legge per promuovere la buona intelligenza fra due letterati diffidenti."⁷⁷²

Magliabechi urged Bassetti "a non lasciar vedere ad alcuno" the letter to Graevius and he needed to make sure that he would address the letter "in Olanda a qualche Amico sicuro, che sia dato in popria mano del signore Grevio".⁷⁷³ Again, the unbalanced triads in which Magliabechi found himself, demanded the utmost discretion.

⁷⁷¹ Magliabechi to Bassetti, Florence, 12 October 1681, ASF, MdP, Carteggi dei Segretari, 1526 (1681), "I am now obliged to forward you the attached letter, which I do with much care, to the very learned sir Graevius. I wanted to address the letter to Leiden to sir Gronovius, who securely gave the letters to Graevius, but now, as far I can tell, things have changed, and from friendship they have become, to my regret, enemies. [...] The infinite courtesy, in the first place, often expressed by me to Your Illustrious Lordship, gives me a reason to bring you this inconvenience and expenses, but the necessity willed myself to do so, not knowing to whom I can address my letters so that they safely arrive in the hands of sir Graevius."

⁷⁷² Bassetti to Magliabechi, Livorno, 9 February 1681 ab incarnazione, BNCF, Magl. VIII 425, f. 33, "I believe that there was a letter for sig. Graevius, whose delivery was already vividly recommended to me by Your Illustrious Lordship, and contained, if I am not mistaken, several pleas to promote the good intelligence between two wary scholars."

⁷⁷³ Ibidem, "not showing to anyone", "in Holland to a trusted friend, whi will give the letter in the hands of sir Graevius".

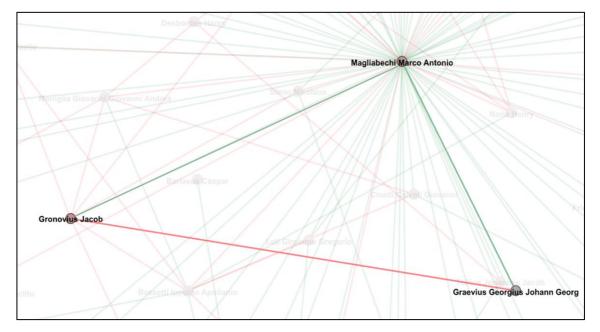


Fig. 24 A triad with one negative and two positive relationships: not balanced. Network created with Gephi.

Nevertheless, the conflict between Graevius and Gronovius had the result that Magliabechi never used the intermediation of Gronovius again to forward his letters to Graevius. In the following years, Magliabechi relied on the intermediation of Bassetti, who subsequently sent his letters to the Florentine merchant Giovacchino Guasconi.⁷⁷⁴ Guasconi then gave the letter to Graevius "per mezzo di amico in proprie mani".⁷⁷⁵

One negative relationship has thus serious consequences for the network of Magliabechi, who now had to rely on 3 intermediaries to reach Graevius. Naturally, the more intermediaries, the more risks the letter from Magliabechi to Graevius was subject to. The letter could easily get lost or intercepted, increasing the risk that Gronovius would find out about the link between Magliabechi and Graevius. In 1695, Magliabechi directly asked his correspondent Gisbert Cuper to take care of his letters to Graevius, "non sapendo a chi altro indirizzarla", lowering the number of intermediaries between him and Graevius.⁷⁷⁶ These kinds of dynamics are visible and quantifiable in the structure of the network of Magliabechi. The following paragraph will explain in more detail how negative relationships impact the performance of the overall network.

6.4 OBSTACLES IN THE NETWORK

Research based in the social network tradition claims that the social relationships of individuals – the edges – provide them with both opportunities and constraints in accessing valuable resources such as

⁷⁷⁴ From November 1681 onwards, Guasconi repeatedly acknowledged the delivery of letters and books from the Grand Duchy of Tuscany to Graevius: letters from Guasconi to Bassetti, 7 November 1681, ASF, MdP, 4263 (XII), f. 653; 5 December 1681, *ibidem*, f. 656; 12 December 1681, *ibidem*, f. 657; 24 December 1681, *ibidem*, f. 658; 9 January 1681, f. 659; 16 January 1681, *ibidem*, f. 660.

 ⁷⁷⁵ Guasconi to Bassetti, Amsterdam, 5 December 1681, ASF, MdP, 4263 (XII), f. 637, "by means of a friend in his hands".
 ⁷⁷⁶ Magliabechi to Cuper, Florence, 17 April 1695, KB, KW 72 D 10, f. 112, "not knowing to who else I can address the letter,"

trust, knowledge and power.⁷⁷⁷ Herein, opportunities in the network are mostly related to the presence of positive edges in the network, while constraints are often the result of negative edges. For example, people only convey confidential information to people they trust or people only introduce people they trust to their friends. The presence of a negative edge can thus be linked to a broad range of behavioral constraints that have a negative impact on the performance and confidentiality of the network as a whole.

Starting off from the simple assumption that people will not convey information to persons they dislike, or distrust and that they do not introduce enemies to their friends, for each time-frame of five years the negative links were isolated (2) and filtered out (3). Figure 25 reports the number of nodes and edges in the network that represent the period 1672-1677. In this period, the network is composed of 361 nodes and 1066 edges, of which 71 are negative (only 6,66% of the total number of edges). Network measures were ran over network (1) and network (3) to study the impact of the negative sign on the overall network performance, and hence determine how detrimental (or not) negative ties are.

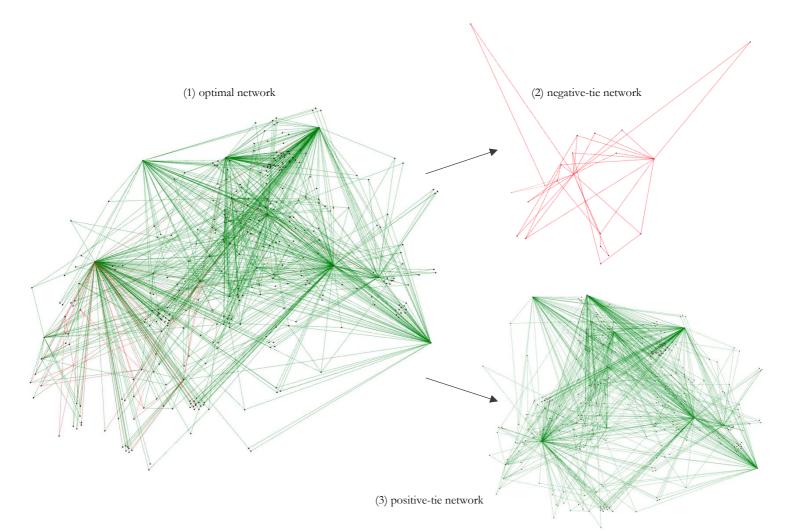


Fig. 25 Division of the whole signed "optimal" network (1) into two sub-networks with only negative (2) and only positive (3) edges. This network represents the period 1672-1677 and consists of 361 nodes and 1066 edges (1). After the removal of dyadic negative relationships the network (3) consists of 345 nodes and 995 edges. This means that only 6,66 % of the network is composed of negative ties. Networks created with Gephi.

⁷⁷⁷ Negative tie research is still a current domain in the social sciences. In 2019, a special issue of the journal *Social Networks* will be dedicated to the study of negative ties. Martin G. Everett and Thomas W. Valente, eds., *Negative and Signed Tie Networks: Special Issue of Social Networks*, Social Networks, https://www.journals.elsevier.com/social-networks.

The present approach builds upon the ideas of the following studies, which use link deletion for the analysis and measurements of social networks. Duncan J. Watts has made use of link deletion in the analysis of small worlds – the principle that most of us are linked by short chains of acquaintances. He suggested that optimal networks are characterized by short average distances between nodes and a high degree of clustering.⁷⁷⁸ According to him, an optimal network is a small-world network that maximizes bridging and bonding opportunities between the nodes of that network. Similarly, Thomas W. Valente and Kayo Fujimoto, used link deletion to introduce "a measure of bridging designed to measure the degree a node in a network occupies a strategic position such that changes in links to or from this node have maximal impact on the overall structure of the network".⁷⁷⁹ In order to do so, they calculate the change in average path-length- of the network when each link is removed. Adilson E. Motter et al. have removed links to demonstrate network vulnerability. Douglas R. White and Frank Harary removed the edges between the nodes to assess the overall cohesiveness in a network. The cohesiveness of a network is measured by the extent to which it is not disconnected by the removal of links.⁷⁸⁰

Following Watts and Valente, low average path-length helps us to measure bridging and bonding in the network. Path lengths in the network are calculated by tracing a path from each node of the network to every other node, and counting the minimal number of nodes that must be traversed to reach the destination. For example, in a network with only positive edges, information can easily diffuse from *a* to *c* through the directed path $a \rightarrow b \rightarrow c$ where *a* is connected to *b* who is further connected to *c*. In this case, the path-length is two, since the shortest path between *a* and *c* must go through *b*. By contrast, in a network that is also composed of negative relations, the flow of information does not follow this pattern. For instance, the same path is not possible if *a* has a hostile relation with *b*. In this case, *a* needs to find another path to reach *c*, which might be longer than necessary. Illustrative for these dynamics was the example of the previous paragraph. When Gronovius refused to forward Magliabechi's letters to Graevius, Magliabechi struggled to reach Graevius. In fact, no less than three intermediaries were needed to forward his letter to the Utrecht professor. The negative edge between Gronovius and Graevius thus affected the length of the path that linked Magliabechi to Graevius.

The negative links in the network were deleted and the resultant changes in the network's average path lengths were compared to the optimal network represented in figure 25. As shown by figure 26, the elimination of the negative links greatly decreased the average path length. The longer the path-length, the greater the amount it takes for information to flow between the nodes and the greater the probability of a failure to flow.

⁷⁷⁸ Duncan J. Watts, Six Degrees: The Science of a Connected Age (New York: W. W. Norton & Company, 2004), 91.

⁷⁷⁹ Thomas W. Valente and Kayo Fujimoto, 'Bridging: Locating Critical Connectors in a Network', *Social Networks* 32, no. 3 (2010): 220.

⁷⁸⁰ Frank Harary and Douglas R. White, 'The Cohesiveness of Blocks in Social Networks: Node Connectivity and Conditional Density', *Sociological Methodology* 31 (2001): 305.

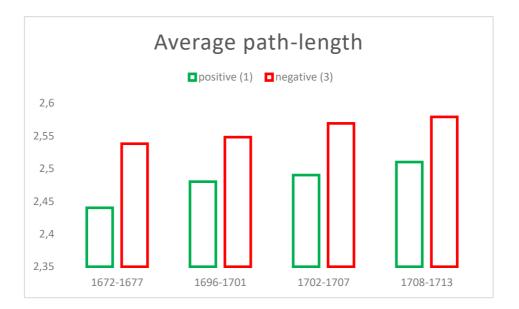


Fig. 26 The average path-lenght in the network of Magliabechi. The green column indicates the average path-length for an unsigned network of Magliabechi, while the red column represents this network in which the negative edges were omitted from the analysis.

7. COMPLEXITY AND INTERCONNECTIVITY IN HISTORICAL NETWORKS

The following paragraph will discuss a more complex case, shown in figure 27, that generalizes the structural balance theory to a more interconnected and interdepended network. The stability of three mutually connected nodes is easy enough to evaluate, but the complexity increases as nodes are added to create larger graphs with many interdependent triads.⁷⁸¹ The structural balance theory also helps us to inform and reason about more complicated models. More complex cases of interconnected triads also illustrate a connection "between local and global properties in the network".⁷⁸² This phenomenon – the interaction between micro- and macro-network structures, will be central in this paragraph. We will see, for example, that the change of one relationship will have major consequences upon the formation of the overall network.

⁷⁸¹ Sack, 90.

⁷⁸² Easley and Kleinberg, cit. 107.

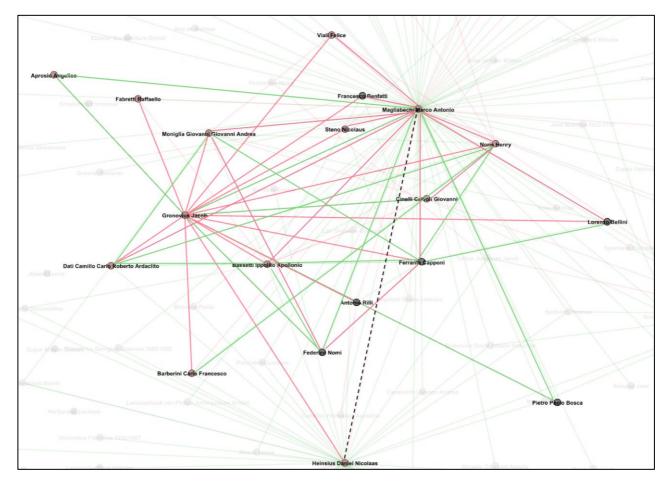


Fig. 27 Structural balance concerning the conflict between Jacob Gronovius and the University of Pisa. Network created with Gephi.

7.1. JACOB GRONOVIUS AND THE UNIVERSITY OF PISA

The majority of Magliabechi's letters to Jacob Gronovius are related to a series of ongoing disputes that emerged between him and the Dutch philologist Nicolaas Heinsius during the 1670s.⁷⁸³ The disputes were centered around a conflict between Jacob Gronovius and the University of Pisa. A combination of personality clashes and power struggles within the University of Pisa was the reason why Gronovius was forced to resign from his chair in Greek. He had been forced to tender his resignation not only because of these academic intrigues but also because of the interference of the Roman Inquisition. The conflict caused serious concerns and disquiet by Gronovius' compatriot Nicolaas Heinsius, who was afraid that the conflict would negatively affect the relationship between the Dutch Republic and the Grand Duchy of Tuscany, jeopardizing a long-standing rapport he had curated for almost three decades. Based on Heider's balance theory, the following paragraphs provide an explanation for the behavior of Magliabechi and his correspondents during this conflict. However, first we offer some background information with a brief account of Jacob Gronovius and his stay in Italy.

In the third chapter of this study we have followed Jacob Gronovius' travels through France, Spain and Italy to visit historic sites and to collate ancient manuscripts in the most prominent library collections in 1673. In Florence, Magliabechi made sure that Gronovius was granted an audience with

⁷⁸³ The correspondence between Magliabechi and Jacob Gronovius is already touched upon by Giuseppina Totaro, 'Libri e Circolazione Libraria Nelle Lettere Di Antonio Magliabechi a Corrispondenti Olandesi', *LEXICON PHILOSOPHICUM. Quaderni Di Terminologia Filosofica e Storia Delle Idee.* X (1999): 173–95 and Nordström, *Antonio Magliabechi Och Nicolaus Steno: Ur Magliabechis Brev till Jacob Gronovius.*

Cosimo III. The Grand Duke's interest in Jacob was such that he offered him, at the insistence of Magliabechi, a chair in Greek at the University of Pisa, which had remained vacant after the death of the Tuscan scholar Valerio Chimentelli in 1668.⁷⁸⁴ Gronovius gladly accepted the professorship in Pisa, much to the delight of Cosimo III, as shown by a letter that Cosimo wrote to Magliabechi, which is transcribed by Jacob in his travel diary:

"Io [Cosimo III] mi posso assicurare, che non potrei in questo mondo avere cosa di maggiore sodisfazzione quanto questa, di avere appresso di me, un virtuoso della sua condizzione, ed oltre a questo di un naturale così Angelico."⁷⁸⁵

In the following weeks, preparations were made for Gronovius' entrance in the university. He received an appropriate gown for lecturing, he was shown around the lecture hall and he received his first stipend of 266 scudi. On the 5th of March 1674, Gronovius reports in his diary that he had "de eerste lesse gedaen".⁷⁸⁶ This is also the last record of his diary.

Other sources inform us about Gronovius' stay in the Grand Duchy of Tuscany. The most important source are the letters between Magliabechi and Gronovius, which give a detailed account of Gronovius' experience at the University of Pisa. Magliabechi's letters to Gronovius, more than 150 in total, confirm the impression that Magliabechi regarded Gronovius as a good and reliable friend, with whom he could confidently touch upon subjects of more concern to him than the borrowing of books or scholarly exchanges. As a result, these letters are intriguingly frank, full of sharp-tongued remarks about people and events in Florence. In addition, the correspondence between Magliabechi and Nicolaas Heinsius provide another source of information, which gives us a glimpse of Gronovius' conflict that would gradually evolve within the walls of the University of Pisa.

From the very moment that Gronovius was appointed professor at the university of Pisa, Magliabechi informed Nicolaas Heinsius about Gronovius' miserable situation. It appears that Gronovius had become victim of a vindictive campaign waged against him by those who were jealous of Cosimo's favors towards him:

"Quasi tutti costoro, copertamente perseguitano terribilmente il Signor Gronovio benché apparentemente gli facciano cortesia. Ne' pochi mesi che 'l detto Signor Gronovio è stato qua, ha benissimo conosciuto la malignità che qua regna"⁷⁸⁷

⁷⁸⁴ UBL, LTK 860, f. 2r. See also Magliabechi to N. Heinsius, 15 February 1674, UBL, BUR F 8, "Stimo che assolutamente V.S.Ill.ma abbia inteso, che capitò quà il Signor Iacopo Gronovio nel principio del mese di Ottobre, e mi portò una Lettera in sua raccomandazzione del Signor Giovanni Cappellano, amico anche di V.S. Ill.ma. Io l'ho servito in tutto quello che ho potuto, ed anche raccomandatolo caldamente a questi Serenissimi Padroni, onde il Serenissimo Gran Duca mio Signore, mi ha fatto grazzia di dargli la Cattedra dell'Umanità di Pisa che aveva il Chimentelli, con provvisione di quattrocento nostre piastre l'anno. In oltre gli ha adesso donate cento piastre, e gli farà dare le stanze per abitare senza spendere in Palazzo Vecchio, con la biancheria"

⁷⁸⁵ *Ibidem*, f. 6r. "I am certain that I cannot have in this world more satisfaction than this, to have near me, a virtuous man of his condition, and besides that, of such an Angelic nature".

⁷⁸⁶ *Ibidem*, f. 12v. "done the first lesson".

⁷⁸⁷ Magliabechi to N. Heinsius, 19 June 1674, UBL, BUR F 8, "Almost all these men secretly pursue sir Gronovius in a terrible way, while they appear to be kind to him. In the few months sir Gronovius has been here, he has well witnessed the evilness that reigns here".

Structural Balance and Jacob Gronovius (1645-1716)										
Year	Total closed triads		%	+	%	- + +	%	+ + +	%	
1672-1677	110	2	1,82%	26	27,37%	29	26,36%	33	30,00%	
1678-1683	107	2	1,87%	30	30,30%	28	26,17%	33	30,84%	
1684-1689	107	2	1,87%	30	30,30%	28	26,17%	42	39,25%	
1690-1695	107	2	1,87%	35	32,71%	28	26,17%	42	39,25%	
1696-1701	99	2	2,02%	30	28,04%	25	25,25%	42	42,42%	
1702-1707	99	2	2,02%	30	28,04%	25	25,25%	42	42,42%	
1708-1713	95	1	1,05%	26	23,64%	14	14,74%	54	58,84%	

Fig. 28 Structural balance in the network of Jacob Gronovius

Figure 28 shows the dynamics of balance and imbalance in the network of Jacob Gronovius, showing that he was part of many unbalanced triads during his stay at the University of Pisa (1672-1677). Gradually, once Gronovius returned to the Dutch Republic, the number of unbalanced triads declined over time.

Who were responsible for the harassments against Gronovius? According to Magliabechi, the physician and poet Giovanni Andrea Moniglia was the fiercest persecutor of Gronovius. When Jacob Gronovius obtained his position at the University of Pisa in 1674, Moniglia was a well-established professor at the University of Pisa. On the 1st of January 1672, Magliabechi expressed for the first time his anger about Moniglia. Magliabechi warned Gronovius that Moniglia "è interamente ripieno di vizzi, di infamie, d'ignoranza" and will do anything to go ahead.

Structural Balance and Giovanni Andrea Moniglia (1625-1700)									
Year	Total closed triads		%	+	%	- + +	%	+ + +	%
1672-1677	19	2	10,53%	13	68,42%	1	5,26%	3	15,79%
1678-1683	31	2	6,45%	25	80,65%	1	3,23%	3	9,68%
1684-1689	28	2	7,14%	22	78,57%	1	3,57%	3	10,71%
1690-1695	31	2	6,45%	25	80,65%	1	3,23%	3	9,68%
1696-1701	31	2	6,45%	25	80,65%	1	3,23%	3	9,68%

Fig. 29 Structural balance in the network of Andrea Moniglia

How does Magliabechi perceive the position of Moniglia in his network? Figure 29 shows the role of balance in the network of Moniglia from 1672 until 1701. The first thing we notice is that the dynamics of balance in the network of Moniglia are in stark contrast to those in the network of Magliabechi in figure 20. While Magliabechi was increasingly involved in many unbalanced triads, Moniglia is mostly part of balanced triads. Interestingly, in the wake of the conflict with Gronovius and Magliabechi – in the years 1678-1683 – Moniglia managed to significantly increase the number of balanced triads in his relationships. During these years, the number of balanced triads increases from 68,42% to 80,65%. These dynamics strongly support the influential position of Moniglia, who teams up with others (- - +) to

undermine the position of Magliabechi and Gronovius. As we shall see, similar dynamics can be found in the networks of all the people responsible for the departure of Gronovius.

Magliabechi accused Moniglia of instigating the Florentine lawyer Ferrante Capponi (1611-1689) to plot against Gronovius. Moreover, according to Giovanni Targioni Tozzetti (1712-1783), prefect of the Magliabechian Library after the death of Magliabechi, Capponi did not accept that Gronovius had been given the chair in Pisa without his permission.⁷⁸⁸ Capponi belonged to a prestigious if not especially wealthy branch of the Capponi family. He studied law at the University of Pisa, and moved to Rome where he became jurisconsult and lawyer at the Roman Rota, the apostolic tribunal of the Catholic Church. In Rome, he worked under Cardinal Luigi Capponi (1583-1659), who helped him to secure ties with important jurists, officers and prelates. In 1651, Capponi returned to Florence and accumulated several high-profile offices at the court of Ferdinando II and under Cosimo III de' Medici. Cosimo III, for example, appointed him as his chief legal expert.⁷⁸⁹ Over the years, Capponi's influence became broad and significant: he did not only help direct Cosimo's political economy, but he also decided over the Grand Duchy's intellectual life, becoming, in 1664, auditore of the universities of Florence and Pisa. As the auditore of the universities of Florence and Pisa, he exerted an ever-increasing influence over university life. He "played a key role in the appointment of professors, receiving recommendations, reading texts by applicants and negotiating contracts. He could also recommend candidates for the chairs which were appointed by the rector. Moreover, all payments, including the salaries of professors, had to be approved by him".⁷⁹⁰

The observations of Magliabechi in his letter to Gronovius concerning Capponi are consistently characterized by mistrust and aversion. Capponi is in Magliabechi's eyes a suspect person in which company one should be on one's guard, apparently because with his great influence he could easily manipulate people to take his side. For example, on the 15th of January 1675, Magliabechi informs Gronovius that Capponi had promised Jacopo Rilli a chair in law at the University of Florence in exchange that he would "dire il peggio che poteva" about Gronovius. This arrangement was detrimental not only for Gronovius, but also for the Florentine poet and intellectual Agostino Coltellini (1613-1693), who had desired the position for years:

"Adesso per benemerito dell'essersi il detto Rilli accordato con costoro a dire il peggio che poteva di V.S. Ill.ma, questo Ministro, perché non si abbia a scomodare ad andare a Pisa, gl'ha fatta avere la Cattedra di Legge di Firenze con grossa provvisione. Il povero Coltellini che quasi si muor come V.S. Ill.ma sa di fame, l'ha in vano durata a chiedere molti anni, e poi si è veduto passare avanti un ragazzo, che non ha merito d'alcuna sorta."⁷⁹¹

⁷⁸⁸ Targioni Tozzetti, *Clarorum Belgarum ad Ant. Magliabechium nonnullosque alios epistolae ex autographis in biblioth. Magliabechiana; quae nunc Publica Florentinorum est, adservatis descriptae. Tomus Secundus* (Florentiae: Ex Typographia ad Insigne Apollinis in Platea Magni Ducis, 1745), 4: "Ferrante Capponius Pisani Lycei moderator, qui Gronovio minus favebat, eo quod inconsulto Pisas advoatus fuerat".

⁷⁸⁹ About Capponi, see Francesco Martelli, "'Nex Spes Nec Metus": Ferrante Capponi, giurista ed altro funzionario nella Toscana di Cosimo III', in *La Toscana nell'età di Cosimo III*, 137–65.

⁷⁹⁰ Jonathan Davies, *Culture and Power: Tuscany and Its Universities 1537-1609* (Leiden: Brill publishers, 2009), cit. 83-85. About the role of the *auditore* at the University of Pisa, see also Romano P. Coppini, *Breve storia dell'Università di Pisa* (Pisa: Plus, 2009), 18.

⁷⁹¹ Magliabechi to J. Gronovius, 15 January 1675, LMU, Cod 4° Cod. Msc 777, f. 139, "Now that Rilli has agreed with them to say the worst things he could about Your Illustrious Lordship, that Minister, so that he does not have to bother to come to Pisa, had given him a chair in law in Florence, highly paid. The poor Coltellini, who almost starves to death of hunger, as Your Illustrious Lordship knows, has asked for the position in vain for many years, and had then to see to it that a boy went ahead of him, who does not even have any sort of credit".

How is Capponi's behavior perceived by Magliabechi? The following table (figure 30) reflects the moments of balance and imbalance in the relationships in the network of Capponi. Similarly to Moniglia, Capponi is involved in many balanced triads, which happen to increase right after the conflict with Gronovius. By manipulating people to join his side (- - +), Capponi is able to sustain many balanced triads, forming as such a strong and stable opposition against Magliabechi and Gronovius.

Structural Balance and Ferrante Capponi (1611-1689)									
Year	Total closed triads		%	+	%	- + +	%	+ + +	%
1672-1677	10	0	0,00%	9	90,00%	0	0,00%	1	10,00%
1678-1683	13	0	0,00%	12	92,31%	0	0,00%	1	7,69%
1684-1689	12	0	0,00%	11	91,67%	0	0,00%	1	8,33%
1690-1695	13	0	0,00%	12	92,31%	0	0,00%	1	7,69%
1696-1701	13	0	0,00%	12	92,31%	0	0,00%	1	7,69%
1702-1707	13	0	0,00%	12	92,31%	0	0,00%	1	7,69%
1708-1713	13	0	0,00%	12	92,31%	0	0,00%	1	7,69%

Fig. 30 Structural balance in the network of Ferrante Capponi

Also Henry Noris (1633-1704), theologian of Cosimo III, became part of the plot against Gronovius. Noris was an eminent Augustinian and theologian. Born in Verona in 1633, at the year of 15, he was sent to study with the Jesuits in Rimini and here he entered the Order of the Hermits of Saint Augustine. In Rimini, he caught the attention of Father Celestino Bruno, who recommended Noris to the Prior General of the Order, Father Fulgenzio Petrelli. It was the latter who sent him to Rome to study theology. In Rome, Noris dedicated his studies to the works of S. Augustine and he began to write his *Historia Pelagiana*. In 1673, when he taught theology at his order's house in Padova, he completed and printed the work, which was revised and approved by the Papal Inquisition. Nevertheless, after the publication of the *Historia Pelagiana*, charges were made against him, accusing him to teach Jansenist theology. In particular, Noris had to face the attacks of the Jesuits, who wrote several publications against him. Despite these accusations, Pope Clement X named Noris one of the qualificators of the Holy Office. In 1674, on the recommendation of Magliabechi, Noris was appointed court theologian by Cosimo III. The Grand Duke also appointed him lecturer in Ecclesiastical and Sacred History at the University of Pisa, where he remained from 1674 until 1678.⁷⁹²

At the University of Pisa, Noris enjoyed the company of Jacob Gronovius, who had been appointed professor around the same time. On the 5th of March 1675, Noris informed Magliabechi about Gronovius' first lecture at the University of Pisa, which did not exactly go as planned:

"Questa mattina ho fatta la prima lezione con tutta frequenza, e li scolari sono stati con silenzio. Ma con mia estrema mortificazione non è così oggi successo al sig. Gronovio, perché stante la pronunzia oltramontana gli hanno fatto 5 o 6 risate. Il sig. Ricciardi però ha operato che desistessero; e credo che il sig. Gronovio sia molto adirato; non avendolo più veduto dopo la lezione."⁷⁹³

⁷⁹² Del Gratta, I docenti e le cattedre dal 1543 al 1737', 527.

⁷⁹³ Targioni Tozzetti, *Clarorum Venetorum ad Ant. Magliabechium nonnullosque alios epistolae ex autographis in Biblioth. Magliabechiana, quae nunc publica Florentinorum est, adservatis descriptiae. Tomus primus.* (Florence: Typographia ad Insigne Apollinis in Platea, 1745), 25, "This morning I did my first letter with complete attendance, and the scholars have been silent. But much to my chagrin,

That the Pisan students made fun of Gronovius' northern accent during the course of his classes was, however, not something to worry about. More disturbing was the fact that Gronovius had been put in an invidious situation by his fellow colleagues. Noris, however, reassured Magliabechi that he would do anything to help Gronovius.⁷⁹⁴ If one reads Noris' letter to Magliabechi, one gets the impression that at least in the beginning, Noris was willing to help his Dutch colleague. However, Noris soon realized that the opposition against Gronovius was too strong to resist. At that point, Noris decided to switch sides and joined forces with the enemies of Gronovius. It was either him or me, must have thought Noris.

That Noris changed his mind, can be explained by the structural balance theory. In light of the structural balance theory, there are two ways for Noris to deal with this conflict. First, Noris can decide to protect Gronovius, which will make him an enemy of all the opponents of Gronovius. In this case, each triad Noris is involved in contains exactly one positive edge (his relationships with Gronovius) while all the other edges turn into negative. Alternatively, Noris could decide to side with Gronovius' opponents. In that case it would be impossible for Noris to remain friends with Gronovius without becoming involved in conflicts expressed by any unbalanced triads in his network. Consequently, he becomes an enemy of Gronovius as well. Again, these dynamics are reflected in figure 31. The number of balanced triads (- +) increases over time, while the number of unbalanced triads tend to decrease over time.

Structural Balance and Enrico Noris (1631-1704)									
Year	Total closed triads		%	+	%	- + +	%	+ + +	%
1672-1677	29	0	0,00%	13	44,83%	10	34,48%	6	20,69%
1678-1683	34	0	0,00%	18	52,94%	10	29,41%	6	17,65%
1684-1689	36	0	0,00%	20	55,56%	10	27,78%	6	19,44%
1690-1695	41	0	0,00%	23	56,10%	11	26,83%	7	17,07%
1696-1701	41	0	0,00%	23	56,10%	11	26,83%	7	17,07%
1702-1707	41	0	0,00%	24	58,54%	10	24,39%	7	17,07%
1708-1713	43	0	0,00%	25	58,14%	11	25,58%	7	16,28%

Fig. 31 Structural balance in the network of Enrico Noris

The foes of Jacob Gronovius tend to stick together, and train others who will also adopt their hostility against Gronovius. These equilibria are also driven by "cascades effects", generally described by the point at which a chain reaction across a network becomes inevitable.⁷⁹⁵ In particular, a cascade has the potential to occur when people make decisions sequentially, with later people merely watching the actions of earlier people and from these actions inferring something about what the earlier people know.⁷⁹⁶ A cascade thus develops when people abandon their own information in favor of inferences

the same did not happen to sir Gronovius, who was laughed at five or six times because of his northern pronunciation. However, sir Ricciardi has acted in such a way that they would give up, and I blieve that sir Gronovius is very mad because I have not seen him anymore after the course."

⁷⁹⁴ *Ibidem,* 26, "Il signore Gronovio è entrato carico di grand'invidia come Ella sa. Non mancherò d'assistergli (giacché mangia meco) con tutti li più opportuni consigli per regolarlo in queste primiere contrarietà".

⁷⁹⁵ Weingart, 'The Networked Structure of Scientific Growth', 27.

⁷⁹⁶ Easley and Kleinberg, cit. 425.

based on earlier people's actions.⁷⁹⁷ The inherent interconnectedness of the network in Florence allowed opinions and sentiments to "cascade" across the scholarly network, reaching the whole community swiftly. It could be that initially someone saw no reason to be against Jacob Gronovius. But with more and more people acting against the Dutch scholar, he must have decided that there was a good reason to follow the crowd and to keep him at bay against the Dutch scholar. As a result, Gronovius would get more enemies over time. Consequently, Apollonio Bassetti, Carlo Dati, Lorenzo Bellini and Viale Felice eventually became part of the plot against Gronovius. On the 25th of September, for example, Magliabechi warned Nicolaas Heinsius that he should be careful to send him letters regarding Gronovius, because his letters will end up in the hands of Apollonio Bassetti "il quale è amicissimo, per non dire l'istessa cosa, di un Ministro grande [Capponi], il quale è stato il più fiero persecutore che abbia avuto il Signor Gronovio".⁷⁹⁸ The cascade effect explains also the reasons why Nicolaas Heinsius stayed loyal to Magliabechi's and Gronovius' enemies, something which will be discussed in the next paragraph.

7.2. TWO BATTLING FRACTIONS IN THE NETWORK

Up to now, the network of Magliabechi is balanced. According to the structural balance theory as proposed by Cartwright and Harary, the network is balanced if it can be divided into two, or multiple sets of mutual friends, with complete mutual antagonisms occurring between the sets. In other words, the network is balanced when it can be divided into two battling fractions. On the one hand, a group led by Moniglia and Capponi sought to strengthen their forces with others with a view to a fierce attack on Gronovius. In opposition to them there was a group led by Magliabechi who tried to defend Gronovius at all costs (see figure 27). It is thus important to notice here that balance is thus not always necessarily harmonious: a network is even said to be balanced when two implacably opposed groups that find it impossible to resolve the opposition between them.

At the beginning of the confrontation, the strength of the opposition did not worry Magliabechi so much, since he was backed by the Grand Duke and many friends who supported Gronovius' stay in the Grand Duchy. For example, the erudite bibliographer Angelico Aprosio (1607-1680), Federico Nomi (1633-1705), rector of the University of Pisa, and Pietro Paolo Bosca, librarian of the *Ambrosiana* in Milan, supported Magliabechi in the defense of Gronovius: they "bestemmiano per così dire la malvagità di costoro" who tried to undermine the position of the Dutchman.⁷⁹⁹ On the 17th of April 1675, in fact, Magliabechi informed Nicolaas Heinsius that, although Gronovius is the subject of vicious harassments and wrong accusations, they certainly will lead to nothing:

"Ha V.S. Ill.ma dato nel segno, che le grazzie che fa S.A.S. al Signor Gronovio lo caricano quà d'invidia appresso molti che sono l'istessa malignità, benché io non creda che gli possino in maniera alcuna nuocere."⁸⁰⁰

Yet, to make sure that nothing bad happened to Gronovius, Magliabechi suggested Heinsius to put in a good word for Gronovius in his next letters to Cosimo III. A good recommendation would guarantee that the Grand Duke would not believe the rumors of Gronovius' enemies. This would ensure that the

⁷⁹⁷ Ibidem, 426.

⁷⁹⁸ Magliabechi to N. Heinsius, 25 September 1674, UBL, BUR F 8, "who is a very good friend, not to say almost the same person, as the great minister, who is the fierest opponent that Gronovius has ever had."

⁷⁹⁹ Magliabechi to J. Gronovius, Florence, 6 March 1675, LMU, Cod 4° Cod.Msc 778, f. 147, "they curse the evilness of those".

⁸⁰⁰ Magliabechi to Heinsius, Florence, 17 April 1674, UBL, BUR F 7, "Your Illustrious Lordship hit the right spot, [by saying] that the favors Your Royal Highness made to sir Gronovius, make many evil men jealous, although I do not believe that they can harm him in any way".

Grand Duke would not change his mind about the goodness of Gronovius. However, the reaction that Magliabechi got from Heinsius was definitely not what he had expected. On the 1st of August 1674, Heinsius replied to Magliabechi that he did not even consider to speak up for Gronovius. As a matter of fact, he held Gronovius responsible for the persecutions. Rumor had it that Gronovius had repeatedly insulted the professors at the University of Pisa. If all this were to be true, stressed Heinsius, then Gronovius "should immediately tone down his attacks and insults against his own colleagues".⁸⁰¹

On the 28th of August 1674, Magliabechi answered Heinsius not to believe this horrible rumor. It was started out of jealousy from Gronovius' fiercest opponents. Magliabechi urged Heinsius to be careful in deciding what the truth was, since many of the opponents of Gronovius pretend to be his loyal correspondents, writing him "con qualche tratto di cortesia, crede ella che sieno Angeli, mentre alcuni sono veramente peggiori de' diavoli".⁸⁰² According to Magliabechi, Gronovius never had spoken a bad word about someone, leading the "most innocent life imaginable, studying day and night in the *Biblioteca Medicea Laurenziana* to collate ancient manuscripts of Greek and Latin authors". Nonetheless, he could not endure the hostile atmosphere of the University. From the first day he set foot in the University, he became victim of his own colleagues who strongly disagreed with Cosimo's decision to offer him the prestigious chair in Greek literature:

"Non ostante però che abbia menato una vita così studiosa, ed innocente, non parlando non che altro sto per dire ad alcuno, non ha potuto sottrarsi dalla diabolica malignità, ed invidia, che qua regna, anche in alcuni, non so con quanta ragione, da V.S. Ill.ma lodati, I quali non potendo soffrire che S.A.S. lo vedesse di buon occhio, e ne facesse quella stima che merita la sua virtù, gli hanno fatto mille porcherie, e tesi un milione di lacci, per farlo o precipitare, o almeno cadere di grazzia del Padron Serenissimo."⁸⁰³

To involve Heinsius in the conflict was a strong move by the opposition. It could unbalance the hardto-resolve opposition between the two battling sides of the network and undermine the position of Magliabechi and Gronovius. Nevertheless, the opponents of Gronovius soon realized that their plot did not have any impact on Grand Duke Cosimo III, who did not change his mind regarding his decision to offer Gronovius a chair at the University of Pisa. The spreading of vicious rumors turned out to be ineffective, so they needed to find a different way to get rid of the Dutch scholar. They decided to involve the Roman inquisition in the Gronovius-affair. It was Padre Noris who wrote a letter to Cardinal Barberini (1597-1679) in Rome to express his discontent that a Protestant scholar was giving lectures at the University of Pisa. This is corroborated by a letter Magliabechi wrote to Jacob Gronovius:

"Il suddetto P.N. con quel Medico scellerato, e con altri maligni, invidiosi, e della grazzia che V.S. Ill.ma godeva appresso di S.A.R., e della provvisione che aveva, si unirono, con quel ateo Ministro [Ferrante Capponi], per rovinarlo. Vedendo che le loro cabale contro di V.S. Ill.ma, con S.A. Reale, non operavano nulla, perché S.A. Reale l'aveva in una infinita stima, si rivolsero

⁸⁰¹ Heinsius to Magliabechi, 1 August 1674, in Targioni Tozzetti, *Clarorum Belgarum ad Ant. Magliabechium nonnullosque alios epistolae ex autographis in biblioth. Magliabechiana; quae nunc Publica Florentinorum est, adservatis descriptae. Tomus Primus* (Florentiae: Ex Typographia ad Insigne Apollinis in Platea Magni Ducis, 1745), 177.

⁸⁰² Magliabechi to Heinsius, 28 August 1674, UBL, BUR F 7, "with so much courtesy that he may think that they are angels, while some of them are actually worse than the devil himself."

⁸⁰³ Magliabechi to N. Heinsius, 28 August 1674, UBL, BUR F 8, "Despite the fact that he had lived such a scholarly and innocent life, without saying anything of what I have said before to anyone, he was unable to escape from the diabolic evilness and envy that reigns here, also in certain men honored (I do not know the reason why) by Your Illustrious Lordship. These men, who could not stand the fact that His Highness looked favorably on Gronovius, and valued his virtues as he deserved, have done him thousands of nasty things, and tightened millions of laces around him, to make him tumble down, or at least make him fall into disgrace by the Serene Patron."

a scrivere a Roma, che era una cosa affatto intollerabile, che in uno Studio Cattolico, e particolarmente in quello di Pisa, leggesse un Protestante."⁸⁰⁴

Magliabechi was aware of the insecure nature of his letters to Gronovius. He urged Gronovius to burn his letters after reading and intentionally concealed the names of his foes, as his correspondence could be read by prying eyes. Thus he used the acronym P.N to disguise the name of Padre Noris, Moniglia was the "evil physician" and Capponi "quel ateo Ministro".

The complot to involve the Catholic Church in the Gronovius-affair turned out to be successful. The Grand Duke got blindsided by the number of letters he received from Rome, telling him that it was inappropriate that a Protestant scholar was giving lectures at a university that was supported by the Catholic church. Cosimo III, worried about the repercussions that the affair could have on the relationships between Florence and Rome, was pressured to give Gronovius an ultimatum: he changed his religion or else he was no longer able to support him:

"Continovamente, venivano Lettere di Roma a S.A.R., e particolare dal signore Cardinale Barberini, al quale il P.N. aveva Dedicato il suo primo Libro, intorno a questo particolare. S.A.R. stette forte molto tempo, resistendo questo potette, ma finalmente, per iscrupoli cred'io, cedette, e mi disse, che se V.S. Ill.ma non avesse mutata Religione, non l'avrebbe più potuta sostenere. Il P.N. sapendo che questo scellerato negozziato, era notissimo, onde ne veniva esso non poco lacerato, per abolirne la memoria, e pel contrario mostrare di averla aiutata, doveva spargere, particolarmente con i forestieri, quello che V.S. Ill.ma mi accenna che non fosse vero, quel che era pur verissimo, e che era sparso per tutto cioè, che esso, fosse stato la cagione, che V.S. Ill.ma si fosse partita di qua."⁸⁰⁵

To give the Grand Duke the ultimate push, Noris also convinced him that not even in the Venetian Republic, the most liberal state in Italy, a protestant scholar was allowed to teach at the University:

"Il capo maggiore che prese questo Frate per precipitare V.S. Ill.ma fu che la Repubblica Veneta benché nelle cose di Religione assai libera, mai aveva permesso che niuno Protestante leggesse nello Studio di Padova. Tal cosa fece colpo in S.A.S. Adesso la Repubblica ha pur chiamato il signore Charleton d'Inghilterra⁸⁰⁶ e si crede che andrà, onde si conosce la malignità scopertissima del Frate."⁸⁰⁷

⁸⁰⁴ Magliabechi to J. Gronovius, undated, LMU, Cod 4° Cod. Msc 778, f. 18, "P.N [Padre Noris] with the evil physician [Moniglia], and with other evil persons, jealous of the Grand Duke's grace towards Your Illustrious Lordship, and of the commissions you got from him, joined forces together with that godless Minister [Capponi] to ruin him. Seeing that their uproar against Your Illustrious Lordship did not have any success upon His Royal Highness, because he had such a high appraisal of you, they addressed their letters to Rome, writing that it was anything but tolerable that, in a Catholic University, and especially in that of Pisa, could teach a Protestant scholar."

⁸⁰⁵ *Ibidem*, "Here there arrived continuously letters from Rome to Your Royal Highness, and in particular from Cardinal Barberini, to whom P.N [Noris] had dedicated his first book, regarding this issue. Your Royal Highness remained strong much time, he resisted, but finally, having scruples I believe, he succumbed and said to me that if Your Illustrious Lordship was not willing to change religion, he would no longer able to support him. P.N., knowing that this evil affair was well-known, which teared him up more than a little, in order to abolish the memory of it, and showing instead that he had helped you, needed to spread that, in particular with the foreigners, whatever Your Illustrious Lordship has indicated to me that it was not true, although was true, and spread all over, that he was the reason for the departure of Your Illustrious Lordship".

⁸⁰⁶ Magliabechi probably referred here to the natural philosopher and English writer Walter Charleton (1619-1707).

⁸⁰⁷ Magliabechi to J. Gronovius, undated, LMU, Cod 4° Cod. Msc 778, f. 18, "The major measure he undertook to bring Your Illustrious Lordship down was to tell the Grand Duke that the Venetian Republic, despite the fact that they are very liberal regarding Religion, never had permitted that a Protestant scholar could lecture at the University of Padova. That made quite an impression on the Grand Duke. Yet, just now the Venetian Republic has called sir Charleton from England and one believes that he will go there, from which becomes clear the exposed evilness of that Friar".

Gronovius refused to convert to Catholicism and was forced to resign from his chair at the University of Pisa. On the 15th of September 1674, only one year after his appointment, Magliabechi informed Heinsius that Gronovius needed to leave Pisa as soon as possible:

"Finalmente la malignità di costoro ha pienamente trionfato, poiché ieri si partì il Signor Gronovio, col Signor Rulleo, per ritornarsene costà in Olanda. Oltre all'avere con mille indegnità e porcheriuole, costretto il detto Signor Gronovio a chieder licenza, come da se stesso ha generosamente fatto, hanno anche operato che il Gran Duca Serenissimo, nel partirsi, non gli ha donato cosa alcuna, come stimo che infallibilmente avrebbe fatto, mentre che la malignità di costoro non si fosse opposta."⁸⁰⁸

Moreover, in a letter of the 24th of November 1674, Magliabechi informed Gronovius about what happened after his departure. It appears that the opponents of Gronovius threw a party to celebrate their victory:

"Qua V.S. Ill.ma riderebbe, poiche ogniuno si vanta di essere stata cagione che ella si sia partita. Alcuni giorni sono fecero per l'allegrezza della sua partenza una Cena, come mi ha scritto uno amico, che essendo da loro stato invitato, vi andò solo per potermi riferire come ha fatto tutto quello che vi si disse, e vi si fece. Gjesù! Ella inorridirebbe a sentire l'empietà, e malignità, che vi furono dette, contro di V.S. Ill.ma, e contro di me. Que' medesimi che mi fingevano l'amico, come il Bellini, e simili, anno mutato interamente mantello, il che però non m'importa niente, poiche gli conosco bene, e so che non mi possono insegnar niente. Di nuovo la riverisco, e di nuovo la prego a degnarsi di stracciar subito questo foglio."⁸⁰⁹

News of this big celebration reached Magliabechi through one of his friends, whose name Magliabechi omitted in his letters to Gronovius, probably as a precaution. Through his insider's account, he found out who his real friends where, most of whom presented themselves differently from who they actually were.

