

**The lost half. Quantitative methods and historical studies:  
a critical review**

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Starting from three recent publications (a handbook, a conference proceeding, and an edited volume), this article discusses the limited use of quantitative methods among historians, especially in the Italian context, despite the widespread debate about digital history and historical “big data”. After the great promises made between the 1960s and the 1980s, and the opposite trend of the following 20 years, the spread of personal computers and the great diversification and refinement of methods have allowed for direct and experimental uses of quantitative analysis, even on a small corpus of data or from a micro-historical perspective. Widespread quantitative training would strengthen historians’ reflexive and interpretative skills.

**Key words:** The lost half. Notes in quantitative methods and historical studies

In 2009, a thorough essay by André Carus and Sheilagh Ogilvie tried to give an answer to the recurring question that haunts many social historians: how could they avoid the pressure for formalism that marks economic history and the refusal of quantification so common among history scholars?<sup>1</sup> Published in the renowned journal “Economic History Review”, their essay reaffirmed the comparative dimension of knowledge and the statistical nature of all comparisons.<sup>2</sup> They suggested searching for the indispensable link between “quality”

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<sup>1</sup> André W. Carus, Sheilagh Ogilvie, *Turning qualitative into quantitative evidence: a well-used method made explicit*, “Economic history review”, 2009, n. 4, pp. 893-925. See also André W. Carus, Sheilagh Ogilvie, *The poverty of historical idealism*, “History workshop journal”, 2005, n. 59, pp. 270-281. On the opposition see Claire Lemercier, Carine Ollivier, *Décrire et compter. Du bricolage à l’innovation: questions de méthode*, “Terrains & travaux”, 2011, n. 2 (19), pp. 5-16.

<sup>2</sup> These are rare themes even for developmental age psychologists: Alison Gopnik, *Il bambino filosofo. Come i bambini ci insegnano a dire la verità, amare e capire il senso della vita* [2009], Turin, Bollati Boringhieri, 2010, chap. 3; see also Alison Gopnik, Andrew N. Meltzoff, Patricia K. Kuhl, *Tuo figlio è un genio. Le straordinarie scoperte sulla mente infantile* [1999], Milan, Baldini & Castoldi, 2000. The exaggerated titles and subtitles, which respond

and “quantity” in the complex effort to establish a relationship between the “emic” categories of past social agents and the “ethic” categories of scholars.<sup>3</sup> The approach presented in the essay sought to make explicit the method that Peter Laslett had implicitly proposed in 1963, and which subsequently became a constant feature in the works of the Cambridge Group for the History of Population and Social Structure.<sup>4</sup> It is not possible here to reconsider a proposal focusing on small “populations” (as statistics use the term) and moves towards a “history from below” approach. Rather, the purpose of this review is to demonstrate that reflections such as those offered by Carus and Ogilvie go to the root of the question whether quantitative methods can know the past, dissolving the contrast between the alleged “reductionism” of the statistical approach and the supposed “irreducibility” of social realities. The emergence and revival of approaches such as Laslett’s “micro-exemplary” one favour a critical use of quantitative methods, which is a fundamental premise for the construction of an analytical, experimental and reflective historical practice, capable of exercise a rigorous (self-)control over choices and protocols concerning sources, methods, categories and research acquisitions dissemination.<sup>5</sup>

The great historian of the French Revolution, Georges Lefebvre, often stated that “if you want to do history you have to be able to count”.<sup>6</sup> As many other

to commercial strategies aimed at new parents, risk casting a shadow on the quality of these books. For an academic reference book see Alison Gopnik, Andrew N. Meltzoff, *Costruire il mondo. Una teoria dello sviluppo cognitivo* [1996], Milan, McGraw-Hill, 2000.

<sup>3</sup> Some important analyses conducted by historians of this dialectic include Carlo Ginzburg, *Our words, and theirs: a reflection on the historian's craft, today*, in Susanna Fellman, Marjatta Rahikainen (eds.), *Historical knowledge. In quest of theory, method and evidence*, Cambridge, Cambridge scholars publishing, 2012, pp. 97-119 (also in “Cromohs”, 2013, n. 18, pp. 97-114) and Simona Cerutti, *Microhistory: social relations versus cultural models?*, in Anna-Maija Castrén, Markku Lonkila, Matti Peltonen (eds.), *Between sociology and history. Essays on microhistory, collective action, and nation-building*, Helsinki, SKS/Finnish Literature Society, 2004, pp. 17-40.

<sup>4</sup> For a revisited and extended version of the essay by Peter Laslett and John Harrison, *Clayworth and Cogenhoe*, originally published in 1963, see Peter Laslett, *Family life and illicit love in earlier generations. Essays in historical sociology*, London, Cambridge university press, 1977, pp. 50-101. A still relevant study on the Cambridge Group is Pier Paolo Viazzo, *Il Cambridge Group e la ricerca storica sulla famiglia*, in Richard Wall, Jean Robin, Peter Laslett (eds.), *Forme di famiglia nella storia europea*, Bologna, il Mulino, 1984, pp. 9-27. For subsequent developments see the official website, [www.campop.geog.cam.ac.uk](http://www.campop.geog.cam.ac.uk) (last accessed — as all links cited in this footnote — on 24 January 2020).

