

# Global Issues

## Who is the “smart worker”? Who *should* she be?<sup>1</sup>

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All economically advanced countries are racing to integrate artificial intelligence (AI) as quickly as possible, in as many industries and as many spheres of society as possible, allocating significant pots of funding in the order of billions to research and development. At first, the focus of AI researchers was on how to get machines to behave just like humans do. But I propose to put the focus back onto humans, and not just humans as a general biological category, but on *humans at work*.

This issue has become even more pressing in the context of the global COVID-19 pandemic, where labour processes are being reorganised at high speed with the help of digital technologies. In this situation, it is important for labour scholars to ask: Who is a “smart worker” expected to be now, given the rise of smart machines? Who will the smart(est) worker need to be in the coming years, given the rise in AI in the workplace?

The smart worker is herself still a human, but today is also someone who strives to, and is now required to a) work with, b) compete against, as well as c) allow decision-making to be owned by, or at least authorised by, machines. Building on concepts around subjectivity and the impact of technology on work which I have developed in *The Quantified Self in Precarity: Work, Technology and What Counts?* (Moore, 2018a), I argue that there is an emerging ideal type of worker in the contemporary era, who is held accountable for characteristics similar to those that the quantified worker embraces. But today, the most suited smart worker will experience the added stressors linked to the perceived autonomy and intelligent capabilities of machines with the introduction of AI-augmented tools and applications, and be expected to work directly with as well as in competition with new forms of machines.

Building on the types of intelligence expected of machines, I discuss in this short article, the types of intelligences expected of an ideal type of smart worker, the preparation needed for this as well as opportunities for resisting the worst outcomes that could be on the horizon – the real and present dangers of automation of work and various types of surveillance in the workplace (Moore, 2020a) which are continuing to advance, even in the early days of COVID-19.

### **Data Protection and Privacy Smarts**

Movement tracking technologies are not completely new, but the most up-to-date versions have far greater scope and precision than past iterations. As well as the location, speed and direction of workers being monitored, now other types of data related to movement are also accessible, including physiological measures like heart rate and the number of steps taken in a given time. Transportation and logistics industries are prime candidates for AI-augmented tracking. Truck drivers and warehouse operators have been targeted, to the point where truck drivers’ hats are at

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<sup>1</sup> Adapted from a report commissioned by the Rosa Luxemburg Stiftung, Berlin (Moore, 2020c).

times fitted with data-gathering sensors.

Location tracking software clearly is expected to demonstrate correct location. Accelerometers, Bluetooth, triangulation algorithms and infrared sensors allow managers to monitor workers far beyond traditional hours logged by swipe-cards or a thermostat that regulates room temperature. New technologies are entering the kinds of service work that happen in the office and financial sector, with new AI augmentation such as facial recognition for building access, or communication monitoring and sentiment analysis. For example, companies try to prevent illegal corporate insider trading by monitoring their staff's lines of communication. In hospitals, nurses are reported to be equipped with badges that track number of times they wash their hands (Ajunwa, Crawford and Schultz, 2017: 110). Body heat and movement levels, as well as physical gestures and tone of voice are now accessible via radio-frequency identification (RFID) technology that is incorporated into workers' chairs and desks in newspaper companies (Moore, 2018a).

All of these sensor technologies are implemented utilising descriptive and assistive machine intelligences, where workers' biometric and location data is used by management or clients to describe their circumstances and potentially even dispositions. Human users are typically not "free" to choose whether or not specific sensors and technological detection systems are installed in the workplace. However, at least in the European Union, the General Data Protection Regulation (GDPR) implemented in 2018 requires a level of meaningful dialogue with, and consent from, workers for workplace technological changes. The GDPR is a good advancement and one that can facilitate smart workers' rights in the area of privacy as it relates to data collection and processing.