The departure of Gronovius was only the beginning of a series of arguments between Magliabechi and Heinsius. When Heinsius read Magliabechi's letter from the 15th of September 1674, he was appalled to hear that the Grand Duke did not donate anything to Gronovius, which was normally the case. After reading Magliabechi's letter, Heinsius was not shocked by the idea that Gronovius was bullied away from the University, but he was worried that Gronovius had brought disgrace to the Grand Duke. Hence, he was afraid that the Grand Duke would not treat the Dutch scholars with the same courtesy he had done in the past.⁸¹⁰ The concern of Heinsius infuriated Magliabechi. "Che ha qua fatto il Signor Gronovio, che per suo conto Sua Altezza Serenissima non abbia a far carezze a' Forestieri?", he asked with anger in a

⁸⁰⁸ Magliabechi to J. Gronovius, 6 March 1675, LMU, Cod 4° Cod. Msc 778, f. 145, "Their evilness has finally triumphed fully, because yesterday Jacob Gronovius left, together with sir Rullaeus, for the Dutch Republic. In addition to having forced, with thousands of unworthy and nasty things, sir Gronovius to resign, as he himself has generously done, they have also made sure that the Serene Grand Duke, did not donate him anything when he left, something which he would otherwise have done infallibly if their evilness would not have opposed to it."

⁸⁰⁹ Magliabechi to J. Gronovius, LMU, Cod 4° Cod.Msc 777, f. 153, "Here Your Illustrious Lordship would laugh, because everyone braggs about how they were they reasons of your departure. Several days ago, they organized a dinner out of happiness because of your depature, as a friend of mine has written me, who was invited by them, he only went there so that he could refer to me the things they said there, and what they did. Jesus! He was horrified to hear the hostility and evilness of the things that were said there, againt Your Illustrious Lordship, and against me. Those who pretended to be my friend, like Bellini, and similar men, have entirely changed their cape, which, however, does not bother me at all, because I known them well, and therefore I know that they cannot teach me anything. I refer your again, and again I beg you to immediately tear this sheet apart."

⁸¹⁰ Heinsius to Magliabechi, 28 February 1675, in Targioni Tozzetti, *Clarorum Belgarum (...) Tomus Primus,* 189: "Porro quod Tibi significaveram, subvereri me, ne Sereniss. Magnique Prinicips animus ab amore exterorum solito revocari nonnihil posset, inconsultis id genus factis, nemo quid tale ad me perscripsit, sed mei timoris id omne crimen censeas licet".

letter to Heinsius dated the 27th of November 1674.⁸¹¹ Heinsius now hears again, what Magliabechi wrote him before: even though Gronovius had led the most innocent life possible, he had become subject of dreadful persecutions in the Grand Duchy of Tuscany. In addition, Gronovius was certainly not the only one, explained Magliabechi, other well-known scholars as, amongst all, Giovanni Alfonso Borelli (1608-1679), Barthélemy d'Herbelot (1625-1695), John Price (1600-1676), Carlo Rinaldini (1615-1698) and "in conclusione tutti gli altri forestieri, sì Oltramontani, come Italiani" met the same fate as Gronovius and were forced to leave Tuscany.⁸¹²

In defending Gronovius, Magliabechi knew very well that he had put his relationship with Heinsius at risk. As a matter of fact, he did not even expect that Heinsius would ever write him again. Yet, on the 6th of March 1675, Magliabechi informed Jacob Gronovius the following:

"Si ricorderà V.S. Ill.ma ch'io le avvisai, di avere scritta al signore Einsio una Lettera in difesa di V.S. Ill.ma, e con forme tali, che non istamava che esso fosse ne per rispondermi, ne mai più per iscrivermi. Esso però, doppo un silenzio di alcuni mesi, che scrive esser derivato da diversi affari, mi ha risposto una lunghissima, inconsideratissima, e pungentissima Lettera."⁸¹³

What did Heinsius write in this "pungentissima Lettera"? In this letter, dated the 28th of February 1676, Heinsius entirely blamed Magliabechi for the conflict. According to Heinsius, Magliabechi had to settle down the conflict and sedate the immature nature of Gronovius. To use Heinsius' own words: instead of pouring water on the fire, Magliabechi had poured oil on the fire.⁸¹⁴ And, if that wasn't enough, he also despised Magliabechi for telling Gronovius that certain Florentine scholars, in particular Carlo Dati, had written lies about Magliabechi and Gronovius.⁸¹⁵ According to Heinsius, not a single letter he received contained any calumnies and accusations against them. To prove this, he even proposed Gronovius to take a look at the letters of Dati, which he had carefully stored in his private archive.⁸¹⁶

The letter from Heinsius has been commented upon at great length by Magliabechi in his next letters to Gronovius. As regarding to Dati's letters in his private archive, Magliabechi is indeed certain that they will not contain any indication that Dati had written something offensive about them. According to Magliabechi "è uso comune nelle Lettere parlar con lode, e scriver cose che possino esser vedute da tutti, ma bisognerebbe poter vedere i foglietti che erano nelle dette Lettere, i quali il signore Einsio avrà stracciati subito che avrà letti".⁸¹⁷

Magliabechi ended his letter by exhorting Gronovius not to show his letter to anyone, not even to his brother and his friend Johannes Georgius Graevius. In addition, he needed to pretend that he did

⁸¹¹ Magliabechi to Heinsius, 27 November 1675, "What [the heck] has sir Gronovius done here that would make His Serene Highness not to care anymore about foreigners?"

⁸¹² Ibidem, "and ultimately, all the other foreigners, both oltremontani (those from over the Alps) and Italian".

⁸¹³ Magliabechi to J. Gronovius, 6 March 1675, LMU, Cod 4° Cod. Msc 777, ff. 171-174, "As Your Illustrious Lordship remembers, I have notified you that I had written a letter to sir Heinsius in your defense, and in such a way that I believed that he would not answer me, or, better yet, not even write to me ever again. Yet, he, after a long silence of several months, resulting, as he writes, from various matters, has replied to me with a very long, very inconsiderate and very harsh letter."

⁸¹⁴ Heinsius to Magliabechi, 28 February 1675, in Targioni Tozzetti, *Clarorum Belgarum*, 190 "(...) ut iuvenilis atque aliquanto concitatioris animi incendio affunderetur aquae nonnihil, Te sollicite rogabamus; nunc vero oleum effundi pro aqua videmus nolentes & dolentes."

⁸¹⁵ *Ibidem*, "Virum videlicet illum praestantissimum, mihique plurimis officiis, ac longo xxx annorum usu probe cognitum, nihil umquam verbo vel unico de Te in suis ad me Litteris perscripsisse, unde colligi detur, non convenire vobis optime pulcherrimeque.".

⁸¹⁶ *Ibidem*, "Haec & plura ego iure optimo tum asseveravi, obtulique ipsas me *Dati* litteras exhibiturum, si vellet, asseverationis huiusce testes plenissimas, simulatque rure rediissem, quo cum scriniis coeteris essent a me pridem ablegatae".

⁸¹⁷ Magliabechi to J. Gronovius, 6 May 1675, LMU, Cod 4° Cod. Msc 777, ff. 171-174, "It is common use to praise someone in letters, and write things that can be seen by everyone, but one needs to see the [separate] pages that were inside these letters, which sir Heinsius must have immediately torn apart after reading them".

not know anything about Heinsius' offensive letters "per non propolare il segreto, e che non apparisce ch'io abbia violata la segretezza delle Lettere."⁸¹⁸ Did Magliabechi regret that he had written Heinsius a letter in defense of Gronovius? A letter from Magliabechi to Gronovius gives the answer:

"Esso non mi ha mai più scritto, ne assolutamente è più per iscrivermi, del che ne ho contento. Dissi questo al Padrone Serenissimo, il quale mi rispose, che io avevo fatto benissimo a rispondergli in quella maniera. E doppo mi soggiunse queste precise parole, che non altero ne meno un jota: <u>Non solo avete fatto bene a rispondergli in quella maniera, ma in oltre io voglio ben grande al signore Gronovio, e gli gioverò dove potrò.</u>"⁸¹⁹

To prove that he was speaking the truth, Magliabechi got the Grand Duke to write a letter to Jacob Gronovius in which he would confirm his benevolence towards him. A letter allegedly in the hand of Cosimo would remove all doubts and demonstrate equivocally that Gronovius did not jeopardize the relationships between the Dutch Republic and the Medici family. In may 1675, Magliabechi informed Gronovius about this plan. He urged Gronovius not to say a word about it before he would actually receive the letter. This would only complete matters and create unnecessary envy and resentment among the Dutch scholarly community. Once Gronovius received the letter, he could show it to everyone, especially Heinsius, who believed that he had left the Grand Duchy of Tuscany in disgrace.⁸²⁰

7.3. Heinsius under Stress: The Vulnerability of the Network

As previously stated, unbalanced triads are socially unstable and vulnerable because, in the light of the structural balance theory, people are motivated to restore a position of balance in their network. People will do everything to correct troublesome relationships, even if this means that this change goes at the expense of others. Un unbalanced triad with the configuration (+ + -), for example, introduces some amount of stress or psychological dissonance into the relationships. Just to recap, this type of triangle correspondents to a person A who is friends with B and C, but B and C do not get along with each other. In this type of situation, the tension can be resolved by one of the acquaintances (B or C) to be broken. In this case, the edge would be removed altogether. These dynamics explain why Heinsius cuts off all contact with Magliabechi (see figure 27). Heinsius needed to re-stabilize the balance by eliminating an

⁸¹⁸ *Ibidem*, "In alcuni luoghi della sua Lettera, il signore Einsio loda anche V.S.Ill.ma ed è per questo che la prego anche a finger sempre di non ne saper nulla, per non propalare il segreto, e che non apparisca ch'io abbia violata la segretezza delle Lettere. Questo foglio la supplico a non lo lasciar vedere ne anche al suo signore Fratello, ne al signore Grevio, che sono i maggiori Padrone, insieme con V.S.Ill.ma che io abbia costà."

⁸¹⁹ *Ibidem*, "He has never written to me anymore, and he certainly will not ever write me again, and I am glad about it. I said that to our Serene Patron [Cosimo III], who has answered me that I did the right thing to answer him in that manner. And subsequently he adds with these precise words, and I do not alter even a single letter: I did not only do the right thing to answer him in that manner, but I [Cosimo] do also care much about sir Gronovius, and I will help him wherever I can."

⁸²⁰ Magliabechi to J. Gronovius, May 1675, "In oltre, mi soggiunse, il che mi ricolma di un estremo giubbilo ogni volta che me ne ricordo; che le vuol rispondere di sua propria mano. Da questo potrà V.S.Ill.ma chiarissimamente conoscere, che è verissimo quello che sempre le ho scritto, che S.A.S. non solo ha una stima grandissima pel gran merito di V.S.Ill.ma, ma che anche le conserva un affetto particolarissimo. Quando codesti invidiosi vedranno un onore così grande, stimo che sin per morire per la pena, e pel dolore. Che dirà il signore Einsio, che faceva tanto rumore per avere (se anche fu vero) veduto un verso critto di propria mano di S.A.S., al signore Magalotti, quando vedrà una Lettera intera scritta a V.S.Ill.ma. La prego però a non ne parlare costà, fino a tanto che non ha ricevuta la Lettera, per iscansare l'invidia, e non gli dare occasione che le facciano de' cattivi ufizzi contro. Quando l'avrà avuta, allora la mostri a coloro che falsamente si persuadono che V.S.Ill.ma si sia partita di qua in disgrazzia del Padron Serenissimo, mentre che veramente, come cento volte le ho scritto, e adesso le replico, il Padron Serenissimo non solamente la stimo, ma anche l'ama. Prova più sicura della Lettera di S.A.S., e di sua propria mano, non ne potrà ne V.S.Ill.ma, ne altri, avere, e stimo che sia per iscriverle assolutamente, o questa sera, o al più lungo la seguente settimana."

unsafe link in his network that caused him discomfort. Consequently, he could continue to correspond with the opponent of Magliabechi, Apollonio Bassetti, and not have to worry about the consequences of their relationship. Bassetti and Heinsius stayed in contact until the death of the latter in 1681.

A disagreement that involves two people can affect others that were not initially involved in the quarrel. Magliabechi and Heinsius had common contacts in the Dutch Republic, which significantly disturbed the balance of their network. In fact, how could Heinsius ever trust someone who is a friend of his adversary Magliabechi? To avoid this, Heinsius had to make sure that none of his own correspondents were correspondents of Magliabechi. The dynamics of imbalance between Heinsius', Heinsius' correspondents and Magliabechi are visible in the network in figure 27.

That Heinsius is significantly under a high amount of pressure is shown by figure 32. If we consider the structural change in the entire epistolary network of Heinsius, as shown by this table, it appears Heinsius is involved in many unbalanced triads (- + +) during the conflict with Magliabechi (1672-1677) that pressured him to change the relationships in his network. In supporting these findings, numerous examples from the correspondence of Magliabechi shed light on Heinsius' efforts to secretly convene his friends away from Magliabechi to restore these unbalanced triads. Again, imbalance triggers secrecy in the network because they introduce an amount of tension between people.

Structural Balance and Nicolaas Heinsius (1620-1681)										
Year	Total closed triads		%	+	%	- + +	%	+ + +	%	
1672-1677	252	0	0,00%	15	5,95%	55	21,83%	182	72,22%	
1678-1683	257	0	0,00%	17	6,61%	46	17,90%	182	70,82%	

Fig. 32 Structural balance in the network of Nicolaas Heinsius

For instance, on the 11th of December 1674, Magliabechi wrote a letter to Jacob Gronovius in which he complained about the behavior of the Heinsius. It appears that Heinsius avoided to introduce his friends travelling to Italy to Magliabechi:

"È stato qua il signore Ruisch alcuni pochi giorni, e adesso stimo che sia per essere arrivato a Roma. Il signore Einsio gli aveva dato Lettere pel S. Dati, e pel S. Panciatichi, ma di me ne anche gliene aveva scritta una sola parola, in una lunga Lettera, dove gli nominava dugento persone, o poco meno, che in Italia poteva cercar di vedere, e conoscere.⁸²¹

As we can read from this letter, the Dutch burgomaster Conrad Ruysch arrived in Florence armed with several letters of recommendation to the most prominent men in Florence, including Carlo Dati (1619-1676) and Lorenzo Panciatichi (1635-1676), with whom Heinsius both maintained a regular correspondence.⁸²² Besides that, Heinsius wrote a long letter to Ruysch in which he gave him advice as

⁸²¹ Magliabechi to J. Gronovius, Florence, 11 December 1674, LMU, Cod 4° Cod.Msc 778, f. 155, "Sir Ruysch has been here for a few days, and now I believe that he has arrived in Rome. Sir Heinsius had given him letters to sir Dati and sir Panciatichi, but about me he did not have even written one single word, in a long letter, in which he mentions two hundred persons, or a little less, Ruysch could look for and meet in Italy."

⁸²² 80 letters written by Carlo Dati to Nicolaas Heinsius are preserved in the university library of Leiden: BPL 1920 (1647 to 1660); BUR F 7 (1652-1671; 1674) and HUG 45 (1660). 4 letters from Heinsius to Dati are extent in BPL 885 (1674) and BUR Q 14 (1673-1674) at the same university. Other letters can be found in Florence (BNCF, Lett. Aut. IV. 64). 4 letters from Panciatichi to Heinsius (1671-1676) are preserved at the Leiden University Library, BUR F 7, while 9 letters (1671-1676) from Heinsius are preserved in the National Library of Florerence, Panc. 216.

to which persons he needed to meet during his travels to Italy, mentioning more than "dugento persone" worthy of a visit. In all these documents, Magliabechi pointed out, Heinsius did not ever made mention of him. Consequently, Magliabechi did not get involved with Ruysch, writing to Gronovius that Heinsius is "la cagione che io non vada mai dal detto signore".⁸²³ When Magliabechi confronted Heinsius with his behavior, asking him straight out why he was left out from all his recommendation letters, Heinsius answered that he did not barely have the time to compile any letter, blaming the uncle of Ruysch who had notified Ruysch' arrival in Florence on such a short notice.⁸²⁴ Evidentially, Heinsius is making here an excuse, especially because other sources inform Magliabechi about the matter. On the 6th of May 1675, for example, Magliabechi writes to Gronovius that Heinsius did not only decline to introduce Ruysch to Magliabechi, but that he also wrote negatively about the librarian to his Florentine correspondents:

"Il fratello del signore Falconieri [Paolo Falconieri], il quale è qua in Corte, come V.S. Ill.ma sa, è stato a visitare il signore Ruyschio, in riguardo delle raccomandazzioni del signore Einsio. A me appena mi guarda in viso, il che tanto maggiormente mi fa credere, che il signore Einsio non abbia scritto benissimo a Monsignore suo Fratello, di V.S. Ill.ma, e di me."⁸²⁵

Likewise, Heinsius wrote negatively about Magliabechi to the Dutch merchant Daniel Cousson while he stayed in Florence. In 1675, Cousson travelled to the Grand Duchy of Tuscany where he stayed for two months before travelling on to the Levant by boat from Livorno.⁸²⁶

In addition, Heinsius also tries to convince his colleague Johannes Georgius Graevius and his stepbrother Willem van der Goes (1611-1686) to sever their connections with Magliabechi:

"Da quel tempo in qua che stampò il Libro, ne anche mi ha più il signore Grevio scritto. Anche il signore Goes non mi scrive, oltre che nell'ultima Lettera. Può V.S. Ill.ma presupporsi, che appena ho tempo di respirare, non che possa rispondere a tutti coloro che mi scrivono, e che però tal cosa non mi da fastidio alcuno. Con tutto ciò si vede che costà il signore E.... cerca di farci il peggio che può segretamente. Per le viscere del signore Dio, e per tutte le Sante Leggi dell'amicizzia supplico V.S. Ill.ma a dissimulare ancora ella seco, già che non ci mancherà di vendicarmi."⁸²⁷

⁸²³ Magliabechi to J. Gronovius, Florence, 13 August 1675, LMU, Cod 4° Cod.Msc 778, f. 180, "he is the reason why I never visited that Sir."

⁸²⁴ Heinsius to Magliabechi, 28 February 1675, in Targioni Tozzetti, *Clarorum Belgarum (...) Tomus Primus*, 191: "Erant complura, de quibus in rem meam actum oportebat, quale illud, quod sine meis ad Te litteris *Conradus Rayschius* venit, quodque in iis, quas ad ipsum illum dederam, nulla Tui mentio occurrebat. Quippe cum ille in procinctu me ex Allobrogibus admonuisset promissi super commendatitiis litteris, in summa festinatione, vix binas exarare licuit mihi Epistolas, praesertim ab avunculo eius Viro Ampl. *Theod. Levio* edoctus, transitum illi brevem per Civitatem vestram nunc fore."

⁸²⁵ Nicolaas Heinsius became acquainted with Ottavio Falconieri (1636-1675) during his travels in Italy, and maintained contact with him after he returned to the Dutch Republic. The letters between them are extent in the University Library of Leiden (BUR F 9, BPL 1920 and BUR Q 14 (49 letters from Ottavio (1660-1675) and 12 letters from Heinsius (1661-1674)). After the death of Ottavio, Heinsius continued to correspond with his brother, Paolo until 1679 (UBL, Bur Q 16, letters written by Paolo Falconieri to Heinsius from 1676 to 1679). Magliabechi to J. Gronovius, 6 May 1675, LMU, Cod 4° Cod.Msc 777, ff. 171-174, "the brother of sir Falconieri, who is here at the court, as Your Illustrious Lordship know, visited sir Ruysch on account of the recommendations made by Heinsius. He barely looks at me in the eyes, which makes me strongly believe that, sir Heinsius has not written something good about me and Your Illustrious Lordship to his brother."

⁸²⁶ Magliabechi to J. Gronovius, 30 May 1675, LMU, Cod 4° Cod. Msc 778, ff. 169-171, "L'Einsio, e gl'altri che mi stimano un ignorantissimo come io sono, ne scrivino qua ad esso signore Cousson, che per qualche tempo mi ha praticato assai familiarmente, ed è in parte è informata della mia Vita, de' miei stiudi, ecc, e sentiranno che io non sono un così cattivo uomo come che essi mi credono."

⁸²⁷ Magliabechi to J. Gronovius, undated, LMU, Cod 4° Cod. Msc 777, f. 123, For some time now after he printed his book, Graevius has not even written me. Also sur Goes does not write to me, other than that last letter. Your Illustrious Lordship can assume that, I have barely time to breath, not able to answer at everyone who writes me, for which it does not bother me. Anyway, one sees that sir Heinsius is trying to do there the worst things to us as possible in secret. In the bowels of the Lord,

CHAPTER 6

Bound by Books

The use of multimodal network representations in historical research

INTRODUCTION

This chapter highlights the importance of books as dynamic actors within the scholarly network by means of multimodal visualizations of epistolary networks.⁸²⁸ In the previous chapters, a one-mode network representation was employed in order to represent the early modern epistolary community. This type of network implies the existence of nodes and edges, where one node of the graph represents a correspondent, and an edge between a pair of nodes corresponds to a letter exchanged between them. As we have seen, the use of this type of network stands in the tradition of the many projects that have started to map the Republic of Letters digitally. Yet, reducing the complex society of the Republic of Letters to a network in which the actors are connected by one single type suggests a static uniformity that does not take into account the multi-facetted dynamics of epistolary exchange. Instead of looking at a network of correspondents in terms of its volume, intensity and centrality, we also need to consider the way in which the network was held together by the exchange of objects. In fact, in addition to letters, the Republic of Letters was tied together primarily by means of books that dominated the contents of these letters. Therefore, this chapter explores an approach that integrates both letters and books in a unified, dynamic multimodal network representation. As such, the creation of a multimodal network structure will be used to explore how books played a decisive role within the structure of the epistolary network. Specifically, I attempt to show how references to books in letters might provide more insight in the working practices of the early modern scholarly community.

This chapter aims at describing the data collection process that is needed to visualize the rich store of information on books contained in early modern correspondences and at demonstrating the possible use of historical network research. It is organized as follows: the first paragraph points to the historiographic blind spot of current digital scholarship that equates the Republic of Letters with correspondence networks, giving the role of the book short shift. This is the argument advanced by Daniel Stolzenberg, who urged for a computational approach that takes the relationship of books and correspondence into account.⁸²⁹ Taking up this challenge, in the second paragraph, I propose a method complementary to modal networks that allows us to integrate both books and letters into the same network: the multimodal network. The various advantages and constraints of the multimodal network will be discussed, which is followed by an explanation of the relational database that underpins this study.

and of every other holy law of friendship, I urge Your Illustrious Lordship to conceal the facts from him, for it will not be long before I will take revenge."

⁸²⁸ Parts of this chapter are published in Ingeborg van Vugt, 'Using Multi-Layered Networks to Disclose Books in the Republic of Letters', *Journal of Historical Network Research* 1, no. 1 (2017): 25–51.

⁸²⁹ Daniel Stolzenberg, 'A Spanner and His Works: Books, Letters, and Scholarly Communication Networks in Early Modern Europe', in *For the Sake of Learning: Essays in Honor of Anthony Grafton*, ed. Ann Blair and Anja-Silvia Goeing (Leiden & Boston: Brill, 2016), 157–72.

I will show in a concrete manner how such a database is constructed and used in conjunction with network visualizations to map the evolving conversations involving the many hundreds of books mentioned in early modern correspondence. Through the case study of Magliabechi's correspondence, I show how looking at letters as a corpus of interconnected data brings the book back on the map, providing insights as to how the book played an active role in the creation and the maintenance of Magliabechi's epistolary network.

1. IS THE BOOK FORGOTTEN IN THE DIGITAL REPUBLIC OF LETTERS?

The Republic of Letters was unquestionably indebted to the circulation of letters, but another sort of regular exchange was necessary to its functioning as well: the circulation of books. Books held the scholarly community together for they fostered the advancement of learning - the ideal aim of the Republic of Letters. This is especially true considering the fact that books were an important medium for the communication of knowledge as well as the output par excellence of scholarly collaboration. Books and letters need thus to be seen as complementary media in the early modern scholarly network, each with their own advantages and constraints. For disseminating knowledge broadly, durably, and in large quantities, the book was without rival. Although the mass printing of texts facilitated the spread of knowledge, it posed also a major threat for the political and religious authorities who quickly realized the potential of the book as a challenge to their influence. Consequently, censorship was introduced for regulating the moral and political consequences and impacts of its circulation. The book did not only undermine the authorities, but individuals as well. Many publications came off the press that were intended to undermine scholarly reputations on a European level. For example, when a book published against Magliabechi was about to ruin his career, he desperately wrote to Cosimo III: "E pure la voce passa subito, e doppo pochi giorni niuno se ne ricorda, dove la stampa va per tutto il Mondo, e dura in eterno."830 By contrast, the letter could be delivered with speed, offered a relative greater freedom from censorship, and was of a more personal and private nature than books, all of which made it an excellent medium to engage in long-distance conversations.⁸³¹

Many authors have acknowledged the important role of books in the epistolary network. Franz Mauelshagen, for example, stressed that correspondence should never be studied in isolation from books, stating that "an exchange of objects was directly associated with the interactive potential of correspondence networks".⁸³² In addition, most of the letters we now only encounter as sheets of paper in the archive, were actually packaging notes to parcels of books, drawings, poems, natural specimen, and other letters. Similar theses are adopted by Dirk van Miert, who made clear that "a letter should never be studied in isolation, but always as part of a larger apparatus of sources: notebooks, drawings, commonplace books and printed treatises"⁸³³ and Anthony Grafton, who illustrated that the Republic of Letters "existed, first and foremost, as a palimpsest of people, books, and objects in motion".⁸³⁴ So, without letters, and the accompanying reciprocal exchange of books and other objects, there would be little to hold such an extensive, geographically separated scholarly community together.

⁸³⁰ Magliabechi to Cosimo III, 4 February 1684, BNCF, Autografi Palatini, 125, "Rumors go away immediately, and after a few days nobody remembers anything, while print goes all over the world, and lasts forever."

⁸³¹ For more about the role of the letter in the early modern period, see James Daybell, *The Material Letter in Early Modern England* (London: Palgrave Macmillan, 2012).

⁸³² Mauelshagen, 'Networks of Trust: Scholarly Correspondence and Scientific Exchange in Early Modern Europe', 18.

 ⁸³³ Dirk van Miert, 'Concluding Observations', in *Communicating Observations in Early Modern Letters (1500-1675): Epistolography and Epistemology in the Age of the Scientific Revolution*, by Dirk van Miert, ed., (London: Turin: Warburg Institute, 2013), 243.
 ⁸³⁴ Grafton, 'A Sketch Map of a Lost Continent: The Republic of Letters', 12.

Yet, Daniel Stolzenberg has recently pointed out that digital studies concerning early modern communication tend to minimize the importance of printed books.⁸³⁵ According to him, large scale projects that map the Republic of Letters digitally treat the scholarly community as an equivalent to correspondence networks, while ignoring the role of the book brought about by that network. Why do these digital initiatives fail to apply data visualizations to both books and letters? According to Stolzenberg, the apparent absence of books in the digital realm of the Republic of Letters has been largely due to the constraints and limitations posed by the digital:

"Correspondence lends itself to social network analysis in a way that books complicate. This is especially true when it comes to the most tantalizing new approach to the history of scholarly communication, projects to map the Republic of Letters digitally. Typically, a letter has one sender and one recipient, each with a specified geographic location. As such, a correspondence network can be converted into a database and then analyzed and visualized by existing methods and software. To create an analogous map that would capture how information was disseminated through printed books as well would be vastly more complicated and imprecise, if indeed it is even possible."⁸³⁶

Stolzenberg presents us here an evident gap in digital scholarship. In the past decade, early modern historiography has seen a proliferation of digital network projects that have started to map sections of the Republic of Letters. Within this relatively small field, the best-known projects – including Six Degrees of Francis Bacon of the Carnegie Mellon University, Mapping the Republic of Letters of Stanford University, Circulation of Knowledge/ePistolarium of the Huygens Institute in Amsterdam and Cultures of Knowledge of Oxford University – all focus on connections between early modern scholars. The specifics of these projects were discussed in the fourth chapter of this study. Typically, these projects employ a unimodal network which supports one type of node per network, meaning that the nodes represent correspondents and their incoming and outgoing edges correspond to the exchange of letters between them. This formula presents us already with stimulating new insights in historical research. In the fourth chapter, for example, we have seen that unimodal networks helps us to shed light on the crucial role of information-brokers. Yet, there are situations – especially when dealing with complex humanities data – when this model falls short. The Republic of Letters cannot be adequately reconstructed only through the lens of correspondences when that network was also tied together by means of other objects, like books.

There are studies that have attempted to include books in the digital Republic of Letters. For instance, Dan Edelstein and Glauco Mantegari, have, in the context of the project *Mapping the Republic of Letters* of Stanford University, visualized the places of Voltaire's publications – including data on false, fictitious, and unknown imprints – on a geographical map.⁸³⁷ By comparing data on publications that were illegally published with networks observed in letters, they could notice, for example, to what extent Voltaire's correspondence was related to complications in the printing of his editions. Although a geospatial representation of objects presents itself as a promising tool, it does not say anything about the

⁸³⁵ Daniel Stolzenberg, 'A Spanner and His Works: Books, Letters, and Scholarly Communication Networks in Early Modern Europe', 157–72.

⁸³⁶ Stolzenberg, 171–72.

⁸³⁷ Glauco Mantegari and Dan Edelstein, 'Linked Data and Early-Modern Networks. An experiment on Voltaire', in Jake Coolidge (ed.), *The Anthology of the Center for Spatial and Textual Analysis at Stanford University* (Stanford University, Center for Spatial and Textual Analysis, 2013): 73-77.

distribution and circulation of the books in the scholarly community.⁸³⁸ For this, books and letters need to be integrated in a unified network representation.

A step in this direction is made by Shakeosphere, a digital research tool funded by the University of Iowa. According to its creators, the incompatibility of current digital repositories lies at the heart of this gap in digital scholarship. Datasets as the Short Title Catalogue (STC) or Early Modern Letters Online (EMLO) focus either on books or letters, but ignore the interactions between their data. To solve this, Shakeosphere started to create a union catalogue to bring these data together, making it possible to navigate and study the network in order "to understand the social world that gave us the works of Shakespeare and his contemporaries".⁸³⁹ This initiative brought for the first time data on books and letters together. Nevertheless, their network is still based on a single-layered approach, in which each node represents a person – a publisher, printer, author or bookseller – whereas the edges represent the printed or manuscript works connecting these nodes. In other words, the books are translated in terms of edges, not as active nodes in the network. This is a limitation if we want to explore questions that regard the active role of books within the connections of the epistolary network.

The following paragraphs take up Stolzenberg's challenge, offering insights into the practical possibilities for representing books within the early modern scholarly network. In addition to looking at the Republic of Letters as if it were a single entity, a different approach that integrates both books and letters in a unified, dynamic multimodal network representation, is considered here. Different from the previous chapters we opt here for a qualitative approach that allows us to explore and create datasets and visualize and interact with them in various network configurations. In the next paragraph, the structure of the bi- and multimodal networks will be discussed, focusing in particular on the various advantages and constraints of such a structure.

2. FROM A UNI-MODAL NETWORK TO A MULTIMODAL NETWORK

Complex multi-layered or multimodal structures have received much attention from the community of sociologists, but in historical research the implementation of multimodal networks is relatively unexplored to date. As an exception to the rule, attempts to explore the use of multimodality may be found in the work of Matteo Valleriani, in the frame of his research project *The Sphere. Knowledge System Evolution and the Shared Scientific Identity of Europe.* In this project, the edition history of the *Tractatus De Sphaera* by Johannes de Sacrobosco is analyzed by means of multimodels of network theory. Specifically, "multilevel networks" are used to investigate how specific commentaries on this text circulated, which actors were responsible for them and what factors supported or hindered the spread of specific kinds of knowledge.⁸⁴⁰

The reason why more complex networks are predominantly used in social sciences is because they present a more accurate description of real systems.⁸⁴¹ The complexity reached by society calls for an approach that takes into account a whole series of different networks in order to understand the bigger picture of its functioning. Research based on unimodal networks would, on the other hand, entail a

⁸³⁸ The mapping of print is a common field in GIS studies, see, for instance, *The Atlas of Early Printing of the University of Iowa* ("The Atlas of Early Printing', accessed 6 November 2018, https://atlas.lib.uiowa.edu/).

⁸³⁹ 'Shakeosphere - About', accessed 18 January 2018, https://shakeosphere.lib.uiowa.edu/about.jsp.

⁸⁴⁰ 'De Sphaera | The Sphere', accessed 22 January 2019, https://sphaera.mpiwg-berlin.mpg.de/home. See also, Florian Kräutli and Matteo Valleriani, 'CorpusTracer: A CIDOC database for tracing knowledge networks', *Digital Scholarship in the Humanities* 33, no. 2 (2018): 336–346. For a multimodal approach to historical networks see also my article: Ingeborg van Vugt, 'Using Multi-Layered Networks to Disclose Books in the Republic of Letters', Journal of Historical Network Research 1, no. 1 (2017): 25–51.

⁸⁴¹ Stefano Boccaletti et al., 'The Structure and Dynamics of Multilayer Networks', *Physics Reports* 544, no. 1 (2014): 1–122; Mikko Kivelä et al., 'Multilayer Networks', *Journal of Complex Networks* 2, no. 3 (2014): 203–71.

simplification of the real-world, ignoring the evolving complexity of present-day society. This, of course, applies to both past and present; the only difference is that the past presents us with more fragmentary and uncertain data. Consequently, historical sources render full data integration impossible. Irad Malkin, for instance, urged for the need of new modes of graphic representation that would avoid the "pitfalls of dazzling oversimplification".⁸⁴² According to Malkin, graphic illustrations of wide-ranging Greek Mediterranean networks in the form of two-dimensional representations turn out to be unhelpful, for they are incapable of offering insights "due to the state of our sources of knowledge".⁸⁴³ Because of the fragmented state of historical sources, he calls for an approach that considers the network's multidirectionality, multidimensionality, and multitemporality.

Especially in the case of Irad Malkin, a historian of antiquity, the application of network concepts becomes problematic for they do not possess enough data to perform a significant mathematical analysis. While sociologists can often study complete uni-modal networks, historians need to rely on the, often incomplete, availability of the sources from the past. Every piece of evidence is meaningful in interpreting history: in the case of early modern correspondence, multiple types of data as scholars, letters, books, journals and academies all work together in the overall communication system. These different types of data lead to a range of different nodes and edges than can only be captured through the use and exploration of bimodal or multimodal networks. In other words, the fragmentation of historical data needs multimodality.⁸⁴⁴

It can be debated whether complexity should be added to a network that in the first place is intended to simplify our perception of society. When the network graph grows in its complexity, it becomes not only more difficult to read the visualization, but also to analyze the network in terms of network metrics. This is the reason why the most common networks being studied are unimodal networks. Unimodal networks can only support one type of node per network. This means that we can either connect books to other books, or the sender and the receiver, or persons that are co-cited together. In other words, it is a structure that cannot accommodate both books and correspondence in the same network. A bimodal network, on the other hand, is a network that consists of two types of nodes (books and letters). Networks with an infinite number of nodes are named multimodal networks. Although preferable, bimodal or multimodal networks are rarely analyzed in their original form because of the incompatibility of its nodes types. That is, you can connect books that influence other books or authors that have influenced each other, but it is a methodological challenge to connect authors and books, let alone connect the author to a book that is cited in a letter. That is comparing apples and oranges. As a result, network scientists have not yet created many algorithms to deal with these complex networks.⁸⁴⁵

So, the more layers we need to describe history, the less characteristics we can get from a statistical or mathematical point of view. In explaining the usability of bimodal networks, Scott Weingart pointed out that "more categories lead to a richer understanding of the diversity of human experience, but are incredibly unhelpful when you want to count things".⁸⁴⁶ In other words, by creating a dataset with a large variety of nodes, it becomes harder to capture the metrics and the structure of the graph. In order to analyze bimodal networks, researchers often reduce the complexity of the network before running any

 ⁸⁴² Irad Malkin, A Small Greek World: Networks in the Ancient Mediterranean (Oxford: Oxford University Press, 2011), cit. 19.
 ⁸⁴³ Malkin, cit. 19.

⁸⁴⁴ This is the philosophy behind nodegoat: Geert Kessels and Pim van Bree, 'Multimodality in Overdrive: A Dynamic Exploration of Historical Networks", paper at the at the DH Benelux Conference 2016, Université du Luxembourg, Belval (9 June 2016).

⁸⁴⁵ Shawn Graham, Ian Milligan, and Scott Weingart, *Exploring Big Historical Data: The Historian's Macroscope* (Singapore: World Scientific Publishing Co Inc, 2015), 208–9.

⁸⁴⁶ Scott Weingart, 'Networks Demystified 9: Bimodal Networks', the scottbot irregular, 21 January 2015, http://www.scottbot.net/HIAL/?p=41158.

social network algorithm.⁸⁴⁷ Bimodal networks can be compressed into unimodal networks consisting of only one type of nodes. This approach is often referred to as projection. For example, if one has a bimodal network of books as one type of node, connected by their edges to their authors and publishers, the other type of node, it is possible to collapse the network into a unimodal network by connecting the people who were involved in the publication of one particular book. The result is a social network that consists of only persons that can be subsequently used to run algorithms on. For instance, the principle of projection is used in the project Shakeospere, which was previously mentioned as an example of a project that integrated both books and letters in the same network. Instead of directly connecting the book to its author and publisher, the book was projected in terms of the edge between the author and the publisher who worked together in the production of that book.

If a complex, bimodal or multimodal network can be projected to a unimodal network, which is less complex and problematic, why should we still consider the use of multimodal networks in historical research? In other words, how can multimodal networks help us in solving historical questions? Although needed for a statistical analysis, projection means also that information gets lost when moving from the full affiliations network to just the projected graph on the set of persons. If the complex society of the Republic of Letters is projected to a network in which the actors are connected by one single type, e.g. correspondence, this will suggest a static uniformity that barely takes into account the multi-faceted dynamics of epistolary exchange. As we have seen in the fourth chapter, Magliabechi was an important information broker, but he accomplished this task through both books and letters. These dynamics are invisible if one considers his correspondence network in isolation.

To improve graphs with the inclusion of objects as active participants is a recurrent theme in the research of the well-known sociologist Bruno Latour. His Actor Network Theory (ANT) considers both human and non-humans as equal parts of the network, commonly named as actors.⁸⁴⁸ In other words, Latour urged for an approach that employs the same metrics and descriptive framework when faced with either people, books, ideas, text, societies in the network, wherein their identity is defined through the interaction between them. As such, adherents of the Actor Network Theory continuously use the term "heterogeneous network" in order to consider both humans and non-humans as equal concepts in a system:

"Often in practice we bracket off non-human materials, assuming they have a status which differs from that of a human. So materials become resources or constraints; they are said to be passive; to be active only when they are mobilized by flesh and blood actors. But if the social is really materially heterogeneous then this asymmetry doesn't work very well. Yes, there are differences between conversations, texts, techniques and bodies. Of course. But why should we start out by assuming that some of these have no active role to play in social dynamics?"⁸⁴⁹

Following the Actor Network Theory, to study any type of system, we need to study all the connections between distinct actors enrolled in the network. The actor network theory can thus be used to better reflect and evaluate multimodal networks.

Exploration is at the heart of this chapter. While most network analysis need to be carried out on unimodal graphs, bimodal or multimodal networks add significant depth and context into historical research. This detail is fundamental because, as noted earlier, a historical source is characterized primarily

⁸⁴⁷ Graham, Milligan and Weingart, 209.

⁸⁴⁸ Bruno Latour, Reassembling the Social: An Introduction to Actor-Network-Theory (Oxford: OUP Oxford, 2007).

⁸⁴⁹ Michel Callon and John Law, 'After the Individual in Society: Lessons on Collectivity from Science, Technology and Society', *Canadian Journal of Sociology* 22 (2): 168.

by the richness of its data, rather than the quantity of it. In other words, historians have to deal with a high amount of multidimensionality in a small set of data. In tackling this multidimensionality, one needs to move beyond simple graphs and investigate more complicated, but more rich historical frameworks. For instance, multimodal networks can help us to intuit and explore interesting patterns within multiple kinds of data. In hybrid networks each different layer represents a separate but, interconnected network from the set of networks that describe the whole set of correspondence. This implies that every layer can be analyzed separately, or in hybrid combinations with other networks, making it possible to add, edit and to remove data where needed. This continuous process of interaction with data allows for more critical readings and levels of interpretation.

The importance of an explorative digital approach is central to the research of Charles van den Heuvel. According to Van den Heuvel et al., "we do not need just networks as static representations, but also networks as interactive interfaces".⁸⁵⁰ He calls here for an approach that consists of dynamic combinations of various layers of networks that are capable of both distinguishing separate historical communities, but also communities that intermingle.⁸⁵¹ As such, the historian can experiment with layers in the network, with graphic and textual zoom and with creating interfaces to layers of meaning of historical sources in various media from multiple perspectives. Inspired by the term "deep maps" coined by David Bodenhamer, Van den Heuvel introduced the concept of "deep networks" to describe this approach.⁸⁵²

Such an approach allows the researcher to combine multiple networks of data in a continuous process of interaction and interpretation that allows us to move easily between close and distant reading, mixing traditional historical research with network analysis. The mixing of the traditional and digital stands close to methods of "digital hermeneutics". Digital hermeneutics, understood as the encounter between classic hermeneutics and digital technology, has challenged the way we interpret historical sources, and, on some level, also ourselves. On facing this challenge, Capurro writes:

"The task of hermeneutics in the digital age is twofold, namely to think digital and at the same time to be addressed by it. The first task leads to the questions about the impact of the digital code on all kinds of processes, in particular societal ones. The second task refers to the challenge of the digital with regard to the self-interpretation of human beings in all their existential dimensions, particularly (...) their understanding of history, their imagination, their conception of science, their religious beliefs."⁸⁵³

Multimodal networks might bring these tasks together. Historical research should switch smoothly between explorative multimodal networks and confirmative unimodal networks in dealing with fragmentary and complex historical data. At first, rich historical data can be efficiently investigated and explored in multiple combinations of layers of networks that can be then manipulated and analyzed individually to assess their influence on the overall structure. In fact, multimodal networks aim to recreate

⁸⁵⁰ Charles van den Heuvel, Ingeborg van Vugt, Pim van Bree, Geert Kessels., 'Deep Networks as Associative Interfaces to Historical Research', in *The Power of Networks. Prospects of Historical Network Research*, ed. Florian Kerschbaumer et al., Digital Research in the Arts and Humanities (London/New York: Routledge Publishers, forthcoming 2019).

⁸⁵¹ Charles van den Heuvel, 'Mapping Knowledge Exchange in Early Modern Europe: Intellectual and Technological Geographies and Network Representations', *International Journal of Humanities and Arts Computing* 9, no. 1 (2015): 111.

⁸⁵² Van den Heuvel, 'Mapping Knowledge Exchange in Early Modern Europe: Intellectual and Technological Geographies and Network Representations', 95. D.J. Bodenhamer, 'The Potential of Spatial Humanities', in *The Spatial Humanities. GIS and the Future of Humanities Scholarship*, ed. D.J. Bodenhamer, T.M. Harris, and J. Corrigan (Bloomington: Indiana University Press, 2010), 14–30.

⁸⁵³ Rafael Capurro, 'Digital Hermeneutics: an Outline', *All & Society* 25, no 1 (2010). See also Geoffrey Rockwell and Stéfan Sinclair, *Hermeneutica. Computer-Assisted Interpretation in the Humanities* (Cambridge/London: The MIT Press, 2016). See also Fred Gibbs and Trevor Owens, 'The Hermeneutics of Data and Historical Writing', in *Writing History in the Digital Age*, ed. Kristen Nawrotzki and Jack Dougherty (Michigan: University of Michigan Press, 2013), 159–70.

an accurate representation of a past society, allowing us to highlight and select patterns of data that are needed to explore specific research questions, while a unimodal network can analytically confirm and substantiate these patterns. In other words, unimodal networks are needed to analyze the workings and dynamics of a system, but its data proceed from a thorough exploration of the multimodal network in the first instance. As a result, algorithm performance can be examined in a more controlled and conscious manner. To sum up, the focus should not be on analytical and statistical methods of network representation alone, but also on an approach that allows us to handle, inquire, and interpret these complex historical data at first.

3. THE CREATION OF A MULTIMODAL DATASET

The contents of early modern correspondence are both wide-ranging and complex. Letter contents, for instance, refer to many different books from authors with many different backgrounds. This requires a way to store, organize and annotate letters, that allows both to analyze books mentioned in separate letters, but also to trace and organize similarities between books in different letters, so as to map the contours of the discourse as a whole. I found such a method in the tool nodegoat.⁸⁵⁴ At its core there is a relational database management system, and it follows an object-oriented approach.⁸⁵⁵ Borrowing from Latour's actor-network theory, as discussed before, this means that people, events, academies, books and sources are treated as equal in the data model. The hierarchy between these actors depends solely on the composition of the network in terms of the relationships that connects them together.⁸⁵⁶

The tool nodegoat is a web-based database management platform, developed by Lab1100 in the Netherlands, that allows scholars to build datasets based on their own data model and offers relational modes of analysis with spatial and diachronic contextualizations.⁸⁵⁷ This means that nodegoat dynamically combines functionalities of a database application with visualization possibilities (like the tool Gephi in the third chapter). By combining these functionalities in one interface, one is able to instantly process, analyze and visualize complex datasets relationally, diachronically and spatially. Such an approach allows us to build up multimodal networks step by step to explore and to interact with our data. As noted earlier, this continuous process of interactions and explorations with data allows for more critical readings and levels of interpretation, highlighting dynamics that would have been possibly overlooked by traditional research. Furthermore, a multimodal dataset as nodegoat enables the researcher to organize rich historical data in a structured way, the importance of which is underlined by Graham R. Gibbs who confirmed that in qualitative research, the use of software primarily has the purpose to organize and manage data:

"The one key advantage that most researchers using the software claim is that the programs help them to keep everything neat and tidy and make it easy to find the material they need later in the analysis. In order to keep a clear mind and not become overwhelmed by the sheer amount of data and analytic writings, the analyst needs to be organized. The bigger the project and the more researchers who are involved, the more sensible it is to use software to support the analysis".⁸⁵⁸

⁸⁵⁴ Nodegoat', last accessed 9 January 2019, http://nodegoat.net/.

⁸⁵⁵ Pim van Bree and Geert Kessels, "Trailblazing Metadata: a diachronic and spatial research platform for object-oriented analysis and visualisations', in *Cultural Research in the Context of Digital Humanities* (St Petersburg, 2013); *Ibidem*, 'Mapping Memory Landscapes in Nodegoat', in *Social Informatics*, ed. Luca Maria Aiello and Daniel McFarland (Berlin: Springer, 2015), 274–78; *Ibidem*, "Towards an Object-Oriented Referencing System: Defining Multiple Forms of Asynchronous Collaboration and Authorship', *Transactions in Digital Humanities* (forthcoming).

⁸⁵⁶ 'Using Nodegoat', last accessed 4 April 2019, https://nodegoat.net/about.

⁸⁵⁷ Ibidem.