<sup>5</sup> Edoardo Grendi, *Del senso comune storiografico*, “Quaderni storici”, 1979, n. 41, pp. 698-670; Eric Brian, *L'horizon nouveau de l'historiographie expérimentale*, in *Le métier d'historien à l'ère numérique: nouveaux outils, nouvelle épistémologie?*, “Revue d'histoire moderne et contemporaine”, 2011, n. 4bis, pp. 41-56. For critical readings see Massimo Mastrogregori, *L'idea della storia sperimentale*, “Belfagor”, 2003, n. 1, pp. 1-18.

<sup>6</sup> As recalled by his pupil Richard Cobb, in an entirely ideological controversy over quantitative methods: *La storia fatta con i numeri* [1971], in *Tour de France* [1976], Milan, Adelphi, 1995, pp. 124-136.

scholars of his generation,<sup>7</sup> he participated in the controversy raised by early twentieth-century sociologists (especially François Simiand) over the “idols of the historians’ tribe”: Politics, Origins and the Individual.<sup>8</sup> Economic historians had always made use of numbers and statistics, but the *Annales* introduced a quantitative approach to history, first explained by Ernest Labrousse and then applied to a wide range of objects during the second post-war period, from the history of climate to that of mentalities.<sup>9</sup> In a clear and all but harmonious framework of relations, as demonstrated by the controversy in the field of “cliometrics”,<sup>10</sup> the French approaches seem to have engaged with the “new history” that thrived in the United States in the 1960s; the latter presented specific variations of the encounter between historical studies and social sciences, also in its use of quantification.<sup>11</sup> While it is utterly misleading to speak of a historiographical hegemony of quantitative methods during the second post-war period, as critics of the time occasionally dared to do (and as their contemporary imitators continue to do), it remains a fact that from the 1980s onwards fascination and promises have made way for disappointment, embodied by the various “turns” and the different “avatars” of postmodernism in historiography.<sup>12</sup> Re-emerging scepticism towards historical knowledge contributed to the failure to exploit the new and extraordinary opportunities offered by the micro-electronic revolution; the first personal computers were equipped with calculation tools that would previously have required bulky computers.<sup>13</sup> For 20 years now, we have been witnessing a revival of the quan-

<sup>7</sup> Stéphane Buzzi, *Georges Lefebvre (1874-1959), ou une histoire sociale possible*, “Le mouvement social”, 2002, n. 200, pp. 177-195.

<sup>8</sup> François Simiand, *Méthode historique et science sociale* [1903], “Annales ESC”, 1960, n. 1, pp. 83-119. See, among others, Massimo Mastrogregori, *Note su Simiand metodologo. Esiste una terza via tra storicismo ed empirismo?*, “Rivista storica italiana”, 1989, n. 1, pp. 237-250.

<sup>9</sup> For two renowned analyses of the time, see Emmanuel Le Roy Ladurie, *La révolution quantitative et les historiens français: bilan d’une génération* [1969], in *Le territoire de l’historien*, Paris, Gallimard, 1973, pp. 15-22 (translated in *Le frontiere della storia*, Rome-Bari, Laterza, 1976, pp. 9-18) and François Furet, *L’histoire quantitative et la construction du fait historique*, “Annales ESC”, 1971, n. 1, pp. 63-75 (translated in Jacques Le Goff - Pierre Nora (eds.), *Fare storia* [1974], Turin, Einaudi, 1981, pp. 3-23).

<sup>10</sup> On “cliometrics” see William H. Sewell, Jr., *A strange career: the historical study of economic life*, “History and theory”, 2010, n. 4, pp. 146-166, Maria Luisa Pesante, *Modelli fuori controllo. A proposito di “La rivoluzione industriale inglese” di Robert C. Allen*, “Quaderni storici”, 2012, n. 2, pp. 575-611 and the recent self-criticism by Stefano Fenoaltea, *Spleen. The failures of cliometric school*, Rome, Banca d’Italia, 2019. A still useful analysis is that offered by Pierre Vilar, *Sviluppo economico e analisi storica*, Bari, Laterza, 1970.

<sup>11</sup> A reconsideration of “new history” can be found in Jan de Vries, *Changing the narrative: the new history that was and is to come*, “Journal of interdisciplinary history”, 2018, n. 3, pp. 313-334.

<sup>12</sup> A convincing critical approach to historiographical “postmodernism” remains Gérard Noiriel’s *Sur la “crise” de l’histoire* [1996], Paris, Gallimard, 2005.

<sup>13</sup> Disinterest and continued changes in formats and backup software have often resulted in the failed storage of gathered data. The frequent disappearance of data storage devices (i.e. CDs and fixed hard drives) urgently calls for a census of Italian degree theses of the 1970s and

titative method, although this has not occurred without some ambiguity. On the one hand, many have celebrated the digitalisation and computerisation of sources on the Internet as well as the revolutionary impact of creating historical big data (think of the case of *The history manifesto*).<sup>14</sup> On the other hand, there has been a limited and methodologically more perceptible return to the examination of data drawn directly from sources via a “constructivist” approach. Regrettably, the scarce knowledge of quantitative methods risks exposure to both an acritical acceptance of such celebration and mistrust of this return.<sup>15</sup> Moreover, in the Italian context, the scarceness of basic statistical expertise among scholars in the “humanistic” area — who often find themselves having to acquire these skills via personal, and usually marginal, initiatives — re-evokes the problem of how quantitative training can be re-integrated into history courses.<sup>16</sup> It is no coincidence that Claire Lemerrier and Claire Zalc’s precious little manual on quantitative methods in history, published in 2008 in France, has never been translated in Italian.<sup>17</sup> Instead, a new English edition recently appeared, titled *Quantitative Methods in the Humanities. An Introduction*. Although the change from “historien” to “humanities” in the title may be no

1980s, which used and sometimes also published quantitative data, for example demographic history data.