## Self-improvement

Algorithms are now seen to have the capacity to self-improve by data selection and rejection processes where, ideally, a machine can sift out data that is not relevant to a process set and to rewrite code which has not been successful in meeting the requirements set by a programmer. So, in some ways, AI has achieved the final stage of intelligence expected of machines, that of "self-improvement".

In parallel with the capabilities for machines to self-improve, we see an onslaught of expectations for human workers' self-improvement in the workplace. The "wellness syndrome", where workplace self-help and improvement programmes are rife, is now firmly anchored, particularly in offices and knowledge economy workplaces (Till, 2014; Cederström and Spicer, 2015; Moore, 2018b). However, the smart worker should remain aware of the implications of simply embracing a rhetoric of wellness, and be critical when it comes to technological innovations and impositions in the workplace. Vigilance and caution are required. *Working conditions* are often the reason that a worker is not well, rather than the lack of self-care, yoga retreats and spa treatments.

## Autonomy

Karl Marx (1993) observed in "Fragment on Machines" in the *Grundrisse* that we as humans often attribute our own characteristics to machines, including, by association, intelligence. However, we also tend to allow ourselves to be ruled by machines. The employment relationship during early industrialisation divided people along class lines. A handful of people were assumed to hold the superior mental capacities and intelligence to design machines and to organise and manage workplaces, as well as to manage workers and control labour processes and operations. The working class were seen to be of a lower intelligence, including those who were expected to carry out

physical labour, as well as to mechanistically build and to maintain the machines that were intended to eventually control these same workers.

The introduction of *autonomous* machines in effect adds another actor with supposed agency and autonomy to the standard employment relationship. Automation and semi-automation and extensive surveillance capabilities are the most concerning features that machines bring to the employment relationship. It is worth recalling that machines are not yet entirely agential and, in that context, remind ourselves that discussions of ethics should ask more detailed and contextual questions about the political-economic models within which AI innovation and experimentation is occurring, but rarely do.

Therefore, we must rethink not only what human autonomy means and can mean for the current “smart worker”, or even the “smartest worker” given the structures within which the individual operates today. If robots become as good as or even better at working than humans, given what work is and what productivity and growth mean within the capitalist context, automation will not have the effect that is usually hoped for in “post-work” debates. Humans will not be freed to go fishing and to write poetry. Humans will become, perhaps, more like resources for machines, where skilled programmers and engineers of relevant AI software gain the best positions and enjoy the most legal and social protections, while unskilled and semi-skilled data-services workers will carry out the work that goes into creating data sets through the psychologically debilitating work of content moderation or the highly surveilled and monitored work of natural language processing (Gray and Suri, 2019). Class divisions, therefore, will be more likely to exacerbate than transform. It is also not a rosy horizon for women’s work in the possible futures of AI autonomy. Women already perform more routine tasks than men across all sectors and occupations, and these are the roles most at risk of automation (Brussevich et al., 2018).

In these contexts, it is not wise to assume that the entrance of technologies into workplaces is part of “business as usual”. The mirror for AI is repositioning, but still reflects human behaviour and human trends (Engster and Moore, 2020; Moore, 2020b). In most ways, the behaviour associated with specific intelligences concretises the standard employment relationship within capitalism. I recommend that even if machinic autonomy develops, a “human-in-command” approach (De Stefano, 2018) must simultaneously advance. The ideal smart worker will remain vigilant and cognisant of the structure of within which AI pursuits occur, realising that the history of AI is not outside of this structure nor is the understanding of what makes an intelligent machine, nor an intelligent human, a *fait accompli*. Smart workers today will be those who use the collaborative or assistive intelligences ascribed to machines to collaborate with one another and to assist one another in ways that can facilitate a democratic workplace. Perhaps technologies can be repurposed and appropriated to overcome the hegemony of competition and growth models that impact the digitalised employment relationship. Today, the smart worker is one who understands and practices both the concepts of meaningful consent and meaningful dissent as AI enters the workplace.

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## BIOGRAPHICAL NOTE

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