REVOLUTIONARY DISCOURSES IN A TIME CAPSULE: A HISTORIOGRAPHICAL ANALYSIS OF CANONICAL, INTELLECTUAL LITERATURE CONCERNING THE SOCIAL IMPACT AND SIGNIFICANCE OF THE INTERNET

Nathalie Fridzema
University of Groningen

Susan Aasman
University of Groningen

Rik Smit
University of Groningen

Tom Slootweg
University of Groningen

The academic community has always been involved with the advancement of the Internet; from the research environments that were born out of the military-industrial complex dating back to the 1940s (Turner, 2006, p. 3), to the implementation of the Internet as a scientific network during the 70s (Flichy, 2007, p. 59), and throughout the 90s in the many web initiatives that were often established by university students (Turner, 2006; Apprich, 2017). However, it was not until the mid-1990s that popular, scholarly writings put forward revolutionary discourses about the Internet's broader social impact and significance. As Turner (2006) argued, the complex intertwining of American counterculture with emerging Silicon Valley cyber communities resulted in a new cultural understanding of networked computing; the personal desktop became the symbol of "empowered individualism, collaborative community, and spiritual communion" (p. 2) whilst the internet offered an escape from hierarchical, bureaucratic systems (p. 247). The rhetoric of the digital revolution suggested the emergence of a liberal "new economy" (p. 175) in which the network metaphor dictated both the organization of cyberspace and the socioeconomic sphere. Discourses like this were frequently produced by key actors from academic communities who were both

eyewitnesses as well as participants in various digital advances. Writers such as Howard Rheingold, Steve Jones, Nicholas Negroponte, Manuell Castells, Sherry Turkle, and Geert Lovink produced influential texts about the social impact and significance of the internet that shaped our understanding of the digital revolution, often from the perspective of their particular theoretical backgrounds, positionality, and based on their own experiences.

Whilst not all of the above-mentioned writers are scholars in the traditional sense, their writings put forward dominant conceptualizations that contributed to future academic debates about the history of the internet, our understanding of its influence in society, and even notions concerning Web 2.0. Prominent terms like 'cyberculture', 'netizens', 'electronic highway', and 'virtual community' eventually bled over into legislative and popular discourse like, for example, *Wired* magazine (Turner, 2006; Flichy, 2007; Stevenson, 2013). Many of such texts are still relevant and used as secondary sources.

Now more than 20 years later, these texts present valuable information as if coming from a time capsule; imaginaries about the internet written during a time of novelty and excitement. Often framed with a rhetoric of transformation, the writers themselves contribute to the idea of a revolutionary internet following optimistic notions of digital utopianism and hopeful manifestations whilst also disclosing critical tones. It is valuable to situate these discourses in the particular Zeitgeist characterized by a post-war society, globalization, neoliberalism, the dot.com crash, and the eventual rise of the platform economy. Therefore, this paper aims to dive deeper into this canonical, intellectual literature through the re-contextualization of it as historical sources and traces.

The acknowledgment of popular, scholarly writings covering the early internet's significance as a historiography about the internet's past - i.e. historicizing these sources - will contribute to our academic understanding of how the internet was understood, designed, and subsequently used. Important in the identification of such socio-technical imaginaries (Jasanoff & Kim, 2015) are texts from scholarly and professional communities. This is especially the case regarding the development of the Internet as the US-based academic communities were an intrinsic part of this process. Besides, many conceptualizations put forward by these groups bled over into mainstream discourse and thus influenced how society imagined the internet at large. Therefore, it is important to critically study these canonical writings to map the evolution of revolutionary notions and to scrutinize the impact of the author's specific historical context and experiences. This highlights important arguments and contradictions whilst discerning prejudices; why did these writers imagine the internet as they did?

To achieve this, the project conducts a historiographic analysis (Tosh, 2015, p. 65) of canonical literature concerning the Internet during the period of the digital revolution before the rise of platforms; early 1990s up until 2006. The methodology includes both quantitative and qualitative approaches. In terms of the former, the analysis includes computational methods such as topic modeling to better examine the trends and evolution in historical concepts based on a large corpus of titles. Critical questions that guide the qualitative analysis of the most popular titles are: what is the background of the authors and their connection to which internet institutions; which sources were used;

what theoretical perspectives were of influence; which themes did they view as most relevant and why, and which were excluded; how was their text interpreted and used by others?

The popular, scholarly literature used in this study includes texts whose objective was to describe the historical social impact and significance of the internet. Preferably, these texts put forward dominant concepts or knowledge that became authoritative in the study of the internet; followed a critical stance to reflect on the internet's revolutionary aspects in the past and future; were either written by scholars or authors associated with the academic community or published by academic publishing houses. Examples of such work include Manuell Castells' *The Internet Galaxy* (2001), Janet Abbate's *Inventing the Internet* (1999), Tim Berners-Lee's *Weaving the Web* (1999), Fred Turner's *From Counterculture to Cyberculture* (2006), and various books by Howard Rheingold (1994; 2000; 2003).

By critically analyzing this canon of internet history captured at a certain point in time, this paper shows which key themes were understood as having the most impact whilst also diving deeper into how these themes developed and why. Furthermore, the paper argues that the overall tone used by authors changed rather rapidly from revolutionary to critical, especially around the dot.com crash. Moreover, the earlier titles have always emphasized critical notions regarding the internet's development stating that a digital utopia is not self-evident unless its advancement is actively discussed. In terms of methodological perspective, it is notable that the chronological order of the most popular titles represents the evolution from technological deterministic frameworks, to mixed approaches like 'technological momentum' (Abbate, 1999), to studies in which social organizational structures are in focus. In terms of concepts, 'the virtual community' and 'the digital divide' are identified as key terms in canonical literature; they are reappearing across titles and are reinterpreted by various authors as well as situated in a historical narrative. This is most notable in Castells's *The Internet Galaxy* (2001).

To summarize, the paper presents a historiographical analysis of canonical, intellectual literature concerning the social impact and significance of the internet, put forward during the digital revolution between the 90s and mid-00s. Through the re-contextualization of this canon as a unique historiography on the past internet, this research introduces the evolution of key understandings whilst shining light on the important contextual and individual influences. In turn, this will showcase the presumed, revolutionary aspects of the internet and thus can likewise broaden our understanding of its perceived key role in social revolutions.

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