

Reviews

Android paranoia

Aaron Benanav, *Automation and the Future of Work* (London: Verso, 2020). 160pp., £12.99 hb., 978 1 83976 129 4

Jason E. Smith, *Smart Machines and Service Work: Automation in an Age of Stagnation* (London: Reaktion, 2020). 160pp., £14.95 hb., 978 1 78914 318 8

Is a future where jobs currently done by humans are carried out by robots just around the corner? Will advanced robotics, machine learning and artificial intelligence bring about a change as fundamental as the industrial revolution? Will a robot take *your* job? If you ask business page commentators, MBAs, venture capitalists, futurists, tech enthusiasts, machine learning experts, politicians, commentators, theorists and Silicon Valley CEOs, the answer is often a resounding ‘yes’. Runaway technological advances, they argue, mean human labour is becoming obsolete. This obsolescence means a chance to avoid drudgery and seek out a better, more meaningful life, as long as the catastrophe of rapid-onset wage evaporation is resolved.

This vision of the future is often practically undermined by the actions of those at its centre: Silicon Valley. Take, for example, Elon Musk. In 2019, Musk promised that his company, Tesla, would have one million autonomously driven taxis on the road by the end of 2020. This did not happen. Meanwhile, an issue with Tesla’s Autopilot assistive driving mode – that it is unable to decipher parked emergency vehicles – has been linked to twelve crashes since 2018. New automated technologies, it seems, promise high but fail to deliver. Perhaps the most extreme example can be found in Elizabeth Holmes’ company, Theranos. Holmes claimed that she could test for hundreds of diseases with just a small pin prick’s worth of blood, replacing technicians with an automated electronic process. It seemed miraculous: a means to affordable medical screening and a lucky escape for the needlephobe. Exactly *how* the testing technology worked was a closely guarded secret – intellectual property is one of the most valuable assets a Valley company pro-

duces – until the whole project collapsed when it became clear that the technology simply did not exist. Theranos’ unravelling left many in the lurch: patients who had been misdiagnosed, funders who had given \$700m to the company and the retailer, Walgreens, which had opened forty Theranos Wellness Centres inside its stores. What seemed like the future of medical technology turned out to be an embarrassing failure.

Nevertheless, the automation proponents believe that we are on the threshold of a new era in which brilliant machines, unhindered by the fleshy externalities of workers displace human labour. Jobs can and will be replaced: the technologically possible becomes the probable. To solve the ‘jobs-apocalypse’ scenario of mass technological unemployment many automation proponents argue for a Universal Basic Income, a proposal explored by Andrew Yang, Martin Ford and Daniel Susskind, among others. A leftist version of the automation thesis, often as much a provocation to imagine an end to drudgery as prediction about a concrete future, can be found in Alex Williams and Nick Srnicek’s *Inventing the Future* (2015) and Aaron Bastani’s *Fully Automated Luxury Communism* (2018).

The future is hard to predict. Alongside the question of whether the automated future is a utopia or a nightmare, there are disagreements about the pace and depth of change: will automation substitute human labour, or merely augment it? Where automation supporters converge is that the developments that make a computerised future possible are already underway and that the barriers to their fulfilment are primarily technological and temporal. It is into this debate that two new books, Aaron Benanav’s *Automation and the Future of Work* and



Jason E. Smith's *Smart Machines and Service Work*, seek to intervene.

Even the most breathless techno-optimists are aware that there remain profound technological barriers to completely substituting human labour – Erik Brynjolfs-son and Andrew McAfee, for example, note that robots are typically less dexterous and agile than humans. But Smith and Benanav are not so bothered about the technical limitations of new and developing technology (though they do note that these remain rather significant barriers to full automation) as much as the economic conditions that render automation, of the kind its proponents claim is fast-approaching, unlikely. Both books are relatively short – *Automation and the Future of Work* reaches a slim 99 pages, *Smart Machines and Service Work* stands at 149 – but gather significant cold water to pour on automation's fever dreams. Rather than being on the tipping point of a new digital age, one already starting to renew sluggish productivity rates, we are, they both argue, beset by a profound economic stagnation. This stagnation means that runaway productivity increases predicted by automation proponents are not happening, and are extremely unlikely to happen, because of a profound economic crisis that goes beyond a few bad business cycles. Both locate this stagnation in a crisis of

