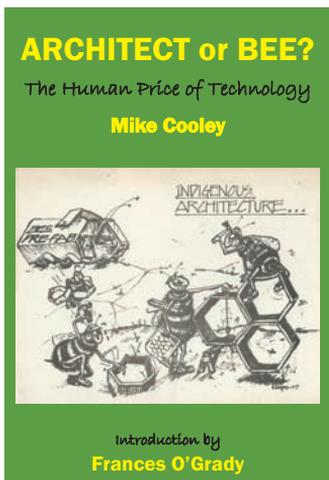


Architect or Bee?

The human price of technology

Frances O'Grady



Frances O'Grady is General Secretary of the Trade Union Congress. She gave the inaugural Ken Coates Memorial Lecture in June 2015 (see Spokesman 129), when she kindly agreed to write this introduction to Spokesman's new edition of Mike Cooley's pioneering exposition of human-centred systems and socially useful production.

When *Architect or Bee?* was first published in the late 1970s, nobody could have anticipated the response to Mike Cooley's ground-breaking study. From Britain to Germany, America to Australia, it became something of a sensation among socially progressive thinkers concerned about the impact – both good and bad – of technological change on the world of work. I remember being struck by the potential to make work more meaningful. My father was a production line worker at British Leyland's plant in Cowley, where scope to improve job satisfaction was, to say the least, considerable. Car industry unions produced an alternative plan which set out not only how to reduce boring, repetitive labour but also, through green investment and innovation, to cut carbon emissions, too.

An engineer, academic, trade unionist and socialist, Mike became the figurehead for a new movement that set out a positive vision of how – through collective action – we could harness the potential of technology to make work better. Today, over three decades on, this remains one of the most fundamental questions facing our society. At a time when the rate of technological change is dizzying, politicians, employers and trade unionists urgently need to think about how to manage its impact on workers, families and communities. What the great T&G leader Jack Jones once called 'the human face of labour' matters more now than ever before.

In the three and a half decades since the book was first published, technology has revolutionised our world. The growing sophistication of information technology

systems, the speed with which capital has been globalised and financialised, the potential for industries to be ‘offshored’, the automation of processes such as supermarket check-outs – all this and more has transformed the way people work and the nature of the jobs they do. The boundaries between work and home life have become blurred, too. Increasingly, from assembling flat pack furniture to managing our own online bank accounts, we are all working for free.

Who back in the 1970s could have foreseen the internet, and how radically it would change the composition of whole industries and the structure of the economy? In the years ahead, we are likely to see even more dramatic changes. Today, taxi drivers currently protest about the growth of Uber, the mobile phone app which allows users to hail minicabs – and which sidesteps many of the regulatory requirements that protect traditional cabbies (and passengers). But by the end of the decade we will be grappling with the implications of driverless vehicles.

Economists have often talked about the ‘hollowing out’ of the labour market, with more jobs at the top, fewer in the middle and many more at the bottom. Globalisation, financialisation, and mass migration all go some way to explaining this trend. But technological change has arguably been the biggest driving force of all. In a sense, managing its impact is an age-old challenge. From what Blake called the ‘dark satanic mills’ of early nineteenth century industrial Britain to Henry Ford’s production lines of the 1920s, from the Stakhanovite shock workers of Soviet Russia to the micro-managed world of the late twentieth century call centre, technology has always shaped working lives, but the speed of change is accelerating.

With the balance of power against working people, such change is often experienced as a struggle to defend jobs, pay and conditions against the onslaught of work intensification. But, as Mike reminds us, advances in technology can be synonymous with liberation. Technology can make us more skilled and more employable. It can remove monotonous tasks and make work more intellectually stimulating and fulfilling. And it can give many workers greater freedom about where and how they do their jobs. Walk past any cafe today and you will see workers sipping lattes and tapping into their laptops, indicative of just how rapidly work has changed for millions of people.

