English summaries[*]

(in alphabetical order)

M.S. Agnoli, *L'arte intellettuale al cospetto dei* big data (*Intellectual Craftsmanship and Big Data*)

The article introduces theoretical and methodological issues at the center of the debate surrounding Big Data, which are then discussed and examined in the essays that follow. In considering these, the author refers to the maxims and recommendations that Charles Wright Mills, in the appendix to The Sociological Imagination, addresses to a young scholar at the beginning of his/her studies in the field of social science. The article highlights their enduring relevance in the context of the challenges and opportunities presented to social research by the growing, and presumed, availability, of information stored and organized in large digitized data banks.

A. Amico, G. D'Alessando, *Strategie di gestione e analisi di grandi basi di dati amministrativi: l'utilità di trasformare dati sincronici in vettori diacronici* (*Large Databases of Administrative Data: Management and Analysis Strategies. The Benefit of Transforming Synchronic Data in Diachronic Vectors*)

The ever-increasing availability of information, together with the higher (time and financial) costs of data gathering, makes the use of pre-existing databases more and more convenient. The majority of the data gathered and recorded each day is not designed for research purposes however. It is still a task of each researcher to choose the relevant data in consideration of the research objectives, and to organize his own database according to his research purposes. The case study presented is the construction of a longitudinal dataset using synchronic data extracted from the administrative archive of the Sapienza University of Rome, and referred to the registered students' careers. This dataset fits the purpose of studying the temporal dynamics and allows the analysis of

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specific phenomena (dropping-out, stopping-out, mobility, degree rates, etc.). Three different analysis on this dataset are presented, that highlight the usefulness of this kind of data structure: a quasi-experimental design, a sequence analysis and an event history analysis.

B. Aragona, *Big data o data that is getting bigger?* (*Big data or Data that is Getting Bigger?*)

The potential of Big Data for sociology is being recognized broadly, but there is still a wide gap between its potential and its realization. One of the reasons is that Big Data encloses types of data which are very different. This articles aims to identify the features of Big Data that are common to other traditional sociological data such as registers, traces and documents. Secondly, its purpose is to propose a typology of Big Data based on four criteria: data origin, flexibility, presence of operational definitions, presence of metadata. Finally, the main methodological issues deriving from the different phases of the data production process are presented for every type of Big Data.

D. Bennato, *Il rischio della datafrenia nell'analisi dei* big data. *Appunti a partire dal caso «Mafia capitale»* (*The Risk of Dataphrenia in the Analysis of Big Data. Notes from the Case «Mafia capitale»*)

This paper begins with an analysis of the diffusion on Twitter of news on an investigation that led to the discovery of the criminal system called «Mafia capitale». It then shows how a strictly computational approach is unable to investigate the factors at play in a media phenomenon, which are halfway between the typical processes of mass communication and those of interpersonal communication. The paper argues that the analysis of Big Data opens significant opportunities for the social scientist, as long as the sociological imagination is maintained and does not fall into an approach dictated by quantophrenia, which we may now call dataphrenia.

R. Conte, Big data*: Un'opportunità per le scienze sociali?* (*Big Data: A Real Opportunity for the Social Sciences?*)

In recent years, Big Data and Big Data science are frontstage both in prestigious scientific institutions around the world, and in the media. Italy has contributed to the launch of Big Data science in Europe. With more than eight hundred million quotes on Google, Big Data is one of the most cited techno-scientific tags. Furthermore, since 2009, when Lazar and colleagues published the famous «Computational Social Science» on *Science*, Big Data science gave impulse to a new formidable endeavor: the creation of a new quantitative social science through the extensive application of Big Data science to the study of social phenomena. Now, a few years after the launch of the quantitative science of society, it is time for a first evaluation. Did Big Data maintain its promises? Does it still represent an opportunity for a new science of society? The answer provided in this paper is mildly positive. Big Data represents a good

opportunity for the innovation of the social sciences on condition that (a) the application of data science to social data is global, rather than local, and oriented to policy, rather than profit-making; (b) the objective of predicting future events does not inhibit the complementary objective of science, i.e. explanatory speculation; and finally (c) quantitative science does not lead to dispense away with the understanding of the cognitive, social, cultural, and political mechanisms that generate social data.

L. Di Giammaria, M.P. Faggiano, *Tra* big *e* small data*: la partecipazione politica degli utenti Twitter* (*Between Big and Small Data: Political Participation of Twitter Users*)

This article aims to show how an approach with a mixed method orientation, combining big and small data, can be fruitfully used to study political participation. The limits of using exclusively of Big Data downloaded from the web (in particular from Twitter) can be partially overcome through a pluralist methodological approach. This case of empirical research, a web survey conducted during the campaign for the parliamentary elections in 2013, highlights the value of this approach in the study of political participation, online and offline, in relation to all its conceptual dimensions, as well as to other social phenomena.

A. Di Stefano, *La profondità dei* big data*. Datacentrismo, ragnatele di significati digitali e cultura algoritmica* (*Big Data, Webs of Significance, Datafication, Algorithmic Culture, Surveillance*)

The main objective of this paper is to describe and analyze the high cultural density and ideological character of the Big Data phenomenon. The technical nature of computational models and the affirmative logic of algorithmic culture conceal the functioning of the mechanisms, simultaneously symbolic and ideological, that contribute to structuring Big Data. As data, it represents the result of an intricate process of construction, imagination, and interpretation. On the other hand, the role played by powerful technological corporations and by a specific form of neoliberal state highlights only the exchange value of Big Data, the production of which is aimed to fulfil commercial and surveillance needs.

