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Chapter 5: (The end of) labour?

An early bot with which many students and office workers have often reluctantly engaged – even if just to make it disappear – was Microsoft's Office Assistant Clippy (actually named Clippit). Clippy resembled an oversized animated paper clip with big eyes and expressive eyebrows and would happily bounce into existence once Word or Excel were opened to offer its services. Released in the Office 97 package, he (see the gendering of Clippy described by Meyer 2015) would predict what one was about to do, such as writing a letter for example. This would prompt an offer of customised assistance like "Get help writing the letter". Clippy, already termed an "intelligent user interface", was discontinued in 2007 but since then virtual assistants, such as Apple's Siri (2011), Amazon's Alexa (2014) and Microsoft's Cortana (2015), have been chirply bouncing into existence at a staggering rate. These and similar figures, such as customer service chatbots, have turned into a considerable market, seemingly confirming some of the original fears associated with robots, namely that they should make human beings redundant.

And indeed, one of the major 'disruptions' associated with bots, and automation more generally, is their presumed ability to automate certain kinds of human workers, from accountants to radiologists (AIs are extremely good at pattern recognition in X-rays and are already out-performing humans). According to KPMG and other consultancies, most so-called 'transactional' work, such as processing invoices, financial controlling, tax and paying suppliers, is going to disappear in the next 10 years. Furthermore, specific jobs could be styled and classified 'transactional' so as to allow for automation, such as the work of translators. The move to automate work routines and key processes follows on from the offshoring (getting work done in a different country) and outsourcing (contracting work to third parties) of these activities that began with colonisation in the 15th century and was validated as a formal and acceptable business strategy in the 1980s. Not surprisingly, imperial geopolitics map unto the new landscape.

Parallel to the development of fully automated interactions, the past years have seen the rise of labour platforms such as Uber or TaskRabbit, specialised in cleaning services and recently purchased by IKEA, and the establishment of what has been called the 'gig economy'. In a report by the New York-based research institute Data & Society, the authors suggest a distinction between "on demand" and "marketplace" platforms (Ticona, Mateescu, and Rosenblat 2018). The former "indirectly manage workforces through 'algorithmic management' to rapidly dispatch them to consumers", the latter "primarily impact the hiring process through sorting, ranking, and rendering visible large pools of workers." (ibid. 3) in either case, workers are forced into conditions of heightened vulnerabilities by, for example, having to forego stable incomes, health insurance, job security, unionisation, and safety while bearing all risks and hidden costs. The authors also stress that the gig economy is not a uniform phenomenon, depending on the kinds of services rendered, their geopolitical distribution and, obviously, the type of person undertaking it. Another feature of the gig economy is the increase in freelancing as work transforms into fixed-term projects and processes leading to an ever less noticeable boundary between private life and work (Bunz 2012). I am writing this from a co-working space in Brandenburg, near Berlin, that was set up a few years ago to cater for freelancers and project workers, a segment that also includes a lot of academics.

So we might argue that rather than abolishing human workers entirely, the automated workplace displaces human labour in different ways. As we have seen in the last chapter, AI is not as intelligent as its proponents have us belief. Not surprisingly, it is humans that have to make up the shortcomings of machines. Partly because some of us will always remain cheaper and more expendable than the socio-technical infrastructures required by automation. One of the most prominent marketplace platforms for this machine-enhancing labour is Amazon Mechanical Turk (MTurk). Described as a crowdsourcing internet marketplace it allows people and businesses, referred to as *Requesters*, to post jobs (called Human Intelligence Tasks or HITs) for a globally-dispersed workforce, known as *Turkers*, who might be the latest iteration of the human computers described in Chapter 1. Turkers do all kinds of work ranging from describing images, transcribing voice recordings and information collection to writing haikus (as our co-curator Vladimir Čajkovac did) to annotating data for academic research and participating in academic studies by filling out surveys and personality tests. Amazon even sells books about how to do academic research using its Mechanical Turk.

