CHAPTER 5

What is at Stake in the Critique of Big Data? Reflections on Christian Fuchs's Chapter

David Chandler

1. Introduction

In his chapter, Christian sets out a powerful overall analytic of the relevance of a critical theory approach for understanding and engaging with the context and alternatives to Big Data capitalism. Here, Big Data plays a fundamental role in the surveillance society, which potentially constitutes a new form of totalitarian controlling ideology: 'The digital machine that organises Big Data creates a new form of reification that destroys qualities, dialectics, critique, and non-instrumental action.' Against this dehumanising ideological control, Christian argues that we require a Marxist critical humanism to put the human back at the centre of the world. I shall not engage with this chapter at the formal level of Marxist argumentation, and have a lot of time for Marxist critical humanism; where I differ from Christian is as to the relevance of these ideas in our contemporary moment and their usefulness as a way of engaging with and critiquing 'Big Data capitalism'.

How to cite this book chapter:
Chandler, D. 2019. What is at Stake in the Critique of Big Data? Reflections on Christian Fuchs's Chapter. In: Chandler, D. and Fuchs, C. (eds.) *Digital Objects, Digital Subjects: Interdisciplinary Perspectives on Capitalism, Labour and Politics in the Age of Big Data*. Pp. 73–79. London: University of Westminster Press. DOI: https://doi.org/10.16997/book29.e. License: CC-BY-NC-ND 4.0

2. Critical Marxism

Firstly, I would like to put Marxist critical humanism into context. Perhaps the classic critical work on the problem of digitalisation in capitalist modernity is the one that established the reputation of critical theory and the Frankfurt School: Theodor Adorno and Max Horkheimer's *Dialectic of Enlightenment* (1947). For Adorno and Horkheimer, modernist thinking was dehumanising: the Enlightenment was problematic in denaturalising the world and the human, and in reducing, universalising, and equalising the experience of the world. For critical theory, the Enlightenment was problematic and oppressive rather than liberating. The Enlightenment view of reason contained its own seeds of destruction. Enlightenment was seen as a history of the separation of humanity from nature through the power of rationality – based on the subsumption of difference to the rule of equivalences. This cast the Enlightenment as a totalitarian project with no inherent limits (Adorno and Horkheimer, 1997: 6), very much along the lines of the presentation in Christian's chapter. So, for Adorno and Horkheimer: 'Bourgeois society is ruled by equivalence. It makes the dissimilar comparable by reducing it to abstract quantities' (1997, 7).

> What was different is equalized. That is the verdict which critically determines the limits of possible experience. The identity of everything with everything else is paid for in that nothing may at the same time be identical with itself. Enlightenment… excises the incommensurable… [u]nder the levelling domination of abstraction. (1997, 12–13)

For this Marxist critical theory approach, rather than being a process of progress and reason, the Enlightenment was seen as a machinic, deadening, reduction of the world and of the human individual. For Adorno and Horkheimer, this was a world with no possibility of an outside, as everything was subsumed into equivalence through conceptual abstraction (1997, 16). In other words, this meant that nothing new could ever occur as 'the process is always decided from the start'; even unknown values could still be put into equations, dissolving the world into mathematics. Everything new was thus already predetermined, producing a world of 'knowledge without hope' (Adorno and Horkheimer 1997, 27–28). Similarly, as Christian argues, Big Data capitalism subsumes everything to the laws of market equivalences or to algorithmic surveillance.

Thus, for this line of critique, the (pre-)history of Big Data capitalism is a long one, starting with the earliest attempts to bring the outside under control through the extension of equivalence, Mauss's gift economy and pre-modern magic and sacrifice being early versions of the exchange of non-equivalents (Mauss 2002). The performative exchange of non-equivalents then led to the reflection of equivalence in thought – conceptual subsumption – through the ratio, i.e. the proportion of conceptual equivalence. Under capitalism this process was formalised further, in both practice and thought, through money

as the universal equivalent of exchange and through the abstractions of democracy and universal rights, and the development of science and the digital (Sohn-Rethel 1978). The modernist project was thus one of the extension of the imaginary of rationalist and bureaucratic control, and with this development came an intensification of subject/object and human/nature binaries.

Christian's chapter is a true inheritor of the critical project in its portrayal of Big Data capitalism as the apogee of all that is dehumanising and problematic in modernity – from peak capitalism, to peak fascism to peak dehumanisation. The Enlightenment project thus apparently reaches its peak in Big Data capitalism with the equivalence of everything through the market and digital algorithmic regulation. Critical theory and its inheritors seek to respond by challenging the dominance of this modernist ideology; questioning hierarchies of nationalism and fascism established upon the basis of the cuts and distinctions of Eurocentric or modernist forms of reason, with their growing distinction between Man and Nature; and seeking to contest the telos of progress and the rationalising grounds upon which equivalences and subsumptions of difference are established. For Christian,

> Big Data capitalism and algorithmic power could result in the world turning into a huge shopping mall in which humans are targeted by ads almost everywhere, and where commercial logic colonises society. In the world of Big Data, algorithms that use instrumental logic for calculating decisions and human needs can automate human activities and decisions. The problem is that algorithms and machines do not have ethics and morals.

