Reflections on automation, digitisation and precarious work: Brexit and the Gig Economy – The Sequel

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As Theresa May and the Labour Party continue to engage in discussions over trying to find a "compromise" agreement that could command a majority in Parliament, talk again turns to Labour seeking to extract "guarantees" from the Government that leaving the EU will not be accompanied by a further diminution of worker rights – in a form that could not be undone by a would-be future Brexiteer Prime Minister. The sincerity of such talks and their potential to effect any meaningful agreement aside, they do highlight the increasingly precarious nature of work in the UK, and in particular the gig economy and the technological changes that have driven developments in these areas thereof.

As such, automation and digitalisation are having a transformative effect on production and work organisation in the UK and other countries. These changes, often associated with the "gig economy", have been argued to constitute a "Fourth Industrial Revolution" (4IR) – a revolution that has been epitomised by such technologies being "seamlessly embedded into our physical environment" (Philbeck and Davis, 2019: 18). The 4IR then builds on the Third Industrial Revolution, which saw the development of digital technologies, and this in turn built on the Second Industrial Revolution of electricity and telecommunications (ibid.). However, the 4IR promises far more dramatic changes to society, or even what it means to be human, than just the widespread application of machine-learning algorithms.

These technological developments have the potential to render many of today's jobs redundant. New technological developments in areas such as robotic process automation (RPA), drones, the Internet of Things (IoT), Artificial Intelligence (AI) and machine learning are continuing to impact upon production and society. What is evident with these technologies is their intimate complementarity and that use of one invariably invokes use of another. Drones, for example, could easily be used by an on-line retailer such as Amazon in concert with

the IoT and/or an RPA to entirely remove the human worker element from purchasing and despatching a product to a customer.

Indeed, some writers predict that in 10 to 20 years, half of current jobs will be "threatened by algorithms" and that "40% of today's top 500 companies will have vanished in a decade" (Helbing et al., 2017: 3). Similarly, Frey and Osborne (2013), basing their article on John Maynard Keynes' (1933) famous prediction of "widespread technological unemployment" (ibid. 2) suggested that algorithms "could substitute for approximately 140 million full-time knowledge workers world-wide" (ibid. 19). Bonin et al. (2015; cited in Schroeder, 2016: 4), applying the Frey and Osborne methodology to Germany, suggested that 42% of jobs there could be at risk of automation over a 20 year period. Schroeder suggests that if one considers "activities" instead of "professions" then the predictions are less dramatic – with only 12% of jobs in Germany being at risk. Nevertheless, the expectant job losses would still fall disproportionately on the low-skilled and low-paid (ibid.).

Of course, such predictions should be treated with a modicum of caution, as technology can create new jobs as well as destroy current ones (Nübler, 2016), so estimating the size of any job-displacement is problematic. Wondering where new jobs would come from, though, to replace jobs lost to automation is somewhat equally problematic, as we cannot fathom that everyone will be – or want to be – a "symbolic analyst" (Reich, 1991) or a creative type (assuming these skills are not possible for AI algorithms to replicate..). Guessing future new job roles would be problematic even at the best of times, though, as the technological changes driving them could depend upon the coming together of as yet unrelated complementary technologies – as has so often been the case with recent transformative innovations (e.g., biotechnology, ICT).

As such, one is left with the contentious (some might say uncomfortable) notion that the gig economy represents a transition from a "wage" economy to a future where the human element is desired to be taken out of production altogether by firms seeking to cut costs and increase control, with all the attendant implications ("no economy?") of mass unemployment and a lumpen precariat class for widespread civil unrest and the growth of right-wing extremism (Standing, 2012). Or are these concerns overstated? After all, there is

a somewhat obvious point that goods and services produced by automated systems are intended with consumption by humans in mind. That is, issues of automation and consumption are still very much grounded in the traditional economic concept of aggregate demand; and moreover, effective demand. The implication here being, of course, that society would have to have sufficient incomes to maintain an effective level of consumption and that political means could be used to achieve this.

However, there are signs that trade unions and government are waking up to the potential problems and long-term threats that the lack of regulation in the gig economy will have for society. The UK Government announced its Good Work Plan to overhaul workers' rights for the 21st Century. Whilst not offering radical change in terms of outlawing zero-hours contracts or introducing stringent labour requirements for gig employers (per calls from the TUC), the plan is potentially a first step in regulating the emerging working environment and recognizes the future potential growth of the gig economy. In contrast, the German government appears to place a stronger emphasis on worker participation in addressing the challenges posed by the 4IR, with the establishment of a tripartite framework (the "Digital Workplace platform") under the Labour Ministry, which is overseen by the requisite minister and the Chairman of *IG Metall*, a large union conglomerate (Schroeder, 2016: 8).

As such, the (negative) experiences of workers in the gig economy could be seen as a step towards more work-life balance, gender equality and concern for community and environmental sustainability as opposed to a narrow concern on profit. Rather than solely interpret the emergence of the gig economy in negative terms, it could be used to re-evaluate the nature of work and the position of work in terms of one's life trajectory.

Of course, the attendant dangers of work intensification and erosion of the boundary between work and leisure that the technology underpinning the gig economy has engendered remain ever-present. Glamorous notions of being footloose without the trappings of family dependents, as depicted in the communal work-living spaces espoused by companies such as WeWork/WeLive, have been described as preserving a lifestyle – at best – akin to a maintaining a university student experience well into one's 30s (Harris, 2018). As

such, this needs to be weighed up against the nature of "home", "family" and "community" that some commentators (ibid.) argue such arrangements lack. Indeed, as mirrored in the UK housing market data presented previously, for many, such patterns of working and living might not be by choice, but rather necessity in a fluid, atomised labour market.

Considering the nature of gig work in its wider (precarious work), the contingency of labour market participation by those in highly precarious forms of work only further reiterates the need for ensuring that work "pays". Moreover, there is a clear imperative to ensure that "work" is posited in a wider system of regulation and benefits that aid personal and professional development.

However, the future is ours to shape – hence, the opposite scenarios of technological utopia or dystopia are entirely possible. The key point is that as technology has evolved to date, so have regulatory frameworks designed to limit the negative consequences of the new systems of production unleashed thereof. The danger comes from growing disenchantment and disengagement from the political process that would otherwise act to limit the power of "big tech" (government or private corporation). Brexit has certainly highlighted the experiences of so-called "left behind communities" in this regard. The opportunity is that technology is finally reaching a stage whereby it is possible to realise a society where a basic decent standard of living is possible for all across the globe and that humanity should live without the need for "brute labour"[1]. However, it still remains to be seen where these developments will take us.

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[1] George Orwell, *Nineteen Eighty-Four*.