profitability. Benanav pins it to Robert Brenner's notion of a 'long downturn' (Brenner was one of his doctoral supervisors at the University of California). Benanav's target is what he terms the 'automation discourse'. This is a consensus straddling the political left, right and centre, which holds that mass technological unemployment is a fast-approaching horizon, offering, should it be managed correctly, a chance to enter a world of abundance and leisure. He argues that while technological changes may well displace or transform some jobs in the future, the idea that technology is already destroying jobs and expelling large numbers of workers from employment is false. This long downturn begins, Brenner and Benanav argue, with post-war developments in manufacturing generating global overcapacity as more efficient manufacturing suppliers joined the world market, but less efficient suppliers did not exit. This results in a disincentive for firms to invest, eventually dragging on GDP growth. As Benanav puts it, '[d]ecades of industrial overcapacity killed the manufacturing growth engine, and no alternative to it has been found'. Manufacturing output rates slowed and the engine of economic growth falls out of the car at the national and global scale.

For Smith, the crisis has its roots in the expansion of unproductive (in the Marxist sense) labour. As compan-

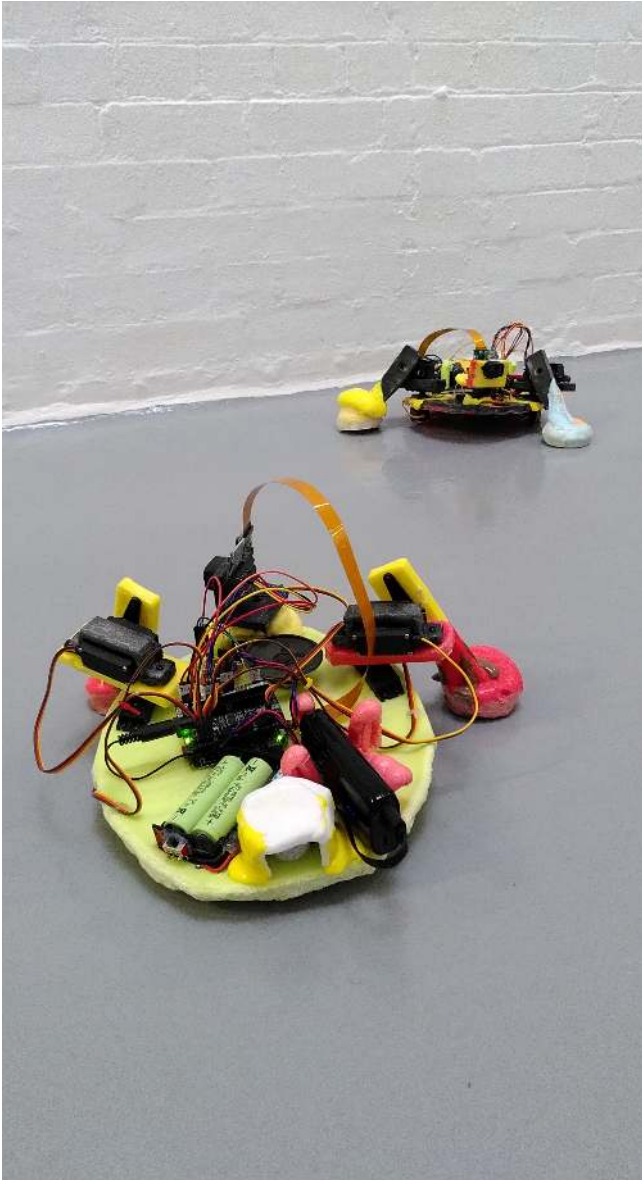
ies compete, they seek to gain a competitive edge against their rivals using labour-saving technology. This reduces the total amount of labour involved in the process, meaning profitability stagnates. Employers are able to draw on a growing reserve army of labour, permitting greater exploitation of that workforce and creating another barrier to automating tasks in new sectors. Value-producing work tends to be increasingly concentrated and distribution more diffuse. 'This pattern', he argues, 'in which enormous productive gains through economies of scale at the point of production are offset by the more labour intensive activities in the circulation process, appears to be a global feature of global capitalist production'. To demonstrate this, he analyses a typical consumer good (or at least a typical American consumer good) – an air-conditioning unit – standing in for Marx's linen coat. 80% of the world's air conditioning units are made in China, and one third of all residential units are made by just one company, Gree. These units are then shipped and sold in small, spatially dispersed retail outlets. Thus, the ratio of unproductive to productive labour grows. This stagnation is the true cause of a key piece of evidence used by automation proponents: low demand for labour. Automation theorists, then, would be wrong to assign the cause of the persistent low demand for labour to technological innovation displacing workers. Whatever its precise cause, the symptoms of stagnation they describe are similar: firms are hesitant to take risks and instead shore up their existing position by using available cash to buy back shares, along with sweating or firing workers. This dynamic comes across particularly clearly in Smith's analysis of share buybacks: between 2015 and 2017, he notes, American corporations spent \$3 out of every \$5 of their net profit on stock repurchases. Firms are speculative platforms, gobbling up competitors or indebted 'zombies' attached to a life support of cheap credit.

