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*Venetian Trading Firm of the Soranzo Brothers (1406-1434)
and Its Commercial Network**

1. INTRODUCTION. VENETIAN STUDIES AND THE NETWORK PARADIGM

Over the last few decades the range of research strategies available to historians has been considerably broadened thanks to the adoption of methods employed in other branches of science. These include but are not limited to the methodology of social network analysis (SNA), which has been developed by sociologists since mid-1950s and is based on the concept of social structure as a system of ties linking various social actors.¹ When applied to economic history, such an approach means shifting the focus of attention from individual economic entities, i.e., households, companies, banks, governments, etc., to the relationships existing between them.² The relevance of network analysis to this research field has been convincingly demonstrated in a number of studies drawing upon material from diverse chronological periods, geographical areas, and cultural settings.³ Recent publications by Francisco Apellániz,⁴ Andrea Caracausi,⁵ Stefania Montemezzo,⁶ and other scholars⁷ attest to the idea that the use of such methodology can be particularly appro-

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¹ M. EMIRBAYER, J. GOODWIN, *Network Analysis, Culture, and the Problem of Agency*, in “American Journal of Sociology”, 99, 1994, n. 6, pp. 1411-1454 (1411-1412); B.H. ERICKSON, *Social Networks and History: A Review Essay*, in “Historical Methods: A Journal of Quantitative and Interdisciplinary History”, 30, 1997, n. 3, pp. 149-157 (149); P.J. CARRINGTON, J. SCOTT, *Introduction*, in *The SAGE Handbook of Social Network Analysis*, J. SCOTT, P.J. CARRINGTON eds., London 2011 (SAGE Publications), pp. 1-8.

² A. CARACAUSI, C. JEGGLE, *Introduction*, in *Commercial Networks and European Cities, 1400-1800*, A. CARACAUSI, C. JEGGLE eds., London 2014 (Pickering & Chatto, Perspectives in Economic and Social History), pp. 1-12 (4).

³ See bibliography in: *Ibid.*, pp. 3-5, 241-243.

⁴ F. APELLÁNIZ, *Venetian Trading Networks in the Medieval Mediterranean*, in “Journal of Interdisciplinary History”, 44, 2013, n. 2, pp. 157-179.

⁵ A. CARACAUSI, *The Wool Trade, Venice and the Mediterranean Cities at the End of the Sixteenth Century*, in *Commercial Networks and European Cities*, cit., pp. 201-222.

⁶ S. MONTEMEZZO, *Galley Routes and Merchant Networks between Venice and the North Sea in the Fifteenth Century*, in *Commercial Networks and European Cities*, cit., pp. 153-169.

⁷ G. CHRIST, *Beyond the Network – Connectors of Networks: Venetian Agents in Cairo and Venetian News Management*, in *Everything is on the Move: The Mamluk Empire as a Node in (Trans-)Regional Networks*, ed. S. CONERMANN, Goettingen 2014 (V&R unipress; Bonn University Press), pp. 27-59; D. PUGA,

priate with regard to the history of medieval and early modern Venice. The network approach seems well-suited to certain features distinguishing the social and economic development of this city-state. For one thing, there is a long tradition of representing the Venetian Republic as a model of social harmony and social cohesion maintained by a competent, benevolent, and sagacious ruling class, i.e., the patriciate, which in its turn stood united in selfless patriotism and remained unaffected by internal strife, clashes of interests, or factional conflict.⁸ Although modern historians acknowledge the influence of the so-called “myth of Venice”⁹ on this picture, it is generally accepted that, unlike the feudal elite in the other states of Europe, the Venetian patriciate was organized horizontally rather than hierarchically, or, more precisely speaking, that it was characterized by stronger horizontal ties between vertically-oriented clans;¹⁰ its members shared the same set of rights, privileges, duties, and responsibilities, and thus even the doge, the formal head of the Republic, was considered merely first among equals.¹¹ Seeing as the narrative sources of Venetian origin normally emphasize the solidarity of nobles and deny the existence of factions or other similar groups within the patriciate, it falls to the present-day scholars to reveal the hidden patterns of social interaction,¹² and network analysis may prove itself instrumental in fulfilling this task.

The social idiosyncrasy of the Republic was matched by the peculiarity of its economic structure. While in Tuscany the commercial revolution of the late Middle Ages led to the emergence of large banking and mercantile companies with branch-

D. TREFLER, *International Trade and Institutional Change: Medieval Venice's Response to Globalization*, in “The Quarterly Journal of Economics”, 129, 2014, n. 2, pp. 753-821.

⁸ E. MUIR, *Civic Ritual in Renaissance Venice*, Princeton, NJ 1981 (Princeton University Press), pp. 13-62; D.E. QUELLER, *The Venetian Patriciate: Reality versus Myth*, Urbana; Chicago, IL 1986 (University of Illinois Press), pp. 3-28; J. MARTIN, D. ROMANO, *Reconsidering Venice*, in *Venice Reconsidered: The History and Civilization of an Italian City-State, 1297-1797*, J. MARTIN, D. ROMANO eds., Baltimore, MD; London 2000 (Johns Hopkins University Press), pp. 1-35.

⁹ See the previous note and the following: G. FASOLI, *Nascita di un mito*, in *Studi storici in onore di Giacobino Volpe*, I-II, Florence 1958 (Sansoni), I, pp. 445-479; F. GAETA, *Alcune considerazioni sul mito di Venezia*, in “Bibliothèque d'Humanisme et Renaissance”, 23, 1961, n. 1, pp. 58-75; J.S. GRUBB, *When Myths Lose Power: Four Decades of Venetian Historiography*, in “The Journal of Modern History”, 58, 1986, n. 1, pp. 43-94; D. RAINES, *L'invention du mythe aristocratique: L'image de soi du patriciat vénitien au temps de la Sérénissime*, Venice 2006 (Istituto Veneto di scienze, lettere ed arti, Memorie, Classe di scienze morali, lettere ed arti, vol. CXII), I.

¹⁰ S. CHOJNACKI, *Patrician Women in Early Renaissance Venice*, in “Studies in the Renaissance”, 21, 1974, pp. 176-203 (203), reprinted in: IDEM, *Women and Men in Renaissance Venice: Twelve Essays on Patrician Society*, Baltimore, MD; London 2000 (Johns Hopkins University Press), pp. 115-131 (131).

¹¹ R. FINLAY, *Politics in Renaissance Venice*, New Brunswick, NJ 1980 (Rutgers University Press), p. 123; E. MUIR, *Civic Ritual in Renaissance Venice*, cit., p. 273.

¹² S. CHOJNACKI, *In Search of the Venetian Patriciate: Families and Factions in the Fourteenth Century*, in *Renaissance Venice*, J.R. HALE ed., London 1973 (Faber and Faber), pp. 47-90; D. ROMANO, *The Limits of Kinship: Family Politics, Vendetta, and the State in Fifteenth-Century Venice*, in *Venice and the Veneto during the Renaissance: the Legacy of Benjamin Kohl*, M. KNAPTON, J.E. LAW, A.A. SMITH eds., Florence 2014 (Firenze University Press, Reti Medievali E-Book, vol. 21), pp. 87-102. Available online at: URL: www.ebook.retimedievali.it, http://www.rm.unina.it/rmebook/index.php?mod=none_Legacy_Kohl (last accessed 31.03.2018).

es in the principal European centers of trade,¹³ the Venetian men of affairs adhered to more flexible organizational practices. Many of them were individual merchants relying on a complex web of commission agents, factors, and other intermediaries to conduct their operations.¹⁴ The word *compa(g)nia* (company) referred in the Venetian context to a joint venture, i.e., a short-term business association created in order to carry out a single project or undertaking, for instance, a commercial voyage. Given that a collaborative enterprise was usually liquidated at the end of this project, the arrangement normally lasted no more than a few years.¹⁵ The niche of a more permanent business entity was occupied by a *fraterna* (from the Latin *frater* – “brother”), or a family partnership comprising brothers who retained joint ownership of hereditary property after their father’s death. The sons of the late *pater familias* became members of such partnership by default unless they initiated the division procedure, therefore *fraterna* constituted not only the most common form of business organization in the Republic but also one of the basic units of the Venetian society.¹⁶ The social and economic functions performed by the family of this particular type were inextricable, and its internal structure mirrored that of the patriciate itself insofar as the brothers possessed equal shares of patrimony and had equal powers to administer joint property. The dynamic interaction between individual merchants, family partnerships, and short-term companies lay at the heart of the Venetian economy,¹⁷ enabling it to swiftly adapt both to the changing market conditions and to the shifts in the political situation. At the same time, the complexity and the fluidity of the resulting system impede the application of traditional historical methods in its study and suggest that the economic structure of the Venetian Republic would be more adequately interpreted in terms of network approach.