For this critical Marxist approach, it is the political struggle against Enlightenment or modernist thought – which lacks a soul, its machinic totalitarianism being without 'ethics and morals' – which is the emancipatory aspect of the contradictions and crises seen to be manifested in Big Data capitalism. The critical approach seeks to resolve the problem by bringing man back to the world and rejecting the homogenising, commodifying and calculating gaze of modernity.

3. Big Data and Modernity

However, the difficulty of squeezing the critique of Big Data into the critical theory denunciation of modernity is that critical theory approaches are forced to evade the non-modern epistemological claims of Big Data and the modes of governance they call forth (focusing on Big Data as an ultra-modernist framing of politics and governance). One aspect that stands out about Christian's 'left' critique of Big Data is precisely the way he ties it to a long history of modernist drives and understandings in order to maintain a critical approach and the

relevance of Karl Marx. While critical of modernist drives to equalise, commodify and control, Christian makes little distinction between Big Data as a methodological approach and Big Data as just another word for more of the same. Where this breaks down is that it reduces Big Data to data. I would suggest that while the modernist positivist assumptions of data have their dangers and problems (see Hacking, 1990), Big Data is claiming something different (and is thereby differently dangerous and differently problematic). This difference reflects the ways politics and governance have changed over the last century, highlighting the collapse of confidence in modernist and Enlightenment approaches.

Big Data claims to provide an insight into the 'actual', rather than working at a level of modernist knowledge based upon representation or abstraction. Big Data capitalism as a mode of governance relies on an 'actualist' or surface view of appearances, rather than focusing on causal relations, where continuities over time are crucial to establishing trajectories of linear and non-linear causation. Thus Big Data claims to transform our everyday reality and our immediate relation to the things around us. It claims to do this by making visible unseen but existing processes and effects through 'datafication'. The process of Big Data 'seeing' through datafication is straightforward in theory, although work on perfecting the correlations required is more complicated. For example, if search terms put into Google correlated with processes in the world, such as shopping intentions, flu outbreaks or increases in conflict tensions, then these processes in the world could be 'datafied' i.e. they could be seen indirectly through the algorithmic detection and analysis of these terms via Google. This would work in the same way as a canary in the coalmine to sense poisonous gases, as a real-time indicator enabling responses.

It is this 'datafication' of everyday life that leads to a very specific form of its 'commodification', and it is this process which lies at the heart of the relational interactions at the core of what we are calling 'Big Data capitalism': a way of accessing reality by bringing interactions and relationships to the surface and making them visible, readable and thereby governable, rather than seeking to understand hidden laws of causality (Anderson 2008; Cukier and Mayer-Schöenberger 2013). Big Data as a mode of governance thus relies upon increasing the field of vision through the power of correlation. This ability to 'see' better through datafication is imagined to allow the modulation or regulation of processes and thereby to perpetually 'ward off', 'cancel out' or 'absorb' crises or breakdowns (Wakefield and Braun 2018). In this imaginary, it would be as if time slowed down, making a shock or crisis governable. For a contemporary example, as I write, see how this can be applied to slow and perceive the 'blur of colour' of horse racing (Wood 2017).

Hopefully, the analogy of 'seeing' the present in slow-motion enables us to grasp that datafication is not about problem-solving through reduction and abstraction, but about the particular and the analogue, sensing changes in context which would otherwise go unseen. So, while data can be understood as

digital – in terms of binary code – the world itself becomes more analogue or less differentiated in terms of distinctive properties or essences of objects. Big Data is concerned with the surface of the 'actual', not the ontological nature of being or the processes of emergence in complex causal interactions. The 'knowledge' generated is therefore not something fixed or that can be stored and re-used, but is about 'seeing' the flux or flow of change through mechanisms of correlation. Thus the governance mode of Big Data capitalism is enabled through a different type of 'knowledge', one that is more akin to the translation or interpretation of signs than that of understanding chains of causation (Esposito 2013).

