

ILPC 2019 Special Stream No. 5

Artificial Intelligence, Technology and Work

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Of all the social changes occurring over the past six or seven decades, perhaps most fascinating is the integration of computers and machines into the fabric of our lives and organizations. Machines are rapidly becoming direct competitors with humans for intelligence and decision-making powers. This is important for research in international labour process because artificial intelligence (AI) brings about challenges and questions for how organizations, globally, are designed and established with respective human resources planning and execution and industrial relations negotiations. We start with John McCarthy's term, who both invented and defined AI as processes that are 'making a machine behave in ways that would be called intelligent if humans were so behaving' in 1955. At the origin of the term, AI aligned humans directly with machines, expecting machines to behave symbolically like humans. Over time, programmers working on neural networks and machine learning have emphasised the cognitive rather than symbolic. Now, AI is seen to have comparable capabilities to humans in both routine and non-routine ways, leading to new possibilities for automation. This draws on huge amounts of data often produced originally by humans. In fact, every time we enter a search term on a computer we add to and train machine 'intelligence.' Every day, billions of actions are captured as part of this process, contributing to the development of AI. In doing so, people provide under-recognised cognitive and immaterial labour.

Therefore, this stream looks at the conditions and circumstances whereby machines begin to have the capacity to influence and become integrated in to humans' ways of thinking, decision-making, working. It also considers the possibilities of AI in resistance against neoliberal and even authoritarian capitalism in the global north and south. AI is a broad term that identifies the pinnacle of machine capabilities that have recently become possible based on the amount of a) extensive big data that has become available in organisations, b) data analytical tools where programmers can identify what to track based on this data and what algorithms will allow one to gain the insights of interest, c) machine learning, where patterns across data sets can be identified and d) AI, where the final frontier has become the ability of pattern recognition across myriad data sets that have already identified their own patterns. When applied to work and work design, the primary goals are efficiency, market capture, and control over workers.

The rise of autonomous machines leads to philosophical questions that Marx engaged with in theories of objectification and alienation. Later, critical theorists have dealt with these questions in labour process research, where technologies and digitalization have created unprecedented concerns for how workplaces and work design are structured and control and resistance are pursued. In particular, the gig economy has become the frontline of these new changes. Workers here are now facing automation of the management function, supervised and even fired (or "deactivated") without human intervention nor interaction. This is creating intensified and precarious working conditions, leading to fragmentation over digital platforms and platform

management methods, as well as new forms of resistance and solidarities. These are all happening while their own work is under the threat of digitalization, where control and resistance have taken new forms and humans are in danger of becoming resources for tools (see Moore 2018a, 2018b; Woodcock, 2017; Waters and Woodcock, 2017).

Ultimately, across the economy, technology and its integration may be leading to organisations that take on a life of their own. Human resource decisions are increasingly taken by algorithms, where new human resources techniques integrate machine learning to achieve a new technique called ‘people analytics’ where data patterns are used to make workplace decisions for hiring/firing/talent predictions, creating significant threats to the possibilities of workplace organising and social justice. Sometimes, AI-based decisions lead to automating aspects of the workplace, for example, in the case of wearable devices in factories that allow human resource calculations based on AI and location-management by GPS and RFID systems. In these ways and others, AI processes inform a number of decision-making processes and digitalized management methods that have led to significant changes to workplaces and working conditions. If machines can deal with ethically based questions and begin to mimic the nuances of experiences and human judgement, will they become participants in humans’ already manifest ‘learned helplessness’? While currently, humans train AI with the use of big data, could machines begin to train humans to be helpless?

This call builds upon the ‘Artificial Intelligence. A service revolution?’ stream that featured at the 36th ILPC conference in Buenos Aires. This year’s stream is intended as a forum to bring together researchers engaged with the topics of labour process, political economy, technology, and AI to discuss this topic. We invite submissions on the following topics (not limited to, but also considering the need not to overlap with other streams):

- The effect of AI on the labour process where control and resistance rub against debates about exploitation Vs empowerment
- The implication of algorithmic management and control on the labour process, work replacement, and/or intensification from the factory to the office
- The “black box” of AI and related practices, algorithmic decision support, people analytics, performance management
- The impact of AI on the Global South: geographies and variegation of AI implementation, direct and indirect impact on jobs and differential effects of diverse socio-political setups
- Resistance and organising against/with AI and social media

Special Issue: We are also considering a submission for a journal special issue (though contributions may be requested before the conference). Please email Phoebe Moore pm358@leicester.ac.uk immediately if this is of interest.

Please feel free to contact the stream organisers with any informal inquiries.

Please submit abstracts via the International Labour Process Conference website (ilpc.org.uk) by the deadline of 26 October 2018.

For information on the ILPC 2019 and the Calls for Papers for the General Conference and the other Special Streams please go to <https://www.ilpc.org.uk/>

References

Moore, P. (2018a): *The Quantified Self in Precarity: Work, Technology and What Counts*, Advances in Sociology series (Abingdon, Oxon: Routledge).

Moore, P. (2018b): 'The Threat of Physical and Psychosocial Violence and Harassment in Digitalized Work' International Labour Organization, ACTRAV, Geneva: Switzerland.

Woodcock, J. (2017): *Working the Phones: Control and Resistance in Call Centres*, London: Pluto.

Waters, F. and Woodcock, J. (2017): 'Far From Seamless: a Workers' Inquiry at Deliveroo', Viewpoint Magazine.