<sup>14</sup> David Armitage, Jo Guldi, *Manifesto per la storia* [2014], Rome, Donzelli, 2016. See the debate in “American historical review”, 2015, n. 2, pp. 527-554, with some critical contributions by Peter Mandler and Deborah Cohen and responses from Armitage and Guldi, and “Annales HSS”, 2015, n. 2, with contributions by Armitage and Guldi as well as by Lynn Hunt, Claudia Moatti, Francesca Trivellato, Christian Lamouroux and the same Claire Lemerrier, *Une histoire sans sciences sociales?*, pp. 345-357. See also Giulia Bassi, *Storia, storiografia, manifesto: alcune considerazioni in merito ad una sintesi difficile*, “Studi storici”, 2016, n. 2, pp. 297-313.

<sup>15</sup> To follow the most recent developments see the journals “Historical methods” (born in 1978), “Histoire & mesure” (launched in 1986, see *Trente ans d’Histoire & Mesure. Entretiens croisés avec Gérard Béaur, Jean-Philippe Genet et Jean Heffer*, “Histoire & Mesure”, 2016, n. 2, pp. 3-9) and the “International Journal of Humanities and Arts Computing” (called “History and computing” until 2007, 1989-2002).

<sup>16</sup> Introductory tests in Italian were published in the 1980s: Luigi Bulferetti, Oscar Itzcovitch, *Orientamenti di storiografia quantitativa*, Naples, Guida, 1983 and Angelo Porro, *Storia e statistica. Introduzione ai metodi quantitativi per la ricerca storica*, Florence, La Nuova Italia scientifica, 1989. See also subsequent volumes: Renzo Derosas, Robert Rowland (eds.), *Informatica e fonti storiche*, “Quaderni storici”, 1991, n. 78 and Simonetta Soldani, Luigi Tomassini (eds.), *Storia e Computer. Alla ricerca del passato con l’informatica*, Milan, Mondadori, 1996. In 1995, the University of Bologna launched an innovative doctoral programme in “History and information technology”. This important experience was ended a few years ago.

<sup>17</sup> Claire Lemerrier, Claire Zalc, *Méthodes quantitatives pour l’historien*, Paris, La Découverte, 2008. A wealth of supplementary material can be found on a website edited by the authors: [www.quantihmc.ens.fr](http://www.quantihmc.ens.fr). The book doesn’t seem to have been reviewed in any Italian journals, but some information is comprised in Claire Lemerrier, *L’analisi testuale*, in Deborah Paci (ed.), *La storia in digitale: teorie e metodologie*, Milan, Unicopli, 2019, pp. 291-292 and *Ce que le numérique fait à l’historienne. Entretien avec Claire Lemerrier*, Elisa Grandi, Émilien Ruiz (eds.), “Diacronie. Studi di Storia Contemporanea”, 2012, n. 10 ([www.studistorici.com/2012/06/29/grandi\\_numero\\_10](http://www.studistorici.com/2012/06/29/grandi_numero_10)).

more than a sign that the potential readership has been extended beyond the historiographical field,<sup>18</sup> the book's contents have significantly been updated.<sup>19</sup> The distance from the Italian context is evident from the earliest paragraphs, for example when the authors thank the "French scientific community for mostly ignoring the divide between the humanities and social sciences" (p. vii) — in Italy, a similar statement would be risky, to say the very least. The book's fundamental principle is the premise that quantitative methods must neither be made into a fetish nor become an object of fear, as they are just one among many tools in the historian's hands. They aren't simply useful accessories or a specialist's instrument, but necessary resources for anyone dealing with sources and documents, regardless of the ingrained prejudice that considers them a monopoly of scholars interested in demographic, social and economic structures.<sup>20</sup> According to Zalc and Lemerrier, some rather simple approaches may often prove more than enough to give solid results: casual sampling methods, contingency tables (which display the frequency distribution of two variables), and their verification (Chi-square test,  $X^2$ ).<sup>21</sup> Yet, the book highlights the possibility of moving beyond these first steps, so as to try out more complex tools.

<sup>18</sup> For a number of essays on the issue of doing history in the era of "digital humanities" see Kristen Nawrotzki, Jack Dougherty (eds.), *Writing history in the digital age*, Ann Arbor, University of Michigan Press, 2013 (<https://writinghistory.trincoll.edu>). On the Italian case see Giancarlo Monina, *Storia digitale. Il dibattito storiografico in Italia*, "Memoria e ricerca", 2013, n. 43, pp. 185-202.