In science and computer sciences, this increase in data gathering possibilities and the development of computational capacity has enabled analysts to talk of a 'fourth paradigm' of knowledge production (beyond theory, experiment and simulation) (Pietsch 2013, 2). Thus Big Data appears to lack certain attributes of the modernist 'production process' of knowledge, and appears as less mediated by subject-centred conceptual apparatuses. As Rob Kitchin highlights, Big Data is unique in that its construction is often not part of a conscious process of knowledge production: the data is often already there, in social media or other electronic processes of data capture, and it is the discovery of correlations which is the key innovation (Kitchin 2014, 2). Thus, it is argued: 'Big Data analytics enables an entirely new epistemological approach for making sense of the world; rather than testing a theory by analysing relevant data, new data analytics seek to gain correlational insights "born from the data"' (Kitchin 2014, 2).

4. Conclusion

This is a point of fundamental importance regarding a critical stance regarding the rise of Big Data. It would appear that, to take a 'left' approach of critique, Big Data has to be seen as a modernist problematic, one that calls forth and intensifies modes of governance of top-down 'command-and-control'. But it is possible to take a different approach, one that engages critically with discourses of Big Data, not because these discourses represent a 'peak' modernist abstraction, but rather on the grounds of an epistemological rejection of modernist claims of causal processes and the potential for the direction and control of human knowledge. Seeing what exists and responding to it is a poor substitute for understanding and being able to apply knowledge to change what exists. Big Data discourses accept the world as it is, and facilitate adaptation to it, reducing the human to any other factor to be modulated and regulated. Rather than follow a modernist approach which artificially exaggerates the divide between human and non-human or subject and object, Big Data approaches seek to bypass these crucial distinctions entirely.

In this respect, the epistemological claims of Big Data and their ontological or metaphysical underpinning reflect the contemporary exhaustion of modernist

and Enlightenment thought. In fact, for many critical theorists who lack Christian's critical Marxist approach, the problem of Big Data is precisely that it does not live up to its claims of removing the human from epistemic claims (boyd and Crawford 2012). Rather than critiquing modernity for its 'soullessness' and for man's separation from the world, contemporary critique wishes to take this further. The modernist episteme is critiqued today, not because it is alienating and dehumanising, but from the opposite standpoint that it is too humanist or human-centred. It is for this reason that Christian's chapter goes against the stream of Big Data critique in its demand for the human to be returned to a world of meaning that has been denied it by modernist rationalism and instrumentality.

References

Adorno, Theodor and Max Horkheimer. 1947/1977. *Dialectic of Enlightenment*. London: Verso.

Anderson Chris. 2008. 'The End of Theory: The Data Deluge Makes the Scientific Method Obsolete.' *Wired Magazine* 16 (7): 23 June. Available at: http://archive.wired.com/science/discoveries/magazine/16-07/pb_theory (accessed 14 May 2018).

boyd, danah and Kate Crawford. 2012. 'Critical Questions for Big Data: Provocations for a Cultural, Technological, and Scholarly Phenomenon.' *Information, Communication, and Society* 15 (5): 662–679.

Cukier, Kenneth and Viktor Mayer-Schöenberger. 2013. 'The Rise of Big Data: How It is Changing the Way We Think About the World.' *Foreign Affairs* May/June. Available at: http://m.foreignaffairs.com/articles/139104/kenneth-neil-cukier-and-viktor-mayer-schoenberger/the-rise-of-big-data (accessed 14 May 2018).

Esposito, Elena. 2013. 'Digital Prophecies and Web Intelligence.' In *Privacy, Due Process and the Computational Turn: The Philosophy of Law meets the Philosophy of Technology*, edited by Mireille Hildebrandt and Katja de Vries. Abingdon: Routledge.

Hacking, Ian. 1990. *The Taming of Chance*. Cambridge: Cambridge University Press.

Kitchin, Rob. 2014. 'Big Data, New Epistemologies and Paradigm Shifts.' *Big Data and Society* 1 (1): 1–12.

Mauss, Marcel. 2002. *The Gift: The Form and Reason for Exchange in Archaic Societies*. London: Routledge.

Pietsch, Wolfgang. 2013. 'Big Data: The New Science of Complexity.' 6th Munich-Sydney-Tilburg Conference on Models and Decisions, Munich, 10–12 April 2013, Philsci Archive, University of Pittsburgh. Available at: http://philsci-archive.pitt.edu/9944/ (accessed 14 May 2018).

Sohn-Rethel, Alfred. 1978. *Intellectual and Manual Labour: A Critique of Epistemology*. Atlantic Highlands, NJ: Humanities Press.

Wakefield, Stephanie and Bruce Braun. 2018. 'Oystertecture: Infrastructure, Profanation and the Sacred Figure of the Human.' In *Infrastructure, Environment, and Life in the Anthropocene*, edited by Kregg Hetherington. Durham, NC: Duke University Press.

Wood, Greg. 2017. 'Bookmakers to Embrace "Big Data" to Shift Racing's Betting Landscape.' *The Guardian*, 6 October.