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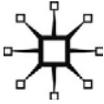Matthew Feldman: **Ezra Pound's Fascist Propaganda, 1935–45**

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The Silent Revolution: How Digitalization Transforms Knowledge, Work, Journalism and Politics without Making Too Much Noise

Mercedes Bunz
Leuphana University, Germany

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Acknowledgements

When I started the endeavour of writing a book on digital-ization, I sketched all the key words on a sheet of paper by drawing a tag cloud. Afraid that I had missed something important, I mailed the digital picture of my sketch to a friend for his opinion. He replied: 'It took me some time, but finally I found what is missing. The arrows!'

Of tremendous help when marking those arrows was my time as *The Guardian*'s technology reporter, but even more important was my encounter with the paper's editor Alan Rusbridger, whose inspiring interest in digitalization has always led the way much better than any navigation device would. Besides him, Alexander García Düttmann and Peter Hallward have been important role models who have inspired lateral thinking.

I have been able to use Matthew Fuller's and Geert Lovink's innovative ways of approaching digital media and have been inspired by Katherine Hayles's consider-ate, yet future-looking approach towards digitalization. On this occasion I would like to bow to Friedrich Kittler, who passed away while the book was being produced, and whose outstanding achievement in thinking media has deeply influenced me. I would like to thank the Centre for the Humanities and the Culture and Media Department of the University of Utrecht, which gave me the opportunity to write and discuss parts of the book as its Impakt Fellow, my editor Felicity Plester for her support and encourage-ment. Sascha Kösch, who had asked for the arrows, and Christian Heilbronn, my German editor at Suhrkamp, have devoted their time to bringing my thoughts into

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This book is dedicated to the British Library, a home for thoughts as much as for books. Its wide, airy reading rooms gave the endeavour of capturing digitalization enough room for such a weighty question to stretch, while its wobbly wireless internet connection left me with no choice but to face it. May our societies hold on to the importance of such places.

Preface

It is the surprising human response to the rise of the internet which started off this book. Maybe like some of my readers, I remember very well a time without it. Back then information was scarce, unlike today when it constantly follows us wherever we go, eager to be processed, day or night, like an annoying child that doesn't want to go to bed. Before the internet, it would take a lot of effort to find the right information. Whenever we wanted to know something, we had to ask a superior, or had to read two difficult books before we could find what we wanted to know in the third one. Or we simply couldn't find out. The tool that is today at our fingertips, the internet, has changed all of this. It patiently answers the simplest of questions. When was the last rocket launched from the Isle of Wight? What are the ingredients I need for Yorkshire pudding? What does skin cancer look like? In which Viennese street do I find the house that Wittgenstein helped building? What is discourse analysis? The internet provides some answers, most of them correct, some to be further verified.

But we weren't pleased. While some visionary geeks such as Katherine Hayles and Franco Moretti, Alan Liu and Matthew Fuller, Geert Lovink, Clay Shirky, or Cory Doctorow were analysing technology's new potential, the majority didn't share their fascination. The public wasn't delighted about the abundance of information; rather, it was concerned. This explains the wide echo of the question 'Is Google making us stupid?' posed in 2008 through the cultural critic Nicholas Carr's cover story on the monthly magazine *The Atlantic*. Within weeks, the question got

picked up by *The Observer*, the weekly magazine *Der Spiegel*, was written about in *The Wall Street Journal*, discussed on *BBC* websites, found on Dutch blogs, and in French magazines. One could say, it became a global concern. The medium provided human societies with information 24/7, and doing so it was internationally considered to make mankind stupid – a surprising and interesting response. There must be a reason for the response, which had better be understood.

I decided to look into it. Most people would agree that digitalization has been changing our societies as much as industrialization has, which had been invoked as a fascinating potential for our economy. However, the potential of digital technology seems to look different from a social point of view, where it has been mostly discussed as a threat. But isn't digital technology also an opportunity for our societies? Vast parts of our digitalization rely on royalty-free technology ever since in 1991 the World Wide Web was prototyped and tested at the French part of CERN, and as its British inventor Sir Tim Berners-Lee being part of the Opening Ceremony of London's Summer Olympic Games 2012 reminded the public by tweeting: 'This is for everyone.' A statement that should be taken very seriously, indeed. Digital communication is closely related to public space, more than ever as today 'it is largely by technology that contemporary society hangs together' (Franssen et al. 2010). Inspired by Hannah Arendt's *The Human Condition*, this book makes an effort to report some of the changes that we experience being with technology. In this respect, the book investigates digitalization by looking at the effects digital media has on Western societies. Like the philosopher Gilbert Simondon, I aim to show that technology is fundamentally related to us humans. In leaving any oppositional approach towards thinking 'being' behind, he, who has inspired my thinking the most, is as much a radical thinker as he is an outstanding philosopher of technology (more in Chapter 3). As in his book *Du mode d'existence des objets techniques*, most of my arguments root on technical examples.