<sup>19</sup> Claire Lemerrier, Claire Zalc, *Quantitative methods in the humanities. An Introduction*, Charlottesville-London, University of Virginia Press, 2019. The authors contributed to a recent special issue of the *Annales* that was dedicated to quantitative history: see, for example, the introduction by Karine Karila-Cohen e all., *Nouvelles cuisines de l'histoire quantitative*, "Annales HSS", 2018, n. 4, pp. 773-783. The manual's two editions have also been combined into a separate text: Claire Lemerrier, Claire Zalc, *Le sens de la mesure: l'histoire et les nouveaux usages de la quantification*, in Christophe Granger (ed.), *A quoi pensent les historiens?*, Paris, Autrement, 2013, pp. 135-164 (with thanks to Enrico Francia for having obtained a copy). Lemerrier is a research director at CNRS (*Un si discret pouvoir. Aux origines de la Chambre de commerce de Paris, 1803-1853*, Paris, La Découverte, 2003), while Zalc runs the Institut d'histoire moderne et contemporaine (*Dénaturalisés. Les retraits de nationalité sous Vichy*, Paris, Seuil, 2016). Only few Italians are mentioned in the text, and not always in view of their use of quantitative methods (e.g. the fathers of "microhistory"). Given that citations are always taken from translations, this may mostly reflect a linguistic barrier.

<sup>20</sup> Charles Tilly's brief but solid call for "formalisation" (a broader practice than that of "quantification") as a research tool goes precisely in this direction: *Observation of social processes and their formal representations*, "Sociological theory", 2004, n. 4, pp. 595-602. See Franco Moretti, 'Operationalizing'. Or, the function of measurement in literary theory, "New left review", 2013, n. 84, pp. 103-119.

<sup>21</sup> Here the authors don't address the radical criticism of these procedures advanced by Maurizio Gribaudi, Alain Blum, *Des catégories aux liens individuels. L'analyse statistique de l'espace social*, "Annales ESC", 1990, n. 45, pp. 1365-1402. See, for a dissociation from this criticism, Claire Lemerrier, *Analyse de réseaux et histoire*, "Revue d'histoire moderne et contemporaine", 2005, n. 2, pp. 88-112 (reference is being made to pp. 90-91) and indirectly, C. Lemerrier, C. Zalc, *Sens*, pp. 162-163.

Fittingly for a history book, and even more so for a manual, the first chapter is devoted to a brief but effective historiographical *excursus* on quantitative methods in the twentieth century. Here, the authors valorise French and American experiences, they highlight the limits of the first stages of “quantitative history”,<sup>22</sup> and they point out the neopositivist risks of the current big data vogue as well as the distortions and scarce productivity — in terms of actual historiographical innovation — of the digitalisation of sources and their transference to the Internet.<sup>23</sup> In the face of the recurrent emergence of “pseudo-qualitative” approaches,<sup>24</sup> which “use examples (selected in a non-explicit way from not clearly defined populations) as proof, and adverbs such as ‘often’ and ‘generally’ without the support of precise data” (25), Lemerancier and Zalc stress the fact that anything can be quantified. In their opinion, one could even make use of the often denigrated statistics of the past without there being any necessity for their — albeit legitimate — criticism and historicisation to turn into mistrust and rejection.<sup>25</sup> Nevertheless, extreme rigour is required for the quantification process, which is outlined in the second chapter. Starting from the very construction of the corpus of data that are drawn from the sources, close monitoring is fundamental. Against the tendency to completeness, the authors advocate the sampling method. In fact, a total of some thousand cases is more than enough to guarantee statistical reliability, provided that their selection is truly casual, that the data available for the population from where the sample is taken are verified, and that comparisons are made with control groups. In the third chapter, the authors make a distinction between the insertion of data and

<sup>22</sup> For an account see Bernard Lepetit, *L'histoire quantitative: deux ou trois choses que je sais d'elle* [1989], in *Carnet de croquis. Sur la connaissance historique*, Paris, Albin Michel, 1999, pp. 231-242. On the development of the quantitative method in history see also the recent studies by Steven Ruggles, Diana L. Magnuson, *The history of quantification in history: the JIH as a case study* and Myron P. Gutmann, *Quantifying interdisciplinary history: the record of (nearly) fifty years*, “Journal of interdisciplinary history”, 2020, n. 3, pp. 363-381 e n. 4, pp. 517-545.

<sup>23</sup> On the theme of “history and Internet”, which cannot be discussed in detail here, see Stéphane Lamassé, Gaëtan Bonnot (eds.), *Dans les dédales du web. Historiens en territoires numériques*, Paris, Editions de la Sorbonne, 2019 and, in Italian, Rolando Minuti (ed.), *Il web e gli studi storici. Guida critica all'uso della rete*, Rome, Carocci, 2015.

<sup>24</sup> Daniel S. Milo, *Le rencontre insolite mais édifiante du culturel et du quantitatif*, “Histoire & mesure”, 1987, n. 2, pp. 7-37.