If technological change were really displacing workers, as automation theorists claim, productivity would be increasing. But, as Robert Solow pithily put it, computers are seen everywhere except the productivity statistics. The automation theorists, then, are wrong on the dynamics of the economy. But might they be correct about its future trajectory? Again, there is strong evidence presented in both books to doubt this. Dwindling returns and access to a low-wage and easily exploited workforce mean that companies might not be particularly interested in invest-

ing in new technologies. Even if there were investment, Benanav argues, such '[p]rofit-driven technological advances are highly unlikely to overcome human drudgery as such' because of the enduring presence of cheap, exploitable labour. Moreover, Smith suggests, automation tends to impact sectors of the economy, rather than the economy as a whole, with workers displaced from the automated car industry ending up pooling in low-wage and low-skill sectors like logistics. This further disincentivises automation in those sectors. In Smith's view, a wage society is not one in which full automation can prevail. A further barrier is that the areas automation would need to traverse before the whole gamut of work was automated is activity that is 'low-skill' for human workers but extremely difficult for machines. Smith points out that today's 'low-skill' labour often relies on unpredictable, highly intuitive and highly relational decisions and tasks, rather than the routine processes of an assembly line. The challenges to the automation of such work are profound.

The jobs-apocalypse scenario in which each job is replaced with its automated version is a bit of an easy target. It is extremely unlikely to come to pass. Previous bouts of unemployment have demonstrably proven this to be a rare development. Instead, local expulsions from skilled work and the reorganisation and deskilling of that work are typical. Technological developments tend to reorganise rather than fully replace human work. Both books, however, give readers good reason to doubt the pace and trajectory of technological change even if it does not substitute for individual jobs. By showing that automation cheerleaders have it wrong about the contemporary economy, and that their glorious predictions are unlikely to materialise, Smith and Benanav are able to puncture their vision of the future.

The future, though, remains bleak. Its bleakness is unlikely to come from technological unemployment, but rather, a combination of low demand for labour meaning underemployment, and potentially of expulsions of workers from a shrinking formal sector. As Phil Jones has persuasively argued, workers might be dispersed into 'digital piecework' – minuscule tasks of data labelling, paid well below subsistence rates – as well as the growing 'servant economy'. Where technology develops, it most likely will be in the service of profit and the sweating of labour rather than its liberation.



How might such a future be resisted? Given that the present is profoundly troubling – secular stagnation, exploitative and undignified jobs, cruel management practices – what should take its place and who should do the taking? Both authors identify agents for change. Benanav looks hopefully at social struggles since the 2008 global financial crisis and their tactics of stoppages, occupations and blockades. A declining share of manufacturing in total employment, he notes, ‘means that these workers no longer have the capacity to cast themselves as representatives of a more just and rational future order’ and that emergent struggles are ‘unlikely to look like the labour movements of earlier centuries’. Lean supply chains, he argues, offer a chance for workers outside the point of production to have leverage through blocking circulation.

Similarly, Smith, following James Boggs, suggests that ‘outsiders’ – those expelled from formal work – might have a crucial role to play in struggle. He is more circumspect about the challenges such movements face: the isolation of workers is a formidable barrier. The workers movement, he argues, was at ‘once product and the reflection’ of industrial production. The working class becomes an organised mass, concentrated in large workplaces, it goes through what Marx and Engels describe as ‘the stern schooling of labour’. By contrast, a deepening ‘servant economy’ fragments workers into smaller, isolated workplaces. Smith considers how a worker’s place in the social division of labour and in the specialisation of production offer different openings for action. Successful teachers’ strikes, for example, have been able to use their specific place in the social division of labour – their work is a precondition for those with children being able to go to work. They cannot be offshored or automated and when their work stops, other work does too. Workers in technologically progressive sectors have power too, in their case, by dint of their place in the technical division of labour. But retail, restaurant, care workers and other similar sectors, characterised by low wage relation work, do not have a decisive position in either division of labour. For such workers, ‘none of the conditions favouring a “coming upsurge” prevail’.