⁸⁵⁸ Graham R. Gibbs, 'Using Software in Qualitative Analysis', in *The SAGE Handbook of Qualitative Data Analysis*, ed. Uwe Flick (London: Sage Publishing, 2014), 281.

3.1. THE FIRST LAYER: THE EPISTOLARY NETWORK

The first step was to break down the data (and therefore its logical organization) into the smallest viable components and then link those components back together to facilitate complex analysis. This process, known as normalization, helps to keep the dataset free of duplicates.⁸⁵⁹ It also means that we step away from the process of storing information in one overview and start storing information in multiple locations. We then make relationships between these locations in order to allow these different locations to communicate with each other.⁸⁶⁰ These relationships are defined as logical, relational connections between different objects in the data-model. This means that the object 'person' can be related as the author of a book, but also as a member of an academy or as a correspondent. Moreover, the final database will not merely connect authors to books in some generic way, but will reflect the fact that, for example, the author Nicolaas Heinsius created both the *P. Vergilii Maronis Opera* (1676) and the *Publius Ovidius Naso, Opera Omnia* (1676). This is the concept of relationality.⁸⁶¹

I started my dataset by creating a type *correspondence* so that I was able to add information about correspondence data and metadata. As shown in the fourth chapter, these data were collected manually as well as through data-mining. An example of this process is represented in figure 33. It regards the correspondence between Nicolaas Heinsius and Antonio Magliabechi which is extent in the collections of the National Central library of Florence as well as in the University of Leiden, as documented in the Card Catalogue of the National Library of Florence as well as in the *Catalogus Epistularum Neerlandicarum*. The senders and the recipients were automatically retrieved and categorized under the type *correspondence*, and equipped with a relational reference to the type *person*. Each object of correspondence is further enriched with information about the place and date of sending and/or receipt, the number of letters exchanged and source information. With this information a unimodal network can be created, in which the nodes are the correspondents, whereas the edges represent a letter-communication between them. We have seen that this model served as the foundation for the analysis carried out in the fourth chapter of this study. In total, 11.871 correspondences are included in nodegoat.

⁸⁵⁹ Jean Bauer, 'Fielding History: Relational Databases and Prose', in Jack Dougherty and Kristen Nawrotzki, eds., *Writing History in the Digital Age* (Open access University of Michigan Press, 2012), last accessed 4 April 2019, https://writinghistory.trincoll.edu.

⁸⁶⁰ What is a relational Database', last accessed 4 April 2019, https://nodegoat.net/blog.p/82.m/20/what-is-a-relational-database.

⁸⁶¹ For a solid overview of relational databases, see Stephen Ramsay, 'databases', in Susan Schreibman, Ray Siemens, and John Unsworth, *Companion to Digital Humanities* (Oxford: Blackwell Publishing Professional, 2004), last accessed 6 November 2018, http://www.digitalhumanities.org/companion.

Morus - Magliabechi (Morus Alexander Magl	Morus Alexander	Magliabechi Antonio
Antonio Magliabechi (Heinsius Daniel Nicola	Heinsius Daniel Nicolaas	Magliabechi Antonio
Gronovius J - Magliabechi (Gronovius Jacob	Gronovius Jacob	Magliabechi Antonio
Le Moyne - Magliabechi (Moine Le Etienne	Moine Le Etienne	Magliabechi Antonio
Wetstein - Magliabechi (Wetstein Hendrik M	Wetstein Hendrik	Magliabechi Antonio
Janson - Magliabechi (Janson Gilles Maglia	Janson Gilles	Magliabechi Antonio
Francio - Magliabechi (Frans de Pieter Magli	Frans de Pieter	Magliabechi Antonio
Franchen - Magliabechi (Franchen Enrico F	Franchen Enrico Federico	Magliabechi Antonio
Vivier - Magliabechi (Vivié du Abrahamsz Jo	Vivié du Abrahamsz Johannes	Magliabechi Antonio
Desbordes - Magliabechi (Desbordes Henry	Desbordes Henry	Magliabechi Antonio
Blaeu - Magliabechi (Blaeu Willem Magliabe	Blaeu Willem	Magliabechi Antonio
Blaeu - Magliabechi (Blaeu Willemsz. Joan I	Blaeu Willemsz. Joan I	Magliabechi Antonio
LeClerc - Magliabechi (Clerc le Jean Maglia	Clerc le Jean	Magliabechi Antonio
Surenhusius - Magliabechi (Surenhuis Wille	Surenhuis Willem	Magliabechi Antonio
Ruiysch - Magliabechi (Ruiysch Conrad Ma	Ruiysch Conrad	Magliabechi Antonio
Perizonius - Magliabechi (Perizonius Jacobu	Perizonius Jacobus	Magliabechi Antonio
Magliabechi - Goes (Goes van der Willem M	Goes van der Willem	Magliabechi Antonio
Magliabechi - Hotton (Hotton Peter Magliab	Hotton Peter	Magliabechi Antonio
Huguetan P Magliabechi (Huguetan Pierre	Huguetan Pierre	Magliabechi Antonio
Brenkman - Magliabechi (Brenkman Henrik	Brenkman Henrik	Magliabechi Antonio
AA - Magliabechi (Aa van der Pieter Magliab	Aa van der Pieter	Magliabechi Antonio
Leti - Magliabechi (Leti Girolamo Gregorio M	Leti Girolamo Gregorio	Magliabechi Antonio
		5
Huguetan M Magliabechi (Huguetan Marc	Huguetan Marc	Magliabechi Antonio
Elsevier - Magliabechi (Elzevier Bonaventur	Elzevier Bonaventure Daniel	Magliabechi Antonio

Fig. 33 Example of the type correspondence, leading to the creation of a unimodal network. Tool: nodegoat.

3.2. THE SECOND LAYER: LETTER CONTENTS

In order to perform a more systematic exploration of the specific contents of each individual letter, the type *letter* has been created. Each *letter* includes a relational reference to the *correspondence* it belongs to. This type offers archival transcriptions with additional metadata on these texts, as well as cross-references in the full-text, referring to other types in the dataset. Currently, the dataset consists of 1.778 full-text transcriptions, of which 985 belong to the correspondence of Antonio Magliabechi. This model can best be explained on the basis of an example. In figure 34, a transcription of a letter written by Magliabechi to Nicolaas Heinsius is represented, in which I have tagged references to mentioned people (red), books (blue) and physical locations (yellow), each category displayed in a different color. Each of these citations are equiped with a relational reference to their respective objects *person* and *book*.

Magliabechi Marco Antonio Heinsius Daniel Nicolaas 28-07-1674 edit (ngHu2H161HYb3Sugplhxr) Atmo: 100 100 er non n Sender Receiver Magliabechi Marco Antonio 9 nsius Daniel Nicolaas % Date 28-07-1674 ne a spere il semponet ACAD Part Corre Antonio Magliabechi (Heinsius Daniel Nicolaas Magliabechi Marco Antonio) 9 Italian IGD. BAT. Language Here Le S BIBL Subject Book provision % Book printing % Source Leiden University Library, BUR F 8 Text Cross-Referencing Transcription VJ. Homo cover certo e li imo Signore Signore e Padrone Col Non sarei stato a incomodare V.S.III.ma con mie Lettere, sapendo benissimo che ella non ha bisogno di stare a perdere il tempo nel leggere i miei spropositi, ed essendomi anche notissimo, che 'l perder verivo più con le Medici de' Ferdi. npo, a chi più sa, più spiace. Sono nondimeno costretto ad avvisarle, come s ubito che dal Panciatichi Lore.. wit ha dato in Services and the service of the serv Redickes, V.S.III.ma, m decreater a Italy Roma il Ha ma ha t Spiristres intito lass Principia Vito Chu anche fidelissimamente ricapitata. Oliva Giovanni P.. Roma (IT) Prediche dette p ieto, in Veros re questo foglio, le avviserò qualche notizzia Letteraria della Per empi nostra <u>Italia</u>. Per lo più saranno cose di pochissima considerazzione, poiché come V.S.III.ma sa, il che scrivo più con le lacrime, che con l'inchiostro, qua non ci è si può dire alcuno che studi per la vera strada Roma (IT) Prediche dette n. Pope Clemens X Roma (**Bo**na Gio Principia et docv. conso I P. M. Noris 1 Janto Agoso now. C ta io lessa Macedo Francisco Verona (IT) Commentatione... enor, giache me la mane Il Padre <u>Oliva</u>, Generale de' Gjesuiti, ha dato in luce adesso in <u>Roma</u> in 1000 a' torch: Al P. Noris is prepar Noris Henry Pulaeus Phillipus foglio, <u>un nuovo tomo delle sue Prediche</u>, dedicate al presente <u>Sommo</u> una Risporta al Kg Rulle I Jare la Pontefice Netherlands Rulaeus Phillipus Gronovius Jacob Biblioteca Medic. Nella mede ma Città di <u>Roma</u>, il Signor <u>Cardinal Bona</u>, ha fatto la faccio stampare costà in Olando. Modoro Hy Rulles ro, stanno qua benimino d' sanita , 1 stampare un suo Libretto spirituale in 12, intitolato Principia Vitae Christian nes epi l'alto anno to nello Miblioteco Laurengiano. Luno, e Il Padre Macedo in Verona, ha finito di fare stampare i s Il radre Macedo in verona, na ninio di tare stampare i suoi Apologetici, cio è per San Vincenzio Lirinense contro il P. M. Noris per Santo Agostino contro 1 Padre Cristiano Lupo ecc. È opera ordinarissima, avendola io letta, ed osservato in essa mottissimi errori già che me la mandava a foglio per foglio, di mano in mano che escivano di sotto a' torchi. Il P. Noris si prepara per rispondergli, e fa Leuven (BE) Padova (IT) e conscience l'ignoranze ed asinisa Atmos y Leverabi . Gedo che VI. M. e conosciuto, 1 mole this imi errori Padova (IT) Frambotto Pietro.. De ludis circensi... P. M. Noris che con mia confusione m Inscriptiones epi. contro del Tada Garnier Gjerista è statovristan ranio in 16. Jenso anche che si vistampi in Pado constanti a faccia a sua Risposta al Signor Rulleo, perché quando se ne ritorna la faccia stampare costà in Olanda. Il detto Signor Rulleo, conso anche il Signor Gonovio, stamo quà benissimo di sanità, stando per così dire continuamente sepolti nella <u>Biblioteca Laurenziana</u>. L'uno e Itah ronto & Padova, fi qua due giorni sono il Frambotto, l'altro, hanno chiaramente veduta, e conosciuta, l'ignoranza, ed asinità Le vite de pittori. Soprani Raffaele Li scrittori della L leta come VI: Housia & quella Cista e mi dise che vole Fauto, namo chiaramente vecuta, e consciuta, ngno arza, eu asima, di molti, stimati costà, ed anote da V.S.III.ma, per Letterati. Credo che V.S.III.ma avrà veduto che la <u>Censura</u> del suddetto <u>P.M. Noris</u>, che con mia confusione mi volte onorare di dedicare a me, contro del <u>Padre</u> Biffo Niccolo In Claudii Cla Panomo de fichis Criensibus con l'occasione deve nente in <u>Lovanio</u> in 8 <mark>nier Gjesuita</mark>, è stata ristampata galantis Sento anche che si ristampi in Padova in foglio, ed altrove

Fig. 34 A digital transcription of a letter between Magliabechi and Nicolaas Heinsius (UBL BUR F. 8). Tool: nodegoat.

The letters from Magliabechi to Nicolaas Heinsius constitute thus a rich array of node types: mentioned people and books all connect to each other via a complex network. If we transform all surviving letters of Magliabechi to Nicolaas Heinsius into a network, the result is the following:

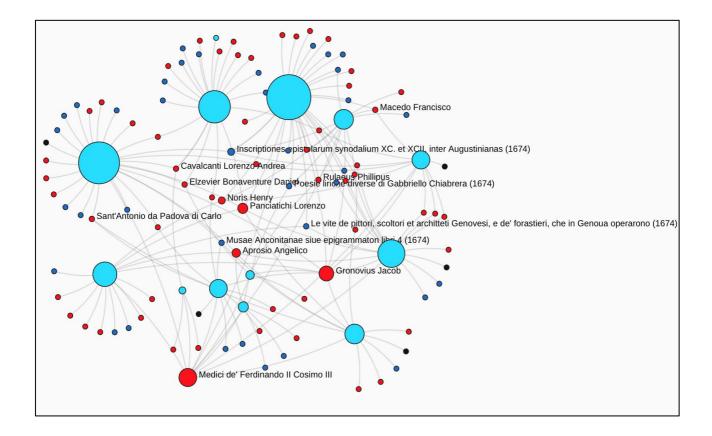


Fig. 35 A multimodal network of the contents of Magliabechi's letters (light-blue) to Nicolaas Heinsius. In these letters, books are mentioned (dark blue), persons (red) and other letters (existing letters in light-blue and lost letters in black). Network created with nodegoat.

The network in figure 35 is enriched by data on books (represented in dark-blue) and persons (red) that are cited in Magliabechi's letters (light-blue) to Nicolaas Heinsius. Overlap in data shows us books and persons that are mentioned repeatedly in more than one letter and the amount of them mentioned per letter. Visually, we see that there are larger and smaller nodes. The seize of these nodes is proportional to the node degree, i.e. the number of connections a node has to other nodes in the network. This means that the bigger a node, the more connections it has within that particular network. As a result, the most cited persons (e.g. Cosimo III, Jacob Gronovius) and the most cited books (e.g. *Inscriptiones epistolarum synodalium* [...]) appear larger than the other nodes. Likewise, the more references to books, persons and letters a letter contains, the bigger this letter is represented in the network graph.

Furthermore, letters refer to other letters with, if we are lucky, the date when the letter was sent or received. On the basis of this information, a reference can be made to the existing letter in the collection. As such, direct connections are formed between letters and their replies which makes it easier to navigate between letters quickly and compare their contents. For example, figure 36 shows that Magliabechi confirmed the receipt of Le Clerc's letter of the 10th of October 1709, which has survived in the collections of the National Library of Florence. By clicking on this reference, represented in lightblue, one is able to directly navigate to the respective letter of Jean Le Clerc (see right letter in figure 36). In the case the letters is untraceable in the archive, mentioned letters help us to trace back lost or burned letters. For instance, Jean Le Clerc mentioned in his letter of the 10th of October 1709 (figure 36), the receipt of Magliabechi's letter dated the 10th of September. This letter has, to date, not surfaced in the archive. As such, Magliabechi's own letter-network can be reconstructed more precisely. This is important because Magliabechi's own letters have survived in smaller quantities than those written to him. In fact, Magliabechi's surviving correspondence contains 599 letters written by him to his correspondents in the Dutch Republic. This number is a fraction of the correspondence sent to Magliabechi, where 395 sent from the Dutch Republic have survived. Using this method, I was able to record 236 letters that have not come down to us. Moreover, as shown by figure 35, the lost letters are represented as black nodes in the correspondence between Magliabechi and Nicolaas Heinsius. Multimodality is thus able to capture both surviving and missing correspondence in visual representations of a network, enhancing the transparency of historical data in network visualizations. That surviving correspondence provides important information about the letters that have not come down to us is also key to the research carried out by Paula Findlen and Hannah Marcus in the context of the Galileo Correspondence project at the University of Stanford.⁸⁶² Exactly because the correspondence of Galileo has a complicated archival history, involving multiple episodes of both intentional suppression and accidental loss of key documents, they experiment with digital methods combined with a close reading of the letters to "reconstruct his archive and find new ways to understand the fraught archival legacy of Galileo's letters".⁸⁶³

ngNa0d161NUhxYaKvN Sender	Magliabechi Marco Antonio %		Sender	Clerc le Jean %				
ender	Clerc le Jean %		Receiver	Magliabechi Marco Antonio %				
ate	26-12-1709		Date	10-10-1709				
art Correspondence	LeClerc - Magliabechi (Clerc le Jean Magliabechi Marco Antonio) %		Part Correspondence	LeClerc - Magliabechi (Clerc le Jean Magliabechi Marco Antonio) %				
anguage	Italian			Latin				
ubject	Book provision % Literary news %		Subject	Book provision %				
ource	Amsterdam University Library, Bijzondere Collecties, hs. C 87		Source	J. le Clerc: Epistolario (1706-1718), sous la dir. de M. e M. G. Sini,				
Transcription/abstract	Text Cross-Referencing			vol. 3, Firenze, Leo S.Olschki, 1994, pp. 223-224; BNCF, Magl. VIII, 1117 (30), f. 31v.				
	Illustrissimo e Dottissimo Signore Signore e Padrone Colendissimo	1	Transcription/abstract	Text Cross-Referencing				
	Dal per tutti i capi, degnissimo Signor Brenemanno, mi è stata	Brenkman Henrik	Illustrissimo, et Doctisismo Viro Antonio Magliabechi S.P.D. Joannes					
	consegnata, l'umanissima, e cortesissima lettera di V.S.III.ma de' 10 di Ottobre, che al solito mi è stata più grata di qualsivoglia tesoro, e le ne	Clerc le Jean Ma Brenkman Henrik		Clericus,				
	rendo grazzie immortali. Io non mancherò di servire il suddetto dotto, e gentilissimo Signore, in tutto quello che si degnerà di comandarni, e di	Dienkinanmennk		Hodie accepi, Vir Illustrissime, litteras tuas 10 Septembris datas quibus, pro innata tibi humanitate et benevolentia erga litteratos, et summo	Magliabechi - Cler			
	questo V.S.III.ma ne sia più che certa. Due giorni sono mi diede l'inclusa			litteras iuvandi studio, guod tibi sempiternam famam peperit, etiam apud				
	sua Lettera per mandare a V.S.III.ma. Con tale occasione, in confuso,			gentes a quibus sol aversus equos iungit, ut Virgilii verbis utar,				
	ed al solito senza ordine di alcuna sorta, scriverò a V.S.III.ma, qualche	Maffei Paolo Ale Receiving of Gemme antiche		omnimodum favorem Brencmanno polliceris, cum Florentiam venerit,	Brenkman Henrik			
	novità Letteraria di Italia.	Gemme antiche		Cod. Mediceum Pandectarum collaturus. Is vero tibi hasce litteras	Firenze (IT)			
	Il signor Cavalier Maffei, mi ha mandato il seguente suo nuovo libro.			reddet, et benignitate tua, quam tam prolixe offerre dignaris, prout vis,				
	Gemme antiche figurate, date in luce da Domenico de' Rossi, colle			utetur. Conatus quidem est iamdudum Laur. Theod. Gronovii	Gronovius Loren			
	Sposizzioni di Paolo Alessandro Maffei Patrizio Volterrano, Cavaliere			collationem sibi, si fieri posset, comparare, sed Gronovis nec ipse eam	Gronovius Jacob			
	dell'Ordine di Santo Stefano, e della Guardia Pontificia. Parte quarta,	Magliabechi Mar Medici de' Ferdi		edere vult, nec alii mutuam dare, nisi si quis ingenti aere collationis illius				
	Dedicata all'Emin.mo e Rev.mo Principe il Signor Cardinale Tommaso	Marchetti Angelo		usuram redimere velit; quae an satis accurata sit nemo novit, multi				
	Ruffo. In Roma nella Stamperia alla Pace l'anno 1709. In 4.	Receiving of Euclides Riform		dubitant. Certe aiunt, in specimine edito, quaedam proferri, quae in				
	Con mio gran rossore, nel suddetto Libro, ho veduto inserito il seguente	Euclides Riform		Codice Mediceo esse nequeunt. Nemo est, qui velit magno pretio				
	Ragionamento.			emere, quod quale sit ignorat. Gratias tibi summas habeo ob titulos librorum in Italia editorum ad me transmissos, Ouosdam iam vidimus, ut				
	Ragionamento sovra un Medaglione di Commodo Imperadore steso in			Vignolii observationes de antiguis Pontificum denariis, de guibus in XIX	Antiquiores ponti.			
	una lettera al Sig. A M. Bibliotecario dell'Altezza Reale di Toscana.			volumine Bibliothecae Selectae agam. Hic ferme nihil in lucem prodit,	Antiquiores ponti.			
	In data de' 20 Novembre 1708.	Argento Gaetano Receiving of	quod sit aliculus pretii, sed brevi non sine voluptate videbitis in Italia					
	Il Signor Marchetti, mi ha mandato il seguente:		Religuias Antiguae Romae, pictas, et sculptas a perito pictore Batavo.	Reliquiae antiqu				
	Euclides Riformatus, sive plana, et solida Geometriae Elementa, Opus	De re beneficiari		gui ter Romae fuit, ut guidguid est veterum ruderum pingeret. Opus est	Roma (IT)			
	in quo tum alia plerague, cum praeipue Rationis, et Proportionis Natura,			tribus volominibus in folio ut vocant, ubi post elegantissimas figuras,				
	et proprietatis nova Methodo clarius, quam antea ab aliis, atque facilius	Napoli (IT)		breues habentur pretiosarum parietinarum descriptiones, quae pertinent				
	exponuntur, firmiusque ac evidentius demonstrantur, ab Angelo de	Mistichelli Dome		ad earum priscos conditores, ut situm, aliaque eiusmodi. Audio in ijs				
	marchettis, Regiae Celsitudinis Ferdinandi Etruriae Principis	Receiving of Trattato dell'apo		conservatam esse externam speciem nonnullarum partium Amphiteatri				
	Mathematico, ac in alma Pisana Universitate Scientiarum Mechanicarum Professore, Liburni, apud Jacobum Valsis, In 4.	tratiato dell'apo		Vespasiani, quae terrae motu, ante aliquot annos corruerunt, sic chartae				
				perenniores erunt marmore. Festinatio Brencmanni plura scribi non	Brenkman Henrik			
	Il <u>Signor Caietano Argenti</u> , Regio Consigliere, nel S. Cons. Napolitano mi ha <u>mandato</u> il seguente, che ha dato in luce senza il suo nome.			patitur, sed non desinam sine voto, quo tibi a D.O.M. quietam et iucundam senectutem exopto. Vale, Vir Doctissime, tuique cultores				
	De Re Beneficiaria Tres Ubi Caroli III. Austrii Hisp. Regis Pii, Felicis,			redama.				
	Victoris, PP. Augusti Edictum Quo fructuum capionem in Sacerdotiis	Gotti Antonio Do		Dabam Amstelodami 10 Octobris 1709				
	Externorum, & Vagantium Clericorum jubet, tum summo, tum optimo	Gotti Antonio Do Receiving of De hydrope ejus		Est hic amicus, qui me oravit, ut te rogarem, an posset per aliguem, cui	Kuster Ludolph			
	jure, rectè, atque ordine factum, demonstratur. 1708. In 4. Non vi è dove sia stampato ma assolutamente è impresso in <u>Napoli</u> .			labores iuxta merces solveretur, codex Herodoti, qui est in Laur.	Biblioteca Medic			
	Il Signor Mistichelli mi ha trasmesso il seguente			Bibliotheca, conferri. Dudum est ex quo eruditi meliorem prestantissimi historici editionem expectant. Jac. Gronouius pollicitus erat, sed nescio	Historiarum libri I.			
	Trattato dell'Epoplessia, in cui con nuove Osservazzioni Anatomiche e			an unquam sit praestiturus.	Gronovius Jacob			
	Riflessioni Fisiche si ricevano tutte le cagioni, e spezie di quel male e vi							
	si palesa fra gli altri un nuovo ed efficace rimedio. Dedicato al Rev.mo			Word Count: 342				

Fig. 36 A digital transcription of two letters between Magliabechi and Jean Le Clerc. Transcriptions in nodegoat.

⁸⁶² Paula Findlen and Hannah Marcus, "The Breakdown of Galileo's Roman Network: Crisis and Community, ca. 1633', *Social Studies of Science* 47, no. 3 (2016): 326–52.

⁸⁶³ See 'Galileo Correspondence Project', accessed 12 February 2019, http://galileo.stanford.edu/.

In addition, nodegoat gives the possibility to indicate the nature of relationships (see figure 36, e.g. *mandato*). As such, one is able to specify why a certain book or person is mentioned in a letter.

In the context of this research, my goal is not just to identify these elements. Rather, these annotations function as a point of departure to dynamically navigate the dataset and thus approach the corpus of letters from different perspectives. It is possible, for instance, to directly navigate from a reference to the book in a single letter to the record of the book, which contains metadata about its publication history (see next paragraph), and from there generate a list of all the letters in which this book is mentioned. This opens up the opportunity to start investigating which contexts feature references to books, and to compare the different reasons why books are mentioned in correspondence, be it a dedication or a gift; a bibliographical reference or a concern. Likewise, it is also possible to directly navigate from a person mentioned in a letter to a bibliographical record, and from there generate a list of all the publications he produced or a list of the people he exchanged letters with. Moreover, one can display all books that are donated or dedicated to Magliabechi, and from there directly navigate to the single letters in which these books are mentioned. Hence, this approach completely changes the way we handle historical data.

3.3. THE THIRD LAYER: METADATA

When creating networks using relational data, we are often confronted with situations where we lack information about the details of their multimodal structures. In such situations, an approach that allows us to integrate and combine different types of data may offer a more complete picture of the network in question. For example, when the name of a book or person is mentioned in a letter, it is the underlying metadata that makes the citation complete. This is especially true in times of censorship where scholars had to be careful when sharing detailed information with others. With regard to these troubled times, questions that book-citations in letters might raise are: what was the occupation of the author of the book? What was the religious affiliation of the author? Was the book prohibited? Is it a theological treatise on faith or rather a book on natural history? In order to tackle these questions, we need to reveal more information about the single nodes in the network. For this reason, every type in the data-model is defined by its biography or publication history. Figure 37 shows that for each person in the dataset (17.658 in total) biographical data are entered, including family name, given name, spelling variations, gender, capacity (e.g. librarian), religion, date and place of birth and death. In addition, each person is linked to a VIAF number.⁸⁶⁴ The Virtual International Authority File (VIAF) provides authority data on persons and organizations collected from many national libraries. By doing so, I have added external identifiers to my dataset to offer transparency and authority control over each data entry. This helps to disambiguate objects (like persons with similar names) and also enhances the interoperability of a dataset. Both these aspects make it easier to share and re-use my dataset in the future.

Figure 38 shows two examples of the object *book* which is enriched with metadata about the author, printer and dedicatee (with cross-references to *person*), subject, language, an external reference to the Short Title Catalogue of the Netherlands⁸⁶⁵, the year and place of publication, information about false imprints and whether the book was enlisted on the Index Librorum Prohibitorum.⁸⁶⁶ Each cited book can thus lead to a range of different kinds of nodes and edges that all played a fundamental role in its

^{864 &#}x27;VIAF', accessed 22 January 2019, https://viaf.org/.

⁸⁶⁵ 'Short Title Catalogue Netherlands (STCN)', last accessed 23 January 2019, http://picarta.nl/. The STCN, compiled by the Royal Library of the Netherlands, is the Dutch retrospective bibliography for the period 1540-1800.

⁸⁶⁶ The monumental work of Jesús Martínez de Bujanda is used to identify prohibited books (*Index Librorum Prohibitorum 1600-1966* (Montréal: Mediaspaul; Genève: Librairie Droz, 2002).

circulation. By using the complex web of cross-references it becomes possible to visualize, for instance, connections between the dedicatees of these books and the correspondents of Magliabechi. The multimodal network enables to analyze network configurations at the same moment and at the same time see how its interaction on different layers change over time. Consequently, the multimodal network constitutes a dynamic network in which nodes appear and disappear along the timeline. When new data are added the overlap of the multimodal changes, resulting potentially in new answers and other questions.

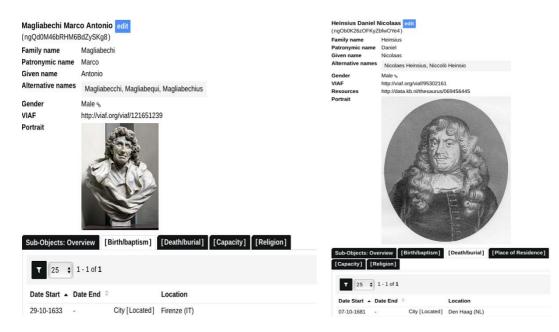


Fig. 37 Biographical data in nodegoat. Bust Magliabechi: https://en.wikipedia.org/wiki/Antonio_Magliabechi Portrait Nicolaas Heinsius: https://nl.wikipedia.org/wiki/Nicolaas_Heinsius.

Printer Year Language Subject	Leeuwenhoek van Philips Antonyszoon Antoni 🗞 Krooneveld van Hendrik 🗞 1695 Latin 🗞 Biology & speriments %	Dictionnaire Historique et Critique (1697) edit (ngZm9p165AwRjKmWhZTp5)							
	Magliabechi Marco Antonio %	Author	Bayle Jean Pierre %						
Image	DEDICATIO.	Printer Index	Leers Reinier % Roman Index Opera Omr	nia e					
	Illustri & Magnifico Viro	Acknowledgements	•						
	D°. ANTONIO MAGLIA- BECHI,	Year	1697						
	Sereniffimi & Potentiffimi Principis ac Domini	Language Subject	French & Biography &						
	COSMI III.	Sort of artifact	book %						
	Magnæ Etruriæ Ducis Biblio- thecæ Præfecto,		Resources http://data.kb.nl/catalogus/840197616						
	S. P. ANTONIUS van LEEU- VVENHOEK.	[Date of completion	n/publication j						
	Uas ad me plus femel deditiliceras, Vir illuftris, cæ volun- raistans, & benevolentie erga me fin- galars tam manifelta funt indicis, ut	▼ 25 \$ 1	- 1 of 1						
	aliquoties rubore fuffundar, præfertim ubi memine- * 3 rim,	Date Start 🔺 Dat	te End 🍦	Location					
Resources	http://data.kb.nl/catalogus/298766361	1697 -	City [Located]	Rotterdam (NL)					
T 25	÷ 1-1of1 🔄 1 🖸								
Date Start	Date End Cocation Notes								

Fig. 38 Publication history of Leeuwenhoek's Arcana Naturae Detecta and Bayle's Dictionaire Historique et Critique. Image titlepage Arcana Naturae Detecta: https://lensonleeuwenhoek.net/content/arcana-naturae-detecta.

Why is metadata important for historical research? Metadata often provide pieces of contextual information that complete the networked structure of the early modern epistolary network. This is especially important when dealing with incomplete, insufficient and uncertain data. The importance of this is shown by the following examples. On the 24th of July 1706, Magliabechi informs Gisbert Cuper in Deventer about the book *Dissertatio de primariis precibus Imperialibus*.⁸⁶⁷ About this book, he writes that the name of the author "è assolutamente finto, ma non so chi ne sia il vero Autore."⁸⁶⁸ The underlying metadata of the *Dissertatio de primariis precibus Imperialibus* reveals that the book was written by Pietro Marcellino Corradini (1658-1743). This information enriches the network for it does not derive from the content of the letter, but from the intrinsic network of the content itself. Multimodal networks allow us to include this information in the network so that data in one layer could indicate missing or omitted data in another.

Furthermore, recording the citations of books in letters helps us to investigate the question of loss in a systematic way, aimed at computing the number of books at present undiscovered.⁸⁶⁹ If one examines the content of early modern scholar's letters, one of the most frequent topics was books: detailed information about the latest publications, reports about works in progress, and so forth. Magliabechi's bibliographical reports are extremely well adapted to trace back lost books or missing bibliographical information. He did not only give full versions of the title, together with details of the author, the publisher, the date and place of publication, but he also provided his correspondents with detailed information about false imprints and anonymous authors, revealing the actual locations and writers of a book. For instance, when he informed Gisbert Cuper about the Satyrae numero auctae (1700) written by Lodovico Sergardi under the pseudonym Quintus Sectanus, he noticed that, although it "apparisca stampato in Amsterdam, è veramente impresso in Napoli.⁸⁷⁰ This information helps us to update union library catalogues like Picarta, in which the record Satyrae numero auctae is ambiguous. Here, the book appears to be printed in Naples or in Rome, which is based on the indications given by Alphonse Willems in his monumental work Les Elzevier: histoire et annales typographiques.⁸⁷¹ The overlap of different data-entries provide context and might fill these gaps, which supports the fundamental concept that data should be able to travel between different repositories.

So far I have discussed the ways in which nodegoat offers tools for doing historical research, and for exploring research material so as to make this research more interdisciplinary, more systematic, and – in some way – more attuned to the complexity of the object of research itself. To see how all this worked in practice, several specific cases will be discussed in the next paragraphs. My point will be that books were not passive objects, but influential agents in shaping the epistolary network. But before turning on to these case studies, in the next paragraph a concise literary review will be presented to show the importance of mapping the rich store of information contained in correspondence.

⁸⁶⁷ Conradi Oligenii J.C. [pseud. Pietro Marcellino Corradini], *Dissertatio de primariis precibus imperialibus : ubi argumentis ex jure canonico deductis, concordatis inclytæ nationis Germanicæ [...] ostenditur illas dirigi a cæsarea majestate non posse sine speciali indulto summi pontificis* (Friburgi Briscojae [Freiburg]: Apud Johannes Strasserum, 1706).

⁸⁶⁸ Magliabechi to G. Cuper, 24 July 1706, KB, KW 72 D 12, f. 148, "is absolutely fake, but I do not know who is the true author".

⁸⁶⁹ Other possible approaches to trace back lost books are given in Andrew Pettegree and Flavia Bruni, eds., *Lost Books. Reconstructing the Print World of Pre-Industrial Europe* (Leiden/Boston: Brill Publishers, 2016).

⁸⁷⁰ Magliabechi to Cuper, 15 August 1701, KB, KW 72 D 10, f. 159, "appears to be printed in Amsterdam, it is actually printed in Naples".

⁸⁷¹ Alphonse Willems, Les Elzevier: histoire et annales typographiques (Brussels: G.A. van Trigt, 1880): 578.

4. THE USE OF BOOK (CO-)CITATIONS

This chapter relies heavily on the work of Yves Gingras, who used methods of network analysis to map the global structure of the early modern intellectual field and its development over time.⁸⁷² In particular, he used techniques developed for the (co)-citation analysis of scientific papers to follow the evolution of cited persons over time as recorded in letters. This idea goes back to the research of Eugene Garfield in the 1950s, who initiated a system of citation indexes as a bibliographical tool for the study of the history of science and the humanities.⁸⁷³ He pioneered citation indexing in the sciences and scholarly journal literature, in which the cited references (footnotes) in each article are recorded and serve as connections between papers, creating as such a network of ideas and concepts that can be navigated over time. It represented a method of clustering author pairs who cited the same papers, the purpose of which is to identify emerging research areas that have not otherwise been characterized. The idea to use citation indexing to study early modern correspondence networks was envisioned more than 50 years later, by the historian David A. Kronick in 2001. He was the first to ask the question whether a variation of citation indexing can be applied to correspondence in the seventeenth and eighteenth centuries.⁸⁷⁴ Such an analysis, he argued, might reveal additional networks or even invisible colleagues in the early modern period. Kronick left the question for future research, which was carried out by Gingras in 2010.

Gingras mapped the evolution of cited persons in the consecutive correspondences of Marin Mersenne (1588-1648), Henry Oldenburg (1618-1677) and Charles Darwin (1809-1882). With this analysis, Gingras aimed at visualizing the evolving conversations in the intellectual field involving the persons mentioned in their letters.875 Besides a citation-analysis, Gingras also performed a co-citation analysis. Originally, co-citation analysis has long been used in the social sciences for identifying coauthorship in scientific papers, defining as such the intellectual structure of a research domain. In this case, a co-citation is formed if two references or authors appear in the same bibliography. If authors are frequently cited together than this can be an indication of the measure of similarity of contents of these two authors. Consequently, this analysis helps for the identification of "invisible colleagues", or groups of scholars that belong to the same research domain but without being linked by formal organizational ties.⁸⁷⁶ According to Gingras, correspondence offers the possibility to map the intellectual structure of the Republic of Letters by providing this measure of proximity between authors, through their being cited frequently together in many different letters. In other words, co-citations appear when two persons are mentioned together in the same letter. In case the number of these co-citations is high, that is if they are cited together in many letters, Gingras suggested that there is a strong link between these persons. The strong link is highlighted by the thickness of the edge, called weight, that is proportional to the number of co-citations. Moreover, based on the idea of co-citations, the University of Luxembourg has developed a tool, Histograph, that can display the interconnections between people that appear together in an image on an interactive graph.⁸⁷⁷

⁸⁷² Gingras, 'Mapping the Structure of the Intellectual Field Using Citation and Co-Citation Analysis of Correspondences', 330–39.

⁸⁷³ Eugene Garfield, 'Citation indexes for science – new dimension in documentation through association of ideas', *Science* 122, no. 3159 (1955): 108-111.

⁸⁷⁴ David A. Kronick, 'The Commerce of Letters: Networks and ''Invisible Colleges'' in Seventeenth- and Eighteenth-Century Europe', *The Library Quarterly* 71, no. 1 (2001): 28.

⁸⁷⁵ Gingras, 'Mapping the Structure of the Intellectual Field Using Citation and Co-Citation Analysis of Correspondences', cit. 331.

⁸⁷⁶ The concept of invisible college was developed in the sociology of science by Diana Crane, *Invisible colleges. Diffusion of knowledge in scientific communities* (Chicago/London: The University of Chicago Press, 1972). For more recent work see, for instance Markus Gmür, 'Co-Citation Analysis and the Search for Invisible Colleges: A Methodological Evaluation'.

⁸⁷⁷ 'Histograph. Graph-based exploration and crowd-based indexation for multimedia collections', last accessed 23 January 2019, http://histograph.eu/.

Building on the work of Gingras, an even more detailed picture can be provided if, in addition to cited persons, also cited books are aggregated in epistolary networks. Instead of seeing each letter as a unique document, one can look at these collected documents as a global corpus of data to be treated as a representation of the evolving conversation going on in the Republic of Letters.⁸⁷⁸ One can, for instance, follow the evolution of cited books over time. Highly cited books give us as clue about which books dominated the discussions and occupied the minds of the early modern scholar. In this way, one also gets an idea of the number of books involved in these exchanges, their emergence and disappearance over time as recorded in their letters. Moreover, this method allows to analyze co-citational pairs of persons and books as well. That means that if certain persons are often referred to together with certain publications (whether they contributed to them or not), this may provide evidence that there is a link between them. Likewise, books that are co-cited with other books, might indicate that there is a connection between these as well. Applying these ideas to this study we can analyze the changing dynamics of book-citations and how this method, which is complementary to the close reading of the detailed contents of correspondence, can help us to highlight the role of books in the early modern epistolary network. Before we turn to this, we need to bring structure in the hundreds of books mentioned by Magliabechi in his correspondence.

5. POWER-LAWS AND STRUCTURE IN BOOK-CITATIONS

In the fourth chapter we have seen that most real-world networks have a statistically significant powerlaw distribution. According to Barabási, these power-laws rarely emerge in systems completely dominated by a roll of a dice.⁸⁷⁹ Does the contents of Magliabechi's letters obey the power law as well? The answer is yes. If we plot the degree distribution of the book-citation network on a graph, we can see that even the cited books in the correspondence of Magliabechi follow a power-law:

⁸⁷⁸ Gingras, 'Mapping the structure of the intellectual field using citation and co-citation analysis of correspondences', 331-332.

⁸⁷⁹ Barabási, Linked: The Science of Networks, 72.

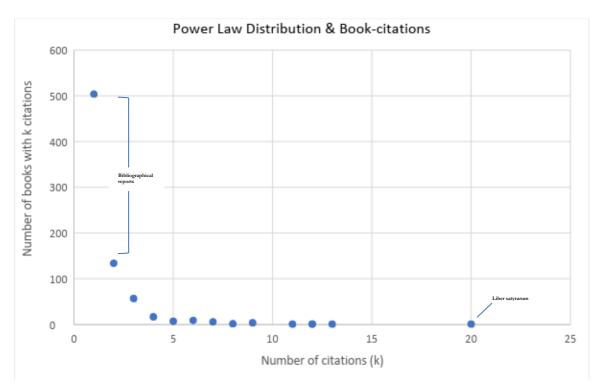


Fig. 39 The power law degree distribution of the cited books in Magliabechi's correspondence.

The dynamics in figure 39 provide a first indication about the structure of the content of Magliabechi's letters and the patterns the information contained in his letters follow. Specifically, the power law distribution in figure 39 confirms that there is a strong concentration of book-citations onto a small proportion of the total number of books mentioned in the letters. This tells us that the majority of the books have only a few links (cited only once or twice) and that these numerous tiny nodes coexist with a few big hubs, books with an anomalously high number of links (frequently cited). The power law distribution as shown in figure 39 shows that the most cited book (*Liber Satyrarum Sexdecim*) is closely followed by several somewhat less cited books, followed by dozens that are cited even less, and so on, eventually arriving at the numerous books that are cited only once. Though much more are cited at least once (504) or twice (134) there are only 49 books cited more than five times. This visualization stands thus as proof of the highly important organizing principles and laws that govern network evolution, which strongly implies that the rich store of information about books contained in intellectual correspondences are more structured than we might expect. In other words, this finding means that there are laws behind the contents of early modern letters, implying that Magliabechi's bibliographical reports were far from random.

5.1. MAGLIABECHI'S BIBLIOGRAPHICAL REPORTS

What does it mean that his bibliographical reports were far from random? To answer this question, we first need to understand what a bibliographical report is. As described in chapter 3, Magliabechi did not ever turn his knowledge into a publication, but incessantly studied the works of others to keep the scholarly community running. The primary scope of Magliabechi's correspondence was thus to inform other scholars about the books they needed to carry out their research. As such, he performed a fundamental role in helping knowledge find its way into print by others. This knowledge of books was shared in the shape of bibliographical reports that amounted to bibliographic news, containing lists of worthy publications which had recently appeared in Italy. Moreover, Magliabechi discussed what he and

other scholars thought of these publications, who was working on what and who was quarreling with whom and about what. His vast epistolary network enabled Magliabechi to receive this news.

Magliabechi synthesized the information about books he gathered from his scholarly contacts and structured them into a clearly arranged lists of bibliographical bulletins. His correspondents praised him for this accuracy, and they were right. The accuracy of Magliabechi's literary reports is reflected in the power-law distribution in figure 39. The pattern implies that hundreds of books (y-ass) were cited only once in his correspondence to the Dutch Republic, meaning that he rarely spoke of the same book in his letters to different scholars. This suggests that the flow of bibliographical news was a very organized and effective system, without unnecessary duplication of titles. Magliabechi mentioned newly published books only once, sometimes twice in case the letter got lost or intercepted, making sure that his news reports were as effective as possible. The reason why Magliabechi could sent unique bibliographical reports to various scholars in the Dutch Republic was because his correspondents passed these reports among each other. This becomes apparent from, for instance, Magliabechi's letter to Gisbert Cuper dated the 28th of June 1709. In this letter, he informed Cuper that he had forwarded him a letter for the Orientalist scholar Adriaan Reland (1676-1718), unsealed so that Cuper could read the bibliographical news before giving the letter to Reland.

"Non iscrivo questa sera a V.S.Ill.ma le novità Letterarie di Italia perché le potra vedere dalla mia qua inclusa, al signore Relando, che le mando, perché possa vederle, senza sigillare".⁸⁸⁰

Likewise, Magliabechi informed Jacob Gronovius that he had to turn to Pierre Bayle's and Antoni van Leeuwenhoek's letters about the latest news in the Republic of Letters, while the Amsterdam publisher Pierre Huguetan could reach out to Ludolph Küster.⁸⁸¹ As such, Magliabechi avoided redundancy: saying the same exact book twice was a waste of everyone's time. In fact, Magliabechi continuously implored his correspondents che "'l perder tempo, a chi più sa, più spiace".⁸⁸²

The organization and structure of Magliabechi's bibliographical reports have contributed to his reputation and the credit he received from many contemporary scholars. A confused note of books, indeed, would led in a waste of time and frustration, particularly over long distances. For instance, on the 6th of March 1674, Magliabechi wrote Jacob Gronovius about the wish lists of books of Johannes Georgius Graevius. The list was so messy that Magliabechi did not understand which books Graevius needed. As a result, Graevius had to re-compile and re-send his letter to Magliabechi, which led to a considerable time loss:

"Io di buona voglia glieli [libri] manderò, bramando sommamente di contribuire qualche pietruzza, a così nobile, e bella fabbrica, ma esso mi ha mandato una nota così confusa, che

⁸⁸⁰ Magliabechi to Cuper, 28 June 1709, KB, KW 72 D 12, ff. 253-254, "This evening I do not write literary news to Your Illustrious Lordship for you can read them in the included letter, to sir Reland, which I send to you, so that you can see them, without sealing"

⁸⁸¹ Magliabechi to J. Gronovius, 10 September 1705, LMU, Cod 4° Cod. Msc 777, f. 104, "Le nuove Letterarie di Italia, V.S.III.ma le vedrà dalla mia qui inclusa, che per tale effetto le mando senza sigillare. Prego V.S.III.ma a degnarsi di farla avere al Signore Bayle sicura (The literary news from Italy, Your Illustrious Lordship can see them in the included letter, which I therefore send you unsealed. Please, make sure that this letter securely arrives to sir Bayle)". Magliabechi to J. Gronovius, 2 October 1710, LMU, Cod 4° Cod. Msc 777, f. 93, "Quella pel Signore a Leeuwehoek, la mando a V.S.III.ma senza sigillare, perché possa vedere le novità Letterarie (The letter for sir Leeuwenhoek, I sent it to Your Illustrious Lordship unsealed, so you can see the literary news)." Magliabechi to Pierre Huguetan, 6 October 1699, UBL, PAP 15, f. 1, "Solamente per obbedirla, le scriverò alcune novità Letterarie di Italia, poiche mi rendo certo che le saranno già note, avendole io scritte alle settimane passata al signore Neocoro, che me ne prego".

