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BIG DATAPHENOMENOLOGY: EMBODIED BIG DATA

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Introduction

Currently, Big Data is attributed a high potential of control and value creation. Mayer-Schönberger and Cukier (2013: 182) consider Big Data to be the main raw material of the information and knowledge society, comparable with the role of oil in the industrial society. Pursuing this metaphor, crude oil is not easily accessible, but it requires a whole industry to detect the oil deposits, dig it out of the soil, purify and process it in refineries. In this sense, Big Data should not be considered an easily accessible material. The main (and partly still open) question is how to make sense out of Big Data and how to find its value.

To reflect (differently) on these questions, I want to propose a phenomenological view on Big Data, raising issues on structures of experience, consciousness, lifeworlds, and embodiment. At a first sight, this might make no sense, as Big Data – at least from a technological point of view – is defined through the 4 Vs – Volume, Velocity, Veracity and Variety –, representing the growing technological capacity to collect, aggregate and process an always bigger volume of always more varied data with always higher velocity and an allegedly high veracity (Uprichard, 2013). Accordingly, Big Data is supposed to be "raw", neutral, and objective material for information retrieval, generation, and analysis. In contrast, Boellstroff and Maurer (2015) propose 3 Rs to characterize Big Data: Relation, Recognition, and Rot. Following these anthropologists, Big Data are made through the relation between human and non-human actors (or actants), conferring specific meaning to it, transforming and sometimes deteriorating or rotting with time; following a social, cultural and political process. Big Dataphenomenology expands this critical view, focusing on the depth of Big Data which reflect the aggregation of millions of single experiences, allowing insight into thousands of different lifeworlds and – maybe – generating a new collective consciousness.

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Enriched, small, or thick Big Data

Some researchers already propose a more phenomenological perspective on Big Data, without calling it Big Dataphenomenology: Crawford (2013) discloses the myths of Big Data – which is supposed to be true, precise and objective (boyd / Crawford, 2011) –, exposing one of its main problems: its missing depth, meaning data without or with little context. Therefore, Crawford pleads for the combination of Big Data and Small Data, in order to recover the "granuality" (Crawford, 2013) of social life and experience. Likewise, Boellstorff (2013) claims "thick" data, "recognizing its irreducible contextuality" (Boellstorff, 2013). Unmasking the oxymoron of "raw" data, he refers to Geertz's notion of data-"thickness" (Geertz, 1973) and his emphasis on the "value of an interpretive base" (Boellstorff, 2013). "It is not against a body of uninterpreted data, radically thinned descriptions, that we must measure the cogency of our explications." (Geertz, 1973: 16).

Phenomenological data assemblages

Ruckenstein (2014) takes the notion of "data doubles" (Haggerty / Ericson, 2000: 606) from the field of surveillant studies, referring to "operations that first abstract human bodies by separating them into various data flows or streams and then reassemble them into data doubles to be analyzed and targeted for intervention" (Ruckenstein, 2014). Although the term "data doubles" evokes the illusion of a data-doppelganger, being a perfect copy of the original, it simply represents "processes that abstract and slice the self into various kinds of data flows" (Ruckenstein, 2014). Following Haraway (2003), these are generated in (digital) data assemblages, where "humans become just one node in a network of software, digital data repositories and smart objects that configure and exchange digital data with each other" (Lupton, 2016), measuring and calculating everyday life and body experiences through digital devices, such as smartphones or sensors. These slice human experience into physical body measurements, e.g. heart rate variability, pulse, steps, or calories, and social practices into digital traces, such as number of messages, number of friends, geolocation information, or personal images.

Embodied Big Data

Consequently and following Plessner's distinction between "having a body" (in German: Körperhaben) and "being a body" (in German: Leibsein) (Plessner, 1941: 240), the current data assemblages and data doubles can partly represent the body/Körper and social behavioral structures, if at all; considering the body/Körper as an objectively observable thing. In contrast, the body/Leib is alive, and needs to be understood functionally. Therefore and following Merleau-Ponty's phenomenology of perception (1945), the body/Leib should be seen as the principal organ of perception, as the zero point of orientation, as a specific and single way of world access: These are keywords that refer to the phenomenological tradition of thinking of corporeality. And they raise two questions regarding Big Data:

1- What happens to Big Data, its analysis, results and insights in life, society and the world, if they miss this phenomenological perspective?
   As an example, it is possible to think of an illness without experienced symptoms, such as pain. What happens with someone, who has a broken leg, but no pain, hence does not feel and experience the broken leg, but only the doctor sees the broken bone on an x-ray?
2- And vice versa: How should Big Data and its corresponding data assemblages look like, if they included a phenomenological point of view?

The paper claims, that the current problem of (not) making sense of Big Data and fruitless efforts to detect its value is intrinsically linked to the above questions. Based on interdisciplinary collaborations, new approaches of empathic, holistic and phenomenological data retrieval tools and algorithms should be discussed and developed, in order to make Big Data sensitive to experiences, narratives, and the specificities of different lifeworlds. By this, Big Data could be enabled to reach a distinctive consciousness by aggregating human and non-human perception.

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