Chapter 63
Privacy Concerns and Networks of Communication among Classmates

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ABSTRACT

The collection of network data referring to social interactions is among the topic more significant and interesting in the research process. Most of the advancements in this area benefit from the introduction of new technologies and the improvement of techniques for the collection and retrieval of data. The collection of information concerning multiple dimensions of personal interactions and the treatment of personal data, however, may pose privacy and ethical problems. In particular, the operative definition of privacy has been attempted in social and psychological research in the form of multi-dimensional indicators and variables referring to the individual perception of sensitivity and confidentiality of information. Recently, however, some attempts have been done to define privacy from a relational point of view using concepts and structural properties from social network analysis. The paper addresses this debate and by means of empirical network data on communication networks discuss the issue of privacy in network data collection and analysis.

1. INTRODUCTION: COMMUNICATIONS AND NETWORKS

Communication mediated by technologies (ICT) provides important accounts about the transformation of the personal space and the boundaries of identity. Several analysis of the social and relational changes induced by the adoption of pervasive technologies portray the transformations that social behaviour is undergoing in contemporary society (Lyon, 2002). Some authors consider that the diffusion of new technologies of communication is going to modify our society and our way of interacting, as well as the scientific ethic and the way technology is managed by practitioners and experts. Changes in the opportunities to communicate and create shared activities increase also the moral ambivalence of technology in personal spheres such as intimate relations, social cohesion

and conflict, and public participation (Hague & Loader, 1999). It is relevant thus to develop an ethical driven understanding of how technological advancements impact social needs and integrate into communicative and collective relations from educational to professional rules of behaviour (Bunge, 1998).

Network studies share a specific interest for personal communications, and the attention for the study of how pieces of information move inside and between social groups dates back to the origins of the discipline (Freeman, 2004). Social networks provide also a representation of social grouping and their study constitutes a relevant area of exploration about the structure and the flow of human communication. Specifically, the influence of social network analysis (SNA) has been recognized because of its impact in explaining the micro and macro link and the mechanisms of transformations underlying specific social processes (Emirbayer, 1994). Individual preferences (social selection), in fact, can be put in evidence though adequate techniques (Mc Carthy, 2002) and their impact (social influence) can be explored also in complex processes of interaction (Steglich, Snjjder & Pearson, 2010).

Among the more interesting SNA studies are those associated with the study of social relations and information networks inside groups of equivalent and non-equivalent members in terms of social attributes such as age, status, gender, organizational position. Recent studies have implemented research on characteristic and impact of information flow through social networks (in terms of influence on personal interactions, types of group formation, efficiency and effectiveness of communication), giving detailed explanations of the impact of traditional and innovative technologies (Wellman, 2003; Leonard & Haines, 2007; Licoppe & Smoreda, 2005). Networks data concerning ITC communications, moreover, can arise ethical problems for researchers (Borgatti & Molina, 2005) and, eventually, be monitored for security reasons as a result of their specific technological configuration and economic diffusion (Castell, 2001).

First investigations of the impact of new communication technologies on social relations anticipated that new forms of 'connected presence' available with contemporary ITC would modify personal networks and in general the types of ties and relations that individuals establish in their social circle (Wellman, 1999). Several studies have been using information and data concerning the adoption of pervasive technologies to analyse the features of communication parts and to report the relational changes that are emerging as a consequence of the new technologies. Licoppe and Smoreda study on sociability and ITC (2005), for example, showed that new technologies are modifying the concept of relational proximity and practices of personal interaction from encounters to established relationships (family, friends), and that a specific 'strategy' underlies individual's choice between types of communication resource. Studies of peer to peer communities also report the emergence of rules of conduct and new forms of reciprocity and commonality among experienced users (Strahilevitz, 2003). Research on virtual networks, (Petroczi et al., 2007) showed that relationships developed on the Internet have similar indicators of intensity, confidence, share of interests and multiplexity than off-line relations; eventually, they provide different forms of relations that are resource specific, such as mutual help (advice though forums) and identity safeguard or preference disclosure (virtual anonymity).

Recognizing these contributes in the study of networks of communication, the article focuses on a special property of personal interactions, privacy. The following paragraphs will describe a recent (2008) exploratory study of personal communications (SMS and Internet communications) among a significant groups of users, high school students. The study was carried on using network analysis techniques and involved the collection of survey data concerning privacy preferences (aka. availability and feasibility of

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