<sup>25</sup> On this matter, see Giovanni Favero (ed.), *Fonti statistiche per la storia economica dell'Italia unita*, “Quaderni storici”, 2010, n. 134, Manfredi Alberti (ed.), *Lo studio del passato e le fonti statistiche. Prospettive storiografiche a confronto*, “Memoria e ricerca”, 2012, n. 40, pp. 111-144 and Luciano Allegra, *Le trappole della statistica. Una stima dei poveri in antico regime*, “Contesti”, 2014, n. 1, pp. 59-90. For a contemporary example see Agnès Labrousse, Poor numbers. *Chaînes statistiques et économie politique du chiffre*, “Annales HSS”, 2016, n. 4, pp. 845-878. For a contextualisation of the quantification processes, both in everyday life and in scientific research, a comparison with the “ethnostatistic” approach may also prove useful. For an introductory note see Jonathan Potter, *Ethnostatistics*, in Lisa McGiven (ed.), *The Sage encyclopedia of qualitative research methods*, Los Angeles, Sage 2008, vol. I, pp. 298-301.

their codification. During the first process, one must remain close to the documentation, whereas in the second process one can test the different categorisations of the gathered information, without neglecting the “conventional” and not “metrological” nature of the social group. While it is best not to be misled by the idea that there are “standard” templates valid for all research, which would only need to be “applied” to one’s own, we mustn’t delude ourselves into thinking that previous templates — or “indigenous” classifications — were neutral. Remaining loyal to an experimental and pragmatic approach, Zalc and Lemerrier insist on the virtues of multiple categorisations and, therefore, on the comparison of different data classification templates.<sup>26</sup>

The second part of *Quantitative methods* takes matters a step further. If the authors call for caution in the shift from rediscovering correlations between data to the assumption of causal relations, a number of instruments allow for the formulation of theories in this regard, and also enable to deal with complex corpuses (i.e. that cannot be reduced to the intersection of few variables). Regressions and factorial analysis are the two classical approaches (outlined in the fourth chapter): different and often counterposed ways of treating qualitative (e.g. job) or discontinuous variables (e.g. number of children: contrary to prices or migration rates, which always allow space for intermediate cases, one cannot have two and a half children) in quantitative terms. For both methods, Lemerrier and Zalc distrust the mechanic use of programmes, and invite the reader to gain awareness of the instruments’ limits and to make critical use of these, paying particular attention to the development of theories and the interpretation of results. Most importantly, the authors encourage a creative and experimental use of the methods, and warn not to limit oneself to a single approach; rather, one should exploit the complementarity between the various statistical families. Furthermore, from the 1970s onwards new methods have been added to the historian’s quantitative arsenal, in order to overcome the static approaches that were centred on variables: network analysis, sequential analysis and event history analysis allow the scholar to put individuals and their relations at the centre of attention while keeping track of time — that is, change (fifth chapter). The manual also contains an adequate consideration of the importance and risks of visual material:<sup>27</sup> graphics and geographical

<sup>26</sup> On the distinction between quantification as a “measure” (typical of natural science and, in different ways, life science) and as a “conventional codification” (according to a legal-institutional model) see Alain Desrosières, *Entre réalisme métrologique et conventions d’équivalence. Les ambiguïtés de la sociologie quantitative*, “Genèses”, 2001, n. 2 (43), pp. 112-127. Of the same author see also *Comment faire des choses que tiennent: histoire sociale et statistique*, “Histoire & Mesure”, 1989, n. 3-4, pp. 225-242. For an author’s profile see Jay Rowell, *De l’urne de Bernoulli au big data. Penser la quantification avec Alain Desrosières*, “Genèses”, 2016, n. 104, pp. 163-168). On this issue see also the considerations of a quantitative studies veteran, Antoine Prost, *Des registres aux structures sociales en France. Réflexions sur la méthode*, “Le Mouvement social”, 2014, n. 246, pp. 97-117.

<sup>27</sup> For a recent and clever discussion see Franco Moretti, Oleg Sobchuk, *Hidden in plain sight. Data visualization in the humanities*, “New left review”, 2019, n. 118, pp. 86-115.

maps as research tools and means of dissemination (sixth chapter).<sup>28</sup> Finally, Zalc and Lemerrier reaffirm the potentiality of a quantitative analysis of the texts (seventh chapter). Counting words and comparing texts can give traditional readings unfathomable dimensions and contribute to the formulation of new interpretations. In sum, while the authors acknowledge that quantitative methods remain largely unused in history studies, they remind the reader that these methods are by no means esoteric or the exclusive monopoly of economic history. Instead, they have the precious advantage of enforcing the adoption of explicit formulations and allowing free experimentations, given their plurality and the fact that they are by now within the reach of our computers.

Written in an accessible way, never too technical and rich with concrete examples drawn from historical research, *Quantitative methods* presents itself as the ideal starting point for anyone who wishes to gain familiarity with quantitative approaches to historical research. The rich bibliography — presented gradually throughout the manual — offers suggestions for further reading, citing more extensive manuals,<sup>29</sup> but also specific texts focused on individual methodologies.

Lemerrier and Zalc's manual tends towards the organisation of information drawn from historical sources via spreadsheets, which are easier to use and enable scholars to directly conduct categorisations and analyses. In their opinion, actual databases would only be appropriate for a mere “relational” intersection between different corpuses. A conference held in 2017 in San Marino focused precisely on these “great data collections”, the proceedings of which have been published by Alessio Fornasin and Michaël Gasperoni.<sup>30</sup>

<sup>28</sup> The systems of geographical information, better known under the English acronym GIS, deserve an analysis of their own. For an introduction see Ian N. Gregory, Paul S. Ell, *Historical GIS. Technologies, methodologies and scholarship*, Cambridge, Cambridge university press, 2007; on the developments in the historical-urban field, see Susanne Rau, Ekkehard Schönherr (eds.), *Mapping spatial relations, their perceptions and dynamics: the city today and in the past*, Cham-London, Springer, 2014 and Jean-Luc Arnaud, *Analyse spatiale, cartographie et histoire urbaine*, Marseille, Parenthèses/MMSH, 2008.