¹³ R. DE ROOVER, *The Organization of Trade*, in *The Cambridge Economic History of Europe from the Decline of the Roman Empire*, I-VIII, Cambridge 1941-1989 (Cambridge University Press). Vol. 3: *Economic Organization and Policies in the Middle Ages*, M.M. POSTAN, E.E. RICH, E. MILLER eds., 2nd ed., Cambridge 1965, pp. 42-118 (70-88); E.S. HUNT, *The Medieval Super-companies: A Study of the Peruzzi Company of Florence*, Cambridge 1994 (Cambridge University Press).

¹⁴ F.C. LANE, *Andrea Barbarigo, Merchant of Venice, 1418-1449*, Baltimore, MD 1944 (Johns Hopkins Press), pp. 93-100; R. DE ROOVER, *The Organization of Trade*, cit., pp. 88-90.

¹⁵ F.C. LANE, *Andrea Barbarigo, Merchant of Venice*, cit., pp. 92-93; IDEM, *Family Partnerships and Joint Ventures*, in *Venice and History: The Collected Papers of Frederic C. Lane*, Edited by A Committee of Colleagues and Former Students, Foreword by Fernand Braudel, Baltimore, MD 1966 (Johns Hopkins Press), pp. 36-55 (44-52).

¹⁶ M. FERRO, *Dizionario del diritto comune e veneto*, 2^a ed., I-II, Venice 1845-1847, I, pp. 772-774; A. PERTILE, *Storia del diritto italiano dalla caduta dell'Impero romano alla codificazione*, 2^a ed. riveduta e migliorata, I-VI, Turin 1892-1902, III, pp. 282, 322; C. FUMAGALLI, *Il diritto di fraterna nella giurisprudenza da Accursio alla codificazione*, Turin 1912; E. BESTA, *La famiglia nella storia del diritto italiano*, Padua 1933 (reprint Milan 1962), pp. 43, 207-209; *Gli statuti veneziani di Jacopo Tiepolo del 1242 e le loro glosse*, ed. R. CESSI, Venice 1938, pp. 124-125 (Lib. 3, cap. IIII); F.C. LANE, *Andrea Barbarigo, Merchant of Venice*, cit., pp. 87-90; IDEM, *Family Partnerships and Joint Ventures*, cit., pp. 37-44.

¹⁷ *Ibid.*, pp. 52-54.

2. LIMITATIONS OF NETWORK ANALYSIS IN MEDIEVAL STUDIES. WHOLE-NETWORK APPROACH VS EGOCENTRIC APPROACH

As is often the case with research tools imported from other fields of science, the use of network analysis in medieval history encounters some limitations. First and foremost, this methodology sets high requirements for the quality of data used, meaning that the latter has to be accurate, relevant, consistent, and complete.¹⁸ Unfortunately, historic material surviving from the Middle Ages rarely meets the completeness criterion, which is considered vital by network specialists. As Bonnie H. Erickson rightfully noted, the loss of 10% of information would not necessarily be critical in a research employing traditional historical methods but would have a dramatic impact on the results of a network study if some of the unaccounted ties were of great structural importance.¹⁹ Due to the damage done by time and chance to primary sources, the medievalists usually deal with more or less representative natural samples, which inevitably leave out certain actors and relationships. In order for the history of Middle Ages to benefit from network analysis and the opportunities it offers, this circumstance needs to be temporarily set aside by implicit agreement between scholars.

However, apart from trying to reconstruct a whole network, there is also another strategy available to researchers. While in medieval studies it is rarely possible to gather data on the entire web of actors and their relationships, many types of primary sources allow a historian to explore so-called “egocentric”, or “ego-centered”, networks, which represent ties connecting a specified central actor, also referred to as “ego” or “focal subject”, with various individuals and entities denoted by the term “alters.”²⁰ A basic “first-order” or “1-degree” network of this kind comprises a central node (i.e., the ego), a number of other vertices (alters), and edges linking the former with these latter, but it can expand so as to include ties between different alters of the same ego or even all of the alters’ connections, becoming a “1.5-level” or a “second-level” network, respectively.²¹ The most obvious limitation of the egocentric approach is that it depends upon the experience of a particular focal subject and therefore offers a deeply personalized view of network structure.²² Nevertheless, the scope of this method can be broadened by merging multiple egocentric networks and comparing their

¹⁸ A. CARACAUSI, C. JEGGLE, *Introduction*, cit., pp. 4-5.

¹⁹ B.H. ERICKSON, *Social Networks and History*, cit., p. 151.

²⁰ P.V. MARSDEN, *Recent Developments in Network Measurement*, in *Models and Methods in Social Network Analysis*, P.J. CARRINGTON, J. SCOTT, S. WASSERMAN eds., Cambridge 2005 (Cambridge University Press), pp. 8-30 (9); D.L. HANSEN, B. SHNEIDERMAN, M.A. SMITH, *Analyzing Social Media Networks with NodeXL: Insights from a Connected World*, Amsterdam; Boston, MA 2011 (Elsevier – Morgan Kaufmann), p. 36; A. MARIN, B. WELLMAN, *Social Network Analysis: An Introduction*, in *The SAGE Handbook of Social Network Analysis*, cit., pp. 11-25 (20); B.L. PERRY, B.A. PESCOLIDLO, S.P. BORGATTI, *Egocentric Network Analysis: Foundations, Methods, and Models*, Cambridge 2018 (Cambridge University Press).

²¹ A. MARIN, B. WELLMAN, *Social Network Analysis: An Introduction*, cit., p. 20; D.L. HANSEN, B. SHNEIDERMAN, M.A. SMITH, *Analyzing Social Media Networks with NodeXL*, cit., p. 36.

²² B.L. PERRY, B.A. PESCOLIDLO, S.P. BORGATTI, *Egocentric Network Analysis*, cit., pp. 29-30.

properties, as is commonly done in modern sociology, where the networks of this type are studied with the help of surveys and questionnaires,²³ and the focal subjects are sampled from large segments of population.²⁴ In theory, collecting and processing egocentric data on every member of the group may ultimately lead to reconstructing the whole network since the latter consists of actors who are surrounded by their own egocentric networks, and thus the two network designs turn out to be interdependent and interrelated.²⁵ At the same time, with respect to the economic history of the late Middle Ages, the examination of stand-alone egocentric networks also appears worthwhile, especially if the lacunae in primary sources prevent one from taking a broader approach. To indicate just a few of its potentialities, this method permits to summarize heterogeneous data on the relations of a certain economic entity, be it a household, a firm, a bank, or even a government; to represent such material visually in a comprehensible form; to explore the structure of the resulting business network and its properties, such as size, density, or composition; and finally, to conduct the attribute analysis of individual ties, ranking them by their strength in order to reveal the “core” of the ego’s closest connections.

