

DATAFICATION GOES MATERIAL: DIGITAL CAPITALISM AND THE MATERIAL CONDITIONS OF EXISTENCE

Yana Boeva

University of Stuttgart

Kathrin Braun

University of Stuttgart

Mascha Gugganig

University of Ottawa

Cordula Kropp

University of Stuttgart

Abstract:

Datafication has been identified as a defining feature of contemporary capitalism. Scholarship in critical data studies, STS, social theory and political economy has interrogated the dynamics of datafication processes in light of a larger sociotechnical and techno-economic reconfiguration of capitalism, captured by concepts such as platformisation, financialisation and assetisation (Birch and Muniesa 2020; Burrell and Fourcade 2021; Fourcade and Healy 2017; Sadowski 2019; Srnicek 2017). From a perspective of digital capitalism, the “data imperative” (Fourcade and Healy 2017), datafication and the according data-driven forms of re-organising social life are based on forms of data extraction that amount to new forms of appropriation and dispossession through digital enclosure (Cohen 2019; Sadowski 2019) or data colonialism (Couldry and Mejias 2019).

The first analyses on these matters primarily focused on digital service platforms that generate revenue from different personal and interaction data that enables monitoring, assessing, predicting and manipulating social actions. In short, the discussion has focused on data about social life and resulting questions of privacy, confidentiality, bias and data sovereignty.

More recently, however, the logic of capitalist datafication or datafied capitalism is expanding beyond the realm of services and behavioural data. Datafication increasingly permeates and enrolls the material world—the world of things, of physical matter, or, in Marxian terms, the modes of production of material life and the material conditions of existence. We can see this expansion already in the fields of agriculture, forestry, medicine, and building construction (Braun et al. under review; Gabrys 2020; Gugganig and Bronson forthcoming; Kuch et al. 2020), others are likely to follow. The increasing integration of technologies (such as sensors, cloud computing, virtual reality, AI and robotics) enables systems for data gathering, data-generating and data-processing directed at the re-production, transformation and incorporation of not only human behaviour, but also buildings, cities, streets, plants, forests, and bodies in a very material sense. Buildings, streets, plants and bodies simultaneously become data and the product of data deployed to increase efficiency and control. Concurrently, the material preconditions of datafication – the need for rare earth minerals, energy resources, telecommunication infrastructures, but also cheap labour – demand closer attention

(Cobby 2020). These datafied modes of production raise new questions:

- What are the material preconditions of datafication processes, and do they differ between classic services and more material worlds?
- Who or what owns and controls these means of production? Who owns this kind of data? And who is probably dispossessed?
- What are the institutional frameworks and infrastructures shaping this transformation?
- What would be forms of resistance and collective action?
- Can we conceive of material data-based modes of production that are not owned and controlled by states or corporations?
- What do appropriation, colonialism or dispossession mean in this context? Who are the actors?
- How does it affect the planetary material conditions of existence? How does it transform what is being built, what is being grown, what medical treatment is, how does it affect our lives and living conditions materially?

We welcome submissions addressing these questions but are not limited to them.

Key words:

datafication, materialities, capitalism