<sup>29</sup> Most references are to Charles H. Feinstein, Mark Thomas, *Making history count. A primer in quantitative methods for historians*, Cambridge, Cambridge university press, 2002, and Pat Hudson, Mina Ishizu, *History by numbers. An introduction to quantitative approaches* [2000], London, Bloomsbury academic, 2017. An excellent introduction is Alain Guerreau's *Statistique pour historiens*, 2004, freely downloadable from <http://elec.enc.sorbonne.fr/statistiques/stat2004.pdf>.

<sup>30</sup> Alessio Fornasin, Michaël Gasperoni (eds.), *Dalla fonte al database. Per una storia economica e sociale delle popolazioni del passato* (San Marino Conference Proceedings, 22-23 June 2017), San Marino, Centro sammarinese di studi storici, 2019. The publication differs from the conference in two ways: it doesn't include Pascal Cristofoli's precious talk on the relational approach to databases, while an interesting text (in French) by Benoît Pandolfi e Sylvain Rassat has been added, on the “Demo-Hist” model of organising data. Fornasin is an Associate Professor in Demography at the universities of Udine and Trieste, and is the director of the Italian society for historical demography. Alessio Fornasin, Claudio Lorenzini (eds.), *Per una storia della popolazione italiana nel Novecento*, Udine, Forum, 2016. Gasperoni is a Cnrs



*Dalla fonte al database* [From source to database] is a timely reminder of the fact that databases, although extremely powerful tools, continue to rely on the questions of the scholar(s) that builds and uses them — like any other historical documentation. Fornasin and Gasperoni's book is a collection of essays focusing on different databases, accompanied by examples of their use in specific research projects. Alessio Fornasin and Anna Marzona offer a description of "Friuli/*in prin*", which gathers data from 339,000 medical examinations in the Friuli region (classes of 1846-1900). Marco Breschi and Matteo Manfredini present the databases that provide information on more than 17,000 individuals from the rural communities of Madregolo (Parma) and Casalguidi (Pistoia), connecting parish records with *status animarum* and fiscal sources, drawn up between 1761 and 1883. Focusing on the decline of mortality rates, Luciana Quaranta gives proof of the historical-demographical potentiality of the data contained in the "Scanian Economic Demographic Database" (SEDD). This database retrieves information from the — notoriously rich — Swedish parish records, as well as from civil status records, fiscal records and other sources, with the aim of describing the population of the country's southern region between 1813 and 1968. Francesco Scalone and Martin Dribe re-examine the decline in fertility rates starting from two extraordinary international databases with the same nature (nominative data) and structure (allowing to make comparisons): the "North Atlantic Population Project" (NAPP, which compares historical census data from Northern Europe and North America) and the "Integrated Public Use Microdata Series" (IPUMS, on contemporary censuses in the United States and in other nations). Michaël Gasperoni accounts for two databases he personally constructed as part of research initiated some 20 years ago, and still ongoing due to the very wide temporal range (covering the period between 1500 and 1850) and the large number of examined sources (starting from parish records and notarial archives). The first database contains information on the population of San Marino (subsequently extended to some hundred parishes within the Diocese of Rimini and Montefeltro — currently consisting of 86,000 individuals), while the second focuses on the Jewish minorities of the ghettos in Rome and the Marche region.

The book ends with the two essays by Vincent Gourdon and Cyril Grange. Gourdon reconstructs the "complex dialogue" between historical demography and family history. If early historical works on family units strongly built on historical-demographical quantification, subsequent studies soon abandoned this method in virtue of a criticism of the quantitative approach (preferring cultural or microhistorical approaches instead), or with the aim of revising certain premises (e.g. the underestimation of extra-domestic family ties). Yet,

over the last two decades the methodological innovations of historical demography (event history analysis, network analysis, sequence analysis) have allowed for a reconciliation. In this same area, Grange's contribution describes the study of marriages and wider family alliances, profoundly renewed by the adoption of new instruments that were specifically developed so as to answer difficult queries. For example, Puck ("Program for the Use and Computation of Kinship data") enables innovative interventions in genealogical databases, such as the identification of "marriage circuits" and "constellations" that divide populations into segments, as in territorial areas of marital preference.<sup>31</sup>

In sum, *Dalla fonte al database* is a great introduction to databases.<sup>32</sup> What is more, it offers a concrete illustration of the potentials of collective work, interdisciplinarity and collaboration among researchers and technicians — all dimensions that are becoming less and less feasible in the context of Italian historiography, given the distortions caused by precarious employment, under-financed work, infra-disciplinary parcelling out and the "assessment" syndrome. The various contributors to *Dalla fonte al database* share an approach that distinguishes itself from that of *Quantitative methods*: if Lemerrier and Zalc argue for casual sampling, which makes it possible to work on a not too large number of individuals (i.e. not always physical people, in a statistical sense), the historical demographers and historians of family relations that participated in the San Marino conference prefer a "total" study of a population (i.e. territorially well-defined and/or via other criteria), which involves a thorough examination of one or more sources. This reflects a disagreement that inevitably re-evokes old, yet still useful, statistical debates.<sup>33</sup> An even more radical split can be found in the field of economic history, which — as we have seen — was the first to be attracted to quantification.<sup>34</sup> This is demonstrated by *Quantità/qualità* [Quantity/quality], a valuable collection of essays that focuses on the (alleged) alternative between quantity and quality, edited by Daniele

<sup>31</sup> For more information see the digital platform "Kinsources": [www.kinsources.net](http://www.kinsources.net).