3. PRIMARY SOURCES ON THE SORANZO TRADING FIRM

The present study aims to contribute to the larger body of research on the Venetian commercial networks by examining the system of business relationships maintained by the Soranzo fraterna, a family partnership that operated during the first half of the 15th century and comprised brothers Donado, Giacomo (Iacomo), Piero, and Lorenzo Soranzo, sons of the late *miser* Vettor Soranzo of the San Samuele parish (*contrada San Samuele*). The activity of this trading firm is documented in its two surviving account books, which are commonly referred to as the *libro real vecchio* and the *libro real novo* (or the *libro reale vecchio* and the *libro reale nuovo* in the Italianized spelling), and which are currently kept in the custody of the State Archives of Venice,²⁶ along with some commercial letters pertaining to the Soranzo brothers and their business partners.²⁷ Being the smaller of the two ledgers, the *libro real vecchio* contains 51 leaves and has at least 16 missing, if one is to rely upon the original numeration; the entries in this book cover the period from 1410 to 1416. The manuscript of the *libro real novo*, which consists of 168 filled folios bearing dates from 1406 to 1434, is fully preserved and well-known to both accounting and

²³ P.V. MARSDEN, *Recent Developments in Network Measurement*, cit., pp. 10-18; IDEM, *Survey Methods for Network Data*, in *The SAGE Handbook of Social Network Analysis*, cit., pp. 370-388.

²⁴ IDEM, *Recent Developments in Network Measurement*, p. 9; O. FRANK, *Survey Sampling in Networks*, in *The SAGE Handbook of Social Network Analysis*, cit., pp. 389-403; P.V. MARSDEN, *Survey Methods for Network Data*, cit., pp. 371-372; B.L. PERRY, B.A. PESCOLIDIO, S.P. BORGATTI, *Egocentric Network Analysis*, cit., p. 20.

²⁵ P.V. MARSDEN, *Recent Developments in Network Measurement*, cit., p. 9.

²⁶ ARCHIVIO DI STATO DI VENEZIA (ASVE), *Miscellanea Gregolin*, 14, Libro real novo, Libro real vecchio.

²⁷ ASVE, *Miscellanea Gregolin*, 8, 13; *Miscellanea di carte non appartenenti ad alcun archivio*, 8.

economic historians. The attention on the part of the former is warranted by the fact that this ledger is generally considered the earliest extant Venetian example of double-entry bookkeeping and is mentioned as such in most treatises on accounting history.²⁸ With regard to the study of late medieval economy, the *libro real novo* provides a breadth of information on the flow of goods, the volume of trade, price movements, profit rates, various types of costs, etc., all of this data having enormous value for the researchers since the period it refers to is rather poor in the number of accounting sources surviving in Venice. Given that the Soranzo brothers had specialized in the import of raw cotton from Syria, their ledger has been cited not only by scholars exploring the Levantine trade in general²⁹ but especially by those who have been interested in this particular branch of commerce, like Wolfgang von Stromer³⁰ and Jong-Kuk Nam.³¹ The latter, for instance, has relied upon the *libro real novo* to demonstrate how the community of South German merchants residing at the *Fondaco dei Tedeschi* had functioned as the main outlet for cotton supplied from Syria and Egypt, and has identified many of the *fraterna's* German customers and the localities of their origin.³²

Despite frequent mentions of the presently discussed account books in various pieces of research, modern historiography lacks a comprehensive study of the Soranzo firm and its business activity, which is largely due to the irregular (or

²⁸ V. ALFIERI, *La partita doppia applicata alle scritture delle antiche aziende mercantili veneziane*, Turin 1891 (ristampa anastatica con presentazione di A. FAZIO, introduzione di V. CAPPELLETTI, Rome 1994), pp. 40-64 (esp. p. 42, note 2); H. SIEVEKING, *Aus venetianischen Handlungsbüchern. Ein Beitrag zur Geschichte des Großhandels im 15. Jahrhundert*, in "Jahrbuch für Gesetzgebung, Verwaltung und Volkswirtschaft im Deutschen Reich", 25, 1901, pp. 1489-1521 (1490-1491, 1502-1510); 26, 1902, pp. 189-225 (193); J. ROW FOGO, *History of Book-keeping*, in *A History of Accounting and Accountants*, R. BROWN ed., Edinburgh 1905, pp. 93-170 (100-107); F. BESTA, *La Ragioneria. Seconda edizione riveduta ed ampliata col concorso dei professori V. ALFIERI, C. GHIDIGLIA, P. RIGOBON. Parte prima: Ragioneria generale*, I-III, Milan 1909-1922, III, pp. 303-304; A.C. LITTLETON, *Accounting evolution to 1900*, N.Y. 1933, pp. 104-105; E. PERAGALLO, *Origin and Evolution of Double Entry Bookkeeping: A Study of Italian Practice from the Fourteenth Century*, N.Y. 1938, pp. 33-34; F. MELIS, *Storia della ragioneria: Contributo alla conoscenza e interpretazione delle fonti più significative della storia economica*, Bologna 1950, p. 533; S. SASSI, *Sulle scritture di due aziende mercantili veneziane del Quattrocento*, Naples [1950]; T. ZERBI, *Le origini della partita doppia: Gestioni aziendali e situazioni di mercato nei secoli XIV e XV*, Milan 1952, pp. 371-377; A. MARTINELLI, *Notes on the Origin of Double Entry Bookkeeping*, in "Abacus", 13, 1977, n. 1, pp. 3-27 (23-24).

²⁹ F.C. LANE, *Andrea Barbarigo, Merchant of Venice*, cit., pp. 155-157, 202-205; E. ASHTOR, *Profits from Trade with the Levant in the Fifteenth Century*, in "Bulletin of the School of Oriental and African Studies", 38, 1975, n. 2, pp. 250-275 (271), reprinted in: IDEM, *Studies on the Levantine Trade in the Middle Ages*, London 1978 (Variorum reprints); IDEM, *Levant Trade in the Later Middle Ages*, Princeton, NJ 1983 (Princeton University Press), pp. 257-261, 323, note 265, 382, 431.

³⁰ W. VON STROMER, *Die Gründung der Baumwollindustrie in Mitteleuropa: Wirtschaftspolitik im Spätmittelalter*, Stuttgart 1978, pp. 37, 54, 78-79, 82, 96, 101, 147.

³¹ J.-K. NAM, *Le commerce du coton en Méditerranée à la fin du Moyen Age*, Leiden-Boston 2007 (Brill; The Medieval Mediterranean: Peoples, Economics and Cultures, 400-1500, vol. 68), pp. 10, 30-34, 107-125, 219-220, 227-239, 384-396.

³² *Ibid.*, pp. 389-394. For a detailed study on German merchants in Venice, see: P. BRAUNSTEIN, *Les Allemands à Venise (1380-1520)*, Rome 2016 (École française de Rome), see mentions of the Soranzo firm on pp. 281, 328, 333, 381, 398, 496, 509, 514-516, 518, 609.

anomalous, in the words of Reinhold C. Mueller³³) nature of the *libro real novo*. The more extensive of the two surviving Soranzo ledgers was not used to record the everyday facts of economic life but compiled from a number of accounting sources, including the *libro real vecchio*, in order to be presented at the Venetian court of the *giudici di petizion*. Although this conclusion had been first explicitly stated by Tommaso Zerbi in 1952,³⁴ the exact circumstances behind the creation of the manuscript remained unknown until the author of this paper was fortunate enough to discover four judicial decisions, or sentences (*sentenze a giustizia*),³⁵ pronounced by the *giudici di petizion* in the case of Vettor Soranzo, son of the late Donado, against his uncles Giacomo, Piero, and Lorenzo Soranzo. As it appears from these rulings, the controversy that lasted at least from 1429 to 1445 and brought about the compilation of the *libro real novo* originated when Vettor claimed full restitution of his mother's dowry and other funds belonging to his father *in proprio* or *in specialità* ("on his own behalf"), along with the profits gained from the investment of said funds in the commercial operations of the family partnership. In the course of the ensuing litigation, the parties to the trial and the court-appointed arbiters hired no less than two accountants, each of whom was tasked with preparing a so-called "*extrato*" or "*estratto*" (lit. "extract, excerpt"), i.e., a kind of expert opinion providing estimate of settlement due to the plaintiff. The *libro real novo* can be identified with one of these *extrati*, meaning that the accounts copied into the ledger were selected specifically for court purposes and are likely to misrepresent the financial result of operations conducted by the *fraterna* in the litigants' interests.³⁶ However, there is no doubt that the materials included in the book were retrieved by a forensic accountant from authentic financial documents and ledgers, therefore the deficiencies of the *libro real novo* do not impede using it to recreate the egocentric network of the Soranzo firm. In future, the network reconstructed with the help of this compilation may be inserted with additional information from the commercial letters of the Soranzo brothers and from the accounts of their agent Lorenzo Priuli,³⁷ and thus the scale of potential omissions and distortions suggested by the nature of the *libro real novo* may finally be revealed.

