SOCIAL RESEARCH METHODS TO INVESTIGATE DIGITAL SOCIETY: INNOVATIVE TEACHING STRATEGIES

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Abstract

The rise of the digital has important implications for sociology and social research as it provides new objects of study and new methods of empirical research. This article firstly introduces the emergent methodological debate that, according some studies, identifies a difference between the "new" digital methods and the "digitization" of existing methods; secondly, it proposes a reflection on the challenges and changes in teaching social research methods in order to provide the next generation of sociologists specific knowledge and skills needed to investigate the social phenomena in the digital era.

Key words: teaching social research methods, sociology student, digital methods digital methods, ICT, sociology student

Resumen

El advenimiento de lo "digital" determina importantes implicaciones para la sociología y la investigación social, porque ofrecen nuevos objetos de estudio y nuevos métodos de investigación empírica. Este artículo introduce, en primer lugar, el debate metodológico emergente que, según algunos estudios, identifica una diferencia entre los "nuevos" métodos digitales y la "digitalización" de los métodos existentes; en segundo lugar, propone una reflexión sobre los retos y cambios en la enseñanza de los métodos de investigación social con el fin de ofrecer a la próxima generación de sociólogos los conocimientos y habilidades específicos necesarios para investigar los fenómenos sociales en la era digital.

1. Introduction

Internet and ICT are changing the ways to approach social research; they provide an increasingly valuable source of information, traces, data, arguments and research

findings (Edwards et al., 2013; Rogers, 2013; Marres & Gerlitz, 2016) through a wide range of environments and contexts that open up new possibilities for empirical research in social sciences. The need to be aware of the new challenges of social enquiry is also due to the rise of 'the digital' that represents for sociology an important phenomenon of contemporary society that needs specific skills and methods of investigation (Marres, 2017). In other words, the digital provides both new objects of study and new methods of empirical research.

Taking account of this articulated configuration, specific capabilities –"traditional" and "new" - are needed in order study contemporary society. Within this framework, this article focuses on the methodological knowledge that undergraduate sociology students should develop in order to investigate society in the digital era; more specifically, it proposes a reflection on the challenges and changes in teaching social research methods in order to train the next generation of sociologists in the study of social phenomena. Starting from an overview of the some implications, meanings and uses underpinning the role of digital in the investigation of society and also on the need to update the teaching of social research methods, the paper describes a teaching experience carried out in an Italian University Sociology based on ICT tools, aimed at guiding students to an informed and aware use of a range of tools and resources offered by the Internet (Pangbourne et al., 2011), that could represent important resources for social research. These aspects are developed in the following sections of this article.

The second deals with the impact of the digital in sociology and social research and some issues of the emerging debate on these topics. The third section relates the development of a pedagogical culture about social research method, providing a reflection of the changes that the methodological discipline is living. Final section illustrates a teaching experience related to an undergraduate course in social research methods in a Italian university in order to allow the learner to approach to some new frontiers of social research in the digital context.

2. Social research methods in the digital era

The rise of the digital has important implications for sociology and it opens up anew long-standing questions underpinning epistemological, methodological and technical issues. Firstly, digital impacts on cultural, political, social, economic aspects of our life, transforming on everyday its practices and structures. The ubiquity and pervasiveness of digital devices have significant effect on the lives of each of us, actively acting on selfhood, social life, social relations and social institutions (Lupton, 2014). As Deborah

Lupton argues "the investigating of our interactions with digital technologies contributes to research into the nature of human experience, it also tells us much about the social world" (Lupton, 2014, p.2); in this sense, the development of digital can be considered as a new kind of total social fact (Marres, 2017, p.18; Lury & Marres, 2015).

Secondly, being Internet a living archive of information, the embedding process of the digital devices in all the aspects of our experience lead to a significant amount of data providing new opportunities for the knowledge and study of traditional and contemporary issues (Savage, 2009).

World of work, electoral forecasting, urban planning and migration are, for examples, typical phenomena that can be investigated also through the collection and analysis of data produced by technological and digital devices and environments. For instance, an important research using online data was carried out by Google in order to predict the incidence of diseases through a close correlation between the number of people who searched on the web specific topics related to flu and the number of people with flu symptoms (website: www.google.org/flutrends/about/). According to this perspective, the web, far from being considered as a second life, is now deeply connected with our habits and becomes space where our opinions dynamically develops, impacting on our identity representations.

These issues have sparked intense debates across disciplines, moving along different directions that intertwine epistemological, methodological and ethical issues from to the complexity of digital methods until to emergent frontiers of big data.

Within this scenario, it emerges that digital technologies represent a challenge to which social scientists must rise, taking account of a plethora of uses and meanings. Nortje Marres (2017) tries to provide a definition of the emerging field of digital sociology, considering its different controversies and conceptions. According to her, digital sociology can be refereed to (1) the topics of social enquiry; (2) the methods of social research; (3) the platforms for engaging with the audiences and publics of sociology and finally (Marres, 2017, p. 26).