⁸⁸² Magliabechi to N. Heinsius, 28 July 1674, UBL, BUR F 7 "the wasting of time hurts most at the ones who know more".

non si può da essa sicuramente discernere quali sieno quelli che esso abbia, e quali gli manchino. Lo prego per tanto a mandarmi una nota distinta di quelli che gli mancano."⁸⁸³

If Magliabechi was sometimes more celebrated than the authors he assisted, that was thus in large measure because he was recognized as playing at least as important a role in helping the scholarly community through his knowledge of books. In fact, Magliabechi was praised by his contemporaries for his encyclopaedic memory, being also called a "bibliothecam viventem".⁸⁸⁴ Correspondence was thus "not merely ancillary to publications, but complementary, meaning that through an effective network of correspondence scholars could gain as much honor as through publications".⁸⁸⁵ On the other hand, the privileged role that Magliabechi had obtained in the Republic of Letters was heavily criticized by many scholars who refused to acknowledge the librarian's fame merely because he circulated some news items about books. For instance, in his satires, Benedetto Menzini (1646-1704) assailed in acrid terms that Magliabechi "perché de' Libri il frontespizio ha letto, si crede esser fra' dotti annoverato".⁸⁸⁶

Furthermore, the role of Magliabechi as an information-broker, deciding which books ended up in his news reports or could cross the border, made him a highly respected yet a feared member of the scholarly society. He could break reputations as easily as he could create them. His position allowed him to include those names and publications he deemed worthy, while he deliberately omitted the publications of his foes or put them in a bad light. Take, for example, Magliabechi's review of the *Quinto libro degli Elementi d'Euclide, ovvero Scienza universale delle proporzioni spiegata colla dottrina del Galileo*, published by the mathematican Vincenzo Viviani in Florence in 1674:

"Qua finalmente doppo tanti anni quel tristissimo e malignissimo Geometra, ha con l'aiuto di Dio, e delle persone, dato in luce quel Libretto, e sento che tra qualche tempo finirà anche il Libro grande, che ha dedicato al Rè di Francia. Ha durato circa a dodici anni a tirare la provvisione, senza ne anche avergli dedicata una sola riga, che in vero è una cosa vergognissima, non solo per esso, ma anche per la nostra Città. Nel Libro che ha dato fuora adesso, non vi è quasi nulla di suo, essendo quasi tutte cose del Galileo, del Toricelli ecc. Nel leggerlo V.S. Ill.ma riderebbe nel vedere le grandissime lodi, che al solito da al Dati, allo Stenone, e a costoro, che avevano lodato esso, e cosi, muli mutuo scabunt."⁸⁸⁷

⁸⁸³ Magliabechi to J. Gronovius, 6 March 1674, LMU, Cod 4° Cod. Msc 777, f. 147, "I would love to send them the books [he wishes], craving to contribute small stones to his noble and beautiful building [building blocks of learning], but he has sent me a note so confused that it is impossible to distinguish between the books he already has, and the ones that he lacks. Could you please sent me a separated note with those books that he lacks".

⁸⁸⁴ P. Bayle to Magliabechi, 8 March 1702, BNCF, Magl. VIII, S. 3, T. III, 11, ff. 30-31, transcribed in Lorenzo Bianchi, 'Le Relazioni Tra Bayle e l'Italia: I Corrispondenti Italiani Di Bayle e Le "Nuovelles de La République Des Lettres", in *Pierre Bayle e l'Italia*, ed. Lorenzo Bianchi (Naples: Ligiori Editore, 1996), 93, "O me infelicem qui nequeam consulere frequenter bibliothecam viventem quo nomine nemo vivit dignus aeque ac illustrissimus Magliabechius".

⁸⁸⁵ Chen, 'Digging for Antiquities with Diplomats: Gisbert Cuper (1644-1716) and His Social Capital', cit. 9.

⁸⁸⁶ Benedetto Menzini, Le satire di Benedetto Menzini con le note postume dell'Abbate Rinaldo Maria Bracci pubblicate da un accademico immobile e del medesimo arricchite degli Argomenti, e di nuove Annotazioni coll'Aggiunta d'un ragionamento epistolare d'Alcisto Salajdio P.A. Sopra l'uso della Satire contro il Parere di Pier Casimiro Romolini, ed. by Rinaldo Maria Bracci (Naples: presso Gennaro Rota Stampatore Camerale, 1765): 113, "Having read the title page of books, he thinks that he is ranked among the learned".

⁸⁸⁷ Magliabechi to J. Gronovius, undated [April 1674], LMU, Cod 4° Cod. Msc 777, f. 129, "Here in Florence, finaly after many years, that very sad and evil geometer [Viviani], with the help of God and people, published that booklet, and I hear that shortly he will finish his major book, which he dedicated to the King of France [Louis XIV]. For 12 years he kept receiving a pension, without having dedicated one single sentence to the King, which is truly a shameless thing, not only for him, but also for our city. In the book he has published now, there is nothing that comes from him, belong everything to the work of Galileo, Toricelli ecc. Upon reading it, Your Illustrious Lordship would laugh in seeing the high praise he, as usual, gives of Dati and of Stensen, of those who had, in turn praised him, and as such, multi mutuo scabunt [one scratches another, do me a service and I will give you one in return]. From 1664 onwards, Viviani received an annual pension from Louis XIV and dedicated his final work the *De Locis solidis secunda Divinatio geometrica in quinque libros Aristaei senioris* (1701) to the French King.

5.2. THE THREAT OF LITERARY JOURNALS?

In the literature on the Republic of Letters, there has been some disagreement about whether or not the epistolary circulation disrupted as a consequence of the appearance of learned journals at the end of the seventeenth century. Scholars as Krzysztof Pomian and Ann Goldgar have argued that, although literary journals did not necessarily solve the problem of the need to exchange news, they greatly supplemented and indeed in some way replaced the *commerce de lettres* as a means of disseminating information quickly.⁸⁸⁸ Scholarly letters and journals tended to discuss the same sorts of topics: what was being published, when, and where; what people thought of it; who was working on what. Indeed, stated Goldar "literary journals simply codified and formalized such conversations and correspondence for wider distribution".⁸⁸⁹ Paul Dibon made a similar, although rather tentative, point, stating that the "exchanges of correspondence remained – at least until the flourishing of journal in the last years of the century – the primary means of coordinating the life of the Respublica literaria".⁸⁹⁰ These arguments are in contrast with the studies carried out by Waquet on the role of journals in the Republic of Letters. According to Waquet, scholarly journals drew information from letters and struggled to provide an updated and unbiased discussion of books.⁸⁹¹ Although Goldgar agreed with Waquet that letters did not lose their importance, she believed that journals became the main source of information for the citizens of the Republic of Letters.

All that we know about the above-mentioned debate is based on traditional historical research: the close-reading of historical documents. However, as the number of historical letters shared online keeps growing, due to projects like ePistolarium, Early Modern Letters Online, Medici Archive Project and RECIRC⁸⁹², it is time to take full advantage of these ever-extending digital datasets and to discover how computational approaches can advance the study and understanding of the Republic of Letters. This paragraph takes a step in that direction, showing how the exploration of multimodal networks that consist of book citations and letter exchanges might provide us with a better understanding of the actual impact of the literary journal within the epistolary network. Indeed, if we look at the evolution of the network of cited books over time, we can clearly see that, although the amount of letters Magliabechi sent to his correspondents in the Dutch Republic remains stable, the number of books he mentioned rapidly declines after the 1690s (figure 40). In these years, several important literary journals were published in the Italian peninsula, in particular the the *Giornale de Letterati di Modena* (1692-1698) and the *Giornale de' letterati d'Italia* (1710-1740), which dominated the contents of Magliabechi's letters in these years.

⁸⁸⁸ Krzystof Pomian, 'De la lettre au périodique: La circulation des informations dans les milieux des historiens au XVIIe siècle', *Organon* 10 (1974): 25-43. Anne Goldgar, *Impolite Learning*, 56-57.

⁸⁸⁹ Goldgar, 57.

⁸⁹⁰ Paul Dibon, 'Communication in the Respublica Literaria of the 17th Century', Res Publica Litterarum. Studies in the Classical Tradition 1 (1978): 47.

⁸⁹¹ Françoise Waquet, 'De La Lettre Érudite Au Périodique Savant: Les Faux Semblants d'une Mutation Intellectuelle', *Dix-Septième Siècle* 140 (1983): 347–59.

⁸⁹² RECIRC is an ERC-funded project researching the impact made by women writers and their works in the sixteenth and seventeenth centuries. 'RECIRC | The Reception & Circulation of Early Modern Women's Writing, 1550 - 1700 | NUI Galway | ERC', last accessed 24 October 2018, http://recirc.nuigalway.ie/. The Medici Archive Project has developed a database that compromised the correspondence of the *Mediceo del Principato*. 'Medici Archive Project', last accessed 24 October 2018, http://www.medici.org/.

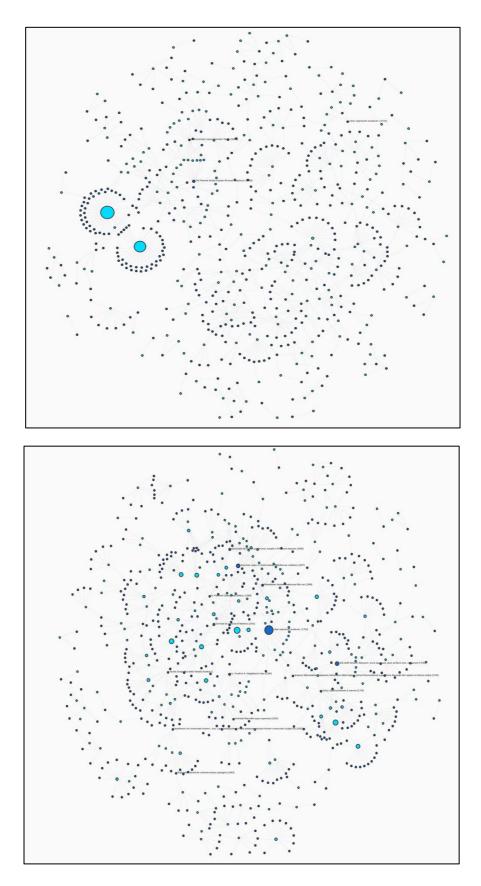


Fig. 40 Book-citations in Magliabechi's letters to the Dutch Republic. The visualization on the top focuses on the period 1670-1690, while the image below represents the period 1690-1710. Networks created with nodegoat.

A close reading of these letters reveals that Magliabechi dispensed himself from informing his Dutch colleagues of the books newly printed in Italy, pointing out to Cuper in 1692 that, as a consequence of the appearance of two literary journals in Parma and Modena "si rende adesso quasi che interamente superfluo, lo scriver più le novità Letterarie di Italia".⁸⁹³ Yet, Magliabechi continued to spread news about the appearance of books – both published and about to be published – throughout the 1690s. Reason for this was because most literary journals were significantly flawed. He wrote this to Ludolph Küster in 1698:

"Mi pare che nell'altra mia Lettera io scrivesse a V.S.Ill.ma, che in Venezzia si stampa un Giornale de' Letterati, intitolato, La Galleria di Minerva, ma vi è del buono, del cattivo, e del mediocre. Vi sono molto errori, e tal volta sono in esso grandemente lodati Libri inettissimi"⁸⁹⁴

Moreover, as already noticed by Waquet, the journal was sometimes to slow to satisfy the scholarly desire for news. Another letter from Magliabechi to Cuper in 1693, for example, reads in part "de' Libri che scrivo nella mia inclusa all'eruditissimo signore Grevio, fino ad ora, non ne è stata fatta menzione in Giornale alcuno, ma assolutamente la faranno, con qualche tempo".⁸⁹⁵ As this letter makes clear, Magliabechi, although being one step ahead of the scholarly journal, he certainly envisioned its usefulness in the Republic of Letters; as time went on, they would arrive as quickly as letters. Indeed, almost twenty years later, the number of books co-cited with literary journals drastically declines in the contents of Magliabechi's letters. In these years, he completely adopted to the use of the literary journal. His correspondence makes clear that Magliabechi, now being of age and tormented by severe inflammations of his eyes, could finally find peace, referring to the news covered in the *Giornale de' letterati d'Italia* in Venice. For example, when he wrote to Pieter Burman in 1711, he wrote the following:

"Non iscrivo a V.S.Ill.ma novità letterarie di Italia, sia per il mio male a gli occhi, come ancora, perché in Venezzia, appresso all'Herz, alcuni Signori, anno principiato a fare stampare un Gjornale de' Letterati di Italia, nel quale le comprendano quasi che tutte".⁸⁹⁶

One might expect that Magliabechi, who established his fame through the circulation of bibliographical reports, would have raised serious concerns about the arrival of the literary journal. The literary journal could have become, after all, his rival, easily undermining his position in the Republic of Letters. Yet, the contrary was true for a variety of reasons. First of all, the editors of the literary journals depended on

⁸⁹³ Magliabechi to Cuper, 18 October 1692, KB, KW 72 D 10, f. 81, "Now it completely does not make sense anymore to write literary news from Italy". See also Magliabechi to J. Gronovius, 25 September 1692, LMU, Cod 4° Cod. Msc 777, f. 21, "Adesso, non è quasi necessario lo scriver novità Letterarie di Italia, si perche escono pochi Libri che sieno degni della notizzia de' dotti, come anche, perche si stampano due Giornali de' Letterati".

⁸⁹⁴ Magliabechi to L. Küster, undated [1698], BNF, Ms fr. 19 645, c. 162 j-k, "I believe that in another letter I wrote to Your Illustrious Lordship that in Venice a literary journal is being printed, entitled La Galleria di Minerva, but there are good things in it, as well as bad and mediocre things. There are many mistakes, and sometimes very bad books are highly praised."

⁸⁹⁵ Magliabechi to Cuper, 2 February 1693, KB, KW 72 D 10, f. 93, "the books I mention in my attached letter to the highly educated sir Graevius, are, up to now, not mentioned in any journal, but, they will certainly do so, after a while.

⁸⁹⁶ Magliabechi to Pieter Burman, 2 September 1710 [1711], UBL, Leiden University Library, BUR Q 23, "Non iscrivo a V.S.Ill.ma novità letterarie di Italia, sia per il mio male a gli occhi, come ancora, perché in Venezzia, appresso all'Herz, alcuni Signori, anno principiato a fare stampare un Gjornale de' Letterati di Italia, nel quale le comprendano quasi che tutte" [I do not write literary news from Italy to your Illustrious Lordship, because of the pain in my eyes, as well as that in Venice, several men have began the printing of a Giornale de' Letterati di Italy by Hertz, which contains them all]. The same message was written to Cuper on the 19th of May 1711, (KB, KW 72 D 12, f. 296) "Non iscrivo a V.S.Ill.ma nuove Letterati, si per la mia flussione degli occhi, come anche, perche in Venezzia, appresso all'Ertz, si stampa un Giornale de' Letterati di Italia, che le comprende quasi che tutte". Likewise, in 1711 he wrote to Jacob Gronovius that "lo scriverle novità Letterarie, si rende affatto superfluo, poiché il signore Appostolo Zeno, ed altri Signori, fanno adesso stampare in Venezzia, dall'Ertz, un Giornale de' Letterati di Italia, nel quale si comprendono quasi che tutte." (Magliabechi to J. Gronovius, 23 May 1711, LMU, Cod 4° Cod. Msc 777, f. 248)

Magliabechi's letters and network for their own information. Magliabechi closely collaborated with the editor of the *Giornale de' letterati di Modena*, Benedetto Bacchini and with Apostolo Zeno, editor of the *Giornale de' letterati d'Italia*, informing them about the latest news in the scholarly community. Moreover, he sent them books from the Dutch Republic, as shown, for instance by Magliabechi's letter to Laurens Gronovius in 1679, in which he informed the latter that he would sent his most recent publication, the *Marmorea basis Colossi Tiberio Caesari erecti ob civitates Asiae restitutas* (1697), which was dedicated to Cosimo III, to Bacchini in Modena.⁸⁹⁷ Secondly, in the fourth chapter we have seen that Magliabechi's brokerage position remains constant throughout the 1690s, despite the apparent proliferation of the scholarly journal. In these years, new correspondents like Pierre Bayle, Jean le Clerc and Pieter Burman joined his scholarly network. Although it is true that they gained most recent news from these journals, Magliabechi could provide them with book-reports tailored for them. He dispensed himself from writing recent literary news, referring to the respective literary journals, and turned his attention to the specific books and manuscripts they needed to carry out their work. The literary journal could thus never replace the vivid subjectivity of Magliabechi, who possessed information that these journals just could not cover.

6. BOOK HUBS IN THE EPISTOLARY NETWORK

The few edges connecting the smaller nodes to each other are not sufficient to ensure that the network is fully connected. As discussed, these edges derive from Magliabechi's bibliographical reports, in which he enlisted those books that came recently off the press. He mentioned the books only once or twice in all his letters to his Dutch correspondents, who circulated the unique news items among themselves. In addition, the power law in figure 39 formulates in mathematical terms the notion that these numerous tiny nodes coexist with a few large events that carry most of the action. In this context, this implies that the network bears a vast majority of book-hubs that dominate the structure of the network for they are cited frequently in his letters. These book-hubs held the network (see figure 41). This means, for instance, that a particular book from the bibliographical reports aroused the interest of the letter-reader, asking for more information about it in his next letters. It can be a book to which the correspondent attached greater importance or a book that gave rise for serious concern. In any of these cases, these books gave impulse to the commerce of letters. This might also explain why the letter remained throughout the seventeenth and eighteenth centuries the means *par excellence* for the communication about books, even after the arrival of the literary journal.

⁸⁹⁷ Magliabechi to L. Gronovius, 22 October 1697, LMU, Cod 4° Cod. Msc 777, ff. 42-44, "Il terzo considererò se sia meglio che da parte di V.S.Ill.ma io lo mani al signore Dottore Cinelli, o pure a Modena, al Padre Bacchini, che in quella Città, compone, o da in luce, il Giornale de' Letterati." Lorenz Theodor Gronovius, *Marmorea basis Colossi Tiberio Caesari erecti ob civitates Asiae restitutas: post horrendos terrae tremores* (Pieter van der AA: Lugduni Batavorum [Leiden], 1697).

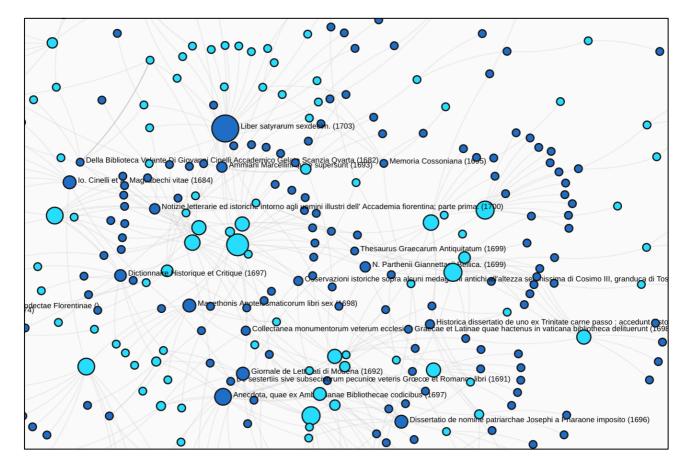


Fig. 41 Close-up network of the book-hubs (dark-blue) cited in Magliabechi's letters to the Dutch Republic from 1673 until 1714. Network created with nodegoat.

Which books dominated the contents of Magliabechi's letters? The books that are designated as hubs are shown in table 1. Given that the distribution of citations in Magliabechi's letters is highly skewed, I have limited the analysis to those bookhubs that are mentioned at least 5 times in Magliabechi's correspondence:

Publication title	Author	Place	Cit.	Roma n	Relationship
				Index	
Liber satyrarum sexdecim. (1703)	Nomi	Leiden	20		Dedicated to
	Federigo				Magliabechi, J.
					Gronovius, Graevius,
					Leibniz
Anecdota, quae ex Ambrosianae	Muratori	Milan	15		Dedicated to
Bibliothecae codicibus (1697)	Lodovico				Magliabechi
	Antonio				
Auli Gellii Noctium Atticarum:	Gronovius	Leiden	13		Dedicated to
prout supersunt, quos ad libros	Jacob				Domenico Passionei
mss. exegerunt (1706)					
Della Biblioteca Volante Di	Cinelli	Naples	12	Burne	Donated,
Giovanni Cinelli Accademico	Giovanni			d	Acknowledgements to
Gelato Scanzia Qvarta (1682)	Calvoli				Magliabechi
Bibliotheca Heinsiana sive	Johannes du	Leiden	11		
catalogus librorum (1682)	Vivié				
Manethonis Apotelesmaticorum	Gronovius	Leiden	9		Dedicated to
libri sex (1698)	Jacob				Magliabechi

Dissertatio de nomine	Bonjour	Paris	9		Donated,
patriarchae Josephi a Pharaone	Guilielmus	1 4115			Acknowledgements to
imposito (1696)	Guillennub				Magliabechi
Vetus Latium profanum &	Corradini	Rome	9		Donated to
sacrum (1704)	Pietro	Rome			Magliabechi
	Marcellino				magnabeem
Giornale de Letterati di Modena	Bacchini	Modena	9		
(1692)	Benedetto	modella			
Apotheosis vel consecratio	Cuper	Amsterdam	8		Donated,
Homeri : sive, Lapis	Gisbert	1 mistertuam	0		Acknowledgements to
antiquissimus in quo poëtarum	Gibbert				Magliabechi
principis Homeri consecratio					magnabeem
sculpta est (1683)					
L'Italia Regnante (1674)	Leti	Géneve	8	Roman	Donated,
	Gregorio	Geneve		Index	Acknowledgements to
	Giegono			mack	Magliabechi
Dictionnaire Historique et	Bayle Jean	Rotterdam	8	Roman	Donated,
Critique (1697)	Pierre	Rottertain		Index	Acknowledgements to
onique (1077)	There			macx	Magliabechi
Supplementa lacunarum in Ænea	Gronovius	Leiden	8		Donated,
Tactico, Dione Cassio et Arriano	Jacob	Leidell	0		Acknowledgements to
de expeditione Alexandri (1675)	Jacob				Magliabechi
Divi Chrysostomi Epistola ad	Bigot Emery	Utrecht	7	Roman	Wagnabeem
Caesarium monachum (1687)	Digot Entery	Oucent	/	Index	
Arrianou Nikomēdeōs	Gronovius	Leiden	7	IIIucx	Dedicated to Cosimo
Anabaseōs Alexandrou biblia	Jacob	Leiden	1		III
hepta (1704)	Jacob				111
Marquardi Gudii et doctorum	Pieter	Utrecht	7		
		Offectit	/		
virorum ad eum epistolae [] et	Burman				
Claudii Sarravii epistolae ex					
eadem bibliotheca auctiores					
(1697)	Gronovius	Leiden	7		Dedicated to Conimo
Ammiani Marcellini quae		Leiden	7		Dedicated to Cosimo
supersunt (1693)	Jacob		7		III
Notizie letterarie ed istoriche	Rilli Jacopo	Florence	7		Donated to
intorno agli uomini illustri dell'					Magliabechi
Accademia fiorentina; parte					
prima. (1700)	Bartolini	F1	7		Dedicated to
Beati Ambrosii, abbatis generalis		Florence	7		
Camaldulensis Hodoeporicon	Niccolo				Magliabechi
(1681) Argang naturna datasta (1605)	Loomer	Delft	7		Dedicated to
Arcana naturae detecta (1695)	Leeuwenhoe k van Antoni	Dent	7		Dedicated to Magliabashi
N Dorthonii Ciarra ettacii Dalli-	Giannettasio	Naples	7		Magliabechi Dedicated to
N. Parthenii Giannettasii Bellica.		Naples	/		
(1699)	Niccolò				Magliabechi
	Partenio Vez Berlel	т.:1			Denstalt
Stephani Byzantini Gentilia per	Van Berkel	Leiden	7		Donated to
epitomen, antehac de Urbibus	Abraham				Magliabechi
inscripta (1688)	NL	N7			Delineele
Cenotaphia Pisana Caii Et Lvcii	Noris Henry	Venice	7		Dedicated to
Caesarvm and Dissertationibvs					Magliabechi
Illvstrata (1681)	NL	F1	7		Denstalte
Inscriptiones epistolarum	Noris Henry	Florence	7		Donated to
synodalium XC. et XCII. inter					Magliabechi
Augustinianas (1674)					D I' + 1
Epistola de sceleto elephantino,	Tentzel	Gotha	7		Dedicated to
Tonnæ nuper effosso. (1696)	Wilhelm				Magliabechi
	Ernst				

Memoria Cossoniana (1695)	Gronovius	Leiden	7		Donated to
· · · · ·	Jacob				Magliabechi
Io. Cinelli et A. Magliabechi vitae (1684)	Moniglia Giovanni Giovanni Andrea	Siena	6	Burne d	
De columna traiana syntagma (1683)	Fabretti Raffaello	Rome	6		Donated to Magliabechi
Origines linguae italicae (1676)	Ferrari Ottavio	Padova	6		Donated to Magliabechi
Collectanea monumentorum veterum ecclesiae Graecae et Latinae quae hactenus in vaticana bibliotheca delituerunt (1698)	Zaccagni Lorenzo Alessandro	Rome	6		Donated, Acknowledgements to Magliabechi
Historica dissertatio de uno ex Trinitate carne passo (1696)	Noris Henry	Rome	6		Donated, Acknowledgements to Magliabechi
Forojuliensis De Antiquitatibus Hortae Coloniae Etruscorum (1708)	Fontanini Giusto	Rome	6		Donated to Magliabechi
Nouvelles de la République des Lettres (1684-1687)	Bayle Pierre	Rotterdam	6	Roman Index	
Dictionaire historique et critique (1702)	Bayle Jean Pierre	Rotterdam	6	Roman Index	Donated to Magliabechi
Sota; hoc est, Liber Mischnicus de uxore adulterii suspecta (1674)	Wagenseil Johan Christoph	Altdorf	5		Dedicated to Magliabechi
Arithmeticae rationalis elementa qvator (1674)	Mengoli Pietro	Bologna	5		Donated to Magliabechi
Thesaurus Graecarum Antiquitatum (1699)	Gronovius Jacob	Leiden	5		Donated to Magliabechi
Osservazioni di Francesco de'Ficoroni sopra l'antichita di Roma (1709)	Ficoroni Francesco	Rome	5		Donated to Magliabechi
Forojuliensis in Romano archigymnasio [] (1705)	Fontanini Giusto	Rome	5		Donated to Magliabechi
La istoria universale : provata con monumenti, e figurata con simboli degli antichi (1697)	Bianchini Giuseppe Francesco	Rome	5		Donated to Magliabechi
Occone (1683)	Mezzabarba Birago Francesco	Milan	5		Donated to Magliabechi
De sestertiis sive subsecivorum pecuniæ veteris Græcæ et Romanæ libri (1691)	Gronovius Jacob	Leiden	5		Donated to Magliabechi
Jani Rutgersii Venusinae lectiones (1699)	Burman Frans Pieter	Utrecht	5		Donated to Magliabechi
Harpocrates, sive, Explicatio imagunculae argenteae perantiquae [] (1687)	Cuper Gisbert	Utrecht	5		Donated to Magliabechi
Bibliotheque choisie : pour servir de suite a la bibliotheque universelle (1703)	Le Clerc Jean	Amsterdam	5	Roman Index	Donated to Magliabechi
Genuina Stephani Byzantini De urbibus et populis fragmenta (1674)	van Berkel Abraham	Leiden	5		Donated to Magliabechi

Schna sive totius hebraeorum juris (1698)	Surenhuis Willem	Amsterdam	5		Dedicated to Cosimo III, Francesco Maria de' Medici
Anonymi dialogi tres. I. De constantia in adversis. II. De dignitate tuenda. III. De amore erga rempublicam (1692)	Bacchini Benedetto	Modena	5		Donated to Magliabechi
Orphei De terrae motibus catalecton (1691)	Eschenbach Andreas Cristian	Nuremberg	5	Roman Index	Donated to Magliabechi

Table 1 The most cited books in Magliabechi's letters to the Dutch Republic

6.1. DEDICATIONS AND GIFTS AS A SOCIAL PRACTICE

The first thing that one might notice is that a high number of books that were donated or dedicated to Magliabechi appear to be amongst the most cited publications in his correspondence. Magliabechi did not have to give proof of his learning by writing books. According to Eric Cochrane, the high number of authors "who applied to him for information kept his name prominently displayed in the dedications and acknowledgements of half of the books published in Italy during his lifetime".⁸⁹⁸ Likewise, Girolamo Albizzi, editor of the literary journal La Galleria di Minerva wrote that, compared to Magliabechi, "non vi è principe al quale altrettanto ne sieno stati dedicati".⁸⁹⁹ Consequently, in many publications, the name of Magliabechi appeared in huge capitals immediately after the title page and as such, his fame was disseminated throughout hundreds of copies in Europe. The number of books dedicated to Magliabechi has not yet been investigated, mostly because they are difficult to detect in the "multitude of books" that appeared in the seventeenth and eighteenth centuries.⁹⁰⁰ Some dedications consist of not much more than a single phrase, others are dozens of pages, and still others consist mainly of a picture.⁹⁰¹ Moreover, as argued by Rienk Vermij, it is general reasonably easy to identify the dedications in the work of one particular author, but it is much harder to find all the books that were dedicated to one particular person, as this information is normally not included in catalogues.⁹⁰² He urged therefore for a more systematic study of dedications.⁹⁰³ The present exploratory study takes a tentative first step in this direction. Indeed, a systematic exploration of the contents of Magliabechi's letters to the Dutch Republic reveals 39 books dedicated to Magliabechi. Naturally, this number will increase if more data from his pan-European correspondence will be added.

Besides identifying dedications, it is even harder to parse the author's intentions. What did they expect from a dedicatee? According to Vermij, the richness in possibilities makes dedications both a promising and a challenging subject in the history of scholarly life. He underlines that dedications were

⁸⁹⁸ Eric Cochrane, Florence in the Forgotten Centuries, 1527-1800: A History of Florence and the Florentines in the Age of the Grand Dukes, 267.

⁸⁹⁹ Girolamo Albizzi (ed.), La Galleria di Minerva overo notizie universali, di quanto e stato scritto da letterati di Europa non solo nel presente secolo, ma ancora ne'gia trascorsi [...], tomo quinto (Venezia: presso Girolamo Albizzi, 1706): cit. 187, "there is no prince to whom an equal number of books is dedicated".

⁹⁰⁰ On this subject see, Ann Blair, *Too Much to Know;* Blair, 'Reading Strategies for Coping with Information Overload, ca.1550-1700', *Journal of the History of Ideas* 64, no. 1 (2003): 11-28; Daniel Rosenberg, 'Early Modern Information Overload', *Journal of the History of Ideas* 64, no 1 (2003): 1-9.

⁹⁰¹ Rienk Vermij, 'On the Function of Dedications in Early Modern Scientific Books', Nuncius 33, no. 2 (2018): 174.

⁹⁰² Ibidem. One of the few examples of a study that considers a list of books dedicated to one specific patron is Marion Peters, De wijze koopman, Het wereldwijde onderzoek van Nicolaes Witsen (1641–1717), burgemeester en VOC-bewindhebber van Amsterdam (Amsterdam: Bert Bakker, 2010): 446-455.

⁹⁰³ Vermij, cit. 174.

definitely a kind of gift, and as such a medium of exchange, but there is no simple key to their meaning because of their wide variety of functions and goals: dedications meant different things in different contexts and moments. As a consequence, the interpretation of a dedication is not always straightforward. Specifically, argues Vermij, "without additional information in the form of correspondence or otherwise, it is very difficult to parse the author's intentions".⁹⁰⁴ Vermij's statement provides an argument in favor of the multimodal network that connects both books and correspondence in the same network. Such a representation enables us to examine how correspondence, book dedications and gifts interacted together, providing a framework to shed light on the author's intentions.

Historians have studied book dedications mostly as an expression of patronage relationships.⁹⁰⁵ In this case, books were dedicated in exchange for specific favors, like protection or financial support. Particularly influential in this field of study is the work of Mario Biagioli, who focused on the role of etiquette and sociability in the construction of patronage relationships between scientific practitioners and princes and aristocrats.⁹⁰⁶ Yet, as shown by Vermij, this was not the only reason of existence of book dedications. Dedications and gifts were part of an elaborate and complex circuit of exchanges that also played a crucial role in the maintenance of relationships.907 Within this framework, the concept of reciprocity prevails. In the fourth chapter, we have seen that reciprocity is a distinctive feature of correspondence as a mode of communication and trust. According to Dena Goodman, "the reciprocity of correspondence both reflected and strengthened the sense of equality that structured relations among citizens of the Republic of Letters".⁹⁰⁸ This reciprocity, however, was not characteristic of correspondence alone: also books could structure relations between scholars. Franz Mauelshagen, for example, pointed out that objects functioned as a medium through which mutual trust could be build and social relationships were sustained. Books, for example, were often sent as gifts that usually encouraged reciprocity in the forms of a response or a counter-gift. In this respect, the communication through books can be considered as reciprocal, similar to the exchange of letters.⁹⁰⁹ A similar thesis is adopted by Ann Goldgar, who stressed that the Republic of Letters was a community in which the exchange of gifts was of vital importance to its existence, stressing that it was "exactly that expectation of return that kept the system in cooperation".⁹¹⁰ Book dedications and gifts opened thus the way to create and strengthen relationships based on mutual respect and reciprocity.⁹¹¹

This idea might be further reinforced if we chart the evolution of networks over time. Specifically, by looking at the overlay of citation- and epistolary networks in flux, new opportunities may rise about how to link book dedications and gifts to strategies adopted by scholars in seeking and strengthening relationships in the Republic of Letters. This analysis is facilitated by the orderly manner in which

⁹¹⁰ Goldgar, Impolite Learning, 19–26.

⁹⁰⁴ Vermij, cit. 197.

⁹⁰⁵ See, for example, Geert Janssen, *Princely Power in the Dutch Republic: Patronage and William Frederick of Nassau (1613-64)* (Manchester: Manchester University Press, 2008; Sharon Kettering, Patrons, brokers and clients in seventeenth-century France (New York/Oxford: Oxford University Press, 1986); Ronald Asch and Adolf M. Birke, eds., Princes, Patronage, and the Nobility: The Court at the Beginning of the Modern Age, c. 1450-1650 (Oxford: Oxford University Press, 1991).

⁹⁰⁶ Mario Biagioli, 'Etiquette, Interdependence, and Sociability in Seventeenth-Century Science', *Critical Inquiry* 22, no. 2 (1996): 193. See also, Mario Biagioli, *Galileo, Courtier: The Practice of Science in the Culture of Absolutism* (Chicago: The University of Chicago Press, 1993).

⁹⁰⁷ Rienk Vermij, 'On the Function of Dedications in Early Modern Scientific Books', Nuncius 33, no. 2 (2018): 171-197. See also Bianca Chen, 'Digging for Antiquities with Diplomats: Gisbert Cuper (1644-1716) and His Social Capital' Republics of Letters: A Journal for the Study of Knowledge, Politics, and the Arts 1, no. 1 (2009): 1–18 and Saskia Stegeman, Patronage and services in the Republic of Letters: the network of Theodorus Janssonius van Almeloveen (1657-1712).

⁹⁰⁸ Goodman, The Republic of Letters: A Cultural History of the French Enlightenment, 18.

⁹⁰⁹ Mauelshagen, 'Networks of Trust: Scholarly Correspondence and Scientific Exchange in Early Modern Europe', 18.

⁹¹¹ The idea that the gift created the obligation for a return gift was pioneered in the influential work of Marcel Maus, who in his Essay sur le don (1925) examined the concepts of reciprocity and exchanged to analysis gifts. Marcel Maus, 'Essai sur le don. Forme et raison de l'échange dans les sociétés archaïques', *L'Année Sociologique* 1 (1923-1924): 30-186.

Magliabechi compiled his bibliographical reports, in which he often specified which books were dedicated or donated to him. As such, the number of books dedicated and donated to Magliabechi have been carefully tracked down in Magliabechi's letters to the Dutch Republic, and overlapped with Magliabechi's correspondence data that has been retrieved from the Card Catalogue of the National Central Library of Florence and the *Catalogus Epistularum Neerlandicarum*.

6.1.1. DEDICATIONS AND GIFTS IN THE CONTEXT OF CREATING RELATIONSHIPS

As early modern correspondents became part of an epistolary exchange, they did not so in some ideal egalitarian society, were anyone could join simply by writing a letter, but in a world regulated by social norms. Dedications, gifts or letters of introduction were needed to get admitted into an epistolary network. By identifying new edges that appear in the network over time, we might understand how to link book dedications and gifts to strategies adopted by scholars to establish a relationship with Magliabechi.

In total, 39 books (appendix 4), written by 35 authors, mentioned by Magliabechi in his letters to the Dutch Republic, are dedicated to him. This book dedication-network is represented in figure 42, showing the authors (red) of the dedicated books (blue) mentioned in Magliabechi's letters to the Dutch Republic. At a glance, we can see that each of these authors is engaged in a regular correspondence (green) with Magliabechi, i.e. the network is fully connected. This first exploration implies that dedications were an important driving mechanism in the shaping of Magliabechi's epistolary network and vice versa. Representing this network over time helps us to identify those books that were used as a means to create, maintain and encourage networks.

This explorative analysis offers a systematic way of highlighting significant books and authors and, by implication, specific letters that may merit localized attention and close reading. For two publications – the *Arcana Naturae Detecta* (1695) of Antoni van Leeuwenhoek and the *Orphei De terrae motibus catalecton* (1691) of Andreas Cristian Eschenbach – the year of the dedication coincides with the beginning of the author's correspondence with Magliabechi. For example, in 1695, Antoni van Leeuwenhoek dedicated his *Arcana Naturae Detecta* to Magliabechi. The year of the dedication coincides with the beginning of the author's correspondence with Magliabechi. A letter from Leeuwenhoek to Magliabechi dated the 16th of August 1695, for instance, shows that Leeuwenhoek expressed his admiration for the Florentine librarian, informing him that he desired to dedicate his *Arcana Naturae Detecta*, to him.⁹¹² Flattered by the dedication, Magliabechi thanked him effusively in a letter dated the 8th of September 1695 and the two remained in contact until 1705.⁹¹³

⁹¹² Leeuwenhoek to Magliabechi, 16 August 1695, "Quum autem reliquae a me scriptae epistolae nunc etiam Latino idiomate sint impressae (ut Viri Docti, cum in Italia, tum alibi, participes reddantur vilium meorum laborum, qui in exteris regionibus pluris fiunt, quam sperare unquam sustinueram) mihique visum fuerit eas Celeberrimo Tuo nomini inscribere", in Palm, Anthoni van Leeuwenhoek, *Alle de brieven. Deel 11*: 1695-1696, 50. For more information about the correspondence between Leeuwenhoek and Magliabechi, see Matilde van Rijnberk, De Briefwisseling tusschen Leeuwenhoek en Magliabechi, *Nederlandsch Tijdschrift voor Geneeskunde* 81 (1937): 3147-59 and *Bijdrage tot de Geschiedenis der Geneeskunde* 17 (1937): 128-38.

⁹¹³ Magliabechi's letter was published in the Boekzaal van Europe, the first literary journal in the Dutch Republic founded by the Rotterdam scholar Pieter Rabus (Pieter Rabus, De boekzaal van Europe. Deel 8 (Rotterdam: Pieter van der Slaart, 1699): 376-379. All the other letters from Magliabechi to Leeuwenhoek also appeared in the Boekzaal, under the rubric "Italiaansch Boeknieuws". For the bibliography concerning the Boekzaal, see Hans Bots (eds), *Pieter Rabus en de Boekzaal van Europe, 1692-1702: verkenningen binnen de republiek der letteren in het laatste kwart van de zeventiende eeuw* (Amsterdam: Holland Universiteits Pers, 1974).

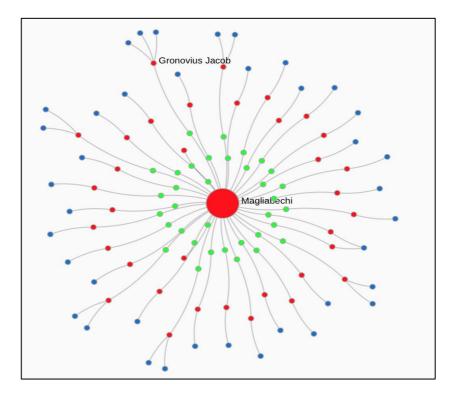


Fig. 42 Book dedications in the network of Magliabechi. Magliabechi stands at the center of this visualization, who is encircled by green nodes which stand for a correspondence with the author (red) who dedicated a book (dark-blue) to him. Network created with nodegoat.

Besides dedications, 430 books, written by 276 authors, were donated to Magliabechi. From these 276 authors, 182 maintained a correspondence with Magliabechi. For three publications in table 1 – the *Vetus Latium profanum & sacrum* (1704) of Pietro Marcellini Corradini, the *Dictionnaire Historique et Critique* (1697) of Pierre Bayle and the *Jani Rutgersii Venusinae lectiones* (1699) of Pieter Burman – the year of the gift coincides with the beginning of the author's correspondence with Magliabechi. For example, on the 25th of April 1700, Magliabechi wrote Pieter Burman for the first time to thank him for the *Jani Rutgersii Venusinae lectiones*.

"Il mio fine si è di riverirla con la penna, come ho sempre fatto col cuore, ed insieme renderle come fo grazzie immortali, della nuova edizzione di Orazzio, con le eruditissime lezzioni Venusine del Rutgersio, che alle settimane passate, da parte di V.S.Ill.ma, mi fu consegnata."⁹¹⁴

After this first gift, Burman and Magliabechi continued to exchange books and letters until 1711.

Another example of how scholars used books to create links with Magliabechi is illustrated by the *Dictionnaire historique et critique* of Pierre Bayle. The dynamics of the multimodal network surrounding the *Dictionnaire* are shown in figure 43. This visualization adds to the understanding of the archival materials regarding this case-study example by using the complex web of cross-references surrounding this particular node. One can dynamically navigate this network and thus approach and organize the corpus of letters from different perspectives, showing the precise moments when Bayle and his books are involved in the conversations between Magliabechi and his correspondents, as well as his emergence

⁹¹⁴ Magliabechi to P. Burman, UBL, BUR Q 23, f. 2, "My purpose is to revere you with the pen, as I have always done with my heart, with which at the same time I thank you for the new edition of Horace, with the very learned teachings of Johannes Rutgers, which I have received on behalf of Your Illustrious Lordship last week."

and disappearance as recorded in these letters. In this way, the network re-enacts the history and circulation of Bayle's *Dictionnaire* in the network of Magliabechi.

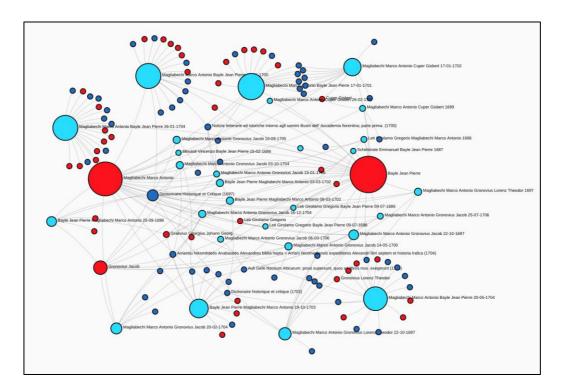


Fig. 43 Multimodal network surrounding Pierre Bayle from 1686 until 1705. Books: dark-blue, people: red, letters: light-blue. In nodegoat, this visualization constitutes a dynamic network in which the nodes and edges appear and disappear among the timeline. As such, the initial contacts between Magliabechi and Bayle through Minutoli, Leti and Cuper will appear first, followed by Bayle's appearance in the correspondence of Laurens and Jacob Gronovius. Network created with nodegoat.

The initial contact between Magliabechi and Bayle went through a long process, and was filled with misunderstanding and intrigues. Bayle was familiar with the name of Magliabechi as early as in 1686, when the Genovese scholar Vincenzo Minutoli (1639-1709) provided Bayle with a list of the most important scholars in Italy.⁹¹⁵ As the editor and main contributor of one of the first scholarly journals in Europe, the *Nouvelles de la République des Lettres* (1684-1687), Bayle might have used the list, which included the name of Magliabechi, as inspiration for ideas and contributions to his journal.⁹¹⁶ Several months later, it was through the historian Gregorio Leti that Bayle directed his first greetings to the librarian.⁹¹⁷ Leti, an Italian who had moved to Amsterdam and converted to Protestantism in 1660, maintained an epistolary relationship with both Magliabechi and Bayle, and was thus in the position to introduce the two to each other.⁹¹⁸ Magliabechi, in turn, returned his greetings which were passed on to Leti in July

⁹¹⁵ Minutoli to Bayle, 15 February 1686, "En Italie non seulement avec le sçavant Mr Charles Patin medecin et professeur à Padoüe, lequel a toûjours tenu le premier rang en son amitié, ce qui leur étoit hereditaire, mais encore avec Mrs Mezzabarba de Biragues, et Settala de Milan dont les grands noms sont connus, Mr Magliabecchi bibliothecaire du grand duc de Toscane, et Mr Bon le Candiot docteur aux droits à Venise", letter stored in l'edition électronique de la correspondence de Pierre Bayle, lettre 517, 'Correspondance de Pierre Bayle', last accessed 13 February 2019, http://bayle-correspondance.univ-st-etienne.fr/.
⁹¹⁶ For more about the Nouvelles de la République des Lettres, see Hubert Bost, Un "intellectuel" avant la lettre: le journaliste Pierre Bayle, 1647–1706: l'actualité religieuse dans les nouvelles de la République des lettres, 1684–1687 (Amsterdam: APA-Holland University Press, 1994).

⁹¹⁷ Leti to Magliabechi, undated, BNCF, Magl. VIII 752, f. 142, "Il signore Bayle la riverisce".

⁹¹⁸ In the fourth chapter we have seen that these dynamics are related to the concept of triadic closure in networks. For the correspondence between Leti and Magliabechi, nowadays in the National Central Library of Florence, see Luigi Fassò,

1686.⁹¹⁹ Once Magliabechi knew that he got Bayle's attention, he took a step further and commissioned Gisbert Cuper to show him the book *La visiera Alzata* of Benedetto Bacchini, which was published in Parma in 1689 and dedicated to Magliabechi.⁹²⁰ Yet, a correspondence between Magliabechi and Bayle did not get off the ground until almost a decade later.

In 1697, Magliabechi had heard from the Venetian cartographer Vincenzo Maria Coronelli (1650-1718), that Bayle had sent him a copy of his *Dictionnaire Historique et Critique*, which was intended as a gift for him.⁹²¹ Upon hearing this, Magliabechi remained "attonito, e stupefatto" and immediately wrote a letter to Laurens Gronovius to ensure whether Coronelli was right. According to Magliabechi, the *Dictionnaire Historique et Critique* was too expensive to receive as a gift, having heard from his correspondents in Rome that the book had become a remarkable success, and was sold out immediately at very high prices. He certainly did not deserve to receive such a precious book, especially considering the fact that he did not ever assist or help Bayle in his research.⁹²² To figure out whether Bayle had indeed sent his *Dictionnaire* to Coronelli, Magliabechi had come up with a plan for Laurens. He urged him, however, to be very cautious, asking him to immediately destroy the letter after reading, for he did not want that Bayle found out about his doubts.⁹²³ The plan was as follows: Magliabechi would write a letter to Laurens in which he deliberately discussed at length how grateful he was that his name was mentioned in the *Dictionnaire*.⁹²⁴ Laurens had then to show the letter to Bayle, who "nel leggere quel che scrivo di esso, da se medesimo, senza di esserne interrogato, dirà se veramente mi ha mandata a donare questa sua Opera".⁹²⁵ Once Magliabechi was certain about Bayle's intentions, he would write a letter to Vincenzo

Avventurieri della penna del Seicento: Gregorio Leti, Giovanni Gerolamo Arconati Lamberti, Tomaso Tomasi, Bernardo Guasconi (Florence: F. Le Monnier, 1924). About Leti see, Franco Barcia, Gregorio Leti, informatore politico di principi italiani (Milan: F. Angeli, 1987); Stefano Villani, 'Encomi "inglesi" di Gregorio Leti', in Forme e occasioni dell'Encomio tra Cinque e Seicento. Formes et occasions de la louange entre XVIe et XVIIe siècle, ed. Danielle Boillet and Liliana Grassi (Lucca: Pacini Fazzi, 2011), 213–36.

