

**REVIEW OF THE BOOK BY DEBORAH LUPTON
"THE QUANTIFIED SELF". CAMBRIDGE: POLITY, 2016**

The book by Deborah Lupton is a timely account on the variety of issues related to self-tracking technologies, practices and imageries. In broader cultural and political circumstances it is another argument in the discussion about how digital technologies should be treated by society in long-term integrative perspective. The author dismantles those technologies as not merely material artifacts invented for improving human living conditions, but as socio-material assemblages, resting on pre-existing socio-historical tendencies and phenomena both on the user's side and on the side of institutions that invent and massively apply certain technological solutions. Lupton describes her interest in terms of "self-tracking cultures, analyzed from a critical sociological perspective" (p. 1). Her focus on cultures is primarily an instrument to avoid explanation of self-tracking as a merely technologically enabled phenomenon, and to discuss its complexity by revealing it as "the product of broader social, cultural and political processes" (p. 1).

Lupton specifies the term self-tracking by the terms "lifelogging", "personal informatics", "personal analytics", as well as "the quantified self" (p. 2). Empirically she works not only with the history, activists and ideology of the *Quantified Self* movement, which has crystallized around the *Wired* magazine in 2007 as a more or less conscious stance (taken mainly by digital technologies' professionals) towards the growing possibility to generate,

store and share data about one's body, health and behavior. In this sense, the title of the book is a bit misleading, for Lupton talks about the whole range of practices of self-tracking, as well as about the descriptions, reviews and discussions of the software that enables self-tracking. Her book thus adds to the broad range of existing attempts to diagnose impacts of digitalization on the forms of collective living of humans, i.e. on institutions, norms and meanings that guide and constrain individual behavior. It is also an interesting contribution to the discussion on how digitization is about shifting the boundaries of the human body; and of how the body and its material context incorporate each other via sensors and code (p. 71).

However Lupton is well aware that self-tracking is not a phenomenon specific to the digital age — those practices are much older and are not necessarily implying quantification of information about oneself (p. 29). She finds the lineage of lifelogging in one's desire to record and archive manifold aspects of life and hence to enhance one's memory (p. 10). It is just that currently it is done with the help of wearable computer devices. The digital factor of self-tracking means for her, firstly, the fact that human body is measured and monitored in a more detail (p. 4). Secondly, an important implication of digitization is that collected information is essentially interconnected. It is accessible not only to the particular ego of a self-tracker, but to other actors and agencies as well. And thirdly, digitalization in this case is an essential instrument for value creation in the new knowledge economy. Various forms of self-tracking and of digitally enabled guidance of one's behavior are thus essential for this new economy. In this respect, for Lupton self-tracking is one of the cases, which could be well described by the notion of 'prosumption' (p. 88). Ritzer and Jurgenson have recently popularized this notion (2010) in order to describe and make sense of those practices which essentially combine features of both production and consumption.

The first chapter of the book is a broad description of the currently used digital applications and devices for self-tracking health, fitness, productivity, etc., without much effort by the author to make a classification out of the discussed material. Besides, this chapter provides an overview of the prevalent empirical research on self-tracking practices. Here Lupton acknowledges that most of such research is market research, most often on issues of health and fitness, and most often in the U.S. society (pp. 30–31). Here the author briefly discusses findings of different research: a) who are most often publicly presented as self-trackers (American white men with technological literacy); b) what

are the self-trackers' common positive and negative experiences (growing self-awareness on the one hand and confusion by too much data on often unrelated processes on the other hand); c) why do people engage in self-tracking activities; d) what are the technical problems self-trackers complain about (and how they do it), etc. (pp. 32-33). In this chapter she also diagnoses the lack of in-depth anthropological studies of self-tracking.