³³ R.C. MUELLER, *The Venetian Money Market: Banks, Panics, and the Public Debt, 1200-1500*, Baltimore, MD-London 1997 (Johns Hopkins University Press), p. 520, note 13.

³⁴ T. ZERBI, *Le origini della partita doppia*, cit., pp. 371-377.

³⁵ ASVE, *Giudici di petizion*, *Sentenze a giustizia*, reg. 68, ff. 21r-25v; reg. 98, ff. 156-160v; reg. 99, ff. 103v-105v, 170v-173v.

³⁶ See: S. KARPOV, M. RYABOVA, *Libri contabili della fraterna Soranzo nell'Archivio di Stato di Venezia*, in "Thesaurismata: Bollettino dell'Istituto Ellenico di Studi Bizantini e Postbizantini", 45, 2015, pp. 171-179.

³⁷ ASVE, *Miscellanea di carte non appartenenti ad alcun archivio*, 8.

4. THE EGOCENTRIC NETWORK OF THE SORANZO FRATERNA

4.1 *Extracting Tie Data*

The data on the business relationships of the Soranzo fraterna is contained in nearly every entry of the *libro real novo*, but it can be most conveniently retrieved from the personal accounts, where it is presented in a systematic manner. It is worth mentioning here that, according to modern classifications, the term “personal account” refers to any account opened in the name of a certain individual, a business entity, or a public institution.³⁸ From a total of 1097 accounts existing in the Soranzo ledger,³⁹ 713 or 65% fall into this category, and only 384 (35%) are impersonal. In view of the objectives set in the present study, the author chose not to include into analysis the accounts of various officials and magistrates of the Venetian Republic, such as the *Chamera da imprestedi*,⁴⁰ the *Provededori dele blave*,⁴¹ the *extraordinarii*,⁴² and others (25 accounts altogether), those of religious and charitable organizations (11 accounts), as well as 43 bank accounts. Another group that has to be treated separately consists of three fraterna accounts,⁴³ an account entitled “Heirs of *miser Vettor Soranzo*” (“*Chomessaria de miser Vettor Soranzò*”),⁴⁴ 32 accounts opened in the names of brothers comprising the family partnership, i.e., Donado,⁴⁵ Giacomo,⁴⁶ Piero,⁴⁷ and Lorenzo Soranzo,⁴⁸ and two accounts of *Vettor di Donado Soranzo*.⁴⁹ While some of these were employed to register deals concluded by a certain member of the fraterna,⁵⁰ others are somewhat reminiscent of the modern capital and drawings account and were most likely created by an expert responsible for compiling the *libro real novo* in connection with the judicial proceedings.⁵¹

The remaining 596 personal accounts relate to individual men of affairs, family partnerships, or companies of merchants, and their holders constitute actors in the business network of the Soranzo fraterna. Interestingly, the average number of entries made in these accounts is only 3.8, or about 1.86 entries per debit column

³⁸ D. HOPKINS, H. RANDALL, *Cambridge International AS and A Level Accounting: Coursebook*, 2nd ed., Cambridge 2017 (Cambridge University Press), p. 45.

³⁹ ASVE, *Miscellanea Gregolin*, 14, Libro real novo.

⁴⁰ *Ibid.*, ff. 2s, 42d, 50d, 56s, 90d, 125d, 126d, 147d, 157d, 163s.

⁴¹ *Ibid.*, ff. 5d, 165d.

⁴² *Ibid.*, ff. 31s, 45d, 52d, 54d, 55d, 69s.

⁴³ *Ibid.*, ff. 8s, 161s, 167d (account “Fraterna zioe ser Donado, Iachomo, Piero, Lorenzo Soranzo fo de miser Vettor”).

⁴⁴ *Ibid.*, f. 160d.

⁴⁵ *Ibid.*, ff. 3d, 36s, 60d, 65s, 91s, 145s, 161d, 168s.

⁴⁶ *Ibid.*, ff. 16d, 139d, 147s.

⁴⁷ *Ibid.*, ff. 25s, 75d, 84d, 94s, 96s, 117d, 141d, 154d.

⁴⁸ *Ibid.*, ff. 27s, 94d, 100d, 124s, 146s, 151d, 155s, 156s.

⁴⁹ *Ibid.*, ff. 121s, 145d.

⁵⁰ For examples, see: *Ibid.*, ff. 36s, 117d, 154d.

⁵¹ For examples, see: *Ibid.*, ff. 65s, 168s.

and 1.94 per credit column, which is rather low in comparison with other types of accounts (for example, the average for merchandise accounts would be about 8.65, or 5.75 per credit and 2.9 per debit, and for bank accounts – 32.67, 14.07, and 18.6, respectively). Out of 596 personal accounts, 109 (18.29%) comprise three entries, 285 (47.82%) two, and 15 one entry, the total number of accounts with less than four entries equaling 409 or 68.62%. Though 32 accounts of this type contain more than 10 entries each, and the longest of them consists of 43 entries, overall the bookkeeping practices of the Soranzo *fraterna* display a tendency for a personal account to record operations involved in completing a single business transaction (i.e., a sale, a purchase, etc.).

Such pattern seems to fit into the description given to the Venetian accounting system by Frederic C. Lane, who coined the term “venture accounting” to stress out the fact that the 15th-century Venetian merchants had not balanced their books at regular intervals, like Florentines had, but had established the results of each business enterprise separately.⁵² For instance, the Soranzo brothers opened a special account for every overseas venture and for every lot of merchandise imported from the Levant. The debit of a merchandise account⁵³ contained all of the costs incurred in connection with a particular consignment, while the credit stated the amount and the contract value of the merchandise purchased by customers. It was only after the whole lot had been sold and the bookkeeper had received complete information on expenses that such an account was closed into the profit and loss account. Each entry in the credit of the merchandise account required a corresponding entry to be made in the debit of a buyer’s account.⁵⁴ Thus, the debit column of the customer’s personal account conveyed how much he owed to the *fraterna*, and the credit recorded the sums he paid. Once the payments received by the Soranzo brothers totaled the contract value of merchandise sold, the customer’s personal account was closed; if the holder failed to meet his obligations, the balance of his account was transferred to the account of bad debts (“*Debitori chattivi*”).⁵⁵ The same principles applied to the management of other personal accounts, with the obvious exception that, in the accounts for trade payables, the roles were switched, so the credit column stated contractual obligations undertaken by the Soranzo brothers, and the debit reflected the discharging of their liabilities.

The small average number of entries in the 596 personal accounts of the *libro real novo* has several implications for network research. First of all, the practice of using particular accounts to register a single business transaction makes it easier to group them by the kind of operations reported, and this procedure in turn opens the way for classifying the account holders according to the functional type of tie linking them to the Soranzo *fraterna*, i.e., according to one of the key attributes of a

⁵² F.C. LANE, *Venture Accounting in Medieval Business Management*, in “Bulletin of the Business Historical Society”, XIX, 1945, 5, pp. 164-173 (esp. 168), reprinted in: *Venice and History: The Collected Papers of Frederic C. Lane*, cit., pp. 99-108.

⁵³ For examples, see: ASVE, *Miscellanea Gregolin*, 14, Libro real novo, ff. 10d, 11s, 12s, *et passim*.

⁵⁴ For examples, see: *Ibid.*, ff. 10d, 11s, *et passim*.