⁹¹⁹ Leti to Bayle, 9 July 1686, "Je vous envoye une de mes lettres qui porte des salutations de la part de Mons Magliabechy", lettre retrieved from l'edition électronique de la correspondence de Pierre Bayle, lettre 596.

⁹²⁰ Magliabechi to Cuper, undated [1689], KB, KW 72 D 10, f. 37, "Prego V.S.Ill.ma a degnarsi di lasciar vedere quest'Opuscolo, a quel signore, che in Amsterdam fa stampare Le Novelle della Repubblica di Lettere, essendogli io obbligatissimo per molti da me non meritati onori, che in esse si è degnato di farmi". The book, *La visiera alzata: hecatoste di scrittori, che vaghi d'andare in maschera fuor del tempo di Carnovale (...)* was written by Benedetto Bacchini under the pseudonym Giovanni Pietro Giacomo Villana.

⁹²¹ 88 letters from Vincenzo Maria Coronelli to Magliabechi, written from 1680 until 1711, are extent in the National Central Library of Florence, Magl. VIII 338.

⁹²² Magliabechi to L. Gronovius, 1698, LMU, Cod 4° Cod. Msc 777, f. 44, "Io le giuro che restai attonito, e stupefatto, nel sentire tal cosa, e ne meno adesso posso crederla. Nel primo luogo, questo non è un Libro che possa in alcuna maniera donarsi, sentendo che costà si venda dieci scudi, ed in Roma son certo che l'anno venduto quindici. Secondariamente, io non ho merito di alcuna sorte col signore Baillio, ne mai ho avuto fortuna di servirlo di nulla, che mi abbia da fare un così gran regalo."

⁹²³ *Ibidem*, "La prego a non domandarne in alcuna maniera al signore Baillio, perché la mia sarebbe una troppo grande impertinenza." "Per le viscere di Gjesù Cristo, è per tutte le sante leggi dell'amicizzia, supplico V.S.Ill.ma a stracciare questa cartuccia, subito che l'avrà letta ella, e 'l suo dottissimo, ed eruditissimo signore Fratello, perche main in tempo alcuno, possa esser veduta da anima vivente, scrivendola io in estrema segretezza, e confidenza, ed in sigillo di Confessione naturale".

⁹²⁴ This letter, dated the 12th October 1697, is extent in the Ludwig Maximilian University Library: "Perché so che 'l dottissimo, ed eruditissimo Signore Baillio, è grande amico di V.S.Ill.ma, e del suo Signore Fratello, sono a supplicarle reverentemente de' loro favori. Da molti amici a Roma mi viene scritto, che nella detta Città di Roma, alle settimane passate, arrivarono molti esemplari del suo Lessico Critico, che subito però furono comprati. Mi soggiungono i detti amici, che anno veduto, che 'l signore Baillio, mi ha per sua bontà onorato, di nominarmi in esso più volte con lode, onore da ma per capo alcuno non meritato. Le prego per tanto a degnarsi di riverire in mio nome il suddetto dottissimo Signore, e rendergli da mia parte grazzie immortali di una sì eccessiva cortesia, usata con me, suo inutile Servo, non avendo io mai avuto fortuna di servirlo di cosa alcuna." (Cod 4° Cod.Msc 777, f. 25). The letter of Laurens is published by Giuseppina Totaro in L. Bianchi, *Pierre Bayle e l'Italia* (Naples, 1996), pp. 239-239 and translated in French by Antony Mckenna in *Correspondance de Pierre Bayle* (Oxford: The Voltaire Foundation, 2014), pp. 164-174.

⁹²⁵ Magliabechi to L. Gronovius, 1698, LMU, Cod 4° Cod. Msc 777, f. 44, "In reading what I write about him, out of himself, without being interrogated, he will say whether he really has gifted me his work".

Maria Coronelli to ask him if the *Dictionnaire* had already arrived in Venice.⁹²⁶ He needed to do so as soon as possible for he was afraid that Coronelli would otherwise sell or give his copy to someone else.

Supplier VI: It many be viscent del hig! orie, e y muse le vand lago dell'aministion ciarl relies de l'aurà lever quesos carqueires pell moi in some alune poro a vedrese de anime viende, scrivendo de is in esterne seguetezar confidenze. To non mi maraviglio punto di quello che UT: time ini mire di quel ladre ino Veneziano, e che abbia corrigoreo ceri melle alle corterie à codesso del onorobinino de Hereanse di libi proiche anche in Italia y core simili di è grandemente scieditato. Canche ignoranti essendo islamente verzatone" Beografios nellaquale prende anelo non picedi evrori. Non sò in che maniera mi ha indrizzato l'incluso Lessera, che benche apparino suise tà alor, è facilé che rie ma. I. Kg: Nomi olor all trent come Vi: 14

Fig. 44 Letter from Magliabechi to Jacob Gronovius regarding Vincenzo Coronelli (LMU, Cod 4° Cod. Msc 778, f. 6)

On the 25th of September 1698, Bayle addressed his first letter to Magliabechi.⁹²⁷ In this letter, Bayle explained the confusions surrounding the *Dictionnaire*. He had met Coronelli in Rotterdam, when the latter was on his way to England with the ambassadors of the Venetian Republic. The meeting was an occasion to talk about Magliabechi and Bayle expressed his desire to send the librarian his *Dictionnaire*. Coronelli also met Reineer Leers (1654-1714), publisher of the *Dictionnaire*, and promised him that he would sent several books to him in exchange for the books from Bayle. Leers and Bayle, however, never received anything from Coronelli and decided not to send the *Dictionnaire* in Italy. This is the rule of reciprocity at work. After Bayle had explained in detail the state of play regarding Coronelli, he asked Magliabechi about the safest way that he could sent him his *Dictionnaire*. Magliabechi received the book on the 14th of May 1700, answering Bayle of the "si prezzioso regalo" which "non si possono donare senza scomodo, ne ricevere in dono senza vergogna".⁹²⁸

Magliabechi was certainly not surprised about the careless way Coronelli had treated Reineer Leers "poiché anche in italia, per cose simili, si è grandemente screditato", as he wrote in confidence to Jacob Gronovius. He also wrote in the same letter that Coronelli is "anche ignorante, essendo solamente versato nella Geografia, nella quale prende non piccoli errori".⁹²⁹ After writing these sentences on a small, easy to hide, piece of paper, Magliabechi urged Gronvius to immediately destroy the letter (see figure 44).

⁹²⁶ *Ibidem*, "perché se fosse vera, l'Opera non andasse male, poiché mentre che 'l Padre Coronelli vedesse che io non gliela chiedessi, potrebbe o farla ad alcuno altro, o barattarla".

⁹²⁷ Bayle to Magliabechi, 25 September 1698, BNCF, Magl. VIII, S. 3. T. III. 9, ff. 27-28, transcribed in Bianchi, 'Le Relazioni Tra Bayle e l'Italia: I Corrispondenti Italiani Di Bayle e Le «Nouvelles de La République Des Lettres»'', 82-84.

⁹²⁸ Magliabechi to Bayle, 14 May 1700, LMU, Cod 4° Cod. Msc 777, f. 40, transcribed in Bianchi, 85-87. "so valuable gift", "cannot be gifted without inconvenience, nor receiving it without embarrassment."

⁹²⁹ Magliabechi to Gronovius, undated, LMU, Cod 4° Cod. Msc 778, f. 6, "because also in Italy, for similar things, he is greatly discredited." "also ignorant, merely being versed in Geography, in which he makes no little mistakes".

6.1.2. DEDICATIONS AND GIFTS IN THE CONTEXT OF MAINTAINING LONG-STANDING

RELATIONSHIPS

The practice of book dedications and gifts clearly illustrates a general habit of scholars to get admitted into someone's epistolary network. It was, however, not sufficient to introduce oneself by a one-time gift or dedication. The hard part was to upkeep these relationships. Dedications and gifts could also serve the purpose of strengthening ties by emphasizing their previous relationship, used as a token of friendship and mutual respect to ensure that a correspondence would continue. Therefore, upon receiving Bayle's *Dictionnaire*, Magliabechi promised Bayle "di mandarle qualche Libretto di Italia".⁹³⁰ Magliabechi honors his promise and on the 14th of May 1700, he sent him a publication of Jacopo Rilli about the members of the *Accademia Fiorentina*, which "forse potrebbe essere di qualche giovamento per l'accrescimento dell'Opera di V.S Ill.ma".⁹³¹ In return, Bayle sent Magliabechi his second edition of the *Dictionnaire Historique et Critique* (1698). These dynamics are shown in figure 45.

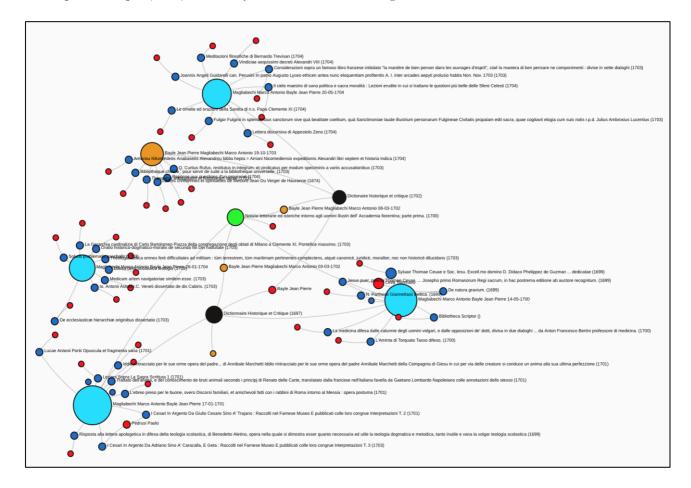


Fig. 45 Multimodal network of the correspondence between Pierre Bayle and Magliabechi. The letters written by Magliabechi to Bayle are represented in light-blue while the answers of Bayle are colored in orange. In these letters, numerous books are mentioned as bibliographical news (dark-blue) written by an author (red). The green node stands for a book donated by Magliabechi, while the black nodes represent the books given by Bayle. Network created with nodegoat.

⁹³⁰ Ibidem, "to send you several books from Italy".

⁹³¹ Jacopo Rilli, Notizie letterarie ed istoriche intorno agli uomini illustri dell'Accademia Fiorentina (Firenze: Piero Matin, 1700). Ibidem, "maybe could be beneficial to the enhancement of the work of Your Illustrious Lordship".

Besides these gifts, the largest part of the letters exchanged between Magliabechi and Bayle concerned the latest news about the output of the Italian and Dutch presses. In his bibliographical reports (shown as dark-blue nodes in figure 45), Magliabechi primarily focused on works on religion and politics, the main interest of Bayle. He mentioned, for example, the Trattato dell'Anima e del conoscimento, de' Bruti Animali (1701), which "apparisca stampato in Colonia Agrippina, è con tutto ciò veramente impresso in Napoli, o vero in qualche altra Città di quel Regno".⁹³² Magliabechi also received the Risposta alla Lettera Apologetica in difesa della Teologia Scholastica from Costantino Grimaldi who published the book "senza il suo nome".⁹³³ This book, in which Grimaldi set Descartes's philosophy against the Aristotelian framework, was eventually put on the Index of Prohibited Books in 1726.934 Other books that Magliabechi mentioned were the Meditazioni Filosofiche of Bernardo Trevisan, printed in Venice in 1704, and Lodovico Marracci's L'ebreo preso per le buone, overo Discorsi familiari et amichevoli, fatti con i rabbini di Roma intorno al Messia (1701), which Magliabechi defined as a book "contra gli Ebrei".⁹³⁵ In return, Pierre Bayle notified Magliabechi with a letter of the 19th of Otctober 1703 about Jean Le Clerc's journal the Bibliothéque choisie, Graevius' Thesaurum antiquitatum et historiarum Italiae and the Expeditionis Alexandri Libri septem et historia indica of Jacob Gronovius.⁹³⁶ In the same letter Bayle also mentions that the Réponse aux questions d'un Provincial has been recently published in Rotterdam, without mentioning however that he is the author of the book.

Books were also the driving force behind the remarkable strong epistolary relationship between Magliabechi and Jacob Gronovius, which lasted no less than 36 years. The exchange of books between them are shown in figure 46. In nodegoat, this network constitutes a dynamic network in which the books and letters appear and disappear along the timeline. As such, we are able to follow the moments when gifts are exchanged and reciprocated. Upon his return in the Dutch Republic, Jacob dedicated Magliabechi his Supplementa lacunarum in Ænea Tactico, Dione Cassio et Arriano de expeditione Alexandri (1675) to thank him for his help during his stay in Florence. In 1698, he dedicated to Magliabechi his Manethonis Apotelesmaticorum libri sex and in 1709 his Origenis Philosophumenôn fragmentum Quod ex bibliotheca medicea (1701). Moreover, numerous books were donated by Gronovius. In 1675, Jacob gifted Magliabechi his Supplementa lacunarum in Ænea Tactico, Dione Cassio et Arriano de expeditione Alexandri (1675) and praised him in the preface of this edition. In 1705, he sent Magliabechi his Arrianou Nikomēdeos Anabaseos Alexandrou biblia hepta (1704), which he had dedicated to Cosimo III. In 1696, Magliabechi received from Jacob Gronovius his Memoria Cossoniana, which was published in Leiden in 1695, and thanked him for praising his name on several occasions throughout the book. The Memoria Cossoniana was written to commemorate the death of the Dutch merchant Daniel Cousson (1648-1689), who was murdered by Algerian pirates in a village near Smyrne where he worked as the vice-consul of the Dutch trade association.⁹³⁷ Magliabechi had personally met Daniel in Florence in March 1675, where he stayed for two months before traveling on to the Levant by boat from Livorno.938 The two remained in contact for several years, but the harsh

⁹³² The *Trattato dell'Anima e del conoscimento, de' Bruti Animali* (...), printed in Naples in 1701, was an Italian translation by Gaetano Lombardo of Antoine Dilly's work on animal conciousness. Magliabechi to Bayle, 17 January 1701, transcribed in L. Bianchi, 88-92 and McKenna, 282-288, "appears to be printed in Colonia Agrippina, but it is nonetheless imprinted in Naples, or in another cities in that reign."

⁹³³ Magliabechi to Bayle, 26 January 1704, transcribed in Bianchi, 98-101, "without his name".

⁹³⁴ Jesús Martínez de Bujanda, *Index Librorum Prohibitorum 1600-1966* (Montréal: Mediaspaul; Genève: Librairie Droz, 2002): 407.

⁹³⁵ Magliabechi to Bayle, 17 January 1701, "against the Jews".

⁹³⁶ Bayle to Magliabechi, 19 October 1703, transcribed in Bianchi, 104-106.

⁹³⁷ Jan Schmidt, *Catalogue of Turkish Manuscripts in the Library of Leiden University and Other Collections in the Netherlands: Minor Collections* (Leiden/Boston: Brill Publishers, 2012), 179. About the murder, see also Jan Schmidt, 'Johannes Heyman (1667-1737). His Manuscript Collection and the Dutch Community of Izmir', in *Frontiers of Ottoman Studies*, ed. Colin Imber, Keiko Kiyotaki, and Rhoads Murphey (London/New York: I.B. Tauris, 2005), 84–85.

⁹³⁸ Magliabechi to J. Gronovius, 6 March 1675, LMU, Cod 4° Cod. Msc 777. f. 145, "È stato qua da me un giovane Olandese [Cousson], il quale fu dicepolo del suo signore Padre d'immortal memoria". Cousson, in fact was a pupil of Jacob's father,

circumstances in Smyrne eventually disrupted their correspondence in 1680.⁹³⁹ Vice versa, Magliabechi sent Gronovius numerous books from his Italian colleagues, including Ottavio Ferrari's *Origines linguae italicae* (1676) and Jacopo Rilli's *Notizie letterarie ed istoriche intorno agli uomini illustri dell' Accademia fiorentina* (1700), both listed in table 1.

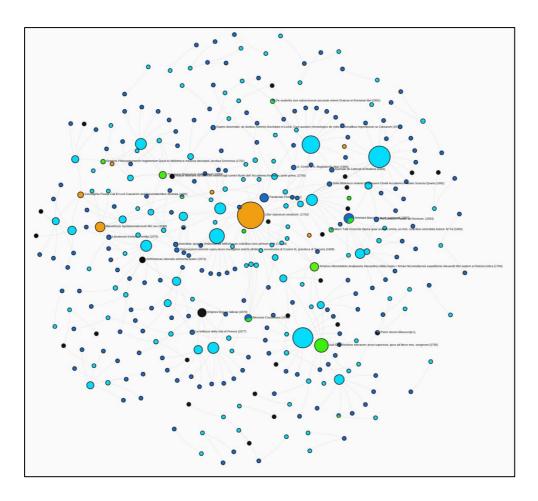


Fig. 46 Multimodal network of the correspondence between Magliabechi and Jacob Gronovius from 1674 until 1711. In the letters from Magliabechi to Jacob Gronovius, numerous books are mentioned as bibliographical news (dark-blue). The green nodes stand for a book donated to Magliabechi, while the black nodes represent the books sent by Magliabechi to Gronovius. Several of these books are dedicated to Magliabechi; these are represented in orange. Network created with nodegoat.

It was thus expected that a dedication or a gift would be rewarded with an answer, but there are cases in the correspondence of Magliabechi in which these did not result in an answer, or even worse, in a rejection. According to Felicity Heal, the exchange of gifts in the early modern period was a delicate

Johannes Fredericus Gronovius at the University of Leiden. See also, Magliabechi to J. Gronovius, 30 May 1675, LMU, Cod 4° Cod.Msc 777, ff. 169-171, "Il signore Cousson è presentemente in Livorno, e andrà alle Smirne col Convoglio. Nel tempo che è stato qua, era quasi ogni giorno da me, ed io non ho mancato di fargli vedere le Pandette, la Libreria di S. Lorenzo, di S. Marco, di S.A.S., ed in somma tutto quello che ha voluto".

⁹³⁹ Cousson continiously lamented the communication that existed between him and his contacts, see, for example, A. Cousson to Magliabechi, 13 December 1677, "mi dispiace molto di esser privo della corrispondenza con simili dottissimi Signori, ma ne la distanza de' paesi permette, ne l'aria di queste contrade favorisce alli studi per li calori intollerabili, di maniera che bisogna aver patienza fin al mio ritorno, il quale Dio conceda sia prospero", in Giovanni Targioni Tozzetti, *Clarorvm Belgarvm ad Ant. Magliabechivm nonnvllonqve alios epistolae,* tomus secundus: 312-313. Yet, Cousson would never return in the Dutch Republic.

process, rather than exclusively a material entity, depending for its success on proper understanding between the transacting parties.⁹⁴⁰ If one of the parties did not properly understand the intentions and impact of a gift, this could turn into mistrust, or at least disturb the delicate balance in their premature relationship. Of crucial importance in Heal's argument is the notion of balance – a recurring theme in this study. Social network theory assumes that people constantly evaluate their relationships. Within these relationships, people prefer balance. This balance can be achieved through negotiating between friendly and hostile relations in a network, as we have seen in the previous chapter, but it can be achieved through reciprocity as well: a book dedication or gift needs an answer or acceptance to restore the balance in the network. This means that if a donation is not reciprocated, the relationship might be challenged and eventually even be unbalanced. Earlier, we have seen that Pierre Bayle did not sent his publications to the Venetian cartographer Vincenzo Coronelli because the latter did not maintain his promise to send him several books from Italy.

In table 1 appear the *Genuina Stephani Byzantini De urbibus et populis fragmenta* (1674) and the *Stephani Byzantini Gentilia per epitomen, antehac de Urbibus inscripta* (1688), both published in Leiden by the Dutch classical scholar Abraham van Berkel, known for his critical editions of various classical authors. Despite being cited frequently in Magliabechi's letters to Jacob Gronovius and Daniel Cousson, Van Berkel is not a direct correspondent of Magliabechi. These dynamics are shown in figure 47, in which a direct epistolary relationships between Magliabechi and Van Berkel is missing. In the previous chapter, we have already seen that Van Berkel was not on good terms with Magliabechi's most trusted correspondent Jacob Gronovius. Consequently, Magliabechi was involved in constant discord between the two. On the one hand, Magliabechi was obliged to thank Van Berkel for his donations, but on the other hand he could not engage with his friend's enemy. He was forced to take sides to restore the balance in his network, and decided to ignore Van Berkel's attempts to reach out to him in order to spare his relationship with Gronovius.

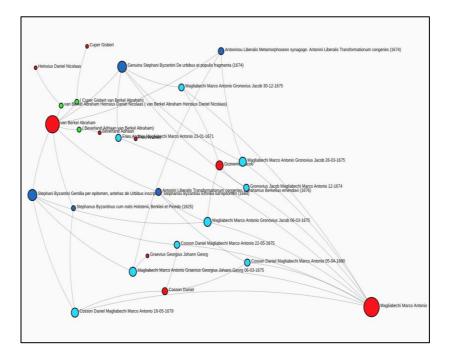


Fig. 47 Multimodal network surrounding the publications (dark-blue) of Abraham van Berkel. The network shows that, although his publications are often mentioned by Magliabechi in his letters (light-blue), a correspondence (green) between Magliabechi and Van Berkel did not exist. Network created with nodegoat.

⁹⁴⁰ Felicity Heal, The Power of Gifts: Gift-Exchange in Early Modern England (Oxford: Oxford University Press, 2014), 23.

6.1.3. BOOKS IN THE CONTEXT OF EXPANDING THE NETWORK

What was the author expected to gain by dedicating or donating a book to Magliabechi? As noted earlier, an important motivation for giving a dedication was the expectation for receiving something in return. This means that book dedications have a slightly compulsory edge to them because it was expected that they would be rewarded. As shown before, Magliabechi rewarded scholars an entry into his network of trans-European scholars, and gave them access to all the contacts, knowledge and books that his network brought about. As such, Magliabechi could provide authors with the means to bring their work to fruition, for example by lending them books and manuscripts. In addition to these rewards, Magliabechi also guaranteed a wide circulation of their work, either in the form of news reports or he physically sent copies of publications to scholars working in the same field. As noted by Alfonso Mirto, this was also the case for prohibited books: scholars intentionally dedicated or gifted controversial publications to Magliabechi, knowing that he could easily circulate these publications throughout Italy.⁹⁴¹

That Magliabechi encouraged the circulation of publications is shown by a letter to Gisbert Cuper, in which we read that Magliabechi sent Gisbert Cuper the *Orphei De terrae motibus catalecton* (1691) of Andreas Christian Eschenbach "solo per obbedirla, in riguardo dell'esser dedicato a me".⁹⁴² Moreover, it is clear from the way correspondents asked for Magliabechi's services that they expected a wide circulation of their work. A letter from Leeuwenhoek to Magliabechi in 1695, for instance, emphasized that he dedicated his work to Magliabechi "so that scholars both in Italy as elsewhere may become acquainted with my trifling labours". In 1706, Jacob Gronovius sent Magliabechi his *Auli Gellii Noctium Atticarum: prout supersunt, quos ad libros mss. exegerunt* (1706), which he had, on the advice of Magliabechi, dedicated to Cardinal Domenico Passionei (1672-1761).⁹⁴³ On the 14th of October 1704, Magliabechi wrote to Jacob Gronovius that it would be clever to consider Passionei as a dedicatee for he could "avere tutto quello che di Roma le bisognerà, per i suoi Studi".

As shown by table 1, several of the most cited Italian publications in the correspondence of Magliabechi were the *Dissertatio de nomine patriarchae Josephi a Pharaone imposito* (1696) of Guillaume Bonjour, the *Anecdota, quae ex Ambrosianae Bibliothecae codicibus* (1697) of Lodovico Antonio Muratori and the *Vetus Latium profanum & sacrum* (1704) of Pietro Marcellino Corradini. Figure 48 shows to what extent these books were part of one or many conversation networks. When we look more closely at this network, an interesting dynamic emerges. The moment a publication is published often coincides with the exact same year Magliabechi mentions it in his letters to his correspondents. For example, the *Dissertatio de nomine patriarchae Josephi a Pharaone imposito* is mentioned in Magliabechi's letter to Gisbert Cuper, Ruth Ernst d'Ans and Johannes Georgius Graevius on the 20th of June, the 4th of August and the 14th of August 1696 respectively. Likewise, the *Anecdota, quae ex Ambrosianae Bibliothecae codicibus*, which was dedicated to Magliabechi, is mentioned on the 28th of July 1697 to Gisbert Cuper, on the 4th of August 1697 to Johannes Georgius Graevius, on the 23th of March 1697 to Jacob Gronovius and on the 22th of October

⁹⁴¹ Mirto, Stampatori, Editori, Librai Nella Seconda Metà Del Seicento, 1: 50

⁹⁴² Magliabechi to Cuper, 5 February 1692, KB, KW 72 D 10, ff. 65-67, ""Sabato, [...] non mi fu possibile il trasmetterle allora l'incluso Opuscolo. Lo mando per tanto adesso a V.S. Ill.ma benché con mio sommo rossore, e solo per obbedirla, in riguardo dell'esser dedicato a me. Come mi pare che io gia le scrivessi, il signore Andrea Cristiano Eschenbachio, e quello che l'ha dato in luce, e con mia confusione, onoratomi a dedicarmelo [Saturday, [...] I was unable to send you the included booklet. I send it to Your Illustrious Lordship now because, while I blush, I am obliged to because he dedicated the book to me. As I have already written before, sir Andrea Christian Eschenbacio, is the one who brought the book to light, and to my confusion, he honored me to dedicate it to me]".

⁹⁴³ Magliabechi to J. Gronovius, 4 October 1705, LMU, Cod 4° Cod.Msc 777, f. 95, "Stimo che l'amicizzia, con questo per tutti i capi degnissimo Signore [Passionei], sia per essere a V.S.Ill.ma per l'avvenire di non piccolo utile, per quello che possa bisognarle, dalle Biblioteche di Roma."

1697 to Laurens Gronovius. Moreover, the *Vetus Latium profanum & sacrum* is mentioned on the 20th of February 1704 to Jacob Gronovius, on the 25th of October 1704 to Gisbert Cuper and in June 1705 to Pieter Burman. These examples show how rapid news flowed through the network of Magliabechi, who was able to satisfy his correspondents' need for up-to-date information.

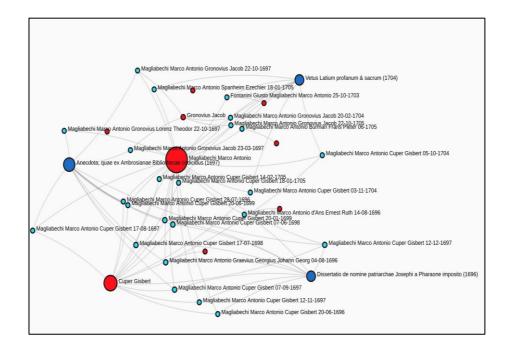


Fig. 48 Multimodal network around the *Anecdota, quae ex Ambrosianae Bibliothecae codicibus*, the *Dissertatio de nomine patriarchae Josephi a Pharaone imposito* and the *Vetus Latium profanum & sacrum*. These books are mentioned in the letters (light-blue) between Magliabechi and his correspondents (red). Network created with nodegoat.

Magliabechi's letters, particularly those containing bibliographical news, were not simply services to scholars needing up-to-date information, but they also forged the creation of new ties. The books that Magliabechi advertised in his letters encouraged contact between the recipients and the authors of the books. Figure 49 shows that, shortly after Magliabechi referred to a certain publication, a correspondence between the author and the recipient takes off. For example, on the 7th of September 1697, Magliabechi sent Cuper the *Anecdota, quae ex Ambrosianae Bibliothecae codicibus*, published in Milan by the famous publisher and writer Lodovico Antonio Muratori (1672-1750).⁹⁴⁴ A correspondence between Cuper and Muratori took off in 1697. Likewise, it is certain no coincidence that Gisbert Cuper started a correspondence with, shown in green in figure 49, Wilhelm Ernst Tentzel, Lodovico Antonio Muratori, Johann Christoph Wagenseil, Henry Noris, Pietro Marcellino Corradini, Raffaello Fabretti, Giusto Fontanini, Benedetto Bacchini, Francesco Bianchini, Guglielmus Bonjour and Francesco Ficoroni immediately after Magliabechi advertised their publications in his letters to him.⁹⁴⁵ Multimodal networks shed light on these dynamics.

⁹⁴⁴ Magliabechi to G. Cuper, 7 September 1697, KB, KW 72 D 10, f. 140.

⁹⁴⁵ The correspondence between Cuper and Tentzel, written between 1698 and 1707, is extent in the National Library of the Netherlands, KW 72 C 23, while the correspondence between Corradini and Cuper is to be found in KW 72 G 23. The letters between Cuper and Wagenseil, written between 1691 and 1699, can be found in KW 72 C 35. The correspondence between Cuper and Noris, which lasted from 1687 until 1696, and the correspondence between Cuper and Fabretti (1684-1699) are both extent in KW 72 D 3, while the correspondence between Cuper and Bonjour (1697-1708) can be consulted in KW 72

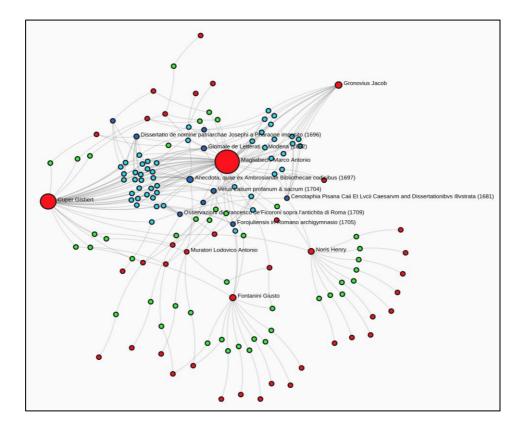


Fig. 49 The role of books in the creation of contacts. In this visualization, the correspondence between Cuper and Magliabechi is represented, who exchanged letters (light-blue) to each other in which books (dark-blue) were mentioned written by a certain author. These authors maintained a correspondence (green). Netork created with nodegoat.

6.2 BOOKS PUBLISHED OUT OF REVENGE

Table 1 clearly shows that the publication *Liber satyrarum sexdecim* (1703) dominates the contents of Magliabechi's letters to his Dutch correspondents, being cited 20 times. To understand why, it is necessary to go back to the broader context in which this publication should be placed. As noted before, a co-citation network is based on the fact that two different objects (e.g. people, publications) mentioned together in many different letters strongly suggest the existence of a connection between the two. The co-citation network around the *Liber satyrarum sexdecim* looks like the following:

H 20. The letters between Ficoroni and Cuper are extent in KW 72 G 23-24. For the detail of the other correspondents of Cuper see chapter 4, paragraph 5.4. Expanding the Network.

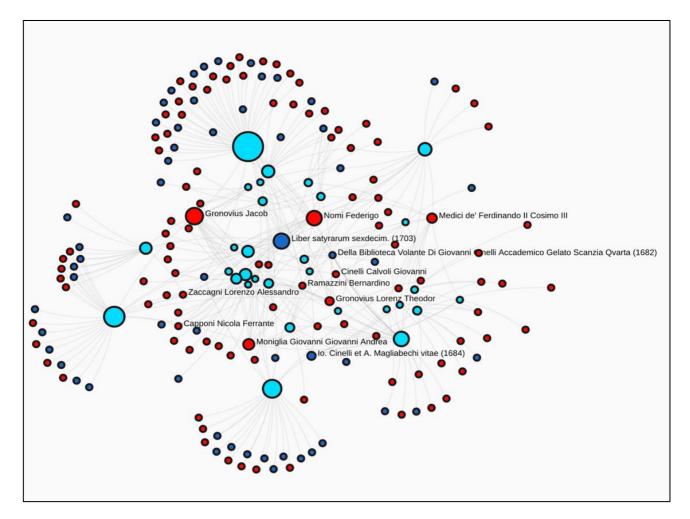


Fig. 50 Multimodal network around the Liber Satyrarum Sexdicem. Network created with nodegoat.

Figure 50 shows a central clique of persons and books that are strongly linked together. The *Liber* satyrarum sexdecim is co-cited frequently with the publications Io. Cinelli et A. Magliabechi vitae (1684) and the Quarta Scanzia (1682), two books that are present in table 1 as well. Central persons who are frequently cited together with these books are Federico Nomi, Giovanni Andrea Moniglia, Giovanni Calvoli Cinelli, Ferrante Capponi, Bernardo Ramazzini, Johannes Georgius Graevius and Cosimo III. This visualization is useful as a first index of centers of discussions going on around the Liber satyrarum sexdecim, which helps us to direct our attention to connections we might have overlooked. Moreover, it provides a tool to structure our thoughts and sources. Following the citations of these books and persons over time helps us to identify significant patterns on which one could then focus more closely by reading the letters in question. Moreover, contextual histories on the cited or co-cited books and persons shed further light about this particular co-citation network.

In 1682, Giovanni Calvoli Cinelli (1626-1706) published anonymously his *Quarta Scanzia*.⁹⁴⁶ It was part of a series of books entitled the *Biblioteca Volante*, a bibliography containing curious and rare information about books. In this fourth part, Cinelli included a passage in which he sided with the physician Bernardino Ramazzini (1633-1714), who was involved in a serious dispute with Giovanni

⁹⁴⁶ Gino Benzoni, 'Cinelli, Giovanni Calvoli', http://www.treccani.it/enciclopedia/giovanni-cinelli-calvoli , last accessed 18 November 2018.

Andrea Moniglia over the Florentine noblewoman Maria Maddalena Bagnesa.⁹⁴⁷ In 1681, Ramazzini was called to the bedside of Maria Maddalena, who died during childbirth. After her death, Ramazzini reconstructed a medical report in which he confirmed that, although she had died because the placenta was not expelled, a manual removal of the placenta would not have saved her life. The rapport was read by Moniglia in Florence who argued that Ramazzini would have saved the life of Maria Maddalena if he would have removed the placenta. This disagreement marked the start of a three-year debate that instigated sixteen publications between Moniglia and Ramazzini regarding their respective medical abilities.⁹⁴⁸

In the *Quarta Scanzia*, Cinelli publicly chose the side of Ramazzini, which obviously did not sit very well with Moniglia. Consequently, he accused Cinelli for publishing a malignant work, who ended up in prison for 93 days. In addition, all copies of the *Quarta Scanzia* were burned on the 11th of March 1683 in the inner courtyard of the *Bargello* prison in Florence. Magliabechi discussed Cinelli's case with his trusted correspondent in the Dutch Republic, Jacob Gronovius:

"Non voglio tralasciare di accennarle, acciocché tanto maggiormente V.S.Ill.ma vegga, in che miserabili tempo qua siamo. Il povero Cinelli, compose la quarta Scanzia, nella quale offese leggerissimamente quell'infamissimo Medico. Non la fece stampare, perché la mando manoscritto a Modena al signore Ramazzini, che fu quello che la fece stampare in Venezzia. Non ostante per tanto che avesse offeso leggierissimamente quell'empio, e che non l'avesse fatta stampare, e che non fosse stampata qua, con tutto ciò, fu tenuto tre mesi in segrete; gli furono dati mille gastighi, a segno, che lo precipitarono affatto, e gli fu il Libretto abbruciato pubblicamente per mano del Boia, col suono della Campana del Bargello, come quando va a impiccarsi qualcuno."⁹⁴⁹

The publication of the *Quarta Scanzia* not only got Cinelli in trouble, but Magliabechi as well. One year later, in December 1684, Magliabechi wrote a series of letters to Cosimo III to inform him that he had become victim of a vicious plot against him. With desperate words, Magliabechi wrote the Grand Duke that he was falsely accused to be the author of the *Quarta Scanzia* in the book entitled *Io. Cinelli et A. Magliabechi vitae*, which was published anonymously in Siena. The worst part was that the printing of the publication was approved by the grand ducal ministers:

"Era gran tempo che mi ero accorto che diversi mi vedevano mal volentieri in Firenze, e facevano il possibile per necessitarmi ad andarmene. Per non gli fare tanto maggiormente ridere, mi ero deliberato di soffrire il tutto, come ho sempre fino ad ora fatto, benché mi sia convenuto più e più volte inghiottire bocconi amarissimi. Adesso però è affatto impossibile ch'io possa soffrir di vantaggio, essendo stata lacerata la mia riputazzione nel peggior modo che possa mai immaginarsi col pensiero. Quando que' miei fogliacci di notizzie erano in mano de' miei nemici, supplicai umilmente V.A.S. con più mie Lettere, che le feci consegnare in Pisa in propria mano, che volesse degnarsi di farmi la grazzie, di ordinare, che fossero date a vedere, a persona disappassionata, che potesse con ogni verità rappresentare a V.A.S. che in esse non si trovava cosa alcuna di quelle che pretendono che nella Scanzia dieno fastidio. La mia digrazzia volle, che io non solo allora non ricevessi tal grazzia, ma che in oltre sia stato poco fa stampato con approvazzione de' Ministri di V.A.S. che sia io l'Autore della detta Scanzia, e voglia degnarsi che con sua buona grazzie, io possa partirmi di qua, e cercare altrove qualche

⁹⁴⁷ Carnevale, 'Ramazzini vs. Moneglia: Una "Terribile" Polemica Medica Seicentesca'.

⁹⁴⁸ Carnevale, 213.

⁹⁴⁹ Magliabechi to J. Gronovius, undated, LMU, Cod 4° Cod. Msc 778, f. 26, "I do not want to leave out to mention that, so that Your Illustrious Lordship better sees, in what a miserable time we are here. The poor Cinelli composed the fourth Scanzia, in which he moderately offended that infamous physcian [Moniglia]. He did not print it, because he sent the manuscript to Modena to sir Ramazzini, who was the one who led it printed in Venice. Although he had slightly offended that villain, and that he did not print it, and that it was not printed here in Florence, all in all, he was held for three months in prison, he was given thousands punishments, which beat him down, and his books were burned in public by the hand of the executioner, with the sound of the bell of the Bargello prison, as when someone is hanged."

riparo alle persecuzzioni. Tanto più che i nemici anno mille protezzioni e dependenze, ed io come è noto a tutti standomene sempre serrato tra quattro Libri ne meno conosco quasi alcuno."⁹⁵⁰

Fear its being revealed, Magliabechi ended his emotional outburst with the statement that the Grand Duke needed to tear up his letter, "perché essendo in Corte molti poco miei Amici, e molti parzialissimi de' miei Nemici non capitasse nelle loro mani e tanto maggiormente mi perseguitassero".⁹⁵¹ Did Magliabechi spoke the truth in his letter to the Grand Duke about him not being the author of the *Scanzia*? Officially, he was not. Yet, he provided Cinelli with the information and books he needed to carry out his research. Almost weekly he sent his observations and notes to Cinelli, which were literally wrapped up in the contents of the *Scanzia*. Some of these observations, as is shown by the above letter, were intercepted by his enemies which led them to the conclusion that Magliabechi was, together with Cinelli, the principal author of the book. Consequently, Magliabechi repeatedly tried to convince the Grand Duke to retrieve his stolen observations out of the hands of his enemies so that he could see for himself that he did not ever write anything that would be upsetting to the author of the *Io. Cinelli et A. Magliabechi vitae*. Soon he found out that his letters to Cinelli were in the possession of Giovanni Andrea Moniglia:

"Quando i miei fogli erano tutti nelle mani del Signore Moniglia, io, con molte e molte Lettere, supplicai V.A.S., a degnarsi di ordinare, che fossero dati per qualche tempo a persona disinteressata, la quale potesse rappresentare a V.A.S., che in essi non era cosa alcuna, ne intorno al detto signore Moniglia, ne circa a niuna altra di quelle che nella Scanzia pretendono che dieno fastidio. Si degni V.A.S. di far trovare le dette mie Lettere, che sono molte, e mentre non sia vero ch'io la supplicassi a far vedere que' miei fogli, protestandomi che in essi non si sarebbe trovata cosa alcuna di quelle che nella Scanzia danno fastidio, mi faccia gettar giù la testa".⁹⁵²

From the previous chapter we know that Moniglia and Magliabechi were not on good terms with each other as early as 1673, when Moniglia did not share Magliabechi's opinion that Jacob Gronovius would make the perfect candidate to fill the vacant chair of Greek at the University of Pisa. Against the will of Moniglia, Magliabechi managed to convince the Grand Duke to offer Gronovius the professorship. Consequently, Moniglia, lashed out in rage, initiated a vicious campaign against Gronovius and managed to get rid of him in less than a year. When Moniglia got hold of Magliabechi's letters to Cinelli and learned

⁹⁵⁰ Magliabechi to Cosimo III, 28 December 1684, BNCF, Autografi Palatini, 122, "For a long time I realized that various men were not very pleased to see me in Florence, and did everything possible to force me to leave. In order not to make them laugh even more, I decided to endure it all, as I have always done until now, because it was better to swallow there bitter mouths. Now, however, it is really impossible that I can suffer for my own benefit, since my reputation has been ripped open in the worst possible way that I could never have imagined to think of. When my papers with notes were in the hands of my enemies, I humbly begged Your Illustrious Lordship with letters, which I had delivered to you in your hands in Pisa, to show them to an impartial person, who could provide Your Illustrious Lordship with the trust that, in those papers, there was none of those things that they argue to be bothersome in the Scanzia. To my misfortune, I did not receive this favor, but they also recently printed, with the approval of the ministers of Your Illustrious Lordship, that I am the author of the Scanzia. I therefore would like your mercy that I can leave from here to find somewhere a place where I can find refuge from these persecutions. Especially because my enemies receive protection and dependencies, while I, as is known to all, am alway locked up amongst my books and know almost nobody."

⁹⁵¹ *Ibidem*, "because there are very little friends of mine in court, and many partials of my enemies, [it is better that this letter] does not end up in their hands so that they will persecute me even more".

⁹⁵² Magliabechi to Cosimo III, February 1685, BNCF, Autografi Palatini, 126, "When all my papers were in the hands of sir Moniglia, I, with many and many letters, begged to your Illustrious Lordship to order that my papers would be given for some time to an impartial person, who can present to Your Illustrious Lordship that in my papers there is nothing that could bother, or sir Moniglia, or something else discussed in the Scanzia. I kindly ask Your Illustrious Lordship to find my papers, which are many, while it is not true that I have begged you to show these letters, protesting that in these papers there would not have been found anything upsetting for those discussed in the Scanzia, I would put my head down".

about his obvious involvement with the *Scanzia*, he started to plot his revenge against the librarian. Yet, what could be so powerful to undermine the reputation of one of the most respected bibliophiles of that time? Moniglia knew how to hit him where it hurt most: he fought the librarian's love for books with a book. In 1684, Moniglia ordered Niccolò Francesco da Barga, whom he had promised a position at the University of Pisa, to compose the work *Io. Cinelli et A. Magliabechi vitae*, in which he accused Magliabechi to be the principal instigator of the *Scanzia*. The work was printed in Florence by Vincenzo Vangelista, reprinted in Venice, and consequently distributed "come se fosse la Dottrina Cristiana" to use the same words of Magliabechi.⁹⁵³

Moniglia's plot against Magliabechi worked out perfectly. On the 8th of December 1684, Magliabechi desperately wrote a letter to Cosimo III asking him for his permission to retire from his position as librarian of the Medici collections. In addition, he desired also to get rid of the *few* books he possessed, which he had obtained during the course of his career "col non mi cavar la voglia di cosa alcuna, e mangiare l'istesse Pasque, e Festività più solenni, una sola coppia d'uovo, e tal volta cosa di meno spesa".⁹⁵⁴ Since he collected these books with the sole purpose to honor the Grand Duke, he considered it necessary to burn them all, or to send them anywhere the Grand Duke desired.⁹⁵⁵ As for the grand ducal library, he desired to show the most precious books to Bernardo Benvenuti, prior of the Benedictine monastery of Santa Felicità in Florence, so that he could identify the books that would have gone missing from the collection following his resignation.⁹⁵⁶

In following letters, Magliabechi, afraid that his enemies would "trovino la strada d'ingannar anche la Santissima Mente di V.A.S.", explained the Grand Duke about everything that had happened to him.⁹⁵⁷ Full disclosure was needed because his enemies were circulating vicious lies in Florence against him. This threat came, most of all, from his own secretary, Apollonio Bassetti:

"Che i miei nemici, empino la città con la voce, ed il mondo con le lettere, di bugie, imposture e calunnie più che diaboliche, contro di me, non mi avrebbe reso ardito a scrivere, ma sentendo da più parti, che l'istesso Signore Canonico Bassetti, ch'io ho sempre bramato di servire, e mai ho offeso, sparge alcune cose contro la verità, forse mal informato, ed avendo esso l'orecchio di V.A.S., mi par che sia necessarissimo, ch'io mi purghi, facendo vedere la verità, almeno di quelle sole cose, che potrebbero trovare più facilmente credenza dell'altre."⁹⁵⁸

⁹⁵³ Magliabechi to Cosimo III, 1684, BNCF, Autografi Palatini Magliabechi, 131, "as it was the Christian's doctrine, or

⁹⁵⁴ Magliabechi to Cosimo III, 8 December 1684, BNCF, Autografi Palatini Magliabechi, 123, "To manage not to desire anything but to eat, with Eastern, and the most solemn Festivities, one single couple of egg, and somethines even something less than that".

⁹⁵⁵ Ibidem, "I Libri, ad ogni mezzo cenno, o abbrucierò, o manderò dove da V.A.S. mi sarà comandato, già che la principal cagione che me gl'ha fatti mettere insieme, è stata, di poter con essi, secondo i miei deboli talenti, far maggiore onore a V.A.S., come è mio obbligo il fare"

⁹⁵⁶ Ibidem, "Perche io possa sempre aver testimonaiza di come lascio la Libreria di V.A.S., e de' Libri che sono in essa non potendo sapere come le cose doppo di me sieno per andare, supplico umilmente V.A.S. che mi sia permesso una sola mezza giornata avanti a che io consegni le chiavi a chi V.A.S. mi comanderà ch'io possa mostrarla diligentissimamente col fargli vedere ad uno ad uno i Libri più rari al signore Bernardo Benvenuti, Priore di S. Felicià avendone esso qua più cognizzione di alcuno altro"

⁹⁵⁷ Ibidem, "find the way to deceive the holy mind of Your Illustrious Lordship".

