

Economic possibilities for ourselves

By Robert Skidelsky

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Although we have not yet reached the point where automation threatens to displace vast swaths of the labor force, a narrative of techno-disruption will continue to frame debates about work, education, and economy policy. That narrative should make allowance not just for the future of work, but also for the possibility of leisure.

The most depressing feature of the current explosion in robot-apocalypse literature is that it rarely transcends the world of work. Almost every day, news articles appear detailing some new round of layoffs. In the broader debate, there are apparently only two camps: those who believe that automation will usher in a world of enriched jobs for all, and those who fear it will make most of the workforce redundant.

This bifurcation reflects the fact that “working for a living” has been the main occupation of humankind throughout history. The thought of a cessation of work fills people with dread, for which the only antidote seems to be the promise of better work. Few have been willing to take the cheerful view of Bertrand Russell’s provocative 1932 essay *In Praise of Idleness*. Why is it so difficult for people to accept that the end of necessary labor could mean barely imaginable opportunities to live, in John Maynard Keynes’s words, “wisely, agreeably, and well”?

The fear of labor-saving technology dates back to the start of the Industrial Revolution, but two factors in our own time have heightened it. The first is that the new generation of machines seems poised to replace not only human muscles but also human brains. Owing to advances in machine learning and artificial intelligence, we are said to be entering an era of thinking robots; and those robots will soon be able to think even better than we do. The worry is that teaching machines to perform most of the tasks previously carried out by humans will make most human labor redundant. In that scenario, what will humans do?

The other fear factor is the increasing precariousness of wage labor – though this concern is seemingly belied by headline statistics suggesting that unemployment is at a historic low. The problem is that an economy at “full employment” now contains a large penumbra of what economist Guy Standing calls the “precarariat”: under-employed people who work less and for lower pay than they would like. A growing number of workers, seeming to lack any kind of job (and pay) security, are thus forced to work well below their ability.

It is natural that one would interpret the onset of precariousness as the first stage in a broader trend toward workforce redundancy, especially if one pays attention to alarmist predictions of the next category of “jobs at risk.” But this conclusion is premature. The penetration of robotics into the world of work has not yet been sufficient to explain the rise of the precariat. So far, “cost cutting” in the West has largely taken the form of offshoring to the East, where labor is cheaper, rather than replacing humans with machines. But “onshoring” work that was previously offshored will offer cold comfort to workers if machines get most of the jobs.

Robo-rapture

According to the first view – let us call it “job enrichment” – technology will eventually create more, better human jobs than it destroys, as has always been the case in the past. Simple, mundane tasks may increasingly be automated, but human labor will then be freed up for more “interesting” and “creative” cognitive work.

In late 2017, the McKinsey Global Institute (MGI) published *Jobs Lost, Jobs Gained*, which claimed that as much as 50% of working hours in the global economy could theoretically be automated; the authors suggested, however, that not more than 30% actually would be. Further, they estimated that less than 5% of occupations could be *fully* automated; but that in 60% of occupations, at least 30% of the required tasks could be.

In line with the usual mainstream assessment, MGI believes that while there will be no net loss of jobs in the long run, the “transition may include a period of higher unemployment and wage adjustments.” It all depends, the authors say, on the rate at which displaced workers are re-employed: a low re-employment rate will lead to a higher medium-term unemployment rate, and *vice versa*.

MGI’s proposal for massive investment in education to lower the unemployment cost of the transition is also conventional. The faster the labor reabsorption, the higher the wage growth. Lower re-employment levels will cause wages to fall, with a greater share of the gains from automation accruing to capital, not labor. But the authors hasten to add:

“Even if the particulars of historical experience turn out to differ from conditions today, one lesson seems pertinent: although economies adjust to technological shocks, the transition period is measured in decades, not years, and the rising prosperity may not be shared by all.”

This assessment is typical, and it has led many to call on governments to invest heavily in so-called “upskilling” programs. In a commentary for *Project Syndicate*, Zia Qureshi of the Brookings Institution argues that, “with smart, forward-looking policies, we can ... ensure that the future of work is a better job.” In this view, automation is simply the continuation of the move toward more, higher-quality jobs that has characterized capitalist growth since the Industrial Revolution.

History is on the optimists’ side. Mechanization has been the durable engine of productivity and wage growth as well as reductions in working hours, albeit usually with a considerable lag. Although the Roberts loom cost hundreds of thousands of handloom weavers their jobs in the nineteenth century, the broader wave of new industrial technologies enabled a much larger population to be maintained at a higher standard of living.

Robo-redundancy

But, according to the second view – call it “job destruction” – this time is different. The programming of machines to perform ever more complex tasks with ever-increasing speed, accuracy, precision, and reliability will result in mass unemployment. In *Rise of the Robots*, author and entrepreneur Martin Ford addresses the techno-optimists head-on. “There is a widely held belief – based on historical evidence stretching back at least as far as the industrial revolution – that while technology may certainly destroy jobs, businesses, and even entire industries, it will also create entirely new occupations ... often in areas that we can’t yet imagine.” The problem, Ford argues, is that information technology has now reached the point where it can be considered a true utility, much like electricity.