The first conception considers the digital as phenomenon of contemporary society that influences many dimensions of social life, impacting on the ways of being, identities, relations etc.. The second vision of digital sociology deals with the methods and techniques of sociological research. It also adopts a useful distinction developed by Richard Rogers (2009) between the "natively digital" methods and the "digitization" of existing methods. The former, considering the distinctive features of digital devices, states that digital technologies make possible the implementation of new methods (Rogers, 2013), causing a number of questions and challenges. The latter argues a conversion of the traditional research methods in a technological and digital settings.

This conception relates for example the many existing empirical research techniques that have been adapted for the web: the rise of web surveys, netnography, network analysis etc. and the so called digitised data objects, i.e. all the information, traces and data, as wel as all the secondary data provided by official statistics institutions that have migrated to the web (Rogers, 2013). This distinction indentifies a complex and multifaceted configuration of the digital ways of doing research that is wide combination of both old and new techniques and methods.

Finally, the third final vision of the digital affects the channels and tools that sociologists adopt to share their knowledge and engage with the publics (Marres, 2017).

The meaning, utilizations, practices, controversies underpinning the digital in society are articulated and interweaved. Although the digital cannot be simply reduced as new way of knowing society or the development of new methods and it implies also many in-between positions in the methodological debate, sociologists need to be aware of its role to the investigation of contemporary society. This also means that the academic research and teaching practice of social scientists within the context of the higher education need to consider these transformations and to educate the new generations of sociologists to a informed use of the existing and new digital resources, tools, channeling it into a scientific framework.

3. Teaching social research methods

Social research methods is a discipline that aims to an understanding of the principles needed to design and carry out an empirical research. Within the context of sociological higher education, the teaching of social research methods provides students the knowledge and skills needed to formulate researchable questions and to outline appropriate research design, i.e. to collect information through the use of a wide range of tools and sources, to analyze the data with methodological rigor and technical competence, to interpreter and present the results. While the scientific literature on *how to do* social research methods is wide and extensive, the reflection on the teaching practice is not particularly developed (Wagner, Garner & Kawulich, 2011). Indeed, differently from other disciplines, for example math, science or statistics, social research methods education is not an recognized field. Although the little attention paid to social research methods teaching in the wider methodological discussions of social sciences, over last years a growing interest in the pedagogy of research methods, is emerging (Lewthwaite & Nind, 2016). Some research have explored the main aspects needed to promote an effective teaching of social research method and to support teachers to facilitate the learning of the discipline amongst both students and early-

career learners in different contexts. More specifically, some studies (Trowler, 2005; Tarifa & Zhupa, 2014; Nind, Kilburn & Luff, 2015) have identified the need to better connect methodological theory and practical research in order to promote both theoretical and technical skills of the learners. Regarding this point, a thematic review carried out by Kilburn, Nind and Wiles (2014) on 24 published papers from 2007 to 2014 indicated that a pedagogic reflection is beginning to develop, incorporating active learning and teaching strategies. In this perspective, also the results of panel carried out by Lewthwaite and Nind (2016) with the participation of international experts, suggested that the teaching of social methods research should encourages students to the reflection of their activities and to the practice of research, making the empirical research process visible. In recent years, other research have also contributed to develop the pedagogical discourse on the teaching and learning of social research methods also taking account of the growth of the Information and Communication Technologies (ICT) (Diana & Catone, 2016; 2018).

In general, the design of a university course is a complex activity characterized by a combination of different aspects. First of all, it means to develop an knowledge of student profile and an analysis of the socio-cultural context where he/she acts in order to provide a personalization of the learning processes. It also implies a reflection on the pedagogical strategy, i.e. the choice on the teaching and learning approaches to adopt, as well as on the specific subject content, i.e. the characteristics of the discipline.

Related to pedagogical choice, the recent educational models are orienting toward a constructivist approach that places the student at the center of knowledge that is built in a collaborative way through the realization of authentic tasks and experiences (Jonassen, 1994). More specifically, the constructivist model aims at providing a "significant learning" that is active, collaborative (i.e., realized through communities of learners), intentional (as it is based on the active involvement of the learner in the achievement of his/her cognitive objectives), contextualized, (i.e. based on real world experience), reflexive (as it enhances the student capacity to reflect on he/her has learned) (Jonassen, 1994).

Regarding the analysis of specific subject content, i.e. the characteristics of subject matter, in the case of social research methods it should be necessary to consider the disciplinary changes and developments also due to the rise of digital technology, as introduced in the first section of this paper. In other words, as the social research is living a transition phase, also the teaching practice of the discipline should take account of this configuration, questioning on the traditional apparatus on which it is traditionally based. However, although the debate on the role of social research methods in the digital is a new territory that opens up new perspectives and

interpretations, same uses and meanings begin to be established and recognized in the scientific discourse. For example, the digitalization process of secondary data that are now available in online databanks and can be online queried, often providing the user the opportunity to create personalized tables and graphs; the introduction of the open data as a valuable source of information on contemporary phenomena. Another issue, due to the rise of new types of data, online traces and information, concerns a different conception of the phases of the empirical research: for instance, in the quantitative method, data visualization is becoming a "deliberate analytical strategy rather than a technocratic method of data presentation" (Halford & Savage, 2017, p.1139). In other words, visualization can be considered as mean to explore and interrogate the data as it allows to identify and communicate the configuration, pattern and trends of variables and their relationships (Kitchin, 2014, p.106; Halford & Savage, 2017). Another aspect relates the digitalization process of many existing social research techniques that are beginning to be very popular and used in the social research practice.