⁵⁵ *Ibid.*, ff. 157s, 160d.

business relationship. 596 personal accounts from the *libro real novo* can be divided into about 21 categories based on the entries' content, and though some of these groups consist of only one or two accounts, their number testifies to the variety of deals contracted by the Soranzo merchants. By far the largest category contains 333 accounts of customers who bought some merchandise from the *fraterna*, the turnover of these sales being as high as 8414.731 *lire di grossi* or approximately 84147 ducats. In contrast, there are only 56 accounts opened in the names of suppliers, the total of purchases registered in them barely amounting to 1131.587 *lire di grossi*, which is less than, for instance, the sum of private loans obtained and provided by the Soranzo merchants, according to 43 accounts of their lenders and borrowers (1191.976 *lire di grossi*).

The huge gap between the two most numerous groups of personal accounts does not convey the actual difference between the contract values of goods acquired and sold by the firm, as one might have expected. The discrepancy is due to the fact that the commodities offered by the *fraterna* at the Venetian market had mostly been imported from the Levant, therefore the costs of procuring them were entered in the account of a person responsible for a particular commercial venture, or voyage (*viazo*), be it a commission agent or one of the Soranzo brothers themselves.⁵⁶ Since the firm's overseas suppliers interacted with its main office through representatives and not directly, the *libro real novo* contains no personal accounts opened in the names of these oriental men of affairs and in general provides very little information on their identities and their relationship with the *fraterna*, making it impossible to include them in the egocentric network reconstructed on the basis of this ledger. To obtain more complete data on the firm's ties to Levantine traders, one would have to consult the accounts which the Soranzo brothers and their commission agents kept while residing abroad, and all of these materials except for the aforesaid records of Lorenzo Priuli (1409-1413)⁵⁷ seem to have either got lost or perished.

Apart from sales, purchases, and loans, personal accounts from the *libro real novo* report other less common types of business dealings, including, but not limited to, transactions performed under a commission agency contract (26 accounts) or under a joint enterprise agreement (6 acc.), operations with government bonds (16 acc.) and bills of exchange (12 acc.), barter deals (9 acc.), will execution (6 acc.), rendering of services (6 acc.), rental payments (4 acc.), and disbursement of dowry (2 acc.). Of particular interest are 46 accounts that each record two or more different types of transactions and thus do not conform to the general tendency for the personal accounts to register a single deal. A few of these heterogeneous accounts were retained perpetually or at least kept for prolonged periods of time, running up to dozens of entries, which is likely to indicate the existence of a stronger and more permanent connection than a purely business relationship. In fact, among the hold-

⁵⁶ For examples, see: *Ibid.*, ff. 65s, 69s.

⁵⁷ ASVE, *Miscellanea di carte non appartenenti ad alcun archivio*, 8.

ers of such accounts one finds Luca *di Leonardo* Donado,⁵⁸ who married Marcolina Soranzo, the sister of the four Soranzo brothers, and brothers Niccolò and Giacomo Priuli,⁵⁹ sons of Costantino and the *cognadi* (in-law relatives) of Donado Soranzo. While it is evident that the ties between these actors and the *fraterna* had a complex, multifaceted nature, the network approach in itself does not allow to determine which aspect of their relationship served as the driving force in creating and maintaining the linkage. In other words, it is unclear whether the pre-existing social and familial ties led to frequent economic interactions with a number of individuals, or the firm's business interests prompted the Soranzo merchants to seek certain matrimonial alliances. Solving this problem would require both the use of additional primary sources and the application of other research methods besides network analysis.

4.2 *Reconstructing the first-order business network*

In order to reconstruct the 1-degree network of the Soranzo merchants, the author integrated the contents of 596 personal accounts found in the *libro real novo* into a tabular database where each entry corresponded to a linkage between the *fraterna* and a certain actor, i.e., an account holder. This procedure entailed identifying partners with more than one account opened in their names and pooling information relating to them so as to obtain weighted data on the alters' attributes. The resulting first-order egocentric network, which is visually represented in Figure 1.1,⁶⁰ consists of 469 ties, the average number of personal accounts per holder being about 1.27. The abundance of overlapping vertices and edges makes this graph hardly readable, so the weak, insignificant, or occasional connections have to be filtered out to achieve a more meaningful and comprehensible visualization (refer to Fig. 1.2 for example). The set of attributes that characterize each of the ties forming the network includes those identifying the alters, such as the name of a counterparty, his or her city of origin, ethnicity, parentage (if known), and the style of address employed, and those describing the relationship itself, i.e., the duration of contact with the *fraterna*, the functional type of tie, the number of personal accounts an actor had in the *libro real novo* and whether or not they were balanced, the number and the volume of transactions recorded in these accounts, and the chosen form of payment.

⁵⁸ ASVE, *Miscellanea Gregolin*, 14, Libro real novo, ff. 80s, 83d, 89d, 109s, 123d, 151d, 165d (“Ser Lucha Donado”).

⁵⁹ *Ibid.*, ff. 100s, 123s (“Ser Nichollo e Iachomo di Priulli”).

⁶⁰ The network graphs in Figures 1.1 and 1.2 were created by the author with NodeXL. See: M. SMITH, A. CENI, N. MILIC-FRAYLING, B. SHNEIDERMAN, E. MENDES RODRIGUES, J. LESKOVEC, C. DUNNE, *NodeXL: a free and open network overview, discovery and exploration add-in for Excel 2007/2010/2013/2016, from the Social Media Research Foundation*. Available online at URL: www.smrfoundation.org (last accessed 30.06.2018).

provides opportunities for a deeper examination of this material, starting with its quantitative analysis, which finds itself considerably facilitated and encouraged within this methodological framework. In the particular case of the Soranzo *fraterna*, creating the database of the personal account holders has enabled the author not only to tabulate the geographical distribution of alters in the egocentric network but also to compute the number of accounts and accounting entries, as well as the approximate turnover of operations, for each of the groups united by common origin (see Table 1 in the Appendix and Figures 2.1, 2.2 below).

Fig. 2.1. Turnover of personal accounts in the *libro real novo* by the origin of their holders (in *lire di grossi*, approx.)

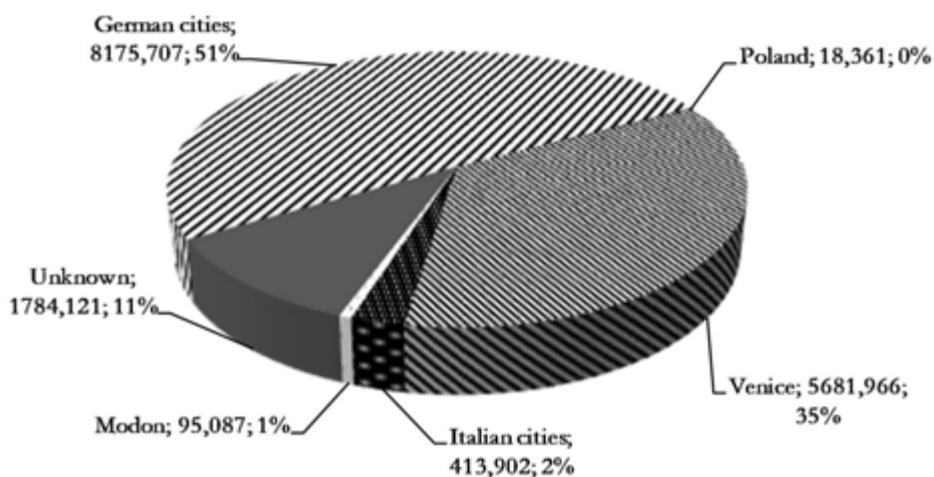
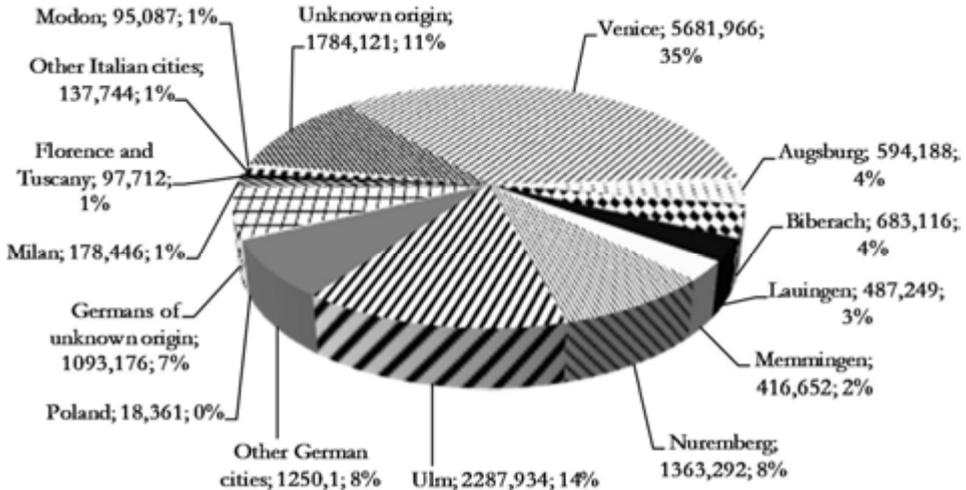


Fig. 2.2. Turnover of personal accounts in the *libro real novo* by the origin of their holders (detailed breakdown; in *lire di grossi*, approx.)