Certainly, much like the machines in the past era, by now digital algorithms have affected almost every aspect of our lives, and unbalanced some of our cultural scales: algorithms have changed the way our societies are processing knowledge. The effect is that in today's expert societies, we all experience the transformation of our work. At the same time, algorithms have widely opened up access to the public sphere initializing new political opportunities soon to be fully discovered. Gathering some of our fierce debates on the effect of the digitalization

on knowledge, work, journalism, and politics, this book tries to get to the bottom of the issue, with the aim of exploring and comprehending these transformations better. In order to do this, the book describes the massive change and the new social options that come with it, starting with a historic comparison of our discussions of work and knowledge. The second part is directed at discussions of the public sphere and its digitalization captured through *thick* description. In terms of style this results in an unusual approach mixing the following two perspectives: a journalist's task that is to report the news, and a scholar's task that is to gather systematic knowledge. As this book reports the systematic change of knowledge and information by digitalization, it is situated between both perspectives. Thus, it is also a tentative endeavour in style, for which the writer begs forgiveness.

A second apology must be offered to computer scientists. In order to gather a better understanding of the role we humans play in the historic process, algorithms – effective procedures expressed as a finite list for calculating a function – will often not be looked upon in their informational sense. Chapter 1, for example, provides an overview of different theoretical approaches in the humanities, which discuss algorithms as the principle digitalization is built upon: computers, digital devices, software programs, internet platforms, apps, data sets, and search procedures, all these different areas are driven by them. Therefore algorithms exceed informatics thereby becoming a social technology that is massively transforming our society.

What social forces unfold with digitalization? To answer this question, this book is, of course, drawing on important academic research that has been undertaken in recent years. As media studies is by now a vast, rich, productive and much too lively discourse to be mapped, I only want to introduce the authors and institutions that informed this book with their research of the presence. Among those, the field of Software Studies critically evaluating computational processes to provide us with the necessary digital literacy has been important. In the nice and apt words of Matthew Fuller: 'algorithms are ways of thinking and doing that leak out of the domain of logic and into everyday life' (Fuller 2008, 1). As software becomes part of our world, it is shaping our societies. To explore this is the concern that is at the core of this book.

Fortunately, this isn't a concern of a voice in the wilderness anymore. By now, influential institutions ponder the use of the internet on a social scale. Among others, the Oxford Internet Institute, the Berkman Center

of Harvard University, the Centre for Internet and Society in Bangalore, and the Massachusetts Institute of Technology (MIT) have promoted excellent research and financed important projects. Surely, their emphasis differs – the Berkman Center puts the focus on law, the Oxford Internet Institute on social studies, the Bangalore Centre for Internet and Society takes a postcolonial perspective, and the MIT puts technology at the core of all of its activities devoted to advancing knowledge. Still it could be said that they share the same intent: to explore the impact of digital technology on society. The critical turn of this is to be found at the Institute of Network Cultures, University of Amsterdam, directed by Geert Lovink, and the Open Media Initiative led by Gary Hall at the University of Coventry, among other playful satellites.

Their critical focus on the social impact of digital technology is something I share, even though my aim here is somewhat narrower. I want to confine my research to look specifically at our discourse of technology, an intellectual endeavour that is (1) following the road of the digital humanities, which is about to enfold itself in theoretical arguments beyond the simple use of digital tools (Berry 2012; Lunenfeld et al. 2012); (2) assuming that in every society the discourse of a technology organizes to a certain extent how this technology is used; this research owes a lot to the discourse analyses of Michel Foucault. Exploring the technical discourse starts with setting aside the virtual/real divide, which is replaced by a *thick* description comprising present and classic debates, actual developments, new channels of distribution, digital methods (Rogers 2013), and historical comparisons. Studying the discourse accompanying the rise of digital technology in order to comprehend how these tectonic shifts affect our social structures, the hypothesis is that we will learn at least partly about the question that fundamentally informs this book: What social forces unfold with digitalization?