Of course, there is a flipside. For the ever growing numbers of workers, technology means the workplace exists 24/7, a development management has not been slow to exploit. Whereas German firms have encouraged workers not to check their emails during their own time, Anglo-American capitalism has enthusiastically exploited digital technology’s ability to

take work into people's private lives. As the Eagles memorably put it in 'Hotel California': you can check out any time, but you can never leave.

But it would be a big mistake to assume that managerial control by technology is confined to the professional classes alone. In this age of zero hours contracts, our growing army of low-paid casual workers is effectively permanently on call, waiting for the text message from the employer or the agency that confirms whether they have work or not. And as we have seen at the likes of Amazon, the growth of sophisticated monitoring and GPS tracking systems means Orwellian-style Big Brother management is an unfortunate reality for many workers in process or manual employment.

The salient questions remain the same as Mike posed back in the 1970s. How do we maximise the upsides and minimise the downsides of technological change? How do we make sure rapid scientific advances empower rather than enslave working people? And how do we mould this progress towards socially useful purposes such as the fight against climate change or public services tailored towards the needs of disadvantaged groups? Ultimately, how do we win the political and industrial battle for control?

I believe a huge part of the answer must be to strengthen workers' voice, giving working people hope that they can influence the direction of technological and economic change. And on this agenda – which surely must be at the heart of the Left's narrative about the future – we have much to learn from what Mike writes in this new edition of *Architect or Bee?* As you would expect of a founder member of the famous Lucas Aerospace Combine Shop Stewards' Committee – and one of the authors of its *Alternative Plan for Socially Useful Production* – Mike's core belief is that it is the skilled labour of working people that drives technological, scientific and industrial progress. He was at the heart of the movement for workers' control in the 1970s, encouraging workforces to deploy their skills, experience and ideas to secure jobs, generate new products, and reshape the economy to meet basic human needs. The driving force? People, not profits, are what matter.

It was a movement that took various forms, from workers' co-operatives such as those at Meriden, Kirkby and *Scottish Daily News* to the famous work-in at Upper Clyde Shipbuilders. But it was the remarkable story of the Lucas Aerospace shop stewards' proposals, in the face of plant closures, that perhaps most captured the spirit of the times. One of the world's largest aerospace components suppliers, the company employed around 18,000 skilled craft workers, fitters, engineers, scientists and

laboratory technicians. When a restructuring programme put 4,000 skilled workers at risk of redundancy, trade unions came up with a radical and far-sighted plan to reconfigure jobs, skills and production.

Using workers' technological know-how, the Lucas shop stewards worked up a detailed blueprint for switching from arms production to a wide range of socially and environmentally useful products including portable kidney machines, hybrid road-rail buses, prototypes of city cars, and medical equipment for developing countries. Crucially, in discussions about how these products would be manufactured, traditional Tayloristic methods were ditched in favour of human-centred systems which celebrated and nurtured the ingenuity of workers rather than subordinating them to the machine or system. This was nothing short of revolutionary: technological change done by workers, for workers. Even the *Financial Times* was impressed. However, Lucas Aerospace remained hostile.

The industrial history of the 1970s is too often reduced to lazy clichés about mindless militancy and union dinosaurs, but the movement for workers' control of which Mike was such an integral part presents a very different story. I still have my copy of the workers' plan for the motor industry produced by shop stewards and sympathetic academics in the 1970s. On page 87, there is a cogent environmental and industrial case for investment in the development of electric cars. Those stewards were all too aware of the challenge of climate change, that the British car industry was in trouble, and that prototypes were already being developed in Japan. Sadly, management and government rejected the plan. It wasn't until 30 years later that a BMW electric mini finally rolled off the production line at Cowley.

Imagine how different things would have been if management had listened to workers and their unions all that time ago. That's why – as a long-term aspiration – the TUC has been campaigning for representation of workers on company boards, as is commonplace on much of the Continent. We're also lobbying hard for workers to have a seat on the remuneration committees that set top pay, a first step in delivering fair shares for all. Given the bewildering speed of technological and industrial change, our boardrooms are badly in need of the ingenuity, honesty and plain common sense ordinary workers can bring. This is not an end in itself, but the beginning of a journey of economic democratisation.