Obviously, the values presented in Table 1 are of approximate nature due to some limitations of the *libro real novo* as a historical source, and first of all to the fact that the individuals mentioned in the ledger are not always easily identifiable; for example, a number of variant spellings are usually found for foreign surnames and toponyms, and same person is occasionally referred to in several different ways. Furthermore, since only 195 account holders out of 469 (41.58%) have their provenance explicitly stated, the author has taken upon herself to single out the members of well-known Venetian families⁶² and to include 41 actors with German-sounding names into the category “Germans of unknown origin”, along with 4 people who are designated in the manuscript as “*todeschi*” or “*d’Alemagna*”. Although one cannot altogether avoid the risk of erroneous identifications, which would have resulted in some minor database inaccuracies, the general picture is rather clear, revealing the preponderance of German customers in the Soranzo trading network and the prominent position of merchants from Ulm, Nuremberg, and Augsburg within this group of foreigners. At the same time, the average number of accounting entries per person is much higher for Venetians than it is for Germans (6.74 *versus* 4.02, respectively), which can be interpreted in the sense that the Soranzo brothers interacted with their fellow compatriots on a more regular basis.

⁶² For reasons of convenience, a family name was considered Venetian if labeled as such in the Da Mosto guide to the Venetian archive. See: A. DA MOSTO, *L’Archivio di Stato di Venezia: Indice generale, storico, descrittivo ed analitico*, I-II, Rome 1937-1940 (Biblioteca d’arte editrice), T. I: *Archivi dell’amministrazione centrale della Repubblica Veneta e archivi notarili*, pp. 71-77.

In addition to its rich potential for the quantitative analysis of attribute data, the network approach permits one to evaluate the relative importance of actors and to rank them within the system of relationships. With respect to the Soranzo case, the most obvious criteria for assessing the strength of tie connecting an alter to the ego are the frequency of mutual interactions and the volume of operations. The first parameter is indirectly reflected by the number of personal accounts and entries contained in them, while the second can be measured with the approximate turnover⁶³ of the said accounts. The 5% of actors who rank highest according to these criteria and thus form the core of the Soranzo business network are listed in Table 2 (see Appendix). The above-mentioned Luca Donado holds the top spot in all three groups, making it hardly surprising that in the late 1420s the *giudici di petizion* appointed him one of the arbiters in the litigation between Vettor di Donado Soranzo and his uncles.⁶⁴ Other actors present in every column include Giacomo di Antonio Dandolo,⁶⁵ who married Marina Soranzo, Donado's daughter and Vettor's sister, in 1423; four German merchants, i.e., Johann Felle or Vöhlin⁶⁶ from Memmingen (*Zan Felle di Manin*),⁶⁷ Rigo Eleng from Ulm (*Rigo Eleng d'Ollmo*),⁶⁸ Rigo Snaper from Biberach (*Rigo Snaper di Brebrach*),⁶⁹ and Johann Dieter from Ulm (*Zan Dieter d'Ollmo*);⁷⁰ Venetian moneychanger Donado di Fellipo,⁷¹ and even one woman – Agnesina Venier,⁷² widow of Andrea, who named the Soranzo brothers executors of her will.

However, apart from the purely quantitative criteria cited in Table 2, ties within the Soranzo business network can also be assessed with respect to the nature of transactions carried out by the actors. The classification of partners according to the functional type of their relationship with the *fraterna* (see Table 3 in the Appendix) takes as a point of departure the content-based classification of personal accounts (see section 4.1 of the present paper). Since both rely on the type of business deals registered in the *libro real novo* as a criterion for forming groups, the actors fall into categories that essentially reiterate those of personal accounts and include, for example, customers who acquired merchandise from the *fraterna* (256 actors), the firm's suppliers (45 actors), commission agents (19 actors), lenders and borrowers (26 actors), investors partaking in operations with government bonds (15 ac-

⁶³ In the context of the present study, the turnover of a personal account was calculated as the sum of debit entries; balance entries were normally excluded, except for the balances transferred from Daniel Ziliol's *extrato* (ASVE, *Miscellanea Gregolin*, 14, Libro real novo, ff. 2d-6s).

⁶⁴ S. KARPOV, M. RYABOVA, *Libri contabili della fraterna Soranzo*, cit., p. 174.

⁶⁵ ASVE, *Miscellanea Gregolin*, 14, Libro real novo, ff. 100s, 115d, 133d, 144d, 162s.

⁶⁶ Identification proposed by J.-K. Nam, see: J.-K. NAM, *Le commerce du coton en Méditerranée*, cit., pp. 393-394.

⁶⁷ ASVE, *Miscellanea Gregolin*, 14, Libro real novo, ff. 70d, 72s, 132s.

⁶⁸ *Ibid.*, ff. 70d, 72s, 98d, 107d, 124d.

⁶⁹ *Ibid.*, ff. 91s, 107d, 140d, 151s.

⁷⁰ *Ibid.*, ff. 53d, 70d, 73s.

⁷¹ *Ibid.*, ff. 43d, 110s, 116s, 119d.

⁷² *Ibid.*, ff. 6s, 22d, 158s, 158d, 160s.

tors), service providers (6 actors), parties to bills of exchange (9 actors) and to barter deals (4 actors), joint enterprise partners (1 actor), *et al.* However, personal accounts opened in the name of the same person sometimes belong to two or more different content-based groups, revealing the heterogeneous character of operations conducted by the individual in question. Holders of such accounts make up the category of actors with multifunctional ties to the *fraterna*, along with partners possessing personal accounts of the mixed type.

Unsurprisingly, the group of 61 alters who interacted with the Soranzo merchants in several various capacities features some members of their inner social circle and extended family, including relatives by blood (for example, uncles Tommaso Soranzo⁷³ and Vido da Canal,⁷⁴ cousins Stefano *di Niccolò* Contarini⁷⁵ and Bartolomeo *di Tommaso* Soranzo)⁷⁶ and by marriage (i.e., the already mentioned Luca Donado, Giacomo Dandolo, and brothers Giovanni, Niccolò, and Giacomo Priuli). At times the individual's exact relation to the *fraterna* may remain unknown, but the nature of the transactions themselves implies social connection, as is the case with Agnesina Venier, whose will the Soranzo brothers executed, or with the unnamed prioress⁷⁷ of the San Lorenzo convent, where their sister Fontana⁷⁸ took the veil. At least 17 actors with multifaceted ties to the *fraterna* were foreigners, 12 of them Germans and 5 Italians, and while these men of affairs occupy a prominent place in the group, the business activities they engaged in appear significantly less diversified than those of the firm's Venetian partners. Like most of their compatriots, these foreigners generally bought articles of Levantine import (14 actors), the main difference being that, in addition, they also sold to the *fraterna* (3 actors) or bartered (10 actors) merchandise of their own. Less common for the members of this subgroup was to use various financial instruments, such as bill of exchange (*lettera di cambio*, 2 actors), guarantee (*proferta*, 2 actors), or loans (1 actor).