M. Fraire, S. Spagnuolo, S. Stasi, *L'utilizzo dei* big social data *per la ricerca sociale: il caso della cittadinanza attiva in difesa del territorio* (*The Use of Big Data Social for Social Research: the Case of Active Citizenship in Defense of the Environment*)

The article presents a case-study of urban conflict on waste management originating from the lack of a shared decision. Facebook posts and blog are analyzed as vehicles used by citizens for information and expression for democracy. The study proposes the Automatic Analysis of Textual Data (AADT) performed by IRaMuTeQ software and the related conceptual map of the 7 statistical phases which have allowed to structure the unstructured data. The AADT

has then been compared with the Semiautomatic Analysis of textual Data (ASDT) performed by the software Nooj.

R. Grimaldi, S.M. Cavagnero, M.A. Gallina, *Uso della rete e consapevolezza delle tracce digitali. Una ricerca tra studenti universitari* (*Use of Internet and Awareness of Digital Tracks. A Research on University Students*)

This research focuses on the perception of postmodern generations regarding Big Data. A questionnaire was given to 151 students of the first year of studies in Educational and Interfaculty Science in Professional Educator, University of Turin (years 2014-15). The questionnaire analyzes the activities carried out on Internet and the perception of the economic value that respondents attribute to the information they daily leave on the Web. This value is calculated on the basis of political, sexual, religious, sports, food, fashion, leisure time and car manufacturer preferences.

G. Giuffrida, F. Mazzeo Rinaldi, C. Zarba, Big data *e news online: possibilità e limiti per la ricerca sociale* (*Big Data and News Online: the Possibilities and Limits for Social Research*)

The main aim of this article is to improve knowledge on applicability of Big Data (BD) techniques in social research, by exploring the validity of using BD as an approach in emerging news contexts. In particular, we constructed and examined a large database of historical data of public online comments on a recent constitutional bill review. We using BD technology in order to analyze people's opinions to this particular reform.

F. Martire, M.C. Pitrone, *Lo studio dell'opinione pubblica al tempo dei* big data. *Una sfida per la ricerca sociale* (*The Analysis of Public Opinion in Times of Big Data. A Challenge for Social Research*)

According to many scholars, social networks provide an unobtrusive vision of public opinion. This in turn allows to overcome the problem of social desirability, typical of public opinion studies through survey questionnaires. Drawing on the media studies tradition devoted to the analysis of the ways in which people use the Internet, the authors argue that the statements posted on a social network, just like the answers to a questionnaire, can be the result of a subtle strategy of control of the self-image. Rather than being solved, the problem of social desirability thereby presents itself again, in renewed forms.

S. Mauceri, *Contro la deriva scissoria. Le funzioni dei* big data *nelle strategie integrate di ricerca sociale* (*Against a Divisive Drift. The Functions of Big Data in the Integrated Strategies of Social Research*)

Despite the undoubted benefits of Big Data, it may also pose the risk of a new divisive drift within social sciences. In the long term, the Big Data revolution could in fact lead to an eclipse of primary data collection procedures, with inevitable damage to the productivity of social research. This paper recon-

structs a typology of strategies to integrate Big Data with conventional research pathways, re-evaluating the forgotten lessons of the American Schools of Chicago and Columbia. The typology is constructed by combining two criteria: the function of Big Data and the time order.

P. Parra Saiani, *Le risorse e il controllo. I* big data *oltre il mito* (*Resources and Control. Big Data beyond the Myth*)

Cuts in research and in particular to social research periodically incite petitions and warnings from the main European scientific associations. What are the consequences and challenges posed by the reduction in resources available for research purposes? Can Big Data be an answer, a solution, a way to access the information in a cost-effective way? Or will they increase the gap between rich and poor universities, and the level of inequality between researchers? Is it a way to finally lay the foundations for the society of information and knowledge glimpsed in recent decades, or will the growing importance of Big Data in the research be accompanied by problems still not entirely clear?

V. Russo, *Un'applicazione empirica dei* big data *allo studio del mediattivismo civico (An Empirical Application of Big Data to the Study on Civic Mediactivism*)

Social Cyberspace, in the 3.0 era, reconfigures social intelligence as an effect of a new perception of shared knowledge. This virtuous circle, increased by the event of the Web «at the tip on your fingers», influences users' behavior between virtual and real dimensions, and determines the development of new spaces and digital bodies. The phenomenon of Civic Mediactivism is born and is played in this context. The purpose of this essya is to investigate the values underlying the phenomenon, and understand how the social sciences can study its form, content and social function, in relation to the ontological, ethical and methodological dimensions.

S. Stefanizzi, Small*,* open*,* big*: i dati e la conoscenza scientifica* (*Small, Open, Big: Data and Scientific Knowledge*)

The paper is an introduction to a series of essays discussed in two parallel sessions during a conference organized in Rome on the 25th and 26th of September 2016 by the department of Methodology of the AIS (Italian Association of Sociology). Given the introductory nature of the presentation to the contributions that have accepted the challenge of Big Data, trying to integrate these powerful research instruments with official statistics, surveys and data stores, the goal here is to retrace, through the submitted essays, some of the most noteworthy aspects of Big Data that require careful epistemological and methodological reflection.