The *Lucas Plan* remains an inspiration to today's trade unionists. Its key tenets – a stronger voice for workers; a greater say in the management of technological change; a focus on socially useful economic activities – are more relevant than ever before. The TUC's 'green workplaces' projects,

which see unions working with employers to slash carbon emissions in offices and factories, draw strongly on the Lucas tradition. Another contemporary example is the recent agreement between the Communication Workers Union and Royal Mail, dubbed the ‘Agenda for Growth, Stability and Long Term Success’. In an age when the use of electronic communication has grown inexorably, this groundbreaking initiative gives workers and union representatives a say in decisions about the modernisation of postal services. Finally, unions have been at the forefront of the popular call to renationalise the railways, with concrete plans put forward utilising the practical expertise of platform staff, signallers, train drivers and transport economists.

In every sector of the economy, it’s time to expose the falsehood that entrepreneurs are the sole wealth creators. As a starting point, we need to take practical steps to reform a corporate governance system premised on the notion that shareholders – who typically hold shares for just a matter of months, with the majority now held overseas – are the best stewards of a firm’s long-term interests. As generations of trade unionists have instinctively known, nobody has a stronger interest in the sustained success of a company than those whose livelihoods depend on it.

But industrial democracy in its broadest sense isn’t just about who calls the shots in the boardroom. As *Architect or Bee?* so powerfully illustrates, it’s about giving workers the collective confidence to respond to new technology, globalisation, and the growing power of finance capital. Trade unions have a responsibility, too, to ensure we build activist capacity and harness the creativity of our members – ordinary working people – in developing practical plans for change. For our ideas to have credibility, we must draw from the deep well of specialist skills within our own ranks and those of our allies. Whether it’s science and innovation or new systems of work organisation, trade union members have unprecedented experience of how technology shapes our working lives – insight that must be put to good use.

As Mike Cooley would be the first to point out, the trade union movement must not fall into the trap of thinking that technological change will always be something that is done to workers, not by them. We have huge reserves of knowledge and skills within the union movement. After all, it was designers, engineers and assembly workers who built the Boeing 747; academics and researchers who nurtured the potential of the internet; and scientists and doctors who pioneered the first heart transplant and other medical advances. Indeed, Britain’s rocket scientists are likely to be trade union members themselves. More prosaically, but no less

significantly, it's skilled manufacturing workers who now produce over 100 cars an hour at Britain's world-leading car plants; IT programmers who design and implement the systems that shape the way organisations work; NHS and care staff who administer drugs and operate heart transplant machines; and engineers who keep our transport and energy infrastructure running come wind, rain or shine. In the years ahead, harnessing this collective expertise will be paramount.

With ordinary workers in both public and private sectors living through an unprecedented period of flux, Mike's book remains a must-read for trade unionists. His philosophy is to make technology work for us – not the other way round. Today's trade unionists need to think creatively about how new technology – social networks; social media; digital campaigning – can generate new forms of workplace and community organising that begin to match the new models of business that transcend borders. This poses a challenge for the way we organise ourselves, including how unions reconcile representative democracy with an appetite for networked participation. We've already seen progress on this front, but my gut feeling is that, when it comes to the net, we are still paddling not surfing.

Technology is an increasingly potent force and that will remain the case throughout our lives: as the cliché goes, change is the only constant. From interactive touchscreens to systems automation, from intelligent machines to 3D printing, new technologies continue to transform the world around us. Yet the basic human need for good, fulfilling, fairly paid work remains as overwhelming as ever. Through collective action – and by strengthening the voice of workers – I'm convinced we can make a difference. As the American writer Studs Terkel presciently wrote:

'Work is a daily search for meaning as well as bread; for recognition as well as cash; for astonishment rather than torpor; in short for a sort of life, rather than a Monday to Friday sort of dying.'

'A bee puts to shame many an architect in the construction of its cells; but what distinguishes the worst of architects from the best of bees is namely this. The architect will construct in his imagination that which he will ultimately erect in reality. At the end of every labour process, we get that which existed in the consciousness of the labourer at the commencement.'

Karl Marx, Capital