The second chapter dwells upon the main theoretical approaches and concepts mobilized in order to make sense of self-tracking cultures. Lupton holds that humans increasingly become subjects of digitization due to embeddedness of digital devices and sensors to the public spaces and social institutions. For her this implies that it is the 'new materialism' or 'social materialism' approach that is the most helpful to understand how humans and technologies intertwine (p. 39). In her argumentation, this approach means, firstly, adhering to the science and technology studies perspective, in which material objects (and not only humans) are regarded as actors; and, secondly, having enhanced research sensitivity to the geographical material location of the studied phenomenon or process. In relation to digital technologies in particular, the 'social materialism' approach, in Lupton, is helpful to show how technology itself is the result of contextualized social interaction. The way she formulates her interest is "the ways in which people incorporate objects into the routines of their everyday lives ... or effectively how they become entangled in assemblages with these objects ..." (p. 41). In this respect she uses the term 'algorithmic identity' (p. 57), denoting effects of algorithms on future individual behavior (in terms of gathering and processing information on ones behavior and guiding one's further actions).

Another part of the conceptual context Lupton reconstructs is built on the-oretizations of narcissism and vanity (Lasch), as well as de-traditionalization (Giddens, Beck, Bauman). At the same time the issue of how digitization affects discourses and practices of selfhood is largely discussed in the Foucauldian perspective, disciplined by his concept of governmentality as biopolitics. She just adds that our conditions are the era "in which biopolitics and the expert knowledges that underpin biopower have become increasingly digitized" (p. 56). Generally, the literature reviewed in this chapter is rather mainstream — Beer, Savage, Burrows, Kitchin and Dodge, Lash, Beck, Giddens, Bauman, Lasch, Andrejevic. However not much attempt is made to juxtapose those different research traditions and purposes. In this sense Lupton's second chapter is rather descriptive, without operationalizations of concepts, which the author

finds relevant for her theme. The approaches that she discusses are characteristic of the studies of digitization in general. Lupton does not make much effort here to ground them in specific empirical settings of self-tracking (either technological or social). The issues she is focusing on — such as enhancement of neoliberal subjectivity by the process of digitization or changing modes of surveillance — could be discussed in the same way in relation to any other phenomenon of digitization.

Yet in the third chapter Lupton elaborates a more nuanced focus on her theme. Here she discusses the wide range of self-tracking practices from 2010s and singles out discourses which both give rise to these practices and legitimize them (such as, for instance, discourses of self-awareness and self-improvement). She shows that on the one hand, self-tracking in the context of digitization helps to produce expert knowledge on one's body or habits, which is based on quantitative information. This is fitting well into the neoliberal ethos of self-help. On the other hand, the ethos of self-tracking is much in line with the 'digital entrepreneurialism' as an orientation to try to use as many new technologies as possible (pp. 66–67). Hence this chapter is largely developing the author's answer on the very relevant question about whether, how, to what extent, and why current digitization is essentially neoliberal. The way Lupton connects phenomena of digital self-tracking and of neoliberal politics is through observation that in the discourse of neoliberal human, the notion of social structural factors is less important than the notion that people are self-made (p. 50). She suggests theorizing self-tracking as "a practice of selfhood that conforms to cultural expectations concerning self-awareness, reflection and taking responsibility for managing, governing oneself and improving one's life chances" (p. 68).

As the most obvious outcomes of neo-liberalization are usually noticed in relation to the 'pillars' of the welfare state such as education or healthcare, it is logical that Lupton's attention is mainly directed to these domains. In healthcare, for instance, self-monitoring devices are widely incentivized, on the one hand, to reduce healthcare costs by transferring certain types of monitoring to the at-home sphere and by promoting preventive health efforts, and, on the other hand, to generate big data sets for the medical research (pp. 18-19). In empirical sociological accounts on self-tracking this activity is often presented "as people's response to the problem of dealing with the uncertainties and openness of choice of late modernity" (pp. 76–77). It is thus seen as a symptom of a fundamental need to take control of one's course of action. On the other

hand, Lupton notes, for others “self-tracking may be a sign of weakness, of inability to engage in self-management without technological assistance” (p. 80). Moreover, she talks about the whole range of feelings of the lack of authenticity resulting from self-tracking — in cooking and eating, in walking around the city, etc. (pp. 81–82).