⁹⁵⁸ Magliabechi to Cosimo III, 28 December 1684, BNCF, Autografi Palatini Magliabechi, n. 124, "That my enemies, fill the cities with the rumors, and the world with letters, lies, and the most evil impostures and slander, against me, would not have been the reason that I dare to write you, but hearing from more sides, that the same sir Canon Bassetti, who I have always craved to serve, and never have offended, spread things against the truth, maybe misinformed, and because he had the ear of Your Illustriou Lordship, I believe that it is necessary, that I purge the truth, at least for these only things, that are easy to believe than other things".

Moreover, Magliabechi had found out that his handwriting was falsified to make everyone believe that he was the author of the *Scanzja*.⁹⁵⁹ Magliabechi is mesmerized by the resentful efforts to undermine his reputation and writes Cosimo with a sarcastic remark that they could even make him the "Autore dell'Alcorano, e del Talmut".⁹⁶⁰ One more time, Magliabechi assured the Grand Duke, that it was not him, but Cinelli who wrote the *Scanzja* and that he was willing to show him "le lettere, ed altre Scritture originali" to prove himself right. With this evidence Magliabechi was certainly not able to restore his reputation, but he hoped that he could at least show that the Grand Duke was deceived by his own subjects, including thus his secretary Bassetti. Yet, the Grand Duke assured Magliabechi that Bassetti would never have said anything that would harm him.⁹⁶¹

Either way, explained Magliabechi to the Grand Duke, there is a bright side to all this. Many scholars from around Italy and beyond had stood up for him, writing him hundreds of letters and poems of praise to prove his innocence and to restore his reputation. Magliabechi forwarded many of these letters to his correspondents, also to his contacts in the Dutch Republic, to show that he had become victim of this vicious plot.⁹⁶² Amongst these letters, there were hundreds of letters written by leading Cardinals, as well as many letters from the Congregation of the Holy Office. These Cardinals found out about the book through the inquisitor of Florence, Francesco Antonio Riveri (1631-1697), who was so horrified that a book like the Io. Cinelli et A. Magliabechi vitae could have been printed under the eyes of Cosimo that he immediately sent the book to Rome.⁹⁶³ In Rome, the commissioner-general of the Congregation of the Holy Office, Tommaso Mazza (1616-1688) and the oriental scholar and cardinal Lodovico Marracci (1612-1700), advisor of the Congregatio pro Indice Librorum Prohibitorum, were as shocked as Riveri, exclaiming, in the words of Magliabechi, that "Firenze sia peggio che Ginevra" and amazed that "niuno in enormità tali metta le mani".⁹⁶⁴ Magliabechi forwarded their letters to Cosimo, in which he could read that they declared that not the Holy Office but the Grand Duke himself should punish the truly guilty.965 On the 9th of October 1684, Lodovico Marracci explained that it is the responsibility of the Grand Duke "essendo in materia meramente politica":

"Mi disse ultimamente il P. Commissario di questo S. Offitio, che dalla parte della sacra Inquisitore si era operato quanto si doveva per conto di quello scelerato libretto, ordinando

⁹⁵⁹ *Ibidem*, "Sento che circa a due mesi sono, fossero mandate varie cartuccie a Casa di diversi, che apparivano scritte di mia mano, nelle quali erano toccati que' tali a quali costoro le mandavano, per concitarmi tutta la città contro, e far credere che fossi stato io l'Autore della Scanzia."

⁹⁶⁰ Magliabechi to Cosimo III, February 1685, BNCF, Autografi Palatini Magliabechi, n. 126, "the author of the Koran or the Talmut".

⁹⁶¹ Cosimo III to Magliabechi, 4 February 1685, BNCF, Autografi Palatini Magliabechi, n. 125, cited in Alfonso Mirto, 'Al servizio dei principi. Antonio Magliabechi e i Medici', in *Antonio Magliabechi nell'Europa dei saperi*, 126.

⁹⁶² See, for instance, Magliabechi's letter to Gronovius dated the 9th of September 1692, LMU, Cod 4° Cod. Msc 778, f. 18, "Potrei mandarne a V.S.Ill.ma molto e molto maggior numero, ma perche non voglio troppo aggravarla di pesa, le invio solamente queste poche. In alcune di esse, V.S.Ill.ma osserverà che vien anche brevemente accennato, e toccato, il diabolico Librello, e 'l suo scellerato Autore. Non ostante che quella infamità, che fece inorridire il Mondo tutto, sieno otto, o dieci anni, che fosse qua stampato, con tutto ciò, seguita ancora ad essere aborrita, e detestata da tutti, come in parte può vedere dall'incluse Poesie."

⁹⁶³ Magliabechi to Cosimo III, 21 May 1685, Autografi Palatini Magliabechi, n. 127, "Così subito che dal Padre Inquisitore fu mandato il diabolico Libello infamatorio a Roma, stomacati che in Firenze, sotto gl'occhi di V.A.S. fosse stata stampata, e dispensata una si orribile infamità, mi scrissero diversi signore Cardinali. Così scrisse il signore Cardinal Cibo, al signore Bonsi, che da sua parte mi dicesse, e l'istesso anche fecero cento, e cento altri. Per non tediare V.A.S., eccole due sole Lettere, di cento e cento che potrei mandarle, di due Religiosi, insigni per Santità di Vita, e per Dottrina, e cospicui anche per Cariche, e tutti a due della S. Congregazzione del Santo Offizzio, anzi uno di essi è Commissario di esso S. Offizzio, che come V.A.S. sa, fa quasi il tutto.

⁹⁶⁴ Magliabechi to Cosimo III, 1685, BNCF, Autografi Palatini Magliabechi, n. 131, "Florence is worse than Geneva", "nobody get his hands on such an enormous case".

⁹⁶⁵ Magliabechi to Cosimo III, 21 May 1685, BNCF, Autografi Palatini Magliabechi, n. 127, "Vegga che la S. Congregazzione si protesta chiarissimamente, che il gastigo di questa diabolica infamità, tocca a V.A.S., non ad essa."

che fusse abbruggiato. Ma il castigo degl'Autori di quello, spettava al Principe secolare, essendo in materia meramente politica. Onde V.S.Ill.ma può più dolersi dei Ministri di S.A.S., che di quelli del S. Offitio. E veramente io resto maravigliato, come costà si sia proceduto con tanta indulgenza in un delito così grave.⁹⁶⁶

If Cosimo would not believe that their letters were authentic, Magliabechi advised him to show the letter to the inquisitor Riveri who was able to recognize his handwriting with a glance.⁹⁶⁷ Magliabechi urged the Grand Duke to reflect on everything what he had learned so far:

"Supplico umilmente V.A.S. a degnarsi di far reflessione, se tollerasse, che fossero dette pubblicamente l'essecrande ingiurie che sono stampate, e mandate per tutto il mondo, contro di me, ad un suo Staffiere, ad un Contadino. Non solo non le tollererebbe VA.S. in niuna maniera, che farebbe severamente gastigare quel tale, metterebbe mano alla spada, e si vendicherebbe.⁹⁶⁸

If that was not enough, Magliabechi continued to rub salt in the wound, using rather hard words to the Grand Duke, urging him to impose an appropriate sentence on Moniglia and that the *Io. Cinelli et A. Magliabechi vitae* should be burned as soon as possible. If the Grand Duke was not willing to grant his request, Magliabechi was forced to resign as a gesture of protest against the injustice that was being done.⁹⁶⁹

While the printer of the publication, Vincenzo Vangelisti was imprisoned, Moniglia was never punished. In his anger, Magliabechi wrote to Gisbert Cuper that "certo in ogni altra parte del mondo gli sarebbe stata tagliata la testa. Qua, non solo non ne ebbe gastigo alcuno, ma premio. O tempora! O tempora! torno a dire."⁹⁷⁰ Moreover, the Grand Duke never gave his permission to Magliabechi to leave the Medici court.⁹⁷¹ Magliabechi, therefore, took justice in his own hands and planned to take his revenge. Together with his friend and poet Federico Nomi (1633-1705) he decided to publish a satirical work against Moniglia.

In his profile of Federico Nomi, Giovanni Bianchini has argued that Moniglia forced Nomi to leave the University of Pisa because he challenged Aristotle's traditional study of science by advocating the research of the physician Francesco Redi.⁹⁷² The correspondence of Antonio Magliabechi sheds further light on the conflict between Nomi and Moniglia, showing how Moniglia managed to convince

⁹⁶⁶ Lodovico Marracci to Magliabechi, 9 October 1684, BNCF, Magl. VIII 1184, f. 54, "Lately the Commisioner of this Holy Office has said to me, that the holy Inquisitor has righly done what he had to regarding that evil book, ordering that it should be burned. But the punishments of the author [Moniglia] of that book, lies with the secular Prience, because it concerns political matters. This means that Your Illustrious Lordship [Magliabechi] should complain about the ministers of Your Serene Highness [Cosimo III] and not of the ones of the Holy Office. And I truly remain astonished, how this very serious crime has been handled there with so much indulgence."

⁹⁶⁷ Magliabechi to Cosimo III, 21 May 1685, BNCF, Autografi Palatini Magliabechi, n. 127, "ed è tutta di sua mano, se V.A.S. ci avesse dubbio alcuno, può mandarla a riconoscere al Padre Inquisitore, che ne avrà certo avuta di esso molte, e riconoscerà la mano benissimo."

⁹⁶⁸ Magliabechi to Cosimo III, undated, BNCF, Autografi Palatini Magliabechi, n. 131, "I humbly beg Your Illustrious Lordship to reflect, if you tollerate that these evil insults are printed and sent over all the world, against me, your staff member, a villager. You would not only tolerate this in any manner, but you should also severily punish that one, putting your hands on the sword, and take revenge".

⁹⁶⁹ *Ibidem*, "Se V.A.S. non si degna di far fare la giustizzia che si deve, di ua cos' enorme scelleraggine, come mi giova di sperare, che che è neccessario che si degni di concerdemi licenzia che con sua buona grazzia io vada a ripararmi altrove, dalla tirannide di costoro."

⁹⁷⁰ Magliabechi to G. Cuper, undated [1681], KB, KW 72 D 10, f. 60, "it is certain that in any other part of the world his head would have been cut off. Here, he is not even punished, but praised. O what times, O what times, I repeat."

⁹⁷¹ Magliabechi to J. Gronovius, July 1696, LMU, Cod 4° Cod. Msc 778, f. 23, "da che successe l'orrenda infamità di quell'empio Medico non mi essendo stata conceduta licenzia di partirmi di qua, non ho mai voluta tirare provvisione alcuna".
⁹⁷² Giovanni Bianchini, *Federigo Nomi. Un letterato del '600, Profilo e fonti manoscritte* (Firenze: olschki, 1984): 21. See also *Ibidem,* 'Francesco Redi e Federigo Nomi', *Studi secenteschi* XXXI (1990): 205-277.

the Grand Duke to dismiss Nomi from his professorship. In 1703, Magliabechi reported the story to Jacob Gronovius in great secrecy, urging him to tear up the letter immediately after reading. In this letter, Magliabechi explained that Moniglia had commissioned Nomi to give him private lessons at his home for being "tanto asino, e così ignorante, che ne meno sapeva mettere insieme, due parole Latine".⁹⁷³ Over time, Nomi was convinced that he was on good terms with Moniglia, and thought he was doing right to tell him about the sinful life of his wife and daughters, who "erano la favola di Pisa".⁹⁷⁴ Nomi hoped that Moniglia would remedy the situation before it got any worse. Moniglia, however, went straight to the Grand Duke and claimed that "il signore Nomi, o contaminava, o almeno voleva contaminare, la moglia, e le Figliuole".⁹⁷⁵ Upon hearing this, the Grand Duke dismissed Nomi on the spot.⁹⁷⁶ After the incident, Nomi retired to Monterchi, a small village a few kilometers from Anghiari, where he started to work on various publications, including his satirical work against Moniglia.

To teach Moniglia a lesson, all that was needed was someone who shared the same feelings of hatred against him. Naturally, Magliabechi did not need to think long before he understood that Jacob Gronovius was the perfect candidate. He had, after all, suffered the same fate as Nomi twenty years earlier.⁹⁷⁷ In 1695, Magliabechi took his chance and reached out to Gronovius in secret, directing him to tear apart the letter after reading. Since Moniglia had intimidated hundreds of men in Florence and Pisa, it was about time that someone stepped up against him. He believed that the publication of Nomi, in which "è copertamente quello scellerato Medico staffilato", would fulfil this purpose.⁹⁷⁸ Nomi offended Moniglia under the name of *Curculione* (transl. weevil) which is the same pseudonym as used by Benedetto Menzini in his *Satire*, who was offended by Moniglia's definition of his poetry as "piscio delle Muse".⁹⁷⁹

Magliabechi contacted Gronovius to see if he was willing to help with Nomi's publication, asking him whether he knew someone who could print the publication.⁹⁸⁰ Gronovius replied positively to Magliabechi's request and offered his assistance. From that moment on, Gronovius provided corrections

⁹⁷³ Magliabechi to J. Gronovius, undated (1703), LMU, Cod 4° Cod.Msc 778, f. 12, "so dumb, and ignorante, that he does not even know how to bring together two words of Latin".

⁹⁷⁴ *Ibidem*, "the joke of Pisa".

⁹⁷⁵ Ibidem, sir Nomi violated, or at least wanted to violate, his wife, and daughters".

⁹⁷⁶ Ibidem, "Il signore Nomi, faceva interamente le lezzioni a Curculione, già ch esso era tanto asino, e così ignorante, che ne meno sapeva mettere insieme, due parole Latine. Curculione, perche il signore Nomi gli componesse le Lezzioni, lo teneva a Pisa in Casa sua, anzi l'aveva per dir così fatto Padrone della sua casa, trattandolo lautissimamente, il che poteva fare senza di un minimo suo scomodo, con settecento scudi l'anno, che aveva, o per dir meglio rubava, da quello Studio. Il signore Nomi, che come V.S.Ill.ma sa, è un ottimo signore, vedendosi da Curculione, tanto onorato, e favorito, stimo di essere in obbligo di avvisargli la vita laida, della Moglie, e delle Figliuole, che, acciò che rimediasse. Non ostante che il signore Nomi, portasse questo affare a Curculione, con ogni circospezzione, e modestia, dicendogli, che non credeva che vi fosse male alcuno, ma che con tutto ciò, era prudenza, il proccurare che non nascesse. Curculione, per mezzo di quell'ateo Ministro, lo rovinò, e gli fece perdere la Carica, e licenziare dallo Studio di Pisa, e con questa scellerato calunnia. Diedero ad intendere a S.A.R., che il signore Nomi, o contaminava, o almeno voleva contaminare, la Moglia, e le Figliuole, di Curculione, onde S.A.R. lo fece subito licenziare dallo Studio."

⁹⁷⁷ Magliabechi to J. Gronovius, 30 December 1696, LMU, Cod 4° Cod. Msc 777, f. 39, "Cento, e cento altri ha rovinati con scelleratissime cabale; ed esso anche fu, come V.S.Ill.ma ben sa, che con quell'ateo, operò il tutto per levarla di Pisa."

⁹⁷⁸ Ibidem, secretly stirred up that unholy physician."

⁹⁷⁹ Girotto, 'Menzini, Benedetto'. See note 752.

⁹⁸⁰ Magliabechi to J. Gronovius, undated, LMU, Cod 4° Cod. Msc 778, f. 4, "Di nuovo ritero a V.S. Ill.ma le mie reverentissime suppliche, perche voglia degnarsi di trovare costà qualche Stampatore, che imprima le suddette Satire, il che a V.S. Ill.ma si renderà facilissimo. Non solamente V.S. Ill.ma farà un favore grandissimo al signore Nomi, ed a me, che siamo suoi cos' gran Servitori, ma ancora a cento, e cento galantuomini, stato o interamente rovinati, o perseguitati, da quello scellerato Medico. Giornalmente mi è domandato da diversi, se sono stampate, e quando si aspettano. Il signore Nomi rimette in V.S. Ill.ma il correggere, e l'emendare, tutte quello che le pare, e se V.S. Ill.ma non vuole la briga, e l'incomodo di correggerele, si degna di farle stamapre come stanno, poiche si vi saranno degli errori la vergogna non sarà punto di V.S.Ill.ma, ma dell'Autore. V.S.Ill.ma quando che fu qua, vedde la somma bontà del signore Nomi; ed io in oltre l'assicuro, che è veramente suo grandissimo, ma grandissimo ammiratore, e non mi scrive volta, il che fa spessimo, che non mi domandi se ho nuove di V.S.Ill.ma, e che non mi imponga di riverirla in suo nome. Mentre che V.S.Ill.ma non potesse, o non volesse farle stampare Ella, la prego a darle o all'ottimo, e dottissimo suo signore Fratello, o a qualche amico, perche le faccia stampare egli."

to the manuscript and sent them directly to Nomi in Monterchi or passed them on through Magliabechi. Nomi had given Gronovius full consent to change or cancel whatever he did not like.⁹⁸¹ Gronovius took advantage of this privilege and insisted, for example, on the deletion of a passage that regarded Gisbert Cuper. In the manuscript, Gronovius noticed that Nomi referred to Cuper as "senatorem Hollandiae". Annoyed, he wrote to Magliabechi that "no one recognizes that frivolous and impotent men as the senator of Holland".⁹⁸² Magliabechi answered Gronovius that "Circa alle Satire del signore Nomi, io non avevo osservato quel luogo intorno al signore Cupero. V.S.Ill.ma lo levi pure interamente".⁹⁸³

On the 20th of August 1685, Magliabechi informed Gronovius that Nomi desired to dedicate the work to him and to Gronovius. Magliabechi, however, did not want to give the impression that the publication was printed out of revenge, and proposed the following solution to Gronovius:

"In riguardo del Libello essecrando infamato contro di me [Io. Cinelli et A. Magliabechi vitae], e delle persecuzzioni contra di V.S.Ill.ma, non è bene che apparisce che V.S. Ill.ma o io abbiamo proccurato che quelle Satire si stampino, perché parrebbe che l'avessimo fatto per vendetta. Può lo stampatore nella Dedicatoria, o Prefazzione di esse, scrivere, che gli è capitato non so come il manoscritto, senza nominar punto, ne V.S. Ill.ma, ne me."⁹⁸⁴

Although Nomi informed Magliabechi that he did not want to remove the passage about Cuper, in the published *Liber satyrarum sexdecim* the name of Cuper does not appear.⁹⁸⁵ On the 19th of October 1696, Gronovius informed Magliabechi that the Leiden publisher and bookseller Jordaan Luchtmans (1652-1708) took the job of printing Nomi's satirical piece.⁹⁸⁶ On the 5th of May 1702, Magliabechi received the first printed page of the *Liber satyrarum sexdecim*, exclaiming his enthusiasm to Gronovius: "Oh come è bello, e nobile, il carattere, la carta, ed ogni altra cosa!"⁹⁸⁷ In addition, Magliabechi had enjoyed reading the printed letter of Jacob Gronovius in the *Liber satyrarum sexdecim* in which he accused Moniglia of his continious harrasments at the University of Pisa.⁹⁸⁸

⁹⁸¹ Nomi to Magliabechi, 23 January 1699, in Giovanni Bianchini, 'Sui rapporti tra Federigo Nomi e Antonio Magliabechi (1670-1705) con lettere inedite del Nomi', 288 (letter XXXIV): "Il Signor Gronovio circa le mie Satire faccia a modo suo, perché mi rimetto a un tanto uomo". See also Magliabechi to J. Gronovius, 3 June 1699, LMU, Cod 4° Cod. Msc 777, f. 53, "Subito che ho mandato il foglio di V.S.Ill.ma al signore Nomi, ho da esso ricevuto l'incluso altro foglio, scritto come vede di sua mano. V.S.Ill.ma però non guardi ad esso, ma corregga, ed emendi, ciò che le pare, come in fine di esso le ne da l'autorità".
⁹⁸² J. Gronovius to Magliabechi, 10 October 1698, in Giovanni Targioni Tozzetti, *Clarorum Belgarum ad Ant. Magliabechium nonnullonqve alios epistolae*, vol. 1, 205, "Primo nullus illum nugacem, et impotentem Hominem agnoscit senatorem Hollandiae".
⁹⁸³ Magliabechi to J. Gronovius, undated, LMU, Cod 4° Cod. Msc 778, f. 9, "Regarding the Satire of sir Nomi, I did not have observed that piece about sir Cuper. Your Illustrious Lordship can remove it entirely".

⁹⁸⁴ Magliabechi to J. Gronovius, undates, LMU, Cod 4° Cod. Msc 778, f. 4, "Regarding the evil books and infamous books that was published against me and because of the persecutions against Your Illustrious Lordship, it is not good if Your Illustrious Lordship or I appear to have ordered the printing of the Satire, because it would look like if we had done that out of revenge. The printer, therefore, can write in the Dedication or preface of the book that he did not know how he did receive the manuscript, wihout mentioning Your Illustrious Lordship and me."

⁹⁸⁵ Nomi to Magliabechi, 30 June 1695 in Bianchini, 'Sui rapporti tra Federigo Nomi e Antonio Magliabechi (1670-1705) con lettere inedite del Nomi: 279 (letter XXVIII), "Del Signor Gisberto Cupero, di cuistimo assaissimo la censura: ma non mi sento ora di mutare il detto, per le sue parole".

⁹⁸⁶ Jordaan Luchtmans established a publishing company in Leiden in 1683. In 1848, Evert Jan Brill took over the firm from the Luchtmans family, which became the seed for the still renowned publishing house Brill. See, Sytze van der Veen, eds., *Brill – 325 Jaar Uitgeven in Dienst van de Wetenschap* (Leiden/Boston: Brill Publishers, 2008); 9-45.

⁹⁸⁷ Magliabechi to J. Gronovius, 5 May 1702, LMU, Cod 4° Cod.Msc 777, f. 76-77, "Oh how beautiful and noble is the type, the paper, and every other thing!"

⁹⁸⁸ Magliabechi to J. Gronovius, undated, LMU, Cod 4° Cod. Msc 778, f. 12, "Ho riso nel vedere, ciò che V.S.Ill.ma nella detta sua elegantissima Lettera scrive, di Curculione". Dedicatory letter of Jacob Gronovius in Federico Nomi, *Liber satyrarum sexdecim* (Leiden: apud Jordanum Luchtmans, 1703): 140, "Quis igitur malus genius et isti Academiae invidus excussit inde tantum decoris et ornamenti, quod ex te percipiebat? An in te quoque subodorari debeo validas robustasque fuisse Curculionis calumnias?"

6.3. PROHIBITED BOOKS IN THE EPISTOLARY NETWORK

Throughout the second half of the seventeenth century, the institutions in charge of censorship became gradually more secular and less controlled by church authorities.⁹⁸⁹ This explains why papal control played out differently among the Italian states, whose local inquisitions varied in number and secular power.⁹⁹⁰ Consequently, the differences in government policy regarding religious or political matters resulted primarily from the divergent preferences of Italian rulers. The Republic of Venice, for instance, imposed severe limits on the jurisdiction of the Roman inquisition within its own territories, maintaining control over most religious matters. As a result, Venice stood out as an oligarchic republic, whose nobility tolerated a rather liberal and flexible climate to stimulate international commerce. Yet, not every authority became more moderate or lenient. The Grand Duchy of Tuscany under Cosimo III is historically regarded as a place of bigotry, where a stringently conservative policy was pursued instead. Here, an even more severe system of censorship and control was in place.⁹⁹¹ A letter from Magliabechi to Jacob Gronovius, for example, reads in part that Cosimo III "non si cura più niente degli Studi, ma della pietà".⁹⁹² He scrabbled these words on a small piece of paper, separate from the main letter, ready to be burned.

Jonathan Israel has argued that Cosimo III, on becoming Grand Duke in 1670, championed the clergy's claims to supremacy over Tuscany's intellectual and cultural life, collaborated with the inquisition in censoring books and controlling the book-trade and leaned heavily on the University of Pisa.⁹⁹³ The *studio pisano* boasted some eminent professors, but the rigid conservatism and the prohibition on Cartesianism as imposed by Cosimo III, made these academic circles soon disappear. The oppressed character of the Grand Duchy of Tuscany in these years is exemplified by the correspondence of Magliabechi, who eased his frustration about the poor state in which he met the scholarly life there. "Lo studio di Pisa va in malora affatto", he wrote to Jacob Gronovius on the 2nd of February 1674, lamenting the lack of competent university professors.⁹⁹⁴

Despite the apparent laws of censorship in Italy, and in the Grand Duchy of Tuscany in particular, Antonio Rotondò has underlined that in the fifty-year period stretching from the 1680s through the 1730s – the peak years of Magliabechi's correspondence – there had not been a foreign book, even the most controversial one, that had not come to Italy from England, Holland, Germany or France. The numerous great libraries that grew up all over Italy in the seventeenth century are the testimony of "questa stagione di apertura europea della cultura italiana".⁹⁹⁵ Rotondò mentioned, by way of example, the library of cardinal Pietro Ottoboni (1667-1740) in Rome which, under the influence of librarian Francesco Bianchini (1662-1729), held one of the largest book and manuscript collections in Italy. In Modena, the historiographers Benedetto Bacchini (1651-1721) and, after him, Antonio Lodovico Muratori (1672-1750) took care of the library of the Duke of Modena. The library of Giuseppe Valletta (1636-1714) was one of the most celebrated and famous libraries in Naples. These men, underlined Rotondò, were all

⁹⁸⁹ Jonathan I. Israel, Radical Enlightenment: Philosophy and the Making of Modernity, 1650-1750 (Oxford University Press, 2001), 119. See also, Mirto, Stampatori, Editori, Librai Nella Seconda Metà Del Seicento, 1:50.

⁹⁹⁰ Caroline Callard, 'L'Inquisiteur, le Prince et l'historien: l'année 1641 à Florence', XVIIe Siècle LI (1999): 452.

⁹⁹¹ Adriano Prosperi, *L'inquisizione Romana. Letture e Richerche, Storia e Letteratura. Raccolta Di Studi e Testi* 214 (Rome: Edizioni di storia e letturatura, 2003), 207–8.

⁹⁹² Magliabechi to J. Gronovius, undated [1676], LMU, Cod 4° Cod. Msc 778. f. 8, "does not care about scholaship, but only about mercy".

⁹⁹³ Prosperi, L'inquisizione Romana. Letture e Richerche, 293.

⁹⁹⁴ Magliabechi to J. Gronovius, 2 February 1674, LMU, Cod 4° Cod. Msc 777. ff. 141-142, "the University of Pisa really goes to hell."

⁹⁹⁵ A. Rotondò, 'La Censura Ecclesiastica e La Cultura', in *Storia d'Italia*, ed. R. Romano and C. Vivanti, vol. V, I Documenti (Turin: Einaudi, 1973), 1415, "This season of European openness of the Italian culture".

known for their "complessa trama di rapporti epistolari".⁹⁹⁶ Interestingly, all of these librarians also maintained a correspondence with Magliabechi, exchanging books and literary news on a regular basis. Likewise, Françoise Waquet has pointed out that "La censure n'empêcha donc pas des oeuvres audacieuses de circuler en Italie" and "il semble, toutefois, que les savants purent se procurer sans trop de difficultés les oeuvres interdites".⁹⁹⁷ Moreover, Alfonso Mirto has argued that "nonostante gli sforzi per ostacolare il commercio librario da parte dell'Inquisizione, sforzi, a volte, congiunti con quelli del potere politico, i libri 'proibiti', nel Seicento, continuarono a circolare, più o meno clandestinamente, in tutta Europa".⁹⁹⁸

Magliabechi plays a central role in the circulation of prohibited books in Italy. Jonathan Israel has noted that "through Magliabechi, information about and access to prohibited ideas, books, and manuscripts was readily available even in the heart of Cosimo III's Tuscany."⁹⁹⁹ The many controversal publications listed in table 1, like Jean le Clerc's *Bibliotheque Choisie*, Pierre Bayle's editions of the *Dictionaire Historique et Critique* and Gregorio Leti's *L'italia Regnante*, which were all enlisted on the *Index Librorum Prohibitorum*, attest to Magliabechi's relative openness about these books.

There are several reasons why the books prohibited in Italy ended up in the hands of Magliabechi. Rotondò has pointed out that the Roman Catholic Church had continued to successfully prevent the spread of books coming from across the Alps, but, beyond the control of the whole censorious apparatus, a sort of *zona franca* of scholars had been created, whose quick access to book novelties and condemned books could not be undermined. How so? To answer this question, the view of Simon Ditchfield is fundamental, who has underlined that continuous censorship can have repressive as well as creative effects.¹⁰⁰⁰ In fact, the correspondence of Magliabechi sheds light on the, rather creative techniques and network strategies used by both scholars and booksellers to circumvent the strict control by the inquisition. One of these techniques was to not sent prohibited books through areas tightly controlled by the inquisition. For example, being aware of the strict control in the north of Italy, the Venetian publishing firm Combì-La Noù (main suppliers of Magliabechi in the 1670s), transported the books from Amsterdam to Livorno over sea instead of over land.¹⁰⁰¹ In addition, they hid incriminated parts of a text in other books or in other merchandise.¹⁰⁰² Before the books were transported to Florence from Livorno, "they had to remain in quarantine for forty days, or sometimes less – in periods with no epidemics or after the intercession of the Florentine librarian Antonio Magliabechi."¹⁰⁰³ After the quarantine, the

¹⁰⁰¹ Mirto, Stampatori, Editori, Librai Nella Seconda Metà Del Seicento, 1:47.

⁹⁹⁶ Ibidem, cit. 1416, "Complex web of epistolary relationhips".

⁹⁹⁷ Françoise Waquet, Le Modèle français et l'Italie savante. Conscience de soi et perception de l'autre dans la République des Lettres (1660-1750), vol. 117 (École Française de Rome, 1989), cit. 230-231.

⁹⁹⁸ Mirto, Stampatori, Editori, Librai Nella Seconda Metà Del Seicento, 52.

⁹⁹⁹ Israel, Radical Enlightenment: Philosophy and the Making of Modernity, 1650-1750, 45.

¹⁰⁰⁰ Simon Ditchfield, 'Sanctity in Early Modern Italy', *Journal of Ecclesiastical History* 47 (1996): 98-112. A similar point of view can be found in the work of Irene van Renswoude, see, for instance, Irene van Renswoude and Christoph Baumgartner, 'Censorship, Free Speech, and Religion', in *Controversies in Contemporary Religion: Education, Law, Politics, Society, and Spirituality*, ed. Paul Hedges, vol. 1, 3 vols (Santa Barbara: ABC-CLIO, 2014), 123–51.

¹⁰⁰² Magliabechi to La Noù, 22 December 1657, "per esser il nome dell'Agrippa un poco sospetto all'Inquisitione, et ancora Satyra diversorum, per sciffar ogni inconvenienza per Ferrara et Bologna dove passano, li ho mescolati con Comeni Lexicon Atriale", in Mirto, *Stampatori, Editori, Librai Nella Seconda Metà Del Seicento*, 53. An earlier example of this practice has been highligted by Rotondò: "L'arte che usano e' detti heretici per seminare i suddetti libri è il far piegare quei che sono in forma grande giustamente alla misura di fagotti dentro i quali mandono fuori le tele d'Olanda ed altre biancherie, et quel che sono in forma piccola li fanno ridurre come se fossero mazzi di carte da giocare", in Rotondò, 'La Censura Ecclesiastica e La Cultura', 1414.

¹⁰⁰³ Elisa Goudriaan, *The cultural importance of Florentine patricians. Cultural exchange, brokerage, networks, and social representation in early modern Florence and Rome (1600-1660),* Unpublished dissertation Leiden University, 2015, cit. 200, http://hdl.handle.net/1887/32883, last accessed 1 April 2019.

books had to be seen by the censors of the inquisition, who, however, were not that strict about the books destined for the Medici court. ¹⁰⁰⁴ Therefore, if there was a risk that books might be forbidden, the Combì-La Noù firm often sent the books to well-known scholars of the Medici court to make them look less suspicious. In the 1660s, for example, when Magliabechi was not yet as influential as he would later become, the books were often sent to the Florentine scholar Carlo Dati instead of Magliabechi "acciò l'Inquisitor non facci troppo stranezza nel riveder i libri".¹⁰⁰⁵

Rotondò has further argued that the networks of travel and correspondence which grew extensively during the seventeenth century, had become uncontrollable by the inquisition.¹⁰⁰⁶ The inquisitors were unable to oversee the overload of information that flowed through these networks.¹⁰⁰⁷ Magliabechi's extensive network of booksellers, scholars, merchants and travelers enabled him to receive books from all parts of Europe. Moreover, through Magliabechi, many learned scholar had access to forbidden literature. For instance, Carlo Dati received from Magliabechi the books of Hugo Grotius, while Bernardo Benvenuti, prior of the Benedictine monastery of Santa Felicità in Florence, obtained the works of Gerardus Vossius.¹⁰⁰⁸ In this way books coming from the Dutch territories could reach Italian readers without major constraints.

How, then, was it possible that Magliabechi does not seem to pose a threat to the Inquisition? In large part this was because the inquisitors depended on his help and expertise. As one of the few people that was able to handle the overload of publications coming to Italy, he proved to be a valuable asset. Magliabechi's relationship with Francesco Antonio Severi, the inquisitor of Florence was stable, even friendly.¹⁰⁰⁹ Severi asked Magliabechi for books (even the various editions of the *Index Librorum Prohibitorum*) or for information about authors rather than waiting for the news to arrive through official channels. In turn, Severi paid these favors back by giving Magliabechi the liberty to pursue his library career in the Grand Duchy of Tuscany. Not only the local inquisitor relied on Magliabechi's help. The "overload of information" also posed an evident problem for the compilation of the *Index Librorum Prohibitorum*.

On the first of July 1670, Leopoldo de' Medici wrote to Magliabechi that the Roman authorities had commissioned him to provide a detailed list of books that were missing in the *Index Librorum Prohibitorum*, stating the name of the author, and the date and place of publication, so that the Congregation could inspect and judge the books. To fulfill this task, Leopoldo immediately contacted the one person fit for this job: Magliabechi. He ordered him to prepare a detailed list of books, especially those by heretic authors, that needed to be included in the *Index*. Magliabechi proceeded with caution, and began to send periodically lists of books that he considered heretical to Leopoldo in Rome. Leopoldo subsequently gave these lists to canon Lorenzo Panciatichi, who put them in order and presented them to the Congregation.

Magliabechi not only updated the lists of prohibited books with the most recent publications, he also provided Leopoldo with corrections to the recently printed *Index*.¹⁰¹⁰ When Magliabechi received a copy of the *Index* of 1670, he was blown away by the amount of errors it contained: ¹⁰¹¹

¹⁰⁰⁴ Cfr. Ibidem, 200.

¹⁰⁰⁵ Mirto, Stampatori, Editori, Librai Nella Seconda Metà Del Seicento, 1:47.

¹⁰⁰⁶ Rotondò, 'La Censura Ecclesiastica e La Cultura', 1415.

¹⁰⁰⁷ On this subject see, Blair, Too Much to Know, 151-153.

¹⁰⁰⁸ Alfonso Mirto, 'Antonio Magliabechi e Carlo Dati: lettere', *Studi secenteschi* 42 (2001): 281-433; Idem, 'Lettere di Antonio Magliabechi a Bernardo Benvenuti', *Studi secenteschi* 39 (1998): 205-242.

¹⁰⁰⁹ Mirto, Stampatori, Editori, Librai Nella Seconda Metà Del Seicento, 1: cit. 50.

¹⁰¹⁰ Index librorum prohibitorum Clementis X. Pontificis Maximi Iussu editus (Romae: ex typographia Reu. Cam. Apost, 1670).

¹⁰¹¹ Alfonso Mirto, 'Antonio Magliabechi e Le Sue Note All'«Index Librorum Prohibitorum»', *Annali Di Storia Di Firenze* V (2010): 76.

"Nell'aprirlo solamente, son restato immobile per l'orrore, vedendo gl'enormi e così spessi errori, de' quali è per tutto ripieno, il che scrivo con vere lagrime a gl'occhi, non per odio, o disprezzo, di chi che sia. Non sono gl'eretici no, che a piena bocca ci vadano burlando e schernendo, ma i medesimi nostri cattolici, ma i medesimi nostri religiosi, son costretti (benché troppo arditamente lo confesso) ad acclamare, dal dolore e dal zelo, con indignazzione e con gemiti."¹⁰¹²

In his report to Leopoldo, Magliabechi had nothing but contempt for Vincenzo Fani, secretary of the Index, who did everything wrong that he could possible to do. He misspelled the names of the publications and their authors (il Vossio a carte 174, in Vorsio), was unable to identify anonymous authors ("Che vuol dire quel quidam Auctor, come di persona incognita. Ogni asino sa che '1 D significa David, il B Blondellus) and forgot books that were already present in previous editions of the Index (Che autorità ha '1 p. maestro Fani di levar dall'Indice i libri già proibiti, come solamente fa di questo, ma ancora di parecchi altri?). Moreover, Magliabechi noticed that for those authors to which *opera omnia* was applied, Fani nevertheless specified several books.¹⁰¹³ This is, naturally, a trivial, rather redundant, mistake. In addition, when Magliabechi came across the title *Mare liberum, sive de Iure, quod competit Batavis ad Indicana Commercia*, without the author [i.e. Hugo Grotius] of the book, he made the following, rather harsh, remark:

"Chi è quello tanto asino che non sappia, che I detto dotto libretto è del Grozzio, ed in oltre stampato e ristampato, col suo nome mille volte. Che non l'abbiano saputo non ostante che l'abbiano proibito, si cava evidentemente non solo dalla detta pagina, ma anche dalla 185, dalla 209 e da altre nelle quali facendosi menzione di esso, non vi è mai nominato I Grozzio. Di più a carte 153, dove si registrano l'opere proibite del detto Grozzio, questa non vi comparisce. Non mi dà fastidio la loro ignoranza in una cosa tanto nota, ma mi dispiace che in questa maniera si imbrogliano le coscienze, già che la maggior parte si confonderanno e non vi vedendo il nome del Grozzio in luogo alcuno, crederanno che I libro proibito non sia I suo, ma qualche altro".¹⁰¹⁴

The Roman ecclesiastical authorities used Magliabechi's reports to compile the *Index Librorum Prohibitorum*, no less, drawing from it an almost complete list of Protestant authors, particularly in theology and philosophy. They could therefore appreciate the efficacy of the method of bibliographical description devised by Magliabechi.

Magliabechi repeatedly asserted that the Inquisitors were in need of this detailed information if they were to identify editions with the greatest bibliographical precision with a view to their possible prohibition. The numerous errors in the Index "non serve ad altro che a generar confusione" and "imbrogliare le coscienze".¹⁰¹⁵ As shown by the aforementioned passage, this confusion would increase

¹⁰¹² Mirto, 'Antonio Magliabechi e Le Sue Note All'«Index Librorum Prohibitorum»', cit. 83, "In opening it only, I freezed in horror, seeing that it is entirely full of enormous and frequent mistakes, which I write with true tears in my eyes, not out of hate, but out of contempt, towards whoever did that. It aren't the heretics who with mouth full are messing and mocking with us, but our own Catholics, of our religion, who are obliged (although way too boldly, I confess) to acclaim, out of pain and zeal, with indignity and groans."

¹⁰¹³ *Ibidem*, cit. 92.

¹⁰¹⁴ *Ibidem*, cit. 117-118, "who is that ass that does not know, that that learned book is from Grotius, which is printed and reprinted with his name thousands of times. That they have prohibited it without even knowing that, can be clearly seen not only from this page, but also from page 185, and 209, and other pages in which it is mentioned, in which no mention is made of Grotius. Moreover, on page 153, where the prohibited works of Grotius are registered, this book does not appear. Their ignorance regarding something very known does not bother me, but I reget that the minds are cheated in this way, because in the most cases one will bring confusion and since the name of Grotius is not present in any place, they will believe that this book is not written by him, but by someone else.".

¹⁰¹⁵ Ibidem, "it serves no purpose except in the creation of confusion"; "tricking the mind".

the ambiguity of the books, causing that a publication like the *Mare Liberum* of Hugo Grotius would escape censorship.

Magliabechi's disdain for the inquisitors, becomes also apparent from the letters he wrote to the Dutch Republic. In a letter to Jacob Gronovius dated the 14th of July 1676, for example, Magliabechi noticed "con ogni segretezza, ma insieme con ogni verità" that "gl'Inquisitori, ed i Vicari, molte volte son persone di pochissime Lettere, onde V.S.Ill.ma non si maravigli che bene spesso dieno a rivedere, e ad approvare i Libri a persone di mediocre letteratura."¹⁰¹⁶

To a certain extent it seems as if Magliabechi hid himself behind his infinite bibliographical reports, passing himself off as someone who merely served the Inquisition or the scholarly community by objectively informing his contacts about every publication that came off the press. In this respect, Magliabechi followed the principle of the bibliographer Conrad Gesner (1516-1665), who in his *Bibliotheca Universalis* (1545) attempted an exhaustive listing of all works printed in Latin, Greek or Hebrew in the first century of printing. Gesner's ambition to be exhaustive required some justification against the charge of including prohibited books. He justified himself as follows: "No author was spurned by me, not so much because I considered them all worthy of being cataloged or remembered, but rather to satisfy the plan which I had set for myself, simply to enumerate without selection all [writings] which happened. We only wanted to list them, and left the selection and judgment free to others."¹⁰¹⁷ Magliabechi seeked to do exactly the same, merely serving the scholarly community in dealing with the overload of books in the seventeenth century.

That Magliabechi seemingly hid himself behind the objectivity of his bibliographical reports is shown by the following example. In June 1683, Magliabechi received a letter from his enemy Andrea Moniglia in which he demanded him to distribute his most recent publication to his correspondents. This letter presents a clear and unambiguous picture as to why Moniglia is considered to be "l'adversaire le plus dangereux des modernes dans le dernier tiers du XVIIe siècle".¹⁰¹⁸ It bears, in fact, a striking example of some early modern blackmailing practices:

"Alcuni mesi sono, quando io mi lamentai con alcuni amici comuni, che V.S. trasmetteva a' molti Letterati d'Europa la 4.a Scanzia di Gio. Cinelli, mi risposero ch'ella allegava per sua difesa, che era solita mandare in diverse parti tutte le leggende che venivano alla luce, essendo dunque uscita una dalla stampa nel tempo ch'io mi ritrovava in Siena la quale forse non le sarà capitata ancora sotto l'occhio, ho stimato mio dovere mandarle un'esemplare, acciò ne possa provvedere quanto le bisognino per inviargli a' suoi medesimi corrispondenti a quali ha fatto venire in mano la 4.a Scanzia, e cordialmente la riverisco."¹⁰¹⁹

As shown by this passage, when Moniglia asked Magliabechi straight out why he had sent the *Quarta Scanzia* to his correspondents all over Europe, Magliabechi replied that he was used to send each single publication that had come off the press, no matter what book it was. Moniglia took advantage of Magliabechi's answer and left him no choice as to circulate his publication as well, given that Magliabechi was so 'indifferent' when it comes to books. An anonymous pamphlet of 8 pages was attached to the letter that was sent to Magliabechi, which discussed the involvement of Cinelli in the controversy between

¹⁰¹⁶ Magliabechi to J. Gronovius, 14 July 1676, LMU, Cod 4° Cod. Msc 777, f. 193.

¹⁰¹⁷ Blair, Too much to know, 162.

¹⁰¹⁸ Gabriel Maugain, Étude Sur l'évolution Intellectuelle de l'Italie de 1657 à 1750 Environ (Paris: Hachette et Cie, 1909), 61.

¹⁰¹⁹ Moniglia to Magliabechi, 23 June 1683, BNCF, Magli. VIII, 1186, f. 75, "Several months ago, when I complained together with some mutual friends that Your Illustrious Lordship had sent the fourth Scanzia of Giovanni Cinelli to many scholars in Europe, you answered me that, in your own defense, that you used to send every story that come to light in various parts, like with the book [scanzia] that was printed while I was in Siena, which would probably not have occurred under my radar. I believe therefore that it is my duty to send you an exemplar of [my] publication, and provide you with as many you need, to send them to the same correspondents that have received the fourth scanzia from you, and I cordially revere you".

Ramazzini and Moniglia concerning the death of Bagnesi.¹⁰²⁰ Of course, we cannot be certain whether or not Magliabechi listened to Monglia and circulated his publication. We know, however, that Magliabechi never mentioned Moniglia's publications in his letters to the Dutch Republic, which leads to think that he ignored Moniglia's request. This provides further evidence that Magliabechi almost never promoted the circulation of the works of his enemies. Publications of Franceso Redi, Vincenzo Viviani, Giovan Battista Gornia, just to name a few, do not appear amongst the most cited books in his correspondence. Hence, we can conclude that Magliabechi was not so neutral after all. Moreover, Magliabechi did have a severe attitude when it came to dedications to his patrons.

While the circulation of books in the network of Magliabechi was not severely hampered by censorship laws, the printing of books was another matter.¹⁰²¹ Magliabechi used his network in the Dutch Republic to publish books of his Italian colleagues that could not be printed in Italy. A letter from Magliabechi to Pierre Huguetan in 1699, for instance, shows that Magliabechi sent the Amsterdam printer a book "di erudizzione profana" because "V.S. è costà in un luogo, dove le è lecito liberamente lo stampare ciò che vuole".¹⁰²² Another example regards the *De Bello Italico* of Bernardo Ruccelai. Around 1510, Rucellai wrote an account of Charles VIII's 1494 military campaign into Italy and his conquest of the Kingdom of Naples. Magliabechi had found the manuscript of the *De Bello Italico* in the *Biblioteca Medicea Laurenziana* and copied it entirely.¹⁰²³ Magliabechi felt confident that the book could not be printed in "Rome, ne in altro luogo d'Italia" because Ruccellai "scrive con grandissima libertà, parlando per la verità, come si dee, da sinceri Istorici, malissimo d'alcuni, e fra gl'altri del Pontefice Alessandro VI".¹⁰²⁴ To overcome this obstacle, Magliabechi made use of his network in the Dutch Republic, where the conditions of the book trade were a lot more tolerant. He implored his most trusted correspondents, Jacob Gronovius, to find someone in Amsterdam that was willing to print the book. To justify his

¹⁰²⁰ Anonymous, Relazione di tutto quello, ch'è seguito nella Controversia letteraria, tra li Signori Eccellentissimi Gio: Andrea Moneglia e Bernardino Ramazzini intorno alla malattia, e morte della Signoria Marchesa N. N. (Siena: nella Stamperia del Pubblico, 1683).