It stands to reason that the successful new industries that will emerge in the years ahead will have taken full advantage of this powerful new utility and the distributed machine intelligence that accompanies it. That means they will rarely – if ever – be highly labor-intensive. The threat is that as creative destruction unfolds, the “destruction” will fall primarily on labor-intensive businesses in traditional areas like retail and food preparation, whereas the “creation” will generate new industries that simply don’t employ many people.

On this view, the economy is heading for a tipping point where job creation will begin to fall consistently short of what is required to

employ the workforce fully. We will soon reach the stage where the machine-driven destruction of existing human jobs far outpaces the creation of new human jobs, resulting in inexorably rising mass “technological unemployment.”

The upskilling mirage

Optimists’ response to such concerns is that the workforce simply needs to be trained or upskilled in order to “race with the machines.” Typical of this outlook is the following headline on a commentary published by the World Economic Forum: “How new technologies can create huge numbers of meaningful jobs.” According to the author, concerns about “the looming devastation that self-driving technology will have on the 3.5 million truck drivers in the US” are “misdirected.” Augmented-reality technology, we are told, can create loads of new jobs by enabling people to work from home. All that will be needed is training of the kind offered by “Upskill, an augmented reality company in the manufacturing and field services sectors,” which “uses wearable technologies to provide step-by-step instructions to industrial workers.”

The author, himself the co-founder of an augmented-reality company, goes on to argue that, “With the pace of technological progress only accelerating and with increasing specialization becoming the norm in every industry, reducing the time necessary to retrain workers is pivotal to maintaining the competitiveness of industrialized economies.” There is no mention of the wages that will be offered to these “upskilled” workers in their “meaningful” new jobs. We are simply told that they will be relocated to “lower cost areas more in need of job creation.” Only at the very end of the commentary does the author acknowledge that, in fact, “Technology is a force that has the potential to eliminate entire industries through robotics and automation, and for that we should be concerned.”

The retraining argument should give us pause. In portraying upskilling as the solution to the

labor displacement caused by new technologies, optimists rarely admit that if predictions about “thinking robots” turn out to be anywhere near true, workers would need to be trained in technical skills to an extent that is unprecedented in human history.

Moreover, the time it takes to upgrade the skills of the workforce will inevitably exceed the time it takes to automate the economy. This will be true even if claims about an imminent deluge of automation are greatly exaggerated. In the interval, there will be under- and unemployment. In fact, this has already been happening. Although automation is not yet bearing down on workers to the extent that has been predicted, it has nonetheless pushed more of them into less-skilled jobs; and its mere possibility may be exerting downward pressure on wages. There are already signs of the new class structure envisioned by the pessimists: “lovely jobs at the top, lousy jobs at the bottom.”

A more fundamental question is what we mean by upskilling, and what its consequences might be. Often, heavy emphasis is placed on the importance of better technological education at all levels of society, as if all people will need to succeed in the future is to be taught how to write and understand computer code.

As the technology writer James Bridle has shown, this line of argument has a number of limitations. While encouraging people to take up computer programming might be a good start, such training offers only a functional understanding of technological systems. It does not equip people to ask higher-level questions along the lines of, “Where did these systems come from, who designed them and what for, and which of these intentions still lurk within them today?” Bridle also points out that arguments for technological education and upskilling are usually offered in “nakedly pro-market terms,” following a simple equation: “the information economy needs more

programmers, and young people need jobs in the future.”

The missing dimension

More to the point, the upskilling discourse totally ignores the possibility that automation could also allow people simply to work less. The reason for this neglect is twofold: it is commonly assumed that human wants are insatiable, and that we will thus work *ad infinitum* to satisfy them; and it is simply taken for granted that work is the primary source of meaning in human lives.

Historically, neither of these claims holds true. The consumption race is a rather recent phenomenon, dating no earlier than the late nineteenth century. And the possibility that we might one day liberate ourselves from the “curse of work” has fascinated thinkers from Aristotle to Russell. Many visions of Utopia betray a longing for leisure and liberation from toil. Even today, surveys show that people in most developed countries would prefer to work less, even in the workaholic United States, and might even accept less pay if it meant logging fewer hours on the clock.

The deeply economic nature of the current debate excludes the possibility of a life beyond

work. Yet if we want to meet the challenges of the future, it is not enough to know how to code, analyze data, and invent algorithms. We need to start thinking seriously and at a systemic level about the operational logic of consumer capitalism and the possibility of de-growth.

In this process, we must abandon the false dichotomy between “jobs” and “idleness.” *Full* employment need not mean *full-time* employment, and leisure time need not be spent idly. (Education can play an important role in ensuring that it is not.) Above all, wealth and income will need to be distributed in such a way that machine-enabled productivity gains do not accrue disproportionately to a small minority of owners, managers, and technicians.

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