This renewal process that is affecting the social research methods determines an updating of its contents in the teaching practice; in other words, teaching methodology of social research means to educate the new generations of sociology students to a critical and conscious knowledge of the methods of empirical research, embedding a broad range of new resources, tools and procedures.

4. A teaching experience

The course of social research methods is planned for the second-year Sociology degree at the University of Salerno (Italy) and attended by about 130 students. The purpose is to introduce students to main issues that comprise the field of quantitative method, i.e. to translate a generic social problem in a specific research question and abstract concepts into measurable ones, to proficiency use data collection and analysis techniques, to present the data with methodological rigor.

Concerning the student profiles, the course is addressed to learners with some socialization problems in the university context, general knowledge gaps, and inappropriate method of study; it is also attended by a high number of working-students and student-workers. Moreover, an important aspect of the analysis of the caracteristics of the students relates some typical problems they usually meet in the learning of the discipline that have been developed in recent studies (Diana & Catone, 2016). One of these difficulties for example concerns a negative perception to

quantitative methods that are often considered very hard and uninteresting (Payne & Williams, 2011), arousing a state of anxiety of the learner.

Taking account of this scenario, the course adopts a blended format according to a constructivist educational approach, i.e. the traditional face-to-face lectures are integrated with online activities, thanks to the support of an e-learning platform. Regarding the use of e-learning, many universities are experiencing this type of distance learning producing significant results in terms of teaching and learning; more specifically, blended learning enhances the main strengths of both face-to-face teaching and of online learning, e.g. the opportunity to get in touch with hard to reach students and to offer them a more flexible places and times of study, the possibility of professors to go beyond the dimensions of the frontal lecture (Garrison & Vaughan, 2008, Garrison and Kanuka (2004), the customization of contents and a collaborative environment of knowledge coproduction (Harasim, 2012). The platform, conceived only as support to the frontal lectures, allows the learner to the implementation of practical activities that are often neglected for several reasons (Diana & Catone, 2018). This use also responds to need to link the methodological reflection to specific tasks in the practice of research that is often required by the students themselves. In this perspective, the choice of an e-learning platform, that is been carefully designed in Moodle environment, is due to give to the learners the opportunity to experience hands-on activities and real tasks designed to guide them through the research process from a theoretical problem to the interpretation of results.

More specifically, the support of an e-learning platform brings students closer to the use of the new web resources, tools and techniques of social research, allowing an easier and direct access and guiding the learners to an informed use. Being an online environment that interfaces with students, the platform represents a direct channel that guide and support the learner in the knowledge, understanding and experience of a range of digital resources and platforms that are needed to carry out a social research. Throught the e-learning platform, structured in units with activities (gamification, simulations etc), work materials (dataset, research reports, questionnaires) and resources (images, audio, video, online platforms), the learner can carry out a sociological empirical research in the different phases of the empirical process. More specifically, student is supported to know and use digital tools, resources and procedures in order to design an empirical research, for data-gathering, analysis and visualization purposes. For example, the learner is guided to the use of a collection of digital resources (*Scopus*, Google Scholar etc) that are designed to search for articles, books, reports in order to explore existing theories, studies on a specific social phenomenon, Moreover, specific activities relate the information, data and digital traces

retrieving. In the case of primary data, beyond to know the most used data collection techniques, such as a structured questionnaire, the learner is involved in the building of a web survey using specific platforms such as *Survey monkey* or *Google Docs*. For secondary data students are guided to use web search tools and social sciences data banks: OECD, ISTAT, UNESCO, European Social Survey. For example, the *OECD The Better Life Index*, for instance, is an interactive tool that allows the user to visualise and compare some of the key factors – like education, housing, environment, etc – that contribute to well-being in OECD countries; the online platform of European Social Survey makes available several resources, data sets for online analysis or download. Also, the development of the open data that, according to Open Knowledge Foundation, anyone can access, use and share, also represent a new form of secondary data. In this perspective, the open data online platforms of Italian public admnistration (dati.gov.it), MiBACT (Ministero dei beni e delle attività culturali e del turismo), Open Coesione (an Italian project of civic engagement) can provide the user/student to access to searchable data on different thematic areas. The use of these resources allows sociology student to develop both methodological competence and a conscious civic participation.

Beyond to introduce the student to existing methods that, with the rise of the digital, are migrated on the web (Rogers, 2013) the learner is be guided to the knowledge and application of same user friendly plug-in in order to retrieve online traces and information and extract valuable data from social media sites and other online platforms . Digital technologies also allow to implement data visualization and output reporting, i.e. activities that underpin a logical and reasoning systems about information and provide a more readily absorbable overview of the data (Halford & Savage, 2017); such interactive tools - e.g. *Infogr.am*, *Picktochart*, *Tableau* or some commands of *R* data analysis software - are included in the activities of specific unit of the platform.

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