As for the remaining 31 partners who were linked to the *fraterna* with multifunctional ties but are not known to be related to the Soranzo brothers by blood or by marriage, their provenance is not indicated in the account books, therefore it is likely that the majority of them were Venetian citizens (*cives de intus* or *de extra*) or patricians. Their dealings with the firm demonstrate highly diversified and individualized combinations of business activities and operations, making it hard to detect patterns of economic behavior; the same applies to members of the Soranzo clan but not to the subcategory of foreigners. A cursory assessment of the subgroup constituted by the Venetians with multifaceted ties to the *fraterna* reveals the presence of actors involved in the day-to-day running of the Soranzo household, such

⁷³ *Ibid.*, f. 4s.

⁷⁴ *Ibid.*, ff. 56d, 115d.

⁷⁵ *Ibid.*, ff. 78s, 163d.

⁷⁶ *Ibid.*, f. 5d.

⁷⁷ *Ibid.*, f. 116d.

⁷⁸ *Ibid.*, ff. 112s, 149d.

as Dario Zusto,⁷⁹ the proprietor of storage facilities rented by the firm, Niccolò da Verseia,⁸⁰ *fameio* of Donado Soranzo, and a bunch of local artisans and shopkeepers (Carlo Coldiera,⁸¹ owner of a *botega*; Renaldo, *sartor a Rialto*;⁸² *choltrer* Andrea da Lorssa;⁸³ *drapieri* Luca and Francesco Zivran;⁸⁴ *miedego* Graziadio).⁸⁵ Two members of the group performed the duties of official brokers, or *sanseri*, at the *Fondaco dei Tedeschi*, and this circumstance merits special attention since the law required the state-appointed intermediaries of trade to participate in every deal concluded with German merchants and worth more than 10 ducats.⁸⁶ Throughout the many years of their business career, the Soranzo brothers interacted with dozens of *sanseri*, the fees due to these latter having been regularly entered into the merchandise accounts, along with other expenses,⁸⁷ but only Bortolamio Alivoto⁸⁸ and Iacomo Perazo⁸⁹ had personal accounts in the *libro real novo*. Their particular closeness to the *fraterna* suggests the potential for illicit agreements not unlike those described by Philippe Braunstein in his recent book.⁹⁰

The central position held within the network by the actors with multifunctional ties to the ego finds reasonable explanation in the fact that concluding several deals of various types with a certain counterparty generally bespeaks coincidence of financial interests, mutual trust, and possibly even a social connection. However, a strong business relationship, though perhaps lacking meaningful social implications, can also emerge thanks to the recurring economic transactions of the same kind. For this reason, a comprehensive analysis of the Soranzo trading network would have to take into consideration the above-listed homogeneous categories of account holders (see Table 3 in the Appendix), especially the largest group comprising 256 buyers of goods. A brief survey of actors who engaged the firm exclusively to acquire merchandise shows that the absolute majority of clients (182, or 71.09%) made only one purchase, so they had no chance to form any sort of lasting connection with the Soranzo brothers. Nevertheless, the *fraterna* did gain some regular customers, and 14 buyers (5.47%), most of them Germans, concluded more than three deals each, the turnover of sales reported in their personal accounts amounting to 2156.807 *lire di grossi*, as opposed to 3155.659 *lire di grossi* spent by 182 one-time buyers. Hence it follows that though the Soranzo firm had access to a rather

⁷⁹ *Ibid.*, ff. 95d, 163d.

⁸⁰ *Ibid.*, f. 22d.

⁸¹ *Ibid.*, f. 20s.

⁸² *Ibid.*, f. 152s.

⁸³ *Ibid.*, ff. 57s, 129s.

⁸⁴ *Ibid.*, f. 97d.

⁸⁵ *Ibid.*, f. 36d.

⁸⁶ P. BRAUNSTEIN, *Les Allemands à Venise (1380-1520)*, cit., pp. 121-123.

⁸⁷ For examples, see: ASVE, *Miscellanea Gregolin*, 14, Libro real novo, ff. 9s, 11s, 12s, *et passim*.

⁸⁸ *Ibid.*, f. 35d.

⁸⁹ *Ibid.*, ff. 140s, 155d.

⁹⁰ P. BRAUNSTEIN, *Les Allemands à Venise (1380-1520)*, cit., pp. 123-126.

large and depersonalized distribution network, the ultimate success of its business strategy depended heavily on a small number of wholesale merchants strongly connected to the *fraterna*.

5. CONCLUSION

The network analysis initiated by the author in this study leaves plenty of room for the application of more specialized and sophisticated research procedures, as well as for the deeper interpretation of its results. At the present stage, the Soranzo business network comprises only actors of first order, i.e., those directly linked to the *fraterna*, and only those with personal accounts opened in their names. Its scope can be further broadened by adding bankers and individuals who did not possess their own accounts in the *libro real novo* but played important structural roles in the organization of commerce, like brokers and intermediaries of trade (*sanseri*), patrons of ships, or other actors mentioned in the entries recording overhead and transportation costs of merchandise. Nevertheless, the egocentric network reconstructed hitherto allows some new light to be shed on the patterns of economic interactions in the business circles of late medieval Venice. Since the data on the relationships maintained by the Soranzo trading firm (“the ego”) with its partners (“alters”) came from the accounting records, every known tie within the network manifested itself in the value of goods or the sum of money that had changed hands, and thus it possessed an inherent quantitative dimension. This has enabled the author to assess the strength of linkages by the number and the volume of transactions conducted with a given individual and to rank the actors accordingly, highlighting those who had invested most heavily in their dealings with the Soranzo merchants.

In addition to the quantitative criteria, the relationships within the network were also classified according to their functional types, which had been defined by the nature of deals concluded. This procedure brought into view the diversity of economic transactions performed by the firm and their mostly impersonal character, at the same time revealing the core of partners with strong multifaceted ties to the Soranzo *fraterna*. The composition of this group turns out to be remarkable in several ways. For one thing, it demonstrates the priority of relationships formed through marriage over those predetermined by kinship patterns. While in recent historiography it has been suggested that the acquisition of political and social advantages through matrimonial alliances may not have been a widespread phenomenon in late medieval Venice,⁹¹ the account books of the Soranzo *fraterna* provide one with vivid examples of the day-to-day economic cooperation between the in-laws who interacted much more tightly than blood relatives or members of the extended Soranzo clan. Furthermore, the core of the Soranzo network contains high percentage of foreigners, mostly South German

⁹¹ D.E. QUELLER, T.F. MADDEN, *Father of the Bride: Fathers, Daughters, and Dowries in Late Medieval and Early Renaissance Venice*, in “Renaissance Quarterly”, 46, 1993, n. 4, pp. 685-711.

merchants residing at the *Fondaco dei Tedeschi*, which results from the fact that the family partnership invested the bulk of its capital in cotton trade. On the other hand, the regular and prolonged business contacts with a group of Germans acting as bridges to the rest of the community may have led to the emergence of permanent social linkages, and these latter may have, in their turn, prevented the *fraterna* from trying to broaden its specialization in order to adapt to the changing market conditions and to the shifts in the political situation. In this manner, the case study of the Soranzo trading network ultimately contributes to revealing both the organizational patterns of the Venetian trade in the Eastern Mediterranean and the underlying mechanisms of economic integration between the Venetian Republic, the Levant, and the cities of Southern Germany.