In the fourth chapter Lupton singles out and discusses that existing research takes on the phenomenon of data in the context of digitalization. And it is in the light of the spread of big data that she comments on the practices and discourses of self-tracking. Most of this discussion is based on quotes from the mass media (mainly articles and interviews by the proponents of the *Quantified Self* movement) and from already existing research material. An interesting insight here, found in Stephen Wolfram, is that self-tracking creates personal analytics, which is analogous to organizational analytics — human body and its processes are analyzed analogically to an organization and its processes (p. 92). Various data one gets about his or her nutrition or physical exercise can be analyzed in the long term and confronted with ones mood and feelings. Self-trackers therefore are encouraged to think about their behavior in terms of correlations between different activities. Here Lupton also complements such *Quantified Self* minded argumentation with her own critical angle, for example, by discussing whether quantitative analysis of sexual intercourse is enough to judge about how good it was (p. 99). In this chapter Lupton equally discusses the range of artistic projects designed around self-tracking practices and experimenting with various modes of displaying self-tracking results (pp. 102–109).

The fifth chapter is devoted to the issue of access to personal data generated in self-tracking practices. Lupton conceptualizes those data generated by self-trackers as ‘biocapital’ in terms of Nikolas Rose (2008), i.e. as a value generated from biological entities of human bodies (p. 117). In this respect online platforms and applications are not really consumed, but ‘prosumed’ in Ritzer’s and Jurgenson’s terms. Lupton herself notes that self-tracking practices “produce value in terms of the intimate biological knowledges” (pp. 117–118). Besides, some insurance companies incentivize their clients to engage in preventive health and testing ones body with self-tracking technologies in order to get better deals (p. 122–123). Lupton talks about the tendencies of private companies to buy data generated by self-trackers, however does not really go into detail of particular examples of this (for instance, uses of digitally generated personal data as evidence in lawsuits). She focuses on the disadvantages

of this situation for those who are already disadvantaged in terms of “assumptions and predictions” made about individuals “on the basis of preexisting data sets” (p. 119). This is most obvious in case of calculating risks in the sphere of insurance.

Such a configuration creates predisposition for the growing digital divide, defined by the access to information — at the current stage those are only big powerful institutions, which have access to big data (p. 129). Lupton points out that only a small minority of users are advanced enough to control the process of how their data are gathered and shared, while the majority “must rely on the commercialized products that are available and therefore lose control over where their data are stored and who is able to gain access” (p. 133). It also provides a range of options for cybercriminals to get access to personal health data with the purpose to sell them illegally on the black market or to illegally get pharmaceuticals (p. 126). Besides, although Lupton discusses that a common practice among the *Quantified Self* movement people as well as among other self-tracking communities to share ones data to others is about “self-reinvention and reflexivity”, she holds that those intentions are usually mobilized in the broader social context for the sake of greater neoliberal individualism (p. 133). Yet she equally recognizes examples of when the data generated via self-tracking are used in egalitarian activism, aimed at environmental issues, community development, or urbanism (pp. 135–136).

In the book’s “Final Reflections” Deborah Lupton summarizes her main points and returns to the main concepts and conceptual approaches that have structured her attention to self-tracking practices. This confirms the topicality of the tendency she is scrutinizing in her book, as well as presents existing conceptual instruments to make sense of this tendency. Lupton’s book is therefore another very useful reminder that digitalization is part of the bigger and more complex transformation along the lines, most often depicted as neoliberalism or late modernity. Further refinement of the notions, which describe this transformation and make it available for analysis, as well as further refinement of the notions of causality between phenomena constituting the given tendency, are among the main tasks of the current and future social science.