<sup>32</sup> For a wider variety of sources, see also Valeria Galimi (ed.), *Trovare la rotta. Banche dati e ricerca storica*, "Passato e presente", 2019, n. 107, pp. 68-87, which includes — other than a brief introduction by the editor — essays by Cesare Panizza, *Il Partigianato piemontese e la società civile* and Andrea Martini, *Il data base dei processi ai fascisti e ai collaborazionisti*.

<sup>33</sup> See, for example, Paolo Fortunati, *Statistica e ricerca scientifica* [1958], in *Scritti di statistica e di politica economica*, Bologna, Cooperativa libraria universitaria, 1968, pp. 11-29. Fortunati insisted on the positions of his teacher Corrado Gini. See Gini's bilingual volume *Statistica e induzione. Induction and statistics*, Bologna, Clueb, 2001 (accessible online: <https://amshistorica.unibo.it/52>). For a contextualisation of their positions in Italian statistics, see Giovanni Favero, *La statistica fra scienza e amministrazione*, in Francesco Cassata, Claudio Pogliano (eds.), *Storia d'Italia-Annali*, 26, *Scienze e cultura nell'Italia unita*, Turin, Einaudi, 2011, pp. 703-735 and Jean-Guy Prévost, *A total science. Statistics in liberal and fascist Italy*, Montreal, McGill-Queens university, 2009.

<sup>34</sup> Riccardo Faucci, "Vecchia" e "nuova" storia economica: quarant'anni di discussioni, in Gianni Toniolo (ed.), *Lo sviluppo economico italiano (1861-1940)*, Bari, Laterza, 1973, pp. 71-117.

Andreozzi.<sup>35</sup> The rise of “pure” economic sciences (or economics) to a discipline of reference for social sciences, regardless of their unrealistic foundations and their continuous failure to define and anticipate a future direction, owes a great deal to the “spirit of the time”, but also to the capacity to provide coherent and quantified explanations, following the model of natural science. No longer “political”, as it was explicitly defined in the classical tradition and as it continued to be considered in nineteenth-century theories (e.g. Keynesian, Marxist, institutionalist) as well as more recent developments (i.e. economics of conventions and regulatory economics), “pure” or *sans phrase* economics overlooks history because it is founded on individual behaviours (in themselves considered invariable) and on market “laws” that formalise it.<sup>36</sup> Aided by the crisis of humanistic knowledge and by the marginalisation of history, according to Andreozzi’s efficient reconstruction the definite consecration of “economy-history” is derived from it. Focused on “markets” and “entrepreneurs”, without alternatives of action, without social contexts and without power relations, this variation of history has the paradoxical consequence of being “incapable of generalising”.<sup>37</sup> Alida Clemente offers a wider historical reconstruction, where she considers the postmodern turn in social sciences as an exclusion of the economic — a reaction to the rise of economics, which nevertheless remains entirely dependent on its disciplinary imperialism. In the name of rejecting reductionism and determinism, historians allegedly abandoned the economic and the quantitative method so as to make way for the stronger project of retrospective econometrics, instead of seeking a dialogue with alternative economic traditions.<sup>38</sup> Giovanni Favero relaunches economic history as the ideal space for a recomposition of structures and cultures, beyond the obsession with creating objective representations via quantitative means (e.g. cliometrics, but also the

<sup>35</sup> Daniele Andreozzi (ed.), *Quantità/qualità. La storia tra sguardi micro e generalizzazioni*, Palermo, NDP, 2017 (freely downloadable from the publisher’s website: [www.newdigitalfrontiers.com/it/book/quantita-qualita-la-storia-tra-sguardi-micro-e-generalizzazioni\\_91](http://www.newdigitalfrontiers.com/it/book/quantita-qualita-la-storia-tra-sguardi-micro-e-generalizzazioni_91)). Andreozzi is an Associate Professor in Economic History at the University of Trieste, along with Roberto Finzi, *Storia economica del mondo moderno e contemporaneo*, Bologna, Clueb, 2002.

<sup>36</sup> Let me cite two classics here: Karl Polanyi, *La grande trasformazione. Le origini economiche e politiche della nostra epoca* [1944], Turin, Einaudi, 2000 and Pierre Bourdieu, *Le strutture sociali dell’economia* [2000], Trieste, Asterios, 2004 (subsequently *Anthropologie économique. Cours au Collège de France (1992-1993)*, Paris, Raison d’agir/Seuil, 2017). For didactic texts see Ha-Joon Chang, *Economia. Istruzioni per l’uso* [2014], Milan, il Saggiatore, 2015 and Francesco Sylos Labini, *Rischio e previsione. Cosa può dirci la scienza sulla crisi*, Rome-Bari, Laterza, 2016.