¹⁰²¹ There is a vast amount of literature available on this subject. An extensive discussion of this literature goes beyond the purpose of this chapter, and I will limit myself, therefore, to mentioning some of the key studies on censorship: Giorgio Caravale, L'ORAZIONE PROIBITA'. Censura ecclesiastica e letteratura devozionale nella prima età moderna. Biblioteca della «Rivista di storia e letteratura religiosa». Studi, vol. 17 (Florence: Leo S. Olschki, 2003). Mario Infelise, 'La censura dans les pays méditerranéens, 1700-1750', in Commercium Litterarium. La communication dans La République des Letters. Forms of communication in the Republic of Letters 1600-1750, 261-181; Ibidem, I padroni dei libri. Il controllo sulla stampa nella prima età moderna (Rome/Bari: Editori Laterza, 2014). Federico Barbierato, eds., Libro e censure (Milan: Edizioni Sylvestre Bonnard, 2002); Sandro Landi, Il governo delle opinioni: censura e formazione del consenso nella Toscana del Settecento (Bologna: Il Mulino, 2000); Ibidem, 'Censure et culture politique en Italie au XVIIIe siècle. Le cas du Grand-Duché de Toscane', Revue d'Histoire Moderne & Contemporaine 45, no. 1 (1998): 117-133. Antonio Rotondò, 'Editoria e censura'', in La stampa in Italia nel cinquecento, ed. Marco Santoro (Rome: Bulzoni editore, 1992), 71-88; A. Panella, 'la censura sulla stampa e una questione giurisdizionale in Firenze alla fine del secolo XVI', Archivio Storico Italiano s. V, XLIII (1909): 140-151; J.A. Tedeschi, 'Florentine documents for a history of the Index of Prohibited Books', in Renaissance. Studies in honor of Hans Baron, ed. A. Molho and J.A. Tedeschi (Florence: G. C. Sansoni 1971), 577-605; E.W. Monter and J.A. Tedeschi, 'Towards a statistical profile of the Italian Inquisitions, Sixteenth to Eighteenth centries', in The Inquisition in early modern Europe: studies on sources and methods, ed. Gustav Henningsen and John Tedeschi (Dekalb: Northern Illinois University Press, 1986), 187-197. P.F. Grendler, 'Printing and censorship', in The Cambridge History of Renaissance Philosophy, ed. C. B. Schmitt, Q. Skinner and E. Kessler (Cambridge: Cambridge University Press, 1988), 25-53.

¹⁰²² Magliabechi to P. Huguetan, undated [1699], UBL, PAP 15, letter published in Alfonso Mirto, *Il carteggio degli Huguetan con Antonio Magliabechi e la corte medicea* (Florence: Rubettini, 2005), 192, "profane erudition", Your Lordship is there in a place, where it is legitimate to print whatever one wants".

¹⁰²³ Magliabechi to J. Gronovius, undated, LMU, Cod 4° Cod. Msc 778, f. 1, "Cento volte le ho voluto scrivere che adesso sono per accennarle. In Libreria di San Lorenzo si trova manoscritta l'Istoria di Bernardo Rucellai, scritta latinamente della venuta di Carlo VIII in Italia. [...] Certo, che per cento e cento capo, sarà la detta l'Istoria desideratissima, e chi che sia vorrà averla. Per vergogna eterna di noi altri, niuno fino ad ora l'ha mai guardato, non che pensato ad essa. Io alcuni anni sono di mia mano la copiai dalla Libreria di S. Lorenzo, e, la manderò costà a V.S.Ill.ma." The *De Bello Italico* of Bernardus Oricellarius can be found in the Biblioteca Medicea Laurenziana, Plut. 68-25. The copy of Magliabechi is still extent in the National Library of Florence: Magl. XXV 168.

¹⁰²⁴ *Ibidem*, "Rome, neither in another place in Italy", "writes with great liberty, sincerely speaking ill, as one should as a sincere historian, about several men, among which Pontiff Alexander VI (1431-1503).

proposal, he argued that the publication would bring the printer fame and profit, all the more because a contested publication would attract the curiosity of the scholarly community. The book, in fact, was much requested in Italy because "questa sua libertà di scrivere farà che l'Istoria sarà anche maggiormente cercata".¹⁰²⁵

Moreover, Magliabechi promised Gronovius that he would generate widespread publicity for the publication. Once the book had come off the press, he himself would immediately buy 50 volumes – which he would pay in advance too – to circulate amongst his friends. These friends were in a position where they could spread word about the publication all over Italy.¹⁰²⁶ Once spread the word, he was convinced that many re-prints were needed to respond to the demand. From this it becomes clear that Magliabechi strategically used his network to guarantee a fast and wide circulation of the book.

However, in the case Gronovius was unable to find a printer, Magliabechi would secretly write to the Amsterdam printer Pieter Blaeu:

"Se V.S.Ill.ma non ha stampatore alcuno al quale voglia far questo servizzio, ne scriverò io segretamente al signore Blaeu, il quale son più che certo che la stamperà subito, già che gli sarà di grandissimo utile. Ho detto che gliene scriverò segretamente, perché non voglio che da niuno si sappia che sia stato io che abbia mandato costà il manoscritto, poiché avrei de' fastidi di Roma dagl'Inquisitori, per quello che nell'Istoria si scrive di Alessando VI."¹⁰²⁷

Magliabechi's request to print a controversial manuscript could have serious consequences. It could get him into trouble with the Inquisition. He therefore needed to take measures of secrecy, ensuring that nobody would know that it was him who sent the manuscript to the Dutch Republic. To conceal the message, Magliabechi asked Gronovius therefore to tear up the letter immediately after reading (see figure 51).¹⁰²⁸

Why did Magliabechi took this risk? Magliabechi believed that the *De Bello Italico* would bring "maggior gloria" to Florence, using the manuscript to restore the degrading scholarly image of Florence. This is certainly a recurring theme throughout this study in general and this chapter in particular. The intellectual climate in the Grand Duchy of Tuscany in the late seventeenth century has a bad press. The suppression of anything that transgressed the boundaries defined by the Church, had turned the Grand Duchy of Tuscany into an improper and corrupt society, closed off from developments abroad. The experience of Antonio Magliabechi seems to corroborate this. He continuously lamented the poor distribution of foreign and Italian titles, as well as the mediocre quality of scholarly publications originating from the Italian peninsula. He wrote, for example, to Nicolaas Heinsius on the 28th of July 1674, that he had compiled his bibliographical report "più con le lacrime, che con l'inchiostro" because "qua non ci è si può dire alcuno che studi per la vera strada".¹⁰²⁹ With the printing of the *De Bello Italico* Magliabechi must have hoped to put Florence back on the map.

¹⁰²⁵ Ibidem, That liberty of writing of his will make the Istoria very looked for".

¹⁰²⁶ *Ibidem*, "non solo non ne pretendo ne anche un esemplare, ma in oltre mi obbligo di comprarne subito cinquanta, per [donare] ad Amici, e pagherò il danaro di esse avanti. I detti cinquanta esemplari che donerò faranno esitare in Italia tutta l'edizzione, e certo che bisognerà ristamparla più volte."

¹⁰²⁷ *Ibidem*, "If Your Illustrious Lordship does not have a printer who wants to do this service, I will write in secret to sir Blaeu [Pieter Blaeu], who, I am sure about it, will print it immediately, because it will be very profitable for him. I say that I will write to him in secret, so that nobody knows that I have sent the manuscript there, because I would otherwise receive trouble from Rome from the Inquisitors, because of what is written about Alessando VI in the *Istoria*."

¹⁰²⁸ *Ibidem*, "La supplico per tutte le sante leggi dell'amicizzia, e per le viscere di Gjesù Cristo signore Nostro, a stracciar questa cartuccia, che le scrivo in estrema segretezza, e confidenza, subito che l'avrà letta, e considerata".

¹⁰²⁹ Magliabechi to N. Heinsius, 28 July 1674, UBL, BUR F 8, "more with tear than with ink", "because nobody here studies on the true path".

a supplie of tusse le sance leggi dell'amicipie e of le vince & Gioni Puiso he nosto a strace Le le cruis in esterno regretera e confidenza subto che l'aura lessa e considerato uno vole le ho voluto sorivera quello che adeno sono y acconnarla. In librerio & Horeno 2 Inoris De Parmando Rucellai priso latrinamense della venuta de Carlo VIII in Hahac. La materia non pue estere ne più degno, ne più curioso 20 ognuno aura caro de viscontrare quello che suive questo Aurore concio La materia non pus dell'isteria maseria serioro, il finiciardino, il Govio, il Nardie - Li tusore oltre all'inchere Parentali egendo lognaso di forenzo de' Mediei il Magnifico, Padre di Leon X fi mendoso Amboria le furlo 2111, Dalla Cepublica Fiorentino a ligno e onde unie Monie De' noi sempi e rella quale abbe parte onde al gan & chi che tro ne era informato lo sile è ottimo e pron mi allungare in questo 17. Alma cio che ne serio Cremo nell'ossavo libro degl'Anofremai. Novi Veneria Bernerdum Civem Florencinum aujus Historias à legisses Divisses alserum Pallustuim aut certe Pallusti this wigton et cet. Perto che prenes e sense capi sarà la desse Monio desiderat . Per vergogna eserno dino alon nuno frio ad ora lita mai quardata non che ad epo lo alcuni anni sono di mia mano la copia della dibrerio di l' forenzi e gale qua in trakie no la stampare la mandero costa a UT: Afma: Il la Tinass che in Ro la youhe segge bal ig Digere probed i questo almo del Rucellai mi fo held mand offendo d'ornarne mobile englari ma is non a ho Breto ne in alte wogo d' Italia si potra mai stampare pite l'Autore sa parlando y la verita, i come si dec da micen Isania, malimino d'alcuni

Fig. 51 The little, easy to be concealed, letter from Magliabechi to Jacob Gronovius requesting the printing of the controversial *De Bello Italico* (LMU, Cod 4° Cod. Msc 778, f. 1)

6.3.1. LIMITATIONS TO SCHOLARLY OPENNESS

While the scholarly journal was able to replace most numerous literary items mentioned in Magliabechi's letters, it did not replace the *commerce de lettres* that revolved around books that deserved more attention or to books that demanded the utmost discretion and privacy. Magliabechi often returns to publications in his letters when they pose a significant threat to his reputation of that of the Medici family. At one level, Magliabechi sat at the center of a pan-European web of learned information and scholarship, managing his status as an independent and relatively free scholar.¹⁰³⁰ There is no doubt that Magliabechi wished to be seen as an important and exemplary citizen of the scholarly network, for he continuously spoke of his duty to share his knowledge with others and invoked the importance of books as precious contributions to the common good of all scholars and authors of Europe. Yet, while member of the Republic of Letters, he felt compelled to stay loyal at the Medici family and the Catholic Church, retaining a certain professional dependence on, and responsibility for, the Grand Duke of Tuscany. This entente occasionally made him vulnerable to awkward dilemmas of loyalty and he needed to set boundaries in order to protected himself and the Medici family.¹⁰³¹ His correspondence sheds light on this entente,

¹⁰³⁰ The definition of an "independent and relatively free scholar" in the Republic of Letters, is borrowed from Jacob Soll, 'Jean-Baptiste Colbert's Republic of Letters', *Republics of Letters: A Journal for the Study of Knowledge, Politics, and the Arts* 1, no. 1 (2018), cit. 3. For more reflections about Magliabechi's, rather, "libertine" spirit, see Salvo Mastellone, 'Antonio Magliabechi: un libertino fiorentino?', *Il pensiero politico* VIII (1975): 33-53; M. Doni Garfagnini, 'Antonio Magliabechi fra erudizione e cultura. Primi risultati dal regesto del carteggio', *Critica storica* XIV (1977):1-39; François Waquet, 'Antonio Magliabechi: nouvelles interpretations, nouveaux problemes', *Nouvelles de la République des Lettres* I (1982): 173-188.

¹⁰³¹ About this argument see also A. Borrelli, '«Intrighi di corte» : due lettere di Antonio Magliabechi a Geminiano Montanari', *Giornale critico della Filosofia italiana* LXVI (1987): 534-547. For a general overview on this topic, see Ian Maclean, *Scholarship, Commerce, Religion; The Learned Book in the Age of Confessions* (Cambridge: Harvard University Press, 2012).

examples of which were also discussed in the first chapter of this study. We have seen, for example, that Magliabechi was rather prudent when mentioning a list of Protestant books to Lorenzo Panciatichi, and limited himself to citing only four publications in order to come to terms with his own faith.

An example of how Magliabechi set boundaries to protect the Medici family is also shown by the following case. When Abraham Cousson expressed to Antonio Magliabechi his desire to dedicate Willem Surenhuis' Latin translation of the Mishnah (*Schna sive totius hebraeorum juris*, see table 1) to Cosimo III and Francesco Maria de' Medici, Magliabechi immediately wrote a letter to Jacob Gronovius:

"Per le viscere del signore Dio, e per tutte le sante leggi dell'amicizzia, supplico V.S.Ill.ma a stracciare questa carta, subito che l'avrà letta, perché mai in tempo alcuno possa esser veduta da anima vivente, scrivendolela io in estrema segretezza, e confidenza. Il degnissimo signore Cosson mi scrive, di aver pensiero di Dedicare due tomi dell'insigne Opera che a sue spese vuol fare stampare, uno al Serenissimo Gran Duca, e l'altro al Serenissimo e Reverendissimo signore Principe Cardinale. Se, intorno a questo non gli rispondo cosa alcuna, prego V.S. Ill.ma a dirgli da mia parte, le due seguenti cose. La prima si è, che se nelle Annotazzioni a quell'Opera, come è facile, sieno cose contro di noi Cattolici Romani, non credo che la Dedicatoria al Serenissimo Gran Duca, che è un Principe religiosissimo, sia per piacere. Tanto peggio poi tornerebbe il Dedicare una Opera nella quale fossero cose contro di noi Cattolici Romani, a S.A.Rev.ma, che è Principe non solamente di sangue, ma anche della medesima Chiesa Romana. Secondariamente la prego ad avvisargli, che qua non è l'uso regalare, a far donativi, a chi Dedica Libri."¹⁰³²

Another example sheds light on how scholarly and confessional boundaries intertwined. This example show also that the cross-cultural exchange between the Dutch Republic and the Grand Duchy of Tuscany did not occur without tensions and reservation. In table 1, we see a sharp peak of references to the publication *Divi Chrysostomi Epistola ad Caesarium monachum*, published in Utrecht in 1687 by the French scholar Emery Bigot. The history of this publication goes back to the sixteenth century, when the theologian Pietro Martire Vermigli (1499-1562) was the first to discover the controversial manuscript of Chrysostom's letter to Caesarius. This letter to Caesarius, who had become a convert to the Apollinarian heresy, was written to reduce Caesarius to the Catholic faith. The letter contained a passage illustrating Chrysostom's understanding of Jesus Christ's presence in the consecrated elements of bread and wine. He maintained that, in opposition to the Apollinarian heresy, there are two complete natures in the one person of Jesus Christ. This remark about the holy Eucharist directly contradicted the Roman Catholic doctrine of transubstantiation, which was one of the principal points of controversy between the Catholic and Protestant faith.¹⁰³³ Vermigli made a Latin transcription of the letter and carried it with him to England, after he had fled Italy because of his adherence to the Protestant faith. Together with the Protestant reformer Bernardino Occhino (1487-1564), Vermigli delivered the letter to the archbishop

¹⁰³² Magliabechi to J. Gronovius, undated, LMU, Cod 4° Cod. Msc 778, f. 9, "In the bowels of Christ, and in every sacred law of friendship, I beg Your Illustrious Lordship to tear up this paper, immediately after reading it, because it cannot been seen by a living soul, as I am writing it in extreme secrecy and confidence. The very decent sir Cosson writes me, that he is thinking about dedicating the two volumes of the eminent work that he is about to print on his expenses, one to the Very Serene Grand Duke, and the other to the very Serene and Reverend sir prince the Cardinal. If I do not anwer him regarding this, I bego Your Illustrious Lordship to say to him on my behalf, the two following things. The first one is, if in the annotations of this work, which is easy to believe, there are things against us, Roman Catholics, I believe that a dedication to the Serene Grand Duke, who is a very religious prince, is not very pleased. Even worse would turn out the dedication, in the case there is written something against the Roman Catholics, to the Serene and Revered Lord, who is not only a prince by blood, but also of the same Roman Church. Second, I beg you to notify him, that here it is not very common to give gifts to those who dedicate books."

¹⁰³³ Jetze Touber, 'Religious Interests and Scholarly Exchange in the Early Enlightenment Republic of Letters : Italian and Dutch Scholars, 1675-1715', *Rivista Di Storia Della Chiesa in Italia* 2, no. 2 (2014): 420-21.

Thomas Cranmer (1489-1556), leader of the English Reformation, who deposited it in his library. After the death of Cranmer, the document got lost and Vermigli was accused of having forged it.¹⁰³⁴

Vermigli's reputation was cleared by the rediscovery of the French scholar Emeric Bigot, who found the letter in 1668 in the San Marco library in Florence.¹⁰³⁵ When he discovered the manuscript, he was together with Magliabechi who helped him with the copying of manuscripts in the library. In a letter to Cuper, Magliabechi described Bigot's surprise upon discovering the Chrysostom epistle, who showed him the document "con grandissima allegrezza".¹⁰³⁶ Magliabechi had to promise "a non parlarne mai ad anima vivente" so that Bigot "Pavrebbe data a suo tempo in luce".¹⁰³⁷ More than 10 years later, on the 21th of November 1679, Magliabechi wrote to Cuper that he had received the first printed sheets of Bigot's edition of *De vita Johannis Chrysostomi dialogus*, in which he had enclosed the text of Chrysostom's letter. However, when the book was finally printed in 1680, the professors of the University of Sorbonne in Paris objected to its distribution and ordered the letter to be cut out of every single copy. Unlike the French university professors, Magliabechi was not concerned about Bigot's discovery. Magliabechi knew that Bigot was himself a Catholic, and would therefore discuss the manuscript in such a way that he would easily transform the contents of the text "in favor nostro".¹⁰³⁸

Then, in 1681, Étienne le Moine (1624-1689), professor of theology at the University of Leiden, urged Laurens Gronovius, who was in Florence at the time, to find out from Magliabechi were Chrysostom's letter to Caesarius was. As pointed out by Jetze Touber, Le Moine had heard from Bigot himself about the discovery of the manuscript while they frequented together the local academy in Rouen.¹⁰³⁹ Magliabechi, who had promised Bigot not to tell anyone about his discovery, answered Gronovius that he did not know in which library Bigot had found the document and he discouraged him to look for it. Yet, despite Magliabechi's refusal to cooperate, Gronovius found the letter in the San Marco library and immediately sent a copy of it to Le Moine. He had done so without letting Magliabechi know. When Magliabechi heard that Le Moine was about the publish the letter, he immediately wrote to Jacob Gronovius:

"Sento che ¹ dottissimo signore Monaco, sia per istampare quella lettera a Cesario Monaco. Tal cosa certo dispiacerà sommamente la Gran Duca Serenissimo mio signore, e lo costrignerà a non far più la licenza ad alcuno di copiare nella Libreria di S. Lorenzo, ed ad ordinare a questi Religiosi che anno librerie, a non lasciar copiare cosa alcuna a Forestieri. In oltre, il Padrone Serenissimo, da V.S. Ill.ma, e dal suo signore Fratello, prenderà questo, e certo se ne sdegnerà non poco. La prego per tanto ad operare, che ¹ detto dottissimo signore Monaco, non voglia, con istampare questa lettera, esser cagione di tanto male. Mi onori di riverirlo in mio nome, e di significargli, che la sua grandissima fama, non è per accrescersi, per dar fuora la traduzzione di quella Lettera, e che ancora io, benché non abbia seco merito d'alcuna sorte, lo prego con ogni maggiore affetto, a tralasciare di stamparla."¹⁰⁴⁰

¹⁰³⁴ For Vermigli's use of the Chrysostom, see M. W. Anderson, *Peter Martyr, a Reformer in Exile (1542-1562). A Chronology of Biblical Writings in England & Europe, Nieuwkoop: B. de Graaf, 1975), 127-60.*

¹⁰³⁵ Leonard E. Doucette, *Emery Bigot. Seventeenth-Century French Humanist* (Toronto: University of Toronto Press, 1970), 3-48. ¹⁰³⁶ Magliabechi to G. Cuper, 28 June 1692, KB, KW 72 D 10, f. 73-74, "with great happiness".

¹⁰³⁷ Ibidem, "Not to speak about it to a living soul", "would have brough it to light in good time".

¹⁰³⁸ Ibidem, "common sense in our favor".

¹⁰³⁹ Jetze Touber, 'Religious Interests and Scholarly Exchange in the Early Enlightenment Republic of Letters : Italian and Dutch Scholars, 1675-1715', 424.

¹⁰⁴⁰ Magliabechi to J. Gronovius, 2 September 1681, Rhenen, Archief van de familie Van Asch van Wijck, inventarisnummer 1272, "I hear that the very learned sir Monaco is about to print that letter to Cesario Monoca. That will dissapoint very much the Grand Duke, Our Serene Lord, and it forces him to not give his permission to anybody to copy manuscripts in the Library of San Lorenzo, and to instruct to all religious men who possess libraries, not to let any foreigner copy anything. In addition, Our Serene Lord, will hear that from Your Illustrious Lordship and your brother, and will be disgusted more than a little by you. I therefore beg you to operate that that very learned sir Monaca, does not want to be the reason for something so bad if he prints that letter. You honor me to revere him in my name, and to let him know that his great reputation will not increase

Jacob was ordered by Magliabechi to do everything in his power to convince Le Moine not to publish the letter. In the case that Jacob would not manage to stop the printing of the letter, this would have serious consequences for the scholarly community. Magliabechi, in fact, warned Gronovius that Cosimo III would ban all foreigners from copying manuscripts outright, and that he, above all, would blame Jacob and Laurens for everything. The situation seems to have been something of an embarassment for Magliabechi and the Grand Duke, who were both offended that Laurens had betrayed their trust and benevolence. The Grand Duke had taken the liberty to grant Laurens access to the Florentine libraries, entrusting that, in the case it would happen that Laurens found the manuscript, would ask his permission to copy it:

"Consideri V.S.Ill.ma come sia per piacere a S.A.S., che avendo dato licenzia al suo signore Fratello non solo di copiare il tutto in Libreria di S. Lorenzo, ma anche di maneggiare per tanto tempo le Pandette che non si lasciano vedere ad alcuno, a suo dispetto poi esca quella lettera, ecc. Qualche tempo fa, fu messo in considerazione al Padrone Serenissimo che era bene lo stracciarla dal manoscritto. S.A.S. non volle che in alcuna maniera si stracciasse, dicendo che non avrebbe creduto che alcuno senza sua licenzia si fosse ardito di copiarla, e darla fuora."¹⁰⁴¹

If it came to light that Gronovius had sent the manuscript to Le Moine, the Grand Duke would receive a lot of complaints from the Inquisition, which, of course, needed to be avoided. In addition, added Magliabechi, Laurens and Jacob would also betray the confidence of Bigot, who had every right to publish the manuscript before Le Moine. On the back of Magliabechi's pressing letter, Jacob Gronovius scrabbled the following words: "Als gevreest hebbe ik en mag sonder consent van Bigot niet gedrukt worden. Syn beloften sijn politijk, verlangen naer antwoort van Bigot".¹⁰⁴² This remark seems to indicate that Jacob is not worried at all about the Grand Duke's threats as to the closing of the libraries. Rather, he is more interested in the answer of Bigot, who had to give his permission for the publication. Whether Bigot had given his permission or not, in 1685, Le Moine published the Latin text of Chrysostom's letter.¹⁰⁴³

Magliabechi also informed Apollonio Bassetti about what had happened in the San Marco Library. On the 12th of October 1681, Magliabechi writes to Bassetti to let him know that he took the liberty to write Jacob Gronovius a letter, in which he explained "acerbissimamente, come ricercava l'atrocità della cosa" why the manuscript of Chrysostom should not be published by a Protestant scholar as Le Moine.¹⁰⁴⁴ In an earlier letter to Bassetti, Magliabechi had already explained that Laurens Gronovius had asked him about the manuscript, which he was trying to locate for someone who intended to "propogare il Calvinismo, e medesimamente far dispetto ad esso".¹⁰⁴⁵ In this letter, he asked Bassetti

by publishing the translation of that letter and because he will not have any credit for it, I beg him, with the greatest affection, to disregard the printing of it."

¹⁰⁴¹ *Ibidem*, "Consider Your Illustrious Lordship how much pleasure the Grand Duke will experience, who has given his permission to your brother not only to copy everything in the library of San Lorenzo, but also to handle the *Pandette* for a long time, which are not shown to anybody, to find out that he betrayed him when the letter is published. Some time ago, the Serene Lord was advised that it was better to tear up the manuscript. The Grand Duke did not want in any way that it would be ripped up, saying that he did not believe that anyone without his permission dared to copy it, and to publish it."

¹⁰⁴² Magliabechi to J. Gronovius, 15 June 1681, Rhenen, Archief van de familie Van Asch van Wijck, inventarisnummer 1272, "As I feared, it is not allowed to print it without the permission of Bigot. His promises are political, wishing for the reply of Bigot."

¹⁰⁴³ Étienne Le Moine, Varia sacra (Lugduni Batavorum: D. à Gaasbeek, 1685).

¹⁰⁴⁴ Magliabechi to A. Bassetti, 12 October 1681, ASF, MdP, Carteggi dei Segretari, 1526 (1681), "severly, as required by the atrocity of the situation".

¹⁰⁴⁵ Magliabechi to A. Bassetti, July 1681, ASF, MdP, Carteggi dei Segretari, 1526 (1681), "to stirr up the Calvinist faith, and at the same time to spite it".

what to do, especially because there were differences of opinions if destroying the manuscript would solve everything. From a later letter to Bassetti, it becomes clear that Magliabechi had begged Cardinal Leopoldo de' Medici not to tear the manuscript apart. Magliabechi was convinced that this was not necessary because if Bigot, or another Catholic scholar, would have published the manuscript "poiché, circa al luogo intorno al SS. Sacramento, che pare così chiaro, e strano, contro di noi, gli potrà dar senso comodo".¹⁰⁴⁶

It was not until 1681, that Gisbert Cuper had found out that is was Laurens Gronovius who had equipped Le Moine with the copy of the manuscript. Cuper had read in the *Nouveau Voyage d'Italia* from the Huguenot François Massimilien Misson, that Cosimo III had expressly forbidden Magliabechi to show the manuscript of Chrysostom to anybody. Reading this, Cuper also noted that there was some confusion about where the manuscript was and whether it was written in Latin or in Greek. To know more about the manuscript and the claims made by Misson, Cuper approached Magliabechi on the 2nd of February 1692. Magliabechi answered Cuper the following:

"Perché vengono moltissimi signori Oltramontani nel passar di Firenze al mio povero Museo, non mi sovviene chi il detto signore Massimiliano sia. Io non gli posso aver detto, se non che l'Epistola Greca di S. Gio. Crisostomo a Cesario, qua in Firenze non ci è, il che è verissimo, essendoci solamente una traduzzione Latina. [...] Gli posso per tanto aver detto, che qua in Firenze non si trova il testo Greco, ma non già che non ci sia stato, e forse che non si trovi, in qualche libreria del Mondo. Se il signore Misson ha scritto diversamente, certo che non mi ha inteso."¹⁰⁴⁷

Cuper, however, was not satisfied with Magliabechi's explanation and wrote him back for further clarification. Magliabechi responded to Cuper's inquiry with a certain nuisance, reminding him about the embarrassments he had to face when Laurens Gronovius sent the manuscript to the Dutch Republic without his and the Grand Duke's permission. He bitterly answered Cuper that he did not know if a Greek version of the manuscript exists because " non ho veduto ne meno i manoscritti di questa sola Città, non che di tutta Europa, che possa asserire che questa Lettera non si trovi".¹⁰⁴⁸ Evidentially, reluctance on the part of Magliabechi to talk to his Protestant scholarly friends about the controversial text becomes clear from this letter. He clearly equivocates on the point and after repeated other inquiries and various letters from Cuper, Magliabechi suggested him that he could contact Laurens Gronovius about the matter.¹⁰⁴⁹ It was Gronovius, after all, who had sent north a manuscript which the Grand Duke preferred to keep stored.

¹⁰⁴⁶ *Ibidem*, "Because, that piece regarding the Holy Sacrament, which seems to clear, and strange, against us, he would easily make sense out of it".

¹⁰⁴⁷ Magliabechi to G. Cuper, 2 February 1692, KB, KW 72 D 10, f. 52-53, "Because so many *oltramontani* (those from over the Alps) came to Florence to see my poor museum, I do not remember who is this sir Massimiliano. I could only have said that the Greek Epistle of Chrysostom to Cesario is not in Florence, which is very true, because here there is only the Latin translation. I could have said to him, that here in Florence one does not find the Greek text, but [I have not said that] it is not to be found in another library in the world, or that it was ever there. If sir Misson has written something different, it is sure that he has misunderstood me."

¹⁰⁴⁸ *Ibidem*, "I have not even seen every manuscript in this city alone, let alone in Europe, that I can claim that that letter not exists".

¹⁰⁴⁹ Magliabechi to G. Cuper, 16 May 1692, KB, KW 72 D 10, f. 63.

Conclusion

This study has shown that we can rethink the relations between the Dutch Republic and the Grand Duchy of Tuscany as an historical venue of networking activity. Taken together, the various case studies throughout this work have illustrated the fundamental relationship between of increasingly networked world for conveying people and objects from one place to another, across various kinds of borders. Each interaction, shaped as it was by religious conversions, secrecy, trust, distrust, rivalry, friendship and lack of cooperation, played an important role in the shaping of the scholarly network as a whole. That network in turn provided the conditions for exchange, information flow, and growth over larger stretches of time and place. To analyze these networks, this study has demonstrated how formal methods derived from social network analysis can be fruitfully applied to selected bodies of historical data, with the result that the concept of network is no longer a mere metaphor but is the subject of a historical research method in itself.

The ongoing digitization of primary sources and the proliferation of born-digital documents increasingly changed our interactions with research material. I have argued in this study not for wholly replacing close reading in historical research, but, rather, for complementing it with explorations of data through models of statistical analysis or multimodal networks. This mixed use of qualitative and quantitative methods, coined by me as disclose reading, is particularly important in the historical field were data is often parse, incomplete and fragmented.

Moreover, we have seen that the systematic analysis of epistolary networks (i.e. the distant reading quantitative patterns supported by the close reading of letters) enables us to observe in more detail how Dutch and Italian scholars managed their epistolary relationships and to what end. We have seen that they self-consciously enacted their networks, moving between dense and brokerage networks and struggled to find a balance between these two. This somehow enabled us to provide blueprints of the academic career of scholars showing the precise moments when they strived for closure or openness in their network. On the one hand, scholars needed a network of densely connected contacts to guarantee that their network was secure and trustworthy. A secure network of trusted contacts allowed individuals to exchange confidences and secrets. Moreover, Dutch scholars brought with them many letters of introductions and book-gifts to get into contact with leading scholars abroad. These letters and books often emphasized their connections to mutual contacts who vouched for their scholarly merit and credibility. The sharing of mutual contacts was certainly reassuring, providing benefactors a reason to trust a 'stranger'.¹⁰⁵⁰ This was especially needed in a time of religious disunity, when scholars needed to present themselves as credible scholars, as "eretici dottissimi" in the words of Magliabechi, even if they held a different faith. On the other hand, they had to move outside their own circle of trust in order to collect innovative information from around the world. As the network gradually evolved, they opened their network to other minds and realized that they did not want to define themselves as belonging to one local group. In fact, beyond these local and dense circles of learning, stretched out the Republic of Letters. To do so, scholars needed to navigate their way through the network. This navigation requires, in the analysis of the network, to find the structural holes between parts of the network that interact very little with each other. Consequently, increasing their brokerage role in the network enabled scholars to have access to innovative information and to bring people together "from opposite sides of the hole". They could either broker contacts, but also isolate contacts, fulfilling as such a gatekeeping role in the

¹⁰⁵⁰ About this argument, see Russell Hardin, Trust & Trustworthiness (New York: Russell Sage Foundation, 2002), 14-23.

network. Network metrics help us to understand how these instances of prudence and the desire for knowledge alternately combined and clashed throughout the scholarly network.

Negative ties, such as hatred and jealousy, contributed to serious tensions in a variety of social contexts. They could ruin collaborations, harm reputations, decrease performance and induce conflicts in the scholarly network. In chapter 5 we questioned and introduced an alternative approach to the continuing representation of the relations between scholars in purely positive terms in the growing literature on networks in the Republic of Letters. Collaborations, friendship and memberships are commonly interpreted as the edges of the network. By using the methods derived from structural balance theory we challenged this one-dimensional, positive approach and explored as well the nature, dynamics and impact of negative relations in the early modern epistolary network between the Dutch Republic and the Grand Duchy of Tuscany. Specifically, chapter 5 has underlined that negative relationships in the network form different structures than positive relations, and are therefore indispensable if one wishes to understand how the networks of the Republic of Letters took shape over time. In addition, negative relations dictated the choices people had to make in the formation of their relationships: they sometimes had to take sides or to mediate. We have also seen that, despite the relative rarity of negative edges, they are more likely to drive attitudes and behavior, as compared to the more frequently observed positive ties.

A distant reading approach allowed me to model the structural changes in the network caused by balance and unbalanced triads and its impact on the developments of the topological structure of the network. This distant reading approach enabled me to identify patterns that required localized attention and close reading. Consequently, a close reading of the correspondence of Antonio Magliabechi confirmed that he indeed was continuously seeking to find a balance in his network, trying to correct irregularities in his relationships. Sometimes he had to do this secretly, by finding a detour that allowed him to stay in contact with the foes of his correspondents, while, at other times, he openly spoke out in defense of his friends, with the risk of losing important contacts in his network. The bird's-eye view of quantitative analysis performed in this chapter sheds light on these dynamics, and worked in tandem with the equally necessary close-reading approach to provide a more comprehensive insight of the conflict and reconciliations in the scholarly network as well as suggestions for further research.

Because of the hybrid nature of epistolary networks and the lack of earlier studies that are undertaken to represent this complexity, in this study I proposed an explorative approach to deal with multiple kinds of data. In studying the networks that held the Republic of Letters together, we are often confronted with situations in which multimodality can be useful. The Republic of Letters was not a single community that merely consisted of scholars writing letters to each other, but constituted a dynamic society in which all kinds of objects were exchanged. Amongst these objects, early modern scholarly correspondence revolved mostly around books. Books dominated the content of letters in the shape of literary reports that informed scholars about the most recent publications, debates and works-inprogress. These reports gave rise to a typical power-law distribution, telling us that Magliabechi's *modus operandi* reveals a very sophisticated system for gathering information from a powerful social network and sharing it with the learned community at large. The numerous bibliographical references in Magliabechi's letters coexist with a vast majority of book-hubs that carry most of the action. These book-hubs kept the conversations and discussions going and flowing in the network, making the letter an irreplaceable medium even after the arrival of the literary journal in the late seventeenth century.

Book-citations offer the possibility to map the scholarly field by providing measures of proximity between books and authors, the frequency of their presence in different letters as well as their position in the epistolary network. Such an analysis shows that books were not only a source of information, but actively participated – had agency- within the structure of the epistolary network. We came across several

case-studies in which I have illustrated that through books, individuals were able to establish, strengthen, and encourage networks. These network dynamics find their ultimate expression in book dedications and gifts. Vice versa, books could also impede and endanger networks when they were published out of revenge. Moreover, controversial publications could put relationships and reputations at risk. Furthermore, multimodal networks do not only capture the interactions between books and letters in context, they also enable us to explore the different networks in which Magliabechi was operating. On the one hand, he needed to follow the idea of reciprocal exchange and the equity of relations as defined by the Republic of Letters, while, on the other hand, he had to deal with the hierarchical relations of the State and Church. These dynamics are difficult to analyze in a unimodal network. The visualizations and observations taken together demonstrated not only what we can discover about epistolary networks, but also, more generally, how social network theory can transform the way we interact with historical data and questions. In particular, an approach to organize and design one's dataset, which allows us at the same time to interact with incomplete and uncertain data, is useful to structure our thoughts, improve the decision and hypothesis making process. Multimodality enhances the interoperability of historical data, allowing us to explore networks from multiple configurations and changing perspectives. This interactive building of hybrid network mediates between traditional research and digital technology, between close and distant reading. The next step could be to statistically model these networks, and so be able to pursue new research questions by integrating an even broader wealth of historical data. This remains, however, for future research.¹⁰⁵¹

¹⁰⁵¹ As noted earlier, the research project "The Sphere. Knowledge System Evolution and the Shared Scientific Identity in Europe" of the Max Planck Institute for the History of Science (MPIWG) in Berlin is currently developing a model to analyze multilevel networks to explain from a social and historical perspective how knowledge and ideas transform over time. In addition, the research project BLIZAAR - Hybrid Visualization of Dynamic Multilayer Graphs launched in January 2019 a call for historians who wish to explore their data by means of Intergraph, a visual analytics tool to explore multilayer graphs, 'BLIZAAR', accessed 22 January 2019, http://blizaar.list.lu/doku.php.

Summary

The structure and dynamics of scholarly networks between the Dutch Republic and the Grand Duchy of Tuscany in the 17th century

In recent years, the theoretical and quantitative approaches of social network analysis have already made an impact in the historical field. Specifically, the Republic of Letters, the intellectual community of the sixteenth, seventeenth and eighteenth century, has emerged as a central subject in the digital humanities field. Based on large quantities of letter collections from the early modern period and with the help of digital techniques, the social networks of scholars are mapped in order to gain more insight into how the Republic of Letters worked in practice. But although the use of network analysis in historical research has attracted more and more scholarly attention, developments in this field remain open for further research. Most studies underline the potential utility of network metrics to better understand and study the past, but leave their exploration for future research. In addition, the use of digital tools is often looked upon in a suspicious way, considered to be too simplistic and hence unsuitable to deal with the complexity and uncertainty of historical sources. It is therefore important that we continue to test and improve our digital tools as well as to experiment with network models that give nuance, sophistication and detail to historical data. This study takes up this challenge and demonstrates how social network analysis enables us to advance the cause of historical inquiry.

This study focuses on the epistolary contacts between scholars from the Grand Duchy of Tuscany and the Dutch Republic during the reign of Cosimo III (1670-1723). The lively epistolary exchange between these two societies allows for a comprehensive view on the Republic of Letters, providing a framework to grasp the sometimes, conflicting dynamics in the sharing of knowledge. The opposed religious and social paradigms often influenced the choices people had to make in the formation of their network, and the strategies they adopted to achieve or ignore coordination on a collective scale. Indeed, early modern scholars had to deal with many tensions and inefficiencies at a time in which the openness of communication was not always guaranteed. These tensions ranged from restrictions imposed by the Roman Inquisition to scholarly rivalries. As a result, it seems that scholars often found themselves between extremes, struggling to find a balance in dealing with these tensions. They had to strategically negotiate between transparency and secrecy in written communication, between friendly and hostile relationships, and between open and closed circles in their network.

This dissertation consists of six chapters which contents can be broken down into two parts. The first part consists of three introductory chapters that provide background and an historical context on the relations between Tuscany and the Dutch Republic during the reign of Cosimo III. In particular, the first chapter discusses that secrecy and confidentiality were needed to foster the exchange between these two societies. The second chapter focuses on the travels of prince Cosimo in the Dutch Republic in the years 1667-1669 – an experience that has undoubtedly aroused the young prince's interest to maintain close contact with the Dutch scholarly community, despite his awareness of their difficult relationship with the Papacy. In order to foster and strengthen his relationships with the Dutch, Cosimo primarily relied on the administrative techniques and methods of learning handled by two principal figures at the Medici court: the grand ducal secretary Apollonio Bassetti (1631-1699) and the court librarian Antonio Magliabechi (1633-1714). The co-existence of two such powerful men at the service of Grand Duke Cosimo III favored a substantial increase of correspondence and interchange between the Dutch

Republic and Florence in the second half of the seventeenth century. The third chapter discusses the stream of Dutch travelers who made their way to the Grand Duchy of Tuscany. The favorable attitude Cosimo III had towards them attracted several Dutch scholars, who came to Florence with the prospect of consulting the rich manuscript collections in the Florentine libraries.

The focus of the second part lies on the complexity of modeling historical "big data" with the help of quantitative methods to assess the structure of the relations between the Grand Duchy of Tuscany and the Dutch Republic. To do so, this study draws inspiration from social network theory. Social network theory highlights the constitutive importance of social networks and the techniques and strategies individuals used to forge ties with each other. The fourth chapter uses data-mining techniques to extract patterns of data from two datasets of letters (the *Catalogus Epistularum Neerlandicarum* and the Card Catalogue of the National Library of Florence) to create a network representation of the epistolary relations between these two societies. This network has been further enriched with archival transcriptions of letters extent in library collections of the Netherlands, Germany and Italy. The result is a dataset that compromises metadata of circa 10.000 correspondences. These distant reading techniques will be combined with a close reading of the correspondence to underpin the evolving dynamics of the early modern epistolary network. The value of this research lies thus in the combination of methods for network analysis for distant reading of large sets of letters with close reading devoted to achieving a deep understanding of the historical source. To denote this approach, this study introduces the term "disclose reading".

In the fourth chapter, a set of metrics are discussed to capture some subtle distinction in how one's network position benefits or disadvantages those people who occupy them. Specifically, I argue how quantitative network analysis can be used to analyze how early modern scholars strategically moved between closed and open circles in their network, showing how early modern scholars build network of trust and capitalized on opportunities for brokerage. On the one hand, they needed to guarantee that their network was secure and trustworthy – especially in light of the many tensions imposed by the Roman Inquisition. This means that they needed to build a closed and secure network of trusted correspondence first, before reaching out to more risky contacts abroad. Networks with closure - that is to say, networks in which everyone is connected to each other - facilitate coordination within the group, help to build a reputation, increase trust and are less likely to be infiltrated by outsiders. Yet, if people move in the same circles and know the same people, it is very likely that they have access to the same resources and information. To have access to innovative information and resources, they needed to get involved with scholars from outside their own circle of trust, reaching out to others who could provide them with new information and recently published books. In other words, they needed to become brokers in the networks. Hence, the key for a successful early modern career is to strike the right balance between closure and openness.

The fifth chapter focuses on the notion of structural balance, based on theories of social psychology developed by the Austrian psychologist Fritz Heider in the 1940s, which can be re-used in the context of the Republic of Letters to reason about how fissures in an epistolary network may arise from the dynamics of conflicts, disagreement and antagonism between corresponding scholars. In most approaches that map the Republic of Letters digitally, the edges have a rather positive meaning. Such representations reinforce the idea that the Republic of Letters was an ideal community of peaceful co-existence between intellectuals. Yet, traditional literature has taught us that the harmony of the ideal of the Republic of Letters was rarely achieved in reality. For instance, within the dynamics of cross-cultural exchanges between the Dutch Republic and the Grand Duchy of Tuscany, scholars had to deal with the many tensions and conflicts arising from the opposing political and religious realities. In addition, jealousy and competition dictated the choices scholars had to make in the formation of their network. Therefore,

this chapter will argue that the digital representation of the early modern scholarly network should also account for the negative and hostile relations in the network. To this end, the structural balance approach offers to capture both positive and negative links to understand the tensions within the network. In addition, it assumes that people constantly evaluate the quality of their relationships in order to achieve a balanced position in a network.

Because of the hybrid nature of epistolary networks and the lack of earlier studies that are undertaken to represent this complexity, in the sixth chapter an explorative approach has been proposed to deal with multiple kinds of data. In studying the networks that held the Republic of Letters together, we are often confronted with situations in which multimodality can be useful. Most studies employ a one-modal network in which one node of the graph represents a correspondent and an edge between a pair of nodes correspondents represents a letter exchanged between them. Yet, reducing the early modern society to a network in which the actors are connected by one single type suggests a static uniformity that barely takes into account the multi-facetted dynamics of epistolary exchange. Indeed, the Republic of Letters was not a single community that merely consisted of scholars writing letters to each other, but constituted a dynamic society in which all kinds of objects were exchanged. Amongst these objects, early modern scholarly correspondence revolved mostly around books. Therefore, the sixth, and final chapter discusses the importance of books as dynamic actors within the early modern network was tied, and untied, together primarily by means of books: they could foster ties when given as gift as well as influence and endanger the network if there were subject to the strict censorship laws imposed by the Holy Office.

Sommario

La struttura e dinamica delle reti intellettuali fra la Repubblica Olandese e il Granducato di Toscana nel Seicento

Soprattutto negli ultimi anni, l'analisi delle reti sociali (nota anche come *social network analysis*) ha avuto un considerevole impatto sull'avanzamento delle discipline storiche. In particolare, la Repubblica delle Lettere, la comunità intellettuale del XVI, XVII e XVIII secolo, è emersa come un argomento centrale nel campo delle *digital humanities*. Sulla base di una gran quantità di dati raccolti studiando le corrispondenze dell'età moderna con l'aiuto di metodi computazionali, si è proceduto a mappare il *social network* dei letterati per ottenere maggiori informazioni su come la Repubblica di Lettere funzionasse nella pratica. Ma nonostante l'analisi delle reti abbia attirato sempre più attenzione nel mondo accademico, tale ambito di ricerca non ha ancora completamente espresso tutte le proprie potenzialità. La maggior parte degli studi sottolinea la utilità delle metriche di rete, ma lascia la loro esplorazione per ricerche future. Inoltre, l'uso di strumenti digitali è spesso considerato in modo sospettoso, essendo ritenuto troppo semplicistico e quindi inadatto per affrontare la complessità e l'incertezza delle fonti storiche. Abbiamo quindi bisogno di continuare a verificare e affinare i nostri strumenti digitali oltre che sperimentare nuovi modelli di analisi che forniscano sfumature, raffinatezza e dettagli ai dati storici. Questa tesi coglie questa sfida e dimostra come l'analisi delle reti sociali ci consenta di avanzare la causa dell'indagine storica.

Questa tesi si concentra sui rapporti epistolari tra i letterati del Granducato di Toscana e della Repubblica Olandese durante il regno di Cosimo III (1670-1723). Il vivace scambio epistolare tra queste due società ci offre una visione comprensiva della Repubblica delle Lettere, fornendoci un quadro per cogliere le dinamiche, talvolta contrastanti, nello scambio dei saperi. Questo studio mostra che contesti religiosi e sociali opposti influenzavano le scelte delle persone nella formazione delle loro reti così come le strategie che essi adottavano per raggiungere o ignorare una collaborazione collettiva. In effetti, i letterati del prima età moderna dovevano affrontare molte tensioni e inefficienze in un momento in cui la libertà di comunicare non era sempre garantita. Queste tensioni andavano dalle restrizioni imposte dal Sant'Uffizio alle rivalità fra letterati, i quali dunque erano alla ricerca di un costante equilibrio per affrontare queste tensioni. Tutto ciò imponeva ai letterati la necessità di dover negoziare strategicamente tra trasparenza e segretezza nella comunicazione scritta, tra relazioni amichevoli e ostili e tra circoli aperti e chiusi nelle loro reti.