Both authors argue for the difficult but fundamentally important task of building power for those who must work to live in conditions of diminishing demand for labour. Benanav goes beyond the identification of agents by which and around whom this power can be rebuilt in a chapter considering what he terms ‘silver bullets’ – ‘one quick trick’ solutions to secular stagnation. He presents and discards one potential way out – the path of Keynesian stimulus. Whether his calculation here is correct depends upon two claims: is he right about the limited growth returns of stimulus spending since the 1970s, and is stagnation so profound as to be resistant to all attempts at reinvigoration? On both counts, there may be reasons to be doubtful. As Alexis Moraitis and Jack Copley argue, ‘debt-fuelled spending was *not* channelled into enhancing ordinary people’s consuming power and thereby directly boosting demand’. On the latter point, they wonder if ‘industrial overcapacity is necessarily impervious to states’ attempts to regulate competition, plan investment or directly stimulate demand.’

A second ‘silver bullet’ discussed and dismissed is that of Universal Basic Income. UBI is often presented as the cure to the jobs-apocalypse. Benanav provides a brief history of UBI – from Thomas Paine’s lump sum payment for all adults, via Friedrich Hayek and Milton Friedman, to Phillipe Van Parijs and Charles Murray. He considers its liberal, leftist and right-wing variations. The care taken with this history is commendable, especially when criticisms of UBI often tend toward bad faith. One recurrent example is the claim that because UBI has been proposed by neoliberals and even outright racists that its support from the left is inappropriate. Kathi Weeks – a supporter of UBI – has termed this the ‘strange bedfellows’ argument. It is mostly hogwash. Two disparate and distinct traditions can converge on a policy proposal, especially one that they understand quite differently, without undermining either of their own cases for it. Instead of taking cheap shots, Benanav considers what is valuable about UBI and why it might be appealing, singling out the goal of *universal* provision as justice-driven reparatory policy, especially important ‘in a country like the United States, where racism birthed welfare programs that treat the poor with suspicion, if not contempt’.

But UBI – of the left-wing variety – is ruled out on practical grounds. Firstly, Benanav calls into question the faith that leftist UBI advocates have in its ability to repair communities and support the scaling of movements and unions. This is partly justified: there is certainly a tendency on the part of advocates for more free time or a UBI to imagine that people will put their time to worthy use – certainly not a given. This tendency is taken to task in Mareile Pfannebecker and James A. Smith’s *Work Want Work* (2020). However, many advocates of UBI are what might be dubbed “yes *and*” advocates of the policy. If it has potential for (re)building working class power, it is only when bundled with other reforms, like ‘Universal Basic Services’, or fighting regressive anti-trade union legislation. ‘UBI-first’ proposals, which pin emancipation to UBI alone, are, as Orlando Lazar argues, unlikely to succeed. The second practical ground for discarding

UBI is that it does not strike at a crucial weapon that capital possesses – *capital strike* – disinvestment and capital flight. The only way, Benanav argues, to achieve change is to take control of that weapon.

Benanav then describes a new way of imagining a future utopia: fully-rounded humanistic production and the establishment of shared abundance. This is a compelling vision. His vision of the future can function in a similar way to that which Helen Hester and Will Stronge see as the role for utopias: a ‘vector rather than terminus’. Refiguring abundance as a social relation – a shared world of public goods, with no possibility of excluding anyone from them, is a helpful corrective to the sometimes overblown account of luxury as a threshold in some left automation theorists (Aaron Bastani, for example, claims that we could all lead lives like today’s billionaires). This vision should orient, he argues, new social struggles, pushing them toward what he terms ‘the conquest of production’. A conquest of production might be the only way to deactivate capital strike but if UBI and Keynesian stimulus can be discarded on the basis of practicality, would not this highly desirable but challenging proposal fail on the same terms? That said, there are certainly compelling reasons to favour this vision of cooperative justice, work redistribution and shared abundance that are normative rather than practical.

Both Benanav and Smith take up the role of the sceptic. Their work suggests that to be a good sceptic involves going beyond the principle of charity to see *why* ideas might appeal to others even when the sceptic finds them wanting. Smith approaches a conceptually complex field and prises apart elisions and confusions with deftness. Benanav’s automation scepticism is all the more convincing for its partially submerged ambivalence: he describes his response to automationists’ vision of their future as a way to develop his own, ‘which by comparison with theirs was still full of the dullest-possible grey’. This ambivalence is productive; it enables an experiment in thinking otherwise. Benanav and Smith, as good sceptics, do not merely cast doubt but offer new hope.

Amelia Horgan