The name of the platform is inspired by the chess-playing (fake) automaton described in the Introduction, and a certain kind of deception remains important to the contemporary Turk as the sociologist Lilly Irani has observed in her studies of crowdsourcing and microwork (this volume, pp. XX-XX). Focusing on the peculiar human/human-as-machine relationship she argues that this configuration "compensates" for the shortcomings of AI and "helps ameliorate the contradictions of intensified labor hierarchies by obscuring workers behind code and spreadsheet." (2015, 721) She turns her attention to the employers of crowdworkers, noting that they can, through services like MTurk, "imagine themselves as technologists and innovators engaged in non-hierarchical peer production." (ibid.) She harks back to feminist scholars of work and infrastructure like Leigh Star who have investigated the many ways in which infrastructural labours have been routinely bracketed off in order to secure and normalise uneven distributions of value, wealth and worth.

Microwork, the automation of labours and the rise of data-centric business models (many apps, smart devices and sharing economy infrastructures are focused on the extraction of users' data, not on providing bicycles or optimising energy consumption) are changing human/machine relations and human and non-human ecologies on different levels. Kajsa Dahlberg's film *Reach, Grasp, Move, Position, Apply Force* (2015), on show in the exhibition, explores the new metrics-based efficiencies which are turning human bodies into machines in places like Amazon warehouses and Apple product manufacturers. Similarly, Eva and Franco Mattes' work on content moderation in social networks provides a glimpse into the semi-automated workforce of the 21st century. Sarah Tripp's video *Youth Administrator* (2014) shows us the paradigmatic body/machine meeting – hands on a keyboard – and narrates for us one of the millions of minutely dramatic scenes that play out in offices around the world every day.

The socio-material and environmental costs of data-driven economies are already felt by many communities worldwide. Berlin is turning into a hub for tech start-ups attracting thousands of freelancers each year to come and try their luck. Facebook, for example, is conducting all its non-English content moderation from offices in Berlin. Start-ups like Mobike are using Berlin as a laboratory for testing novel services and processes often to the detriment of the environment and an ever-precarious workforce. This has considerable impacts on the city where rents are already out of control and the inner districts are becoming increasingly homogenised. In South East Asia, massive data

centres are being built on what used to be plantations, mirroring the colonial appropriations of lands and people (Neilson 2018). In parallel, enormous data centres are also emerging in places like Denmark, where convoluted agreements, often negotiated away from public debate and due scrutiny, are making it impossible to properly assess environmental impacts and energy consumption (Maguire 2018). Imperial formations are also at the heart of the resources necessary to build devices and infrastructures. In our exhibition we show 24 rock samples from the mineralogy collection of the Museum für Naturkunde Berlin. From these rocks our mobile devices, networks, infrastructures and economies emerge, prompting a different, chemical canontable, complimentary to the one produced by the artist Mimi Onuoha, that begins with Antinomy, Arsenic, Barium and ends with Tungsten, Yttrium and Zinc. Looking at the labels it becomes evident that the extraction of these materials maps unto colonial geopolitical patterns continuing the vast machine of colonialism's exploitations and destructions. And as Browne (2015) and others (Thatcher, O'Sullivan, and Mahmoudi 2016) have argued, the extraction of bodily data, whether in the form of biometrics or your TV consumption (see Kashmir Hill's contribution), is turning all of us into potential assets to be mined, mapped and sold.

Work is changing and so are our human/machine relations. But these changes do not happen autonomously from historically grown and situated structures and politics. While much effort is being made to celebrate the magic of AI, to remove and diminish the human element, and to highlight radical innovation and disruption, materials, histories and subjects of the past are making their presents felt. This also means that our existing repertoire for thinking with and intervening in socio-technical change is anything but obsolete. On the contrary, many individuals and collectives have been creatively and carefully forging radical connections between pasts and the kinds of equitable and just futures we want and need. Lilly Irani, together with colleagues, has for example published ethical research guidelines for academics using MTurk and built a widely-used activist tool, the Turkopticon, allowing Turkers to compare and rate the jobs available on MTurk (Irani and Silberman 2013).[i] As the cyberfeminst collective Deep Lab says:[ii]

WE MUST ENGAGE WITH THE FUTURE IN ORDER TO MAKE HISTORY.
[while all we have is the present].

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[i] Guidelines at http://guidelines.wearedynamo.org/
[ii] http://www.deeplab.net/