Questa tesi consiste di sei capitoli e può essere suddivisa in due parti. La prima parte è composta da tre capitoli che forniscono un quadro storico dei rapporti tra il Granducato di Toscana e la Repubblica Olandese durante il regno di Cosmo III. In particolare, il primo capitolo sostiene che segretezza e confidenzialità erano due ingredienti essenziali per favorire lo scambio tra la Toscana e l'Olanda nella seconda metà del Seicento. Il secondo capitolo si concentra sui viaggi di Cosimo nella Repubblica Olandese negli anni 1667-1669, un'esperienza che indubbiamente spinse l'allora giovane principe a mantenere stretti rapporti con la comunità intellettuale olandese, nonostante il difficile rapporto di quest'ultima con il Papato. Per favorire e rafforzare i suoi rapporti con gli olandesi, Cosimo si affidò principalmente a due figure della corte Medicea: il segretario granducale Apollonio Bassetti (1631-1699) e il bibliotecario Antonio Magliabechi (1633-1714). La presenza di due uomini così potenti al servizio del Granduca favorì un sostanziale aumento nella corrispondenza e interscambio tra la Repubblica Olandese e Firenze. Il terzo capitolo discute del flusso di viaggiatori olandesi verso il Granducato di Toscana.

L'atteggiamento favorevole che Cosimo III ebbe verso questi viaggiatori attrasse molti letterati olandesi, i quali si approfittarono di questa opportunità per consultare le ricche raccolte di manoscritti nelle biblioteche fiorentine.

La seconda parte (capitoli 4-6) si focalizza sulla complessità di maneggiare grande quantità di dati storici attraverso l'uso di metodi quantitativi, con particolare riferimento all'analisi delle reti sociali. Tale teoria evidenzia l'importanza costitutiva delle reti sociali e le tecniche e strategie utilizzate dagli individui per stringere rapporti tra di essi. Il quarto capitolo illustra l'utilizzo di tecniche di *data mining* applicate all'analisi di due cataloghi di corrispondenze (il *Catalogus Epistularum Neerlandicarum* e il Catalogo dei carteggi della Biblioteca Nazionale Centrale di Firenze). I dati così ottenuti sono stati ulteriormente arricchiti con trascrizioni di lettere esistenti nelle biblioteche dei Paesi Bassi, della Germania e dell'Italia, creando così un database contenente informazioni relative a circa 10.000 corrispondenze. Oltre a fornire la base per l'applicazione degli algoritmi, tale database costituisce il nucleo di questa ricerca, il cui valore risiede quindi nella combinazione di *close* e *distant reading* delle corrispondenze. Nell'ambito di questo studio, tale combinazione è identificata con il termine *disclose reading*

Nel quarto capitolo, è discusso il modo in cui la posizione di un individuo all'interno di una rete possa generare una situazione di vantaggio (o svantaggio). In particolare, i letterati della prima età moderna avevano la necessità di muoversi strategicamente tra circoli aperti e chiusi, usufruendo da un lato delle opportunità di intermediazione, e garantendo dall'altro lato l'affidabilità della propria rete soprattutto alla luce delle numerose tensioni imposte dal Sant'Uffizio. Il carattere chiuso di una rete – i cui partecipanti sono tutti in rapporto uno con l'altro – facilita la collaborazione all'interno della rete stessa, aiuta a costruire una reputazione, aumenta la fiducia reciproca e diminuisce le possibilità di infiltrazioni dall'esterno. Tuttavia, i membri di un circolo chiuso hanno tutti tipicamente accesso alle stesse risorse e informazioni. Per avere accesso a risorse e informazioni innovative, bisogna entrare in contatto con individui estranei alla propria cerchia di fiducia. In altre parole, bisogna saper agire come broker o intermediari tra due o più reti. Quindi, la chiave per una carriera di successo è trovare il giusto equilibrio tra a apertura e chiusura nei rapporti.

Il quinto capitolo prende in esame il concetto di *structural balance*, sviluppato dallo psicologo austriaco Fritz Heider negli anni '40, che può essere utilizzato per analizzare le divisioni all'interno di una rete epistolare. La maggior parte degli studi che cercano di mappare la Repubblica delle Lettere utilizzando strumenti digitali tendono a focalizzarsi solo sui rapporti positivi, restituendo così l'immagine di una comunità caratterizzata dalla convivenza pacifica tra i letterati. Al contrario, recenti studi hanno dimostrato che questa immagine idilliaca della Repubblica delle Lettere fosse ben lontana dalla realtà dei fatti. Per esempio, negli scambi interculturali tra la Repubblica Olandese e il Granducato di Toscana, i letterati dovevano spesso affrontare tensioni e conflitti derivanti dalle opposte realtà politico-religiose oltre che dalla gelosia e competizione tra i letterati stessi. Per questa ragione, il quinto capitolo porta avanti la tesi che le rappresentazioni digitali dell'età moderna devono anche tenere conto delle relazioni negative e ostili che attraversano una rete. A tal fine, viene proposto l'utilizzo della *structural balance theory,* che considera la qualità dei rapporti sia positivi che negativi intrattenuti da un individuo al fine di raggiungere una posizione di equilibrio all'interno di una rete.

Nel sesto e ultimo capitolo, è proposto un approccio esplorativo per far fronte alle complessità derivanti dalla natura ibrida dei dati storici. La maggior parte degli studi digitali sulla Repubblica delle Lettere fa uso di *uni-modal networks*, nei quali un solo tipo di *nodes* e *edges* viene utilizzato per rappresentare, rispettivamente, i corrispondenti e le lettere. Questo modello, tuttavia, è caratterizzato da un'uniformità statica che non sembra tener conto delle ricche dinamiche dello scambio epistolare. Infatti, le lettere non erano gli unici oggetti a circolare all'interno della Repubblica delle Lettere, essendo anche i libri oggetto di un vivace scambio. Pertanto, il sesto capitolo propone l'utilizzo di *multi-modal networks* al fine di

rivalutare l'importanza dei libri come attori dinamici all'interno delle rete epistolari. In questo modo, il sesto capitolo rivela che la società della prima età moderna era tenuta assieme principalmente per mezzo dei libri, i quali potevano favorire i legami quando venivano dati in dono, ma potevano anche minacciare la tenuta di una rete qualora fossero oggetto di censura o di scrutinio da parte del Sant'Uffizio.

Samenvatting

De structuur en dynamiek van geleerdennetwerken tussen de Nederlandse Republiek en het Groothertogdom van Toscane in de Zeventiende eeuw

In de afgelopen jaren hebben de methodes en inzichten van sociale netwerkanalyse het historisch vakgebied sterk beïnvloed. In het bijzonder heeft de Republiek der Letteren, het internationale Europese netwerk van geleerden in de periode tussen de vijftiende en de achttiende eeuw, in de *digital humanities* volop in de belangstelling gestaan. Op basis van grote hoeveelheden brievencollecties uit de vroegmoderne tijd en met behulp van digitale technieken zijn de sociale netwerken van geleerden in kaart gebracht om meer inzicht te krijgen in hoe de Republiek der Letteren in de praktijk werkte. Hoewel het gebruik van netwerkanalyse ten behoeve van historisch onderzoek steeds meer aandacht krijgt, blijven de ontwikkelingen binnen dit vakgebied open voor nader onderzoek. De meeste studies onderstrepen het potentieel van netwerkanalyse om het verleden beter te begrijpen en te onderzoeken, maar de daadwerkelijke implementatie laat nog op zich wachten. Bovendien worden nieuwe digitale technieken vaak sceptisch bekeken, zelfs als te simplistisch beschouwd en daarom ongeschikt om complexe en onzekere historische bronnen te kunnen analyseren. Het is daarom van belang om digitale methodes en tools te blijven toetsen en verder te ontwikkelen, alsmede te experimenteren met netwerkmodellen die nuance, subtiliteit en detail geven aan historische data. Met dit proefschrift ga ik deze uitdaging aan en laat ik zien hoe sociale netwerkanalyse het historisch onderzoek kan bevorderen.

Deze studie richt zich op het schriftelijke contact tussen de Nederlandse Republiek en het Groothertogdom van Toscane tijdens het bewind van groothertog Cosimo III (1670-1723). De levendige briefwisseling tussen deze twee samenlevingen biedt een brede, omvattende blik op de Republiek der Letteren en creëert een kader voor de soms tegenstrijdige dynamieken in de uitwisseling van kennis. De tegengestelde religieuze en sociale realiteiten waren vaak van invloed op de keuzes die vroegmoderne geleerden moesten maken bij het vormen van hun netwerk alsmede voor de strategieën die zij gebruikten om wel of niet bij te dragen aan het bevorderen van het collectief belang. Vroegmoderne geleerden hadden vaak te maken met spanningen en inefficiënties, voornamelijk in een tijd waarin de vrijheid van communicatie niet altijd gegarandeerd was. Deze spanningen varieerden van de beperkingen opgelegd door de Inquisitie tot rivaliteit onder geleerden onderling. Om met deze spanningen om te gaan, moesten geleerden de juiste balans vinden: zo moesten zij strategisch bemiddelen tussen openheid en geheimhouding in schriftelijke communicatie, tussen vriendschappelijke en vijandige relaties en tussen open en gesloten cirkels in hun netwerk.

Dit proefschrift bestaat uit zes hoofdstukken en kan in twee delen worden onderverdeeld. Het eerste deel bestaat uit drie hoofdstukken die een historische achtergrond en context bieden voor de relaties tussen Toscane en de Nederlandse Republiek tijdens het bewind van Cosimo III. In het eerste hoofdstuk wordt met name gesteld dat geheimhouding en vertrouwelijkheid essentieel waren om de uitwisseling van kennis tussen deze twee samenlevingen te bevorderen. Het tweede hoofdstuk richt zich op de twee reizen van prins Cosimo in de Nederlandse Republiek in de jaren 1667-1669 – een ervaring die ongetwijfeld heeft bijgedragen aan de motivatie van de jonge prins om nauw contact te onderhouden met de Hollandse geleerdenkringen, en dit ondanks het feit dat deze vaak op gespannen voet stonden met het Pausdom. Om de relaties met de Nederlandse Republiek te onderhouden, rekende Cosimo op de diensten van twee sleutelfiguren aan het Medici hof: staatsecretaris Apollonio Bassetti (1631-1699) en

bibliothecaris Antonio Magliabechi (1633-1714). Beiden zorgden voor een aanzienlijke toename in de uitwisseling van brieven tussen het Medici hof en de Nederlandse Republiek in de tweede helft van de zeventiende eeuw zorgden. Het derde hoofdstuk bespreekt de stroom van Nederlandse reizigers naar het Groothertogdom van Toscane. De open houding die Cosimo III aannam ten opzichte van de Nederlandse Republiek stimuleerde geleerden om naar Florence af te reizen om de rijke manuscriptencollecties daar te raadplegen.

Het tweede deel richt zich op de complexiteit van het modeleren van historische "big data" met behulp van kwantitatieve methoden om de structuur van het netwerk tussen de Nederlandse Republiek en het Groothertogdom van Toscane te analyseren. Dit onderzoek is geïnspireerd door technieken van sociale netwerkanalyse die inzicht geven in hoe een netwerk tot stand komt en welke strategieën individuen hanteren om zich in dit netwerk te positioneren. In het vierde hoofdstuk worden *datamining* technieken gebruikt om gegevens te verzamelen uit twee brievencatalogi, te weten de *Catalogus Epistularum Neerlandicarum* en de gedigitaliseerde kaartencatalogus van de Nationale Centrale Bibliotheek van Florence. Aan de hand van deze data, die verder zijn aangevuld met gegevens verzameld uit Nederlandse, Italiaanse en Duitse bibliotheek- en archiefcollecties, is een netwerkmodel gecreëerd van 10.000 brievenuitwisselingen tussen de Nederlandse Republiek en Toscane. Het belang van dit onderzoek ligt met name in de combinatie van traditioneel interpretatief historisch onderzoek met "distant reading" van een grote hoeveelheid brieven. Voor deze methode introduceerde ik de term "disclose reading".

In het vierde hoofdstuk is besproken hoe een bepaalde positie in een netwerk voordelen op kan leveren of juist nadelig kan zijn. Deze netwerkposities worden uitgewerkt aan de hand van een kwantitatieve netwerkanalyse dat inzicht biedt in hoeverre vroegmoderne geleerden zich strategisch tussen open en gesloten cirkels in hun netwerk bewogen. Vooral ten tijde van de Inquisitie was het belangrijk om een veilig en betrouwbaar netwerk op te bouwen. Gesloten netwerken - dat wil zeggen, netwerken waarin iedereen met elkaar verbonden is – vergemakkelijken samenwerking, helpen een reputatie op te bouwen, stimuleren vertrouwen en worden minder snel door buitenstaanders geïnfiltreerd. Echter, als mensen zich steeds in dezelfde gesloten kringen bevinden en omgaan met dezelfde mensen is het zeer waarschijnlijk dat ze toegang hebben tot dezelfde bronnen van informatie. Om toegang te hebben tot nieuwe kennis moesten ze in gesprek raken met geleerden van buiten hun eigen vertrouwelijke kring die hen van nieuwe informatie en recent gepubliceerde boeken konden voorzien. Met andere woorden, ze moesten *brokers* in hun netwerk worden. Het vierde hoofdstuk stelt dus dat de juiste balans tussen gesloten en open netwerken essentieel is voor de carrière van de vroegmoderne geleerde.

Het vijfde hoofdstuk richt zich op het begrip *structural balance*, gebaseerd op theorieën uit de sociale psychologie ontwikkeld door de Oostenrijkse psycholoog Fritz Heider in de jaren 40. Dit concept kan worden gebruikt om te redeneren over hoe verdeeldheid binnen een netwerk kan ontstaan vanuit conflicten, onenigheid en antagonisme tussen geleerden onderling. Analyses van de Republiek der Letteren hebben verreweg het meeste aandacht gegeven aan positieve relaties. Zulke representaties versterken het idee dat de Republiek der Letteren een ideale gemeenschap was van een vreedzame samenwerking tussen geleerden. Toch was voor veel geleerden de werkelijkheid vaak anders en werd het ideaal van de Republiek der Letteren zelden bereikt. Zo moesten zij vaak omgaan met de vele spanningen en conflicten die voortvloeiden uit de tegengestelde politieke en religieuze visies tussen verschillende samenlevingen. Bovendien beïnvloedden jaloezie en concurrentie de onderlinge relaties in een netwerk. Om deze reden laat dit hoofdstuk zien dat de digitale weergave van het vroegmoderne geleerdennetwerk ook rekening moet houden met negatieve relaties in een netwerk in kaart te brengen om zo inzicht te krijgen in hoeverre vroegmoderne geleerden bemiddelden tussen vrienden en vijanden om een evenwichtige positie in hun netwerk te bemachtigen.

Vanwege het veelzijdige karakter van correspondentienetwerken en het gebrek aan eerdere studies om deze complexiteit te vertegenwoordigen, is in het zesde hoofdstuk een explorerende benadering uiteengezet om met verschillende soorten data om te gaan. De meeste studies die de Republiek der Letteren digitaal in kaart brengen, maken gebruik van een *one-modal* netwerk representatie, waarin een enkel type *nodes* en *edges* worden gebruikt om respectievelijk de schrijvers en de brieven weer te geven. Dit model houdt echter geen rekening met de veelzijdige dynamiek van de Republiek der Letteren. Naast brieven, werden er ook boeken uitgewisseld. Daarom richt het zesde hoofdstuk zich op het gebruik van *multimodal networks* waarmee de rol van het boek in het correspondentienetwerk kan worden weergegeven. Deze netwerken laten zien dat boeken netwerken konden bijeenhouden of juist uit elkaar konden laten vallen: ze konden relaties bevorderen wanneer ze als geschenk werden gegeven maar vormde ook een bedreiging als ze aan censuur werden onderworpen door de Inquisitie.

Appendix 1 Correspondents Magliabechi - The Dutch Republic

Name		Total number of letters	To Magliabechi	From Magliabechi	Letters to Magliabechi	Letters from Maglibaechi	Start	End
Alexander Morus (1616- 1670)	Amsterdam	2	2		BNCF, Magl. VIII 1183		1657	
Andries Fries (1630-1675)	Venice/ Amsterdam	15	15		BNCF, Magl. VIII 1255; 1166; 640a		1659	1675
Pieter Blaeu (1637-1706)	Amsterdam	110	108	2	BNCF, Magli. II. I. 382	BNCF, Magl. VIII, 380, f. 112	1660	1705
Willem Blaeu (1635-)	Amsterdam	1	1		BNCF, Magli. II. I. 382		1662	1662
Joan Blaeu (1596-1673)	Amsterdam	7	7		BNCF, Magli. II. I. 382		1663	1669
Pietro Leneo	Leiden	1	1		BNCF, Magl. VIII 356		1662	
Nicolaas Heinsius (1620- 1681)	The Hague	25	13	12	-BNCF, Magl. VIII 297 -UBL, BUR Q 14 (copies) -UBL, BUR F 8 (copies)	UBL, Bur F 8	1671	1674
Johannes Georgius Graevius (1632- 1703)	Utrecht	38	27	11	BNCF, Magl. VIII 296	-LMU, Cod 4° Cod. Msc 777 and 778 -KB, KW 72 C 16	1675	1686
Gregorio Leti (1630-1701)	Amsterdam	14	14		BNCF, Magl. VIII 752		1686	1697
Jacob Gronovius (1645-1716)	Leiden	287	100	187	BNCF, Magl. VIII 339; 771; S. II. T. II	-LMU, Cod 4° Cod. Msc 777 and 778 -Biblioteca comunale Forli, Raccolte Piancastelli, Sez. Autografi dei Secc. XII - XVIII, Busta 33 - -Archief van de familie Van Asch van Wijck, Rhenen, inventarisnummer 1272	1673	1710
Daniel Cousson (1648- 1688)	Amsterdam	11	11		BNCF, Magl. II. IV 533 and 274		1675	1680
Henricus Rulaeus (1612- 1680)	Amsterdam	1	1		BNCF, Magl. VIII 1202		1675	
Bruno van der Dussen (1660- 1714)	Vienna	2	2		BNCF, Magl. VIII 1232; S.III.T.VII		1675	1676
Lorenz Theodor Gronovius (1648-1724)	Italy/Deventer	58	23	35	BNCF, Magl. III 335	LMU, Cod 4° Cod. Msc 777	1675	1707
Daniel Elzevier (1626-1680)	Amsterdam	1	1		BNCF, Magl. VIII.S.I.TIII		1675	
Marc Huguetan (-1702)	Amsterdam	14	14		BNCF, Magl. II. I. 393		1676	1689

Willem van der Goes (1611- 1686)	Leiden	9	9		BNCF, Magl. VIII 1170		1676	1683
Stephanus Le Moine (1624- 1689)	Leiden	1	1		BNCF, Magl. VIII 1184		1676	
Gisbert Cuper (1644-1716)	Deventer	226	104	122	BNCF, Magl. VIII 1119; 1328; 261; S. II. T. I. 24; Aut. Pal. II, 74.	KB, KW 72 D 10-12	1677	1712
Jacob Tollius (1633-1696)	Italy/Utrecht	28	28		BNCF, Magl. VIII 322		1677	1691
Coenrad Ruijsch (1650- 1736)	Italy	4	4		BNCF, Magl. VIII 1202		1679	1696
Hendrik Wetstein (1649- 1720)	Amsterdam	2	2		BNCF, Magl. VIII 1226		1679	1682
Adriaen Haelwegh (1637-1696)	Italy	4	4		BNCF, Magl. VIII 1223		1681	1682
Isaac Vossius (1618-1689)	London	4		4		-UBL, BUR F 11 (copies) -UBA, Bijzondere Collecties, hs. III E 10, 67 (original)	1682	1684
Carolus Crucius	Utrecht	3	3		BNCF, Magl. VIII 270		1683	1683
Antoni van Leeuwenhoek (1632-1723)	Delft	16	16		BNCF, Magl. VIII 547		1685	1705
Johannes van Diepenbroeck	Rome	1	1				1685	
Gilles Janson	Amsterdam	1	1		BNCF, Magl. VIII 1223		1688	
Johannes de Witt jr. (1662- 1701)	Italy	2	2		BNCF, Magl. VIII 1226		1688	1691
Joannes Kool (1672-1712)	Amersfoort	7	7		BNCF, Magl. VIII 550		1689	1700
Henry Desbordes (1682-1722)	Amsterdam	1	1		BNCF, Magl. VIII. 1163		1689	1689
Henricus Franchen	Amsterdam	1	1		BNCF, Magl. VIII 1218		1691	
Hendrik Copes (1650-1708)	Italy	18	15	3	BNCF, Magl. VIII 551	UBL, LTK 1300 and 1003	1695	1696
Theodorus Janssonius van Almeloveen (1657-1712)	Amsterdam	1	1		UBU, Hs 995, IV, f. 92r-93r (copy).		1695	
Johannes Abrahamsz du Vivié	Leiden	1	1		BNCF, Magl. VIII 1226		1696	1696
Pierre Bayle (1647-1706)	Rotterdam	8	4	4	BNCF, Magl. VIII.S.III.T.III	-Biblioteca Reale, Copenhagen, Thott 1.208 b-c 4 - LMU, Cod 4° Cod. Msc 777	1697	1704
Petrus Francius (1645- 1704)	Amsterdam	2	2				1697	1699
Ludolph Kuster (1670- 1716)	Utrecht	3	2	1	BNCF, Magl. VIII.1187	BNF, Ms fr. 19 645	1698	1699
Abraham Cousson	Utrecht	16	16		BNCF, Magl. VIII 1160; 1356; 335		1699	1709
Pierre Huguetan	Amsterdam	3		3	, -,	UBL, PAP 15	1699	1708

Total		994	599	395				
Brenkman (1681-1736)	Rome, Amsterdam				VIII.S.III.T.VI		1,12	
Perizonius (1651-1715) Henrik	Florence,	4	4		BNCF, Magl.		1711	1714
Jean le Clerc (1634-1736) Jacob	Amsterdam	5	4	1	BNCF, Magl. VIII	UBA, Hs. C 87	1706	1709
Adriaan Reland (1676-1718)	Utrecht	2	2		BNCF, Magl.VIII 1198		1706	1714
Edward Holthen	Utrecht	1	1		BNCF, Magl. VIII 1223		1706	
Pieter van der AA (1659-1733)	Leiden	1	1		BNCF, Magl. VIII 1232		1705	1705
Mathias de Roy	Utrecht	1	1		BNCF, Magl. VIII 1202		1703	1703
Peter Hotton (1648-1710)	Leiden	2	2		BNCF, Magl. VIII 259		1703	1709
Johannes van Braam (1677- 1751)	Dordrecht	1	1		BNCF, Magl. VIII.S.III.T.VI		1705	
Henricus de Bilderbecq	Koln	2	2		BNCF, Magl.VIII.S.III.T.V		1700	1707
Willem Surenhuis (1664-1729)	Amsterdam	6	6		BNCF, Magl. VIII 1219		1699	1707
Pieter Burman (1668-1741)	Utrecht	19	9	10	-BNCF, Magl. VIII S. I. TII; 339 - UBL, BUR Q 20 (copies)	-UBL, BUR Q 23 -UBL, BUR Q 20	1700	1711

Appendix 2 Metrics CEN+CCF (Magliabechi) +Bassetti

Nodes (correspondents): 11390 Edges (correspondences): 11969 Average Clustering coefficient: 0,251 Average path length: 4,246 Network Diameter: 20 Average Degree: 2,479

Name	Deg ree	Closeness Centrality	Betweenness Centrality	Clustering Coefficient	Trian gles	Eigenvector Centrality
Magliabechi Marco Antonio	226 2	0,390	16115708	1,41E-04	354	1
Constantijn Huygens	133 3	0,354	8.893.924	4,41E-04	194	0,293
Nicolaas Heinsius	433	0,380	4.949.473	0,004	420	0,169
Gisbert Cuper	282	0,386	3.661.771	0,010	397	0,130
Isaac Vossius	250	0,355	2.457.883	0,007	217	0,103
Pieter Burman	221	0,341	2.337.623	0,007	165	0,085
Jean Le Clerc	205	0,349	2.934.757	0,005	108	0,081
Theodorus Janssonius van Almeloveen	191	0,341	1.670.961	0,007	132	0,079
Fredericus Ruysch	182	0,295	1.682.425	2,43E-04	4	0,044
Christiaan Huygens	164	0,324	1.460.348	0,006	78	0,057
Frans van Limborch	160	0,289	1.669.555	2,36E-04	3	0,037
Phillipus van Limborch	139	0,301	1.146.015	0,003	33	0,035
Philip Ernst Vegelin van Claerbergen	127	0,315	1.541.862	0,001	10	0,040
Johannes Leonardus Blasius	127	0,298	925.316	0,002	18	0,037
Johannes Georgius Graevius	123	0,385	2.573.970	0,037	278	0,087
Samuel ten Nuyl	89	0,315	595.406	0,010	41	0,036
Francois d'Ausson Marquis de Villarnoux	84	0,280	2.154.030	0,000	0	0,018
Joannes Vollenhove	81	0,317	753.943	0,018	59	0,033
Cornelis van Eck	81	0,306	614.026	0,012	40	0,027
Pierre Daniel Huet	70	0,311	481.659	0,029	71	0,034
Cornelis Booth	69	0,253	571.237	4,26E-04	1	0,016
Carolus Andreas Druker	67	0,275	502.310	0,013	28	0,019
Antonius III Matthaeus	67	0,293	500.987	0,006	14	0,020
Staten-Generaal	67	0,277	597.414	0,012	27	0,025
Apollonio Bassetti	66	0,323	419.107	0,027	58	0,045

William III of Orange	66	0,310	955.313	0,017	36	0,026
Prosper Marchand	66	0,237	534.243	4,66E-04	1	0,014
Joachim Oudaen	58	0,290	446.938	0,010	16	0,017
Simon van Limborch	58	0,267	364.922	0,000	0	0,017
					-	,
Henricus Ruysch	58	0,246	383.538	0,000	0	0,012
Friedrich August I	56	0,155	483213	0,000	0	0,011
Jacob Perizonius	54	0,347	437.602	0,088	126	0,052
Arnold Moonen	53	0,299	333.383	0,020	28	0,020
Pierre Bayle	51	0,335	435.516	0,046	59	0,044
Stanisław Lubieniecki	50	0,292	359.811	0,011	13	0,017
Johann Friedrich Gronovius	46	0,326	347.236	0,082	85	0,033
Antonius van Dale	42	0,297	278.258	0,017	15	0,016
Antoni van Leeuwenhoek	41	0,334	503.494	0,023	19	0,037
Simon Abbes Gabbema	39	0,287	286.161	0,015	11	0,014
Reineer Leers	39	0,305	164.547	0,073	54	0,021
Gerardt Brandt	38	0,293	213.344	0,031	22	0,013
Johann de Witt	37	0,288	329.087	0,015	10	0,012
Matthaeus Vossius	37	0,254	242.230	0,006	4	0,009
Frans van Oudendorp	36	0,266	154.462	0,052	33	0,011
Franciscus Junius	36	0,279	244.267	0,011	7	0,011
Wolf Dietrich von Beichling	36	0,182	691278	0,002	1	0,007
Siwart Havercamp	36	0,274	261.200	0,013	8	0,010
François Halma	36	0,303	180.727	0,073	46	0,020
Louis XIV	35	0,262	259.015	0,010	6	0,010
Jacob Gronovius	33	0,338	274.852	0,108	6	0,042

Appendix 3 Metrics 2ND degree Network

TABLE 1 1660-1670

Edges (correspondences): 1029

Average Clustering coefficient: 0,574

Average path length: 3,261

Name	Closeness centrality	Betweenness centrality	Clustering coefficient	# triangl es	Deg ree	Eigenvector Centrality
Antonio Magliabechi	0,459	239.080	3,81E-04	25	363	1
Nicolaas Heinsius	0,462	176.557	0,0022	71	257	0,631
Isaac Vossius	0,432	113.910	0,0038	55	175	0,412
Johann Friedrich Gronovius	0,409	32.092	0,0226	36	58	0,165
Ezechier Spanheim	0,466	20.080	0,5000	5	6	0,146
Leopoldo de' Medici	0,438	19.482	0,0867	26	26	0,153
Apollonio Bassetti	0,389	17.395	0,0345	14	29	0,099
Jacob Tollius	0,345	16.682	0,4667	7	7	0,084
Theodorus Janssonius van Almeloveen	0,259	15582	0,0000	0	14	0,012
Gisbert Cuper	0,377	15.426	0,0316	8	23	0,074
Gilles Ménage	0,458	15.394	0,5000	3	5	0,137
Johannes Georgius Graevius	0,392	13.655	0,0390	9	23	0,090
Thomas Bartholin	0,429	12.024	0,3333	1	3	0,088
Ottavio Falconieri	0,432	11.611	0,3333	2	4	0,093
Angelico Aprosio	0,435	10.714	0,3333	2	4	0,096
Jean Chapelain	0,456	10.290	0,5000	3	4	0,113
Stefano Gradi	0,455	10.137	0,3333	1	3	0,107
Emery Bigot	0,455	10.137	0,3333	1	3	0,107
Carlo Dati	0,437	9.555	0,2179	17	13	0,124
Lucas Holstenius	0,417	9.554	0,3000	3	5	0,091
Francesco Redi	0,380	7.414	0,0879	8	14	0,082
Jacob Gronovius	0,369	5.537	0,0278	1	9	0,050
Godefridus Henschen	0,408	5.527	0,3333	1	3	0,077
Pieter Blaeu	0,425	5.500	0,6667	5	7	0,084
Valerio Chimentelli	0,428	5.500	0,6667	2	3	0,091
Andrea Cavalcanti	0,425	5.500	0,0000	0	2	0,084
Petrus Scavenius	0,425	5.500	0,0000	0	2	0,084
Leone Allacci	0,408	4.947	0,3333	1	3	0,080
Lorenzo Panciatichi	0,405	4.637	0,3333	1	2	0,073
Agostino Coltellini	0,390	3.497	0,3333	1	3	0,062

TABLE 2 1670-1680

Edges (correspondences): 1587 Average Clustering coefficient: 0,832 Average path length: 2,846

Name	Closeness centrality	Betweenness centrality	Clustering coefficient	Deg ree	# triangl es	Eigenvector Centrality
Antonio Magliabechi	0,630	755.060	0,000	791	78	1
Nicolaas Heinsius	0,541	305.277	0,003	270	123	0,256
Isaac Vossius	0,397	175.122	0,004	168	52	0,131
Gisbert Cuper	0,485	67.691	0,028	57	44	0,090
Johannes Georgius Graevius	0,476	47.524	0,024	42	20	0,075
Johann Friedrich Gronovius	0,381	41.173	0,024	50	28	0,052
Apollonio Bassetti	0,451	37.023	0,034	47	37	0,082
Theodorus Janssonius van Almeloveen	0,334	36.109	0,000	31	0	0,017
Gilles Ménage	0,474	26.090	0,467	7	7	0,063
Jacob Tollius	0,447	25.399	0,179	9	5	0,051
Etienne Le Moine	0,473	20.697	0,250	9	9	0,057
Ezechier Spanheim	0,470	15.774	0,667	7	10	0,064
Jacob Gronovius	0,446	14.840	0,086	15	9	0,056
Leopoldo de' Medici	0,452	12.678	0,097	25	29	0,072
Francesco Redi	0,446	11.726	0,158	16	19	0,061
Jean Le Clerc	0,289	11.479	0,000	12	0	0,010
Pierre Bayle	0,324	9.908	0,000	9	0	0,005
Daniel Elzevier	0,463	9.123	0,600	5	6	0,054
Anthanasius Kircher	0,394	7.285	0,000	2	0	0,035
Pierre Daniel Huet	0,381	7.013	0,333	9	12	0,031
Nicolaus Steno	0,395	6.864	0,178	10	8	0,045
Peter Lambeck	0,425	6.239	0,000	2	0	0,053
Joachim Pastorius	0,458	6.239	0,667	3	2	0,050
Stefano Gradi	0,458	6.239	0,667	3	2	0,050
Godefridus Henschen	0,425	6.239	0,000	2	0	0,042
Stephanus Le Moyne	0,430	6.239	0,667	3	2	0,040
Emery Bigot	0,464	6.239	0,833	4	5	0,040
Petrus Francius	0,361	5.797	0,156	10	7	0,022
Antoni van Leeuwenhoek	0,327	5.646	0,000	9	0	0,006
Alexander Morus	0,312	5.486	0,000	6	0	0,004

TABLE 3 1680-1690

Edges (correspondences): 2191 Average Clustering coefficient: 0,497 Average path length: 2,815

Name	Closeness centrality	Betweenness centrality	Clustering coefficient	# triangl es	Deg ree	Eigenvector Centrality
Antonio Magliabechi	0,657	1.512.173	9,50E-05	70	121 5	1
Nicolaas Heinsius	0,383	298.200	0,003	66	211	0,100
Isaac Vossius	0,499	291.973	0,004	61	174	0,109
Gisbert Cuper	0,500	199.690	0,014	79	107	0,085
Theodorus Janssonius van Almeloveen	0,354	126.087	0,004	17	89	0,038
Johannes Georgius Graevius	0,486	121.957	0,013	35	75	0,068
Jean Le Clerc	0,354	71.806	0,004	5	48	0,022
Henricus Christianus de Hennin	0,433	44.562	0,167	1	4	0,030
Pieter Burman	0,318	43.307	0,000	0	28	0,009
Pierre Bayle	0,344	34.241	0,011	3	24	0,014
Apollonio Bassetti	0,434	33.426	0,049	16	26	0,045
Jacob Gronovius	0,453	31.427	0,062	13	21	0,044
Antoni van Leeuwenhoek	0,419	20.306	0,017	2	16	0,033
Francesco Redi	0,439	19.760	0,103	8	13	0,038
Jacob Tollius	0,457	19.721	0,127	7	11	0,039
Etienne Le Moyne	0,471	17.975	0,306	11	9	0,040
Jacob Perizonius	0,368	15.565	0,150	18	16	0,018
Kuster Ludolph	0,404	15.456	0,000	0	2	0,028
Raffaello Fabbretti	0,445	13.870	0,286	8	10	0,040
Gregorio Leti	0,436	13.629	0,000	0	3	0,031
Emery Bigot	0,466	10.843	0,500	5	5	0,038
Johannes Albertus Fabricius	0,410	10.223	0,000	0	2	0,029
Anthanasius Kircher	0,410	10.223	0,000	0	2	0,029
Johann Georg Volckamer	0,410	10.223	0,000	0	2	0,029
Joachim Feller	0,410	10.223	0,000	0	2	0,029
Friedrich Benedikt Carpzov	0,456	9.531	0,667	4	4	0,036
Joachim Pastorius	0,448	9.392	0,667	2	3	0,035
Petrus Scavenius	0,430	9.392	0,000	0	2	0,031
Thomas Bartholin	0,451	9.392	0,667	2	3	0,034
Ezechier Spanheim	0,466	9.392	0,833	5	5	0,041

TABLE 4 1690-1700

Edges (correspondences): 2275 Average Clustering coefficient: 0,519 Average path length: 2,59

Name	Closeness centrality	Betweenness centrality	Clustering coefficient	# triang les	Deg ree	Eigenvector Centrality
Antonio Magliabechi	0,742	1.859.893	6,00E-05	65	147 5	1
Theodorus Janssonius van Almeloveen	0,509	348.313	0,003	60	193	0,095
Gisbert Cuper	0,502	234.826	0,007	64	139	0,081
Clerc le Jean	0,349	103.753	0,007	16	68	0,024
Johannes Georgius Graevius	0,354	10.225	0,005	14	75	0,029
Bayle Jean Pierre	0,491	93.349	0,029	26	43	0,046
Burman Frans Pieter	0,356	67.318	0,012	12	46	0,019
Gronovius Jacob	0,458	45.129	0,040	13	26	0,037
Leeuwenhoek van Philips Antonyszoon Antoni	0,437	36.256	0,010	3	25	0,032
Jacob Perizonius	0,352	27.163	0,050	19	28	0,017
Ludolph Kuster	0,449	20.377	0,100	1	5	0,027
Apollonio Bassetti	0,429	19.809	0,038	4	15	0,030
Claude Nicaise	0,458	17.856	0,600	9	6	0,031
Hendrik Copes	0,454	15.848	0,067	7	15	0,032
Giuseppe Valletta	0,439	15.476	0,000	0	2	0,025
Petrus Francius	0,456	14.979	0,090	7	13	0,031
Henricus Christianus de Hennin	0,465	14.808	0,500	5	5	0,030
Jacob Tollius	0,477	14.226	0,222	8	9	0,034
Friedrich Benedikt Carpzov	0,468	12.062	0,400	4	5	0,030
Nicholas Toinard	0,457	9.669	0,333	1	3	0,028
Giovanni Giustino Ciampini	0,457	9.669	0,333	1	3	0,028
Daniel Papebroch	0,440	9.594	0,333	1	3	0,026
Laurens Gronovius	0,437	9.491	0,071	2	8	0,027
St. Clair Patrick	0,438	9.240	0,000	0	2	0,025
Pierre Daniel Huet	0,356	8.735	0,167	6	9	0,010
Pieter Deinot	0,341	6.397	0,000	0	4	0,005
Carolus Crucius	0,315	6.188	0,000	0	5	0,002
Joannes Kool	0,461	5.670	0,267	4	6	0,029
Reineer Leers	0,360	4.145	0,400	6	5	0,010
Antonio Muratori	0,470	3.038	0,333	7	2	0,032

TABLE 5 1700-1710

Edges (correspondences): 2361 Average Clustering coefficient: 0,507

Average path length: 2,64

Name	Closeness centrality	Betweenness centrality	Clustering coefficient	# triangl es	Deg ree	Eigenvector Centrality
Antonio Magliabechi	0,720	2.014.659	5,30E-05	59	149 9	1
Gisbert Cuper	0,509	308.809	0,005	89	182	0,098
Theodorus Janssonius van Almeloveen	0,374	297.983	0,003	52	180	0,066
Jean Le Clerc	0,477	198.275	0,005	34	116	0,065
Pieter Burman	0,493	175.169	0,014	71	101	0,067
Johannes Georgius Graevius	0,350	82.407	0,003	5	56	0,020
Pierre Bayle	0,495	78.746	0,042	40	44	0,048
Jacob Gronovius	0,458	53.787	0,043	14	26	0,037
Antoni van Leeuwenhoek	0,440	33.246	0,004	1	22	0,031
Jacob Perizonius	0,358	27.311	0,054	27	32	0,019
Adriaan Reland	0,475	25.900	0,205	16	13	0,035
Henricus Christianus de Hennin	0,462	24.220	0,400	4	5	0,029
Joannes Kool	0,464	23.749	0,250	9	9	0,032
Henry Noris	0,452	19.309	0,133	2	6	0,028
Edward Holthen	0,466	19.278	0,200	2	5	0,030
Johannes Albertus Fabricius	0,484	18.314	0,700	7	5	0,033
Giusto Fontanini	0,451	16.166	0,133	3	6	0,026
Joachim Feller	0,451	16.166	0,000	0	2	0,026
Alexander Cunningham of Block	0,463	16.166	0,833	5	4	0,030
Peter Hotton	0,466	16.166	0,667	2	3	0,029
Eusebe Renaudot	0,463	15.768	0,500	3	4	0,030
Hendrik Copes	0,349	15.566	0,050	6	16	0,010
St. Clair Patrick	0,439	14.381	0,000	0	2	0,025
Henricus de Bilderbecq	0,439	14.381	0,000	0	2	0,025
Laurens Gronovius	0,434	13.473	0,000	0	7	0,026
Carolus Crucius	0,315	8.730	0,000	0	6	0,002
Ludolph Kuster	0,439	6.326	0,000	0	5	0,026
Jacob Tollius	0,316	4205	0,000	0	3	0,001
Francesco Bianchini	0,303	4205	0,000	0	2	0,001
John Chamberlayne	0,349	4.135	0,000	0	3	0,005

TABLE 6 1710-1720

Edges (correspondences): 1920 Average Clustering coefficient: 0,522 Average path length: 2,671

Name	Closeness centrality	Betweenness centrality	Clustering coefficient	# triangl es	Deg ree	Eigenvector Centrality
Antonio Magliabechi	0,708	1.473.126	3,30E-05	28	129 6	1
Gisbert Cuper	0,513	271.406	0,005	59	155	0,093
Theodorus Janssonius van Almeloveen	0,371	202.753	0,003	29	141	0,056
Jean Le Clerc	0,359	170.976	0,002	10	115	0,043
Pieter Burman	0,493	161.615	0,007	37	101	0,069
Jacob Gronovius	0,473	91.227	0,011	3	24	0,038
Jacob Perizonius	0,470	65.207	0,024	12	32	0,041
Adriaan Reland	0,480	29.582	0,154	14	14	0,038
Henrik Brenkman	0,478	28.506	0,250	9	9	0,036
Ezechier Spanheim	0,459	22.068	0,333	1	3	0,030
Henry Dodwell	0,453	21.392	0,333	1	3	0,029
Jean-Alphonse Turrettini	0,436	20.824	0,000	0	2	0,028
Edward Holthen	0,467	20.105	0,333	2	4	0,032
Lucas Schroeck	0,441	18.313	0,000	0	2	0,028
Joachim Feller	0,441	18.313	0,000	0	2	0,028
Antoni van Leeuwenhoek	0,329	12.543	0,000	0	9	0,003
Pierre Daniel Huet	0,353	7.391	0,333	2	4	0,007
Carolus Crucius	0,321	7162	0,000	0	5	0,002
Laurens Gronovius	0,261	5.458	0,000	0	5	0,002
Joannes Kool	0,342	4.099	0,200	3	6	0,006
Ludolph Kuster	0,427	3.900	0,000	0	4	0,027
Anton Maria Salvini	0,350	3.729	0,400	4	5	0,007
Carolus Andreas Druker	0,320	3582	0,000	0	2	0,002
Jaques Basnage de Beauval	0,357	2.880	0,667	2	3	0,007
John Chamberlayne	0,280	2.880	0,000	0	2	0,004
Anthonie Heinsius	0,348	1.903	0,333	1	3	0,005
Richard Benthley	0,347	1.812	0,333	1	3	0,006
Jacob Tollius	0,259	1792	0,000	0	2	0,001
Pieter van der AA	0,242	1792	0,000	0	2	0,001
Henricus Arntzenius	0,320	1792	0,000	0	2	0,002
Cornelisz Nicolaes Witsen	0,342	1.765	0,167	1	4	0,005
Jean Bouhier	0,345	1.244	0,000	0	2	0,004

Publication title	Author	Citat ions
Liber satyrarum sexdecim. (1703)	Nomi Federigo	20
Anecdota, quae ex Ambrosianae Bibliothecae codicibus (1697)	Muratori Lodovico Antonio	15
Manethonis Apotelesmaticorum libri sex (1698)	Gronovius Jacob	9
Inscriptiones epistolarum synodalium XC. et XCII. inter Augustinianas (1674)	Noris Henry	7
W.E. Tentzelii Epistola de sceleto elephantino, Tonnæ nuper effosso. (1696)	Tentzel Wilhelm Ernst	7
Arcana naturae detecta (1695)	Leeuwenhoek van Antoni	7
Joh. Christophori Wagenseilii Sota; hoc est, Liber Mischnicus de uxore adulterii suspecta, (1674)	Wagenseil Johan Christoph	5
Copia di due lettere scritte all'illustrissimo signor Antonio Magliabechi sopra i moti, e le apparenze delle due comete [] (1681)	Montanari Geminiano	4
Origenis Philosophumenôn fragmentum Quod ex bibliotheca medicea descripsit Jacobus Gronovius (1701)	Gronovius Jacob	3
De constitutione anni 1691 apud Mutinensis : dissertatio (1691)	Ramazzini Bernardino	3
Orphei De terrae motibus catalecton (1691)	Eschenbach Andreas Cristian	3
Musae Anconitanae siue epigrammaton libri 4 (1674)	Sant'Antonio da Padova di Carlo	3
De syderum intervallis, & magnitudinibus opusculum. Cui accessit ejusdem tractatus De problematum determinatione. (1699)	Monforte Antonio	3
Beati Ambrosii, abbatis generalis Camaldulensis Hodoeporicon (1681)	Bartolini Niccolo	3
Jac. Gronovii Supplementa lacunarum in Ænea Tactico, Dione Cassio et Arriano de expeditione Alexandri (1675)	Gronovius Jacob	2
Titi Petronii Arbitri Equitis Romani Satyricon (1669)	Heinsius N., Gronovius J.F. (printed by J. Blaeu)	2
Meditationes familiares (1697)	Scaramucci Giambattista	2
Bibliotheca Romana seu Romanorum scriptorum centuriae 2 (1692)	Mandosio Prospero	2
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Exegeses physico-mathematicæ, de momentis gravium, de vecte, ac de motu æquabiliter accelerato (1685)	Vanni Giovanni Francesco	2
Copia di lettera scritt all'illustrissimo Signore Antonio Magliabechi [] intorno alla nuova cometa apparsa quest'anno 1682 (1682)	Montanari Geminiano	2
Squarcio di lettera del Dottor Bernabò Scacchi sopra le considerazioni del Signor B. Garofalo, intorno alla poesia degli Ebrei (1709)	Rabeni Raffaello	2
De runis helsingicis (1698)	Celsius Olof	1

Indigetica : panegyricus Francisci Berrettarii. (1682)	Berrettari Francesco Ubaldo	1
Dissertatio Iuridico-Historica, De Crucifixi Jesu Titulis, Puniendorum Superdictionibus, nec non Exaltationis Hora (1694)	Reyer Samuel	1
De feliciori nunc quam olim medicina diascepsis (1696)	Mercklin Georg Abraham	1
De Magisteriali Cantu (1694)	Wagenseil Johan Christoph	1
De Navali Christianorum Ad Echinadas [] (1694)	Gleich Johann Andreas	1
Memorie dell'Insigne Collegio di S. Spirito della città di Benevento [] (1688)	Sarnelli Pompeo	1
Octavii Ferrarii De re vestiaria libri septem : quatuor postremi nunc primum prodeunt, reliqui auctiores (1685)	Ferrari Ottavio	1
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Epistolae et poemata : una cum vita auctoris (1707)	Mencke Johann Burchard	1
La visiera alzata (1689)	Aprosio Angelico, Villani Pietro Giacomo	1
Benedicti Accolti Aretini Dialogus De praestantia Virorum sui Aeni Ex bibliotheca D. Antonii Magliabequii (1689)	Bacchini Benedetto	1
De Motu Cordis Moechanicum Theorema : Ad Illustrissimum D. Antonium Magliabechium (1689)	Scaramucci Giambattista	1
Septem problematum geometrica ac trigonometrica resolutio (1675)	Marchetti Alessandro	1
Ioannis de Bussieres e Societate Iesu, Miscellanea poetica (1675)	Bussières de Jean	1
l'Epistola ad clarissimum et eruditissimum virum Antonium Magliabechi, continens solutiones problematum [] (1676)	Monforte Antonio	1
Amatunta del signor Giouanni Canale dedicata all'illustrissimo signore Antonio Magliabechi [[(1681)	Canale Giovanni	1

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