<sup>37</sup> Daniele Andreozzi, *Senso e potere. Alla ricerca della storia tra dimensioni, confini e rilevanze*, in D. Andreozzi (ed.), *Quantità/qualità*, pp. 17-34

<sup>38</sup> Alida Clemente, *Micro e macro tra narrativismo postmoderno e scelta razionale: il problema della agency e la storia economica come scienza sociale*, in D. Andreozzi (ed.), *Quantità/qualità*, pp. 35-56. Of the same author see also *A proposito di “The world in the model: how economists work and think”, di Mary Morgan*, “Quaderni storici”, 2017, n. 1, pp. 255-273.

preference for the “typical”, the “average” and the “representative”), which would avoid the problems of comparison, change and the very production of the “fact”.<sup>39</sup> Finally, although they stress different elements, Luca Mocarelli and Carlo M. Cipolla reaffirm the “difficult position” of economic history: suspended between “two cultures that don’t speak to one another” and tending — as Deirdre McCloskey states — towards a “cultural” rather than “scientific” declination.<sup>40</sup> The authors of *Quantità/qualità* consider — even if not all in the same way — the return to microhistory as a possible way out of the crisis of economic and social history. It is not simply a question of scales, as the prolific “global” applications of this approach demonstrate,<sup>41</sup> but of counterposing the construction of context and the attention to concrete agents to a history that becomes evenemential and exclusive.<sup>42</sup> The microhistorical practice — whose pioneers, Giovanni Levi and Edoardo Grendi, are mentioned in the volume — would allow for the creation of a new declination of social history, capable of measuring itself also with economic dimensions. The aspiration to generalisation would be guaranteed, and not denied by the strong analytical and experimental tension. Thus, history would take the shape of a science of partial replies — because based on specific cases and studied through sources that bear only traces of the past — to universal, theoretical questions. Consequently, the latter would continuously need to be reformulated if we are to take those specific replies into consideration.<sup>43</sup>

The publication of *Dalla fonte al database* and *Quantità/qualità* seem to imply that there may be space for an Italian translation of Lemerrier and Zalc’s manual. A similar operation might help revive the debate on quantitative methods for the study of history, starting from the fundamental dimension of university teaching. Yet, we cannot hide the fact that the problems we face as scholars represent only a small part of a wider and more urgent issue: schools, too, should become interested in statistics education.<sup>44</sup> The dissemination of a

<sup>39</sup> Giovanni Favero, *Sul metodo storico e le scienze sociali: per una microstoria applicata*, in D. Andreozzi (ed.), *Quantità/qualità*, pp. 57-70. Of the same author see *Microstoria e storia economica*, in Paola Lanaro (ed.), *Microstoria. A venticinque anni da L’eredità immateriale*, Milan, FrancoAngeli, 2011 pp. 107-117.

<sup>40</sup> Luca Mocarelli, *Storia ed economia: un matrimonio impossibile?*, in D. Andreozzi (ed.), *Quantità/qualità*, pp. 71-98.

<sup>41</sup> Christian G. De Vito, *Verso una microstoria translocale (micro-spatial history)*, “Quaderni storici”, 2015, n. 3, pp. 815-833 (followed by a debate in subsequent issues of the journal, 2017, n. 2 e 2018, n. 3) and *History Without Scale: The Micro-Spatial Perspective*, “Past and present”, 2019, suppl. 14, pp. 348-372.

<sup>42</sup> In this regard, see the six issues of “Contesti”, a “microhistory journal” edited by Davide Tabor, launched in 2014 and now in its sixth year: the editorial “Project” can be consulted on the journal’s website: [www.contestirivista.it](http://www.contestirivista.it).

<sup>43</sup> Giovanni Levi, *La storia. Scienza delle domande generali e delle risposte locali*, “Psiche”, 2018, n. 2, pp. 361-377.

<sup>44</sup> Obviously the problem is not so much that of introducing a “statistics” hour, or giving it more space in existing courses (e.g. maths); rather, we ought to consider why and how we should

stronger awareness of the “point of view of the number”<sup>45</sup> would be the best antidote to the proliferation in mass communication (hence well beyond the scientific world) of “data”, “graphics” and “maps” used as a means of authoritarian information, rather than as a means of shaping public opinion and, therefore, critical citizenship. As within the small community of historians, in the wider society they inhabit they must be able to use numbers, and for the same reasons: to avoid risks provoked by the absence of critical exchange, impulsive obsessions and rejection based on prejudice.

teach statistics, and therefore which approach would be preferable. Think, for example, of the ongoing debate on teaching economics in primary schools, which usually leads to a “financial education”; this runs parallel with the promotion — at a European level — of “business competence” in educational programmes, which equally aims at promoting a neoliberal cultural hegemony from the earliest age on.

<sup>45</sup> Maurice Halbwachs, Alfred Sauvy, *Le point de vue du nombre 1936*, Paris, Ined, 2005. By Halbwachs see also the classic *Morphologie sociale* [1938], Paris, Colin, 1970. On Halbwachs see Olivier Martin, *Raison statistique et raison sociologique chez Maurice Halbwachs*, “Revue d’histoire des sciences humaines”, 1999, n. 1, pp. 69-101.