APPENDIX

Tab. 1. The Geographical Distribution of the Personal Account Holders in the *Libro Real Novo* of the Soranzo *Fraterna* (ASVE, *Miscellanea Gregolin*, 14)

Provenance of account holders	Number of account holders	Number of personal accounts	Total number of entries	Average number of entries per account holder	Total turnover of accounts (in <i>lire di grossi</i> , approx.)	Average turnover per account holder (in <i>lire di grossi</i> , approx.)
Venice	158	210	1065	6.74	5681.966	35.962
German lands, including:	200	257	803	4.02	8175.707	40.879
Ulm (<i>Olmo</i>)	34	49	183	5.38	2287.934	67.292
Nuremberg (<i>Norimbergo</i>)	30	43	145	4.83	1363.292	45.443
Augsburg (<i>Ausborgo</i>)	15	19	60	4	594.188	39.613
Biberach (<i>Brebach</i>)	9	14	61	6.78	683.116	75.902
Konstanz (<i>Chostanzà</i>)	9	11	31	3.44	209.273	23.253
Salzburg (<i>Salzisborgo</i>)	9	11	26	2.89	153.681	17.076
Regensburg (<i>Rausborgo / Renesborgo</i>)	7	8	23	3.29	183.458	26.208
Vienna (<i>Viena</i>)	7	8	19	2.71	106.057	15.151

Memmingen (<i>Manin</i>)	6	12	40	6.67	416.652	69.442
Lauingen (<i>Laibin / Longin</i>)	5	7	21	4.2	487.249	97.45
Breslau (<i>Breslavia</i>)	4	4	8	2	39.391	9.848
Cologne (<i>Chologna</i>)	4	5	18	4.5	166.036	41.509
Passau (<i>Passo</i>)	3	3	8	2.67	56.324	18.775
Fainboch (?)	1	1	2	2	38.296	38.296
Freiburg (<i>Feriborgo</i>)	1	1	2	2	2.837	2.837
Frankfurt (<i>Francho fort</i>)	1	1	3	3	10.207	10.207
Landshut (<i>Lanzuot</i>)	1	1	2	2	37.121	37.121
Lübeck (<i>Lubeck</i>)	1	1	2	2	13.698	13.698
Munich (<i>Munego</i>)	1	2	5	5	39.175	39.175
Neustadt (<i>Neustat</i>)	1	1	2	2	15.556	15.556
Nördlingen (<i>Norlin</i>)	1	1	3	3	43.49	43.49
Seresborgo (?)	1	1	2	2	7.5	7.5
Sipplingen (<i>Spilimbergo</i>)	1	2	6	6	31.45	31.45
Songar (?)	1	1	4	4	87.941	87.941
Strasbourg (<i>Strasborgo</i>)	1	1	2	2	3.17	3.17
Villach (<i>Villacho</i>)	1	1	2	2	5.439	5.439
Germans of unknown origin	45	48	123	2.73	1093.176	24.293
Italian cities, including:	28	36	100	3.57	413.902	14.782
Milan (<i>Milano</i>)	10	14	35	3.5	178.446	17.845
Florence (<i>Firenze</i>)	4	4	10	2.5	55.462	13.866
Ascoli Piceno (<i>Ascholle</i>)	2	2	5	2.5	9.837	4.919
Mantua (<i>Mantova</i>)	2	2	4	2	7.21	3.605

Bergamo (<i>Bergamo</i>)	1	5	18	18	29.297	29.297
Castel Maggiore (<i>Chastel Magor</i>)	1	1	2	2	4.91	4.91
Modena (<i>Modena</i>)	1	1	2	2	4.243	4.243
Pavia (<i>Pavia</i>)	1	1	4	4	4.183	4.183
Peraga (<i>Peraga</i>)	1	1	5	5.00	35.731	35.731
Pordenone (<i>Pordenon</i>)	1	1	1	1	2.805	2.805
Sesto di Friuli (<i>Sesto di Frenul</i>)	1	1	3	3	5.3	5.3
Spoletto (<i>Spollitti</i>)	1	1	2	2	4.59	4.59
Treviso (<i>Trevixo</i>)	1	1	5	5	29.638	29.638
Tuscany (<i>toschan</i>)	1	1	5	5	42.25	42.45
Modon	2	3	8	4	95.087	47.544
Poland (<i>Polana</i>)	1	1	2	2	18.361	18.361
Origin unknown	80	89	288	3.6	1784.121	22.302
Total / Average	469	596	2266	4.83	16169.144	34.476

Tab. 2. Top-5% of Actors in the Egocentric Network of the Soranzo Fraterna

Rank	By the number of accounts		By the number of entries		By the turnover of accounts	
	Name	Number of accounts	Name	Number of entries	Name	Turnover of accounts (in <i>lire di grossi</i> , approx.)
1	Donado, Lucha*	8	Donado, Lucha*	142	Donado, Lucha*	815.66
2	Felle, Zan	7	Venier, Agnexina*	77	Donado di Fellipo	526.476
3	Venier, Agnexina*	6	Dandolo, Iachomo*	40	Dandolo, Iachomo*	419.437
4	Belltrame d'Andrea*	5	Priolli, Zan di e fradelli*	30	Rumel, Zan e Rigo*	356.7
5	Dandolo, Iachomo*	5	Felle, Zan	28	Venier, Agnexina*	328.556
6	Eleng, Rigo*	5	Dieter, Zan*	25	Felle, Zan	307.246
7	Benbo, Bernardo*	4	Priolli, Nichollo e Iachomo di*	25	Zan di Piero	266.736
8	Donado di Fellipo	4	Eleng, Rigo*	23	Scharssso, Chorado	264.743
9	Priolli, Nichollo e Iachomo di*	4	Priolli, Chonstantin di*	23	Praun, Piero	251.308
10	Priolli, Zan di e fradelli*	4	Benbo, Lorenzo	20	Priolli, Chonstantin di*	244
11	Rabia, Piero*	4	Chorner, Alvixe*	20	Snaper, Rigo; Pruner, Zan	231.185
12	Snaper, Rigo*	4	Charllo, Nichollo	19	Rumel, Vielmo e Zan	227.809
13	Zan d'Ollmo	4	Chontarini, Zan fo di Nicholo	19	Dieter, Zan*	200.32
14	Chres, Lio Polldo*	3	Donado di Fellipo	19	Pexaro, Franzescho da cha da	190.933
15	Chorner, Alvixe*	3	Snaper, Rigo*	19	Dobratti, Iachomo e fradelli	190
16	Detil, Renaldo*	3	Soranzo, Agostin e fradelli*	19	Zan d'Ollmo	186.329
17	Dieter, Zan*	3	Belltrame d'Andrea*	18	Eleng, Rigo*	180.044

18	Donado, Andrea e Almoro*	3	Zusto, Dario*	17	Benbo, Lorenzo	176.29
19	Elsimer, Rigo	3	Hostorich, Zufredo	16	Chlomer, Ios	174.26
20	Granata, Nicholo	3	Pollo, Marcho	16	Soranzo, Agostin e fradelli*	166.605
21	Grazian, Andrea	3	Bertollin, Marcho di	15	Rosso, Armano	156.681
22	Hostorich, Zufredo	3	Donado, Andrea e Almoro*	15	Snaper, Rigo*	148.023
23	Rumel, Vielmo e Zan	3	Loredan, Zullian*	15	Mautin, Zan e chompagni	141.274
24	Scharssso, Chorado	3	Detil, Renalldo*	13	Bertolldo d'Olmo	139.618
<p>The spelling of personal names follows the <i>libro real novo</i> (ASVE, <i>Miscellanea Gregolin</i>, 14) * - Partners with multifunctional ties (See Table 3, row 12)</p>						

Tab. 3. Classification of the Personal Account Holders according to the Functional Type of Their Tie with the Soranzo Fraternal

№	Category name	Number of account holders	Number of entries			Total turnover of accounts (in <i>lire di grossi</i> , approx.)	Average turnover (in <i>lire di grossi</i> , approx.)
			Debit column	Credit column	Total		
1	Buyers of goods	256	396	477	873	7716.171	30.141
2	Suppliers of goods	45	76	85	161	1018.515	22.634
3	Commission agents	19	57	114	171	1229.568	64.714
4	Lenders / borrowers	26	62	57	119	833.956	32.075
5	Parties involved in operations with government bonds	15	22	22	44	415.613	27.708
6	Parties to a bill of exchange	9	9	10	19	163.242	18.138
7	Parties to a barter deal	4	6	7	13	40.2	10.05
8	Guarantors of payments	6	7	10	17	102.919	17.153
9	Service providers	6	7	6	13	19.808	3.301
10	Partners in a joint enterprise	1	2	2	4	2.325	2.325
11	Other	21	30	24	54	384.66	18.317
12	Partners with multifunctional ties	61	433	345	778	4242.167	69.544
13	Total / Average	469	1107	1159	2266	16169.144	34.476