A Second Round of Digital Circulation

Gabriele Balbi

USI-Lugano (CH)

Alessandro Delfanti University of Toronto (CAN) Paolo Magaudda Università di Padova (IT)

Italian Journal of Science & Technology Studies

Abstract: This introduction provides an overview of the articles included in the second part of the special issue on 'digital circulation', whose first portion has been published in the previous issue of the Journal (1/2016). In doing so, the authors reconnect the content of this issue with the theoretical and empirical insights developed in the introduction that accompanied the first part.

Keywords: Digital circulation; media; communication; infrastructures; data flow.

Corresponding author: Paolo Magaudda, Dip. Fisppa, Università di Padova, Via Cesarotti, 10/12, 35123 Padova, Italy. Email: paolo.magaudda@unipd.it.

This issue of *Tecnoscienza* is the second part of a special series analysing 'digital circulation' that completes the issue that was published in July 2016 (Tecnoscienza 1/2016). The concept of 'circulation' is emerging as a central concern in both digital media studies and science and technology studies. In this issue, we stress the need to cross-pollinate these two fields through approaches that address the interrelationship between the cultural and technological transformations that underlie digital circulation. Studying digital objects as they travel through space, time, and social spheres requires a close analysis of their cultural and political significance. Digital circulation produces meanings, responds to social and cultural needs, and shapes different social worlds. However, while this second part presents articles that mainly move away from analysis of the material infrastructures that underlie digital circulation, we aim to keep technology at the core of our work. In our original introduction that was published within the first part of the double special issue, we provided an initial theoretical framework for the study of digital circulation in science & technology studies and media studies (Balbi, Delfanti and Magaudda 2016). Referring to the work of Appadurai, we emphasized the need to identify the patterns of circulation and techno-political regimes that sus-



tain and create the life trajectories of digital objects; additionally, we argued for a multifaceted understanding of their specific and material biographies – their 'social lives'. This cannot be separated from a theoretically grounded grasp of the technological and material levels that constitute digital circulation.

In this second part, we present a series of studies that complement the first set of articles by insisting upon the lively cultural and political significance of digital circulation in diverse areas, such as mapping, television, youth and social media, and sexuality. Articles in this issue thus expand the empirical base for the development of understanding digital circulation while simultaneously converging in the production of a shared approach to examining the complex relationship between digital technology studies and theories of circulation. To align with the rhetorical use of the circulation framework as presented in our original introduction, we stress that the new articles published in this issue also explore and expand the circulation of ideas among STS, media and communication studies as well as other relevant fields.

This second issue on digital circulation begins with a "lecture" by Amade M'charek entitled *Performative circulations: On flows and stops in forensic DNA practices.* During the assembly of these two special issues, we discovered that the work of M'charek was surprisingly aligned with our own work. Therefore, we invited her to present her reflections on the relevance of the notion of 'circulation' in the anthropology of science. More specifically, M'charek focuses on 'circulation' as a framework to investigate the way that DNA currently is constantly travelling from the domain of scientific laboratories to the realm of the social world and vice versa. In doing so, she shows that the process of circulation is not only a way to examine how society and genetics relate to one another but also the actual generator of the contexts in which DNA's meanings and identities are constantly transformed and reconfigured.

After this opening lecture, the special issue presents five essays that contribute by elaborating upon and fostering the notion of circulation in relation to different empirical contexts and theoretical frameworks.

In Disciplining Change, Displacing Frictions. Two Structural Dimensions of Digital Circulation across Land Registry Database Integration, Annalisa Pelizza addresses the notion of circulation by focussing on crucial issues in digital infrastructures, particularly frictions and resistances in the circulation of data between different databases. The author borrows concepts from semiotics to problematize infrastructures and standards that are involved in the database management of an institutional infrastructure in the Netherlands, thereby offering new insights into the understanding of data circulation and, more specifically, how data circulation resists being regulated by standard procedures.

In Liquefying Social Capital. On the Bio-Politics of Digital Circulation in a Palestinian Refugee Camp, Monika Halkort describes the material political effects of data circulation in the context of a refugee camp in Lebanon. The construction of spatial and social information about the camp through the generation and circulation of speculative digital data is interwoven with entrenched social knowledge and documentary evidence, which shifts the balance of power within the camp. The conversion of lived and embodied memory into data-informed forms makes claims of land ownership visible and effective while simultaneously restricting individual and collective life opportunities. The 'probabilistic' nature of geographical data is thus involved in the transformation of collective memory into a tradable asset.

The article written by Cosimo Marco Scarcelli and Claudio Riva is the first of three contributions that are explicitly focussed on the use of digital media and how media appropriation in itself is at the centre of different circulation processes. Hence, in *Digital Literacy Circulation: Adolescents and Flows of Knowledge about New Media*, Scarcelli and Riva address the process of appropriation of the Internet by Italian adolescents, examining how competencies that are involved in its use circulate and are reproduced among new generations. By addressing four different kinds of flows of these competencies, which emerge from their empirical research, the authors show that the appropriation of digital media can be understood as a multi-layered circulation of competencies that is much more complex and stratified than the vision offered by the notion of the 'digital divide'.

Alberto Marinelli and Romana Andò, in their paper entitled *From Linearity to Circulation: How TV Flow is Changing in Networked Media Space*, focus on a key concept of television studies: 'flow'. They claim that this powerful idea, which was first analysed by Raymond Williams in the 1970s, is now changing directions from a producer-controlled phase to a user-controlled phase. Due to the multiplication of screens and possibilities of consumption as well as new forms of digital interactivity between broadcasters and audiences, the authors claim that TV contents are changing their classic models of circulation. Specifically, audiences can now rephrase and control content, especially through social media. This theoretical hypothesis is corroborated through unpublished data from the Osservatorio Social TV 2015 research project that examined Italian TV audiences' consumption practices.

Finally, the article by Renato Stella entitled *Circulation of Technology, Circulation of Desire. Cybersex and the 'Sadian Collective Intellectual'* offers an additional contribution by reflecting on the notion of circulation by presenting an analysis that is based on his ethnographic empirical research on extreme online sexual activities. Borrowing from authors such as Akim Bay and Pierre Levy, Stella elaborates upon the concept of the 'Sadian collective intellectual' to address the logic of the circulation of extreme sexual narratives and imaginaries over the Internet. He also traces their evolution from the libertine sexuality presented in novels by Marquis de Sade to contemporary forms of online sexual interactions and cybersex practices. Combined with the contributions that were published in the previous special issue, these articles further contribute by reflecting on the notion of 'circulation' and also by expanding the same process of the circulation of concepts and approaches among STS, media studies and other branches of social research.

References

Balbi, G., Delfanti, A. and Magaudda, P. (2016) *Digital Circulation: Media, Materiality, Infrastructures. An Introduction*" in "Tecnoscienza: Italian Journal of Science & Technology Studies", 7 (1), 7-16.