

III Cicero Institute

The Future of Labor — Keynes

“By the sweat of your brow you will eat your food until you return to the ground, since from it you were taken; for dust you are and to dust you will return.” — (Genesis 2:15)

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In 1930 the economist John Maynard Keynes wrote a short, influential essay entitled *Economic Possibilities for our Grandchildren*. The Depression had not yet hit rock bottom, but Keynes was worried about a macroeconomic trend he called “technological unemployment” — namely, “unemployment due to our discovery of means of economising the use of labour outrunning the pace at which we can find new uses for labour.”¹ Automation anxiety is an ancient phenomenon, and includes a lineage of distinguished British thinkers dating back to the dawn of the Industrial Revolution. In the following decades, Keynes’ essay became the focal point of a large literature on the idea that machines will create widespread structural unemployment.

Today, we are likely in the very early innings of another major wave of innovation and technological unemployment. For this reason, it is useful to think about what Keynes got right and wrong.

Keynes projected that 100 years hence, the standard of life in Western countries would approach 8 times the level it was in 1930. His prediction was remarkably accurate. Since 1930 GDP per capita in the US has increased 6.5x, and should hit 7.5x by 2030.² Keynes thought this enormous increase of wealth would gradually liberate human beings from the necessity of working at all — but he had drawn the wrong implications from his economic data. The great thinker predicted that in the superabundant 21st century “three hours a day” would be enough to satisfy most people. But for the average American the number remains close to eight.³

The explanation for this discrepancy is that in the past hundred years we have found myriad ways

for wealth to raise our standard of living. Any living American feels “poor” if he lacks access to inventions such as cars, indoor plumbing, and modern medicine. We adapt to technological progress by raising our minimum standards of living and working to stay above this rising threshold. Consequently, the cost not to be “poor” today is higher than it was in Keynes’ time. There are still at least hundreds of years of progress to be made in science, medicine, and technology. There are new corners of the human psyche to be explored with the tools of psychology and neuroscience, transportation systems and metropolitan infrastructure to be reengineered, and advancements to be made in literacy, numeracy, and sanitation. We have yet to fully explore depths of the ocean floor or the other planets in our solar system. As we progress as a species, we will unlock new means for enhancing our lives at every turn — and our conceptions of wealth and poverty will evolve in tandem.

“We intrinsically crave heightened sensual experience, superior physical health, a richer understanding of our world, and elevated artistic achievement — as well as more extensive peace, prosperity and justice for our fellow man.”

Technological innovation will empower us to live lives of plenty. But it is not in our nature to pursue lives of leisure. Critics of capitalism often describe work-ethic in terms of greed and unending materialism. They ask: what reason do we have to continue working hard once our biological needs are met? The answer is that work is in fact profoundly *positive-sum*. Hard work enables us to improve ourselves and the world around us, to combat injustice, reduce suffering, and increase human freedom. It allows us to live out the principles of progress, humaneness, and service to others known as “Tikkun Olam” in the

¹ Keynes, John Maynard. “Economic Possibilities for our Grandchildren.” 1930.

² Bureau of Economic Analysis, U.S. Department of Commerce. “Table 7.1: Selected Per Capita Product and Income Series in Current and Chained Dollars.” 2015 data.

³ Bureau of Labor Statistics. “American Time Use Survey Summary.” 2015. <http://www.bls.gov/news.release/atus.nr0.htm>

Jewish tradition. Hard work makes us better people and helps our communities flourish.

Keynes' fundamental error is to conceive of work as purely instrumental to a good life. He argues that technology will ultimately *solve* the "economic problem" of providing for our basic biological needs, thus freeing us of any obligations to work at all. In Keynes' post-economic utopia supply and demand will dissolve away — much as they do in the aftermath of Karl Marx's "proletariat revolution." In a world where labor is automated and capital resources are widely available, "it will be those peoples, who can keep alive, and cultivate into a fuller perfection, *the art of life* itself and do not sell themselves for the means of life, who will be able to enjoy the abundance when it comes." Keynes is careful to note that this future will take a long time to materialize, writing that our work ethic and "intense purposiveness" will remain strong within us for many generations. But ultimately labor will go the way of the lamplighter and we will be left to pursue the art of life in days of complete leisure.



John Maynard Keynes — (1883–1946)

To really get to the bottom of Keynes' essay, you need to understand his taxonomy of biological needs. Keynes thinks human needs are twofold. He claims that we feel "absolute needs" — preconditions for biological survival and psychic stability — regardless of the circumstances of our fellow human beings. We also feel "relative needs" to be *superior* to other human beings...what Hegel called the "dialectic of lordship and bondage".⁴ Although our cravings for relative status are infinite and insatiable, our absolute needs have natural limits — adequate shelter and food supply, companionship, and possibly entertainment. For Keynes the "economic problem" consists in adequately covering these basic needs for the entire human population. He writes, "We have been expressly evolved by nature — with all our impulses and deepest instincts — for the purpose of solving the economic problem."

⁴ Hegel, G.W.F. "Phenomenology of Spirit." Trans. A.V. Miller, Oxford U.P., 1977 [1807].

Unlike Keynes we think that our needs are mostly relative in principle. The human outlook is deeply grooved with assumptions of scarcity at the level of the human genome. From the perspective of evolutionary biology we are wired to assume that calories, sexual reproduction, bodily security and companionship are scarce goods. Keynes' taxonomy of relative and absolute needs isn't useful in thinking about genetic determinants on human behavior, because from the perspective of the gene all of our desires are limitless. It is a wonder that this idea was lost on Keynes, who famously described market decisions as the result of spontaneous urges in the form of "animal spirits"! Instead, there are infinitely many ways in which we can improve our societies, as befits our finite, corporeal nature.

There is always something to fix, improve, create or amplify. Therefore, labor is not a zero-sum game of working the precise amount necessary to satisfy a limited set of natural desires for food, shelter, security and community. If it were, most of the Western world, staggeringly wealthy by historical standards, would surely have stopped working hard in the early 1900s. The distinction between the "developed" and the "developing" worlds is a false dichotomy — the difference is not a matter of kind but of degree. We are all developing towards a more prosperous future. In other words, Keynes' "economic problem" should be recast as a perennial challenge: how can we improve our circumstances on earth *today*? While Keynes gets the evolutionary story partly right, he draws the wrong philosophical implications.

“Temporary spates of technological unemployment will be followed by golden eras of human liberation.”

⁵ Nietzsche, Friedrich. "On the Genealogy of Morals." Ed. Walter Kaufmann. Trans. Walter Kaufmann and R.J. Hollingdale. New York: Vintage Books, 1989. Section 1.13

We intrinsically crave heightened sensual experience, superior physical health, a richer understanding of our world, and elevated artistic achievement — as well as more extensive peace, prosperity and justice for our fellow man. It is in our nature to continue to climb. This drive has gone by different names in different times; for the Platonists it amounted to a *telos* of divinity, for Nietzsche it was a secular "will to power."⁵ Buddhist and Stoic traditions counsel a repudiation of these earthly drives — and there is much to say for a wisdom of detachment. But for those who choose to remain engaged in the world, hard work is a clear path to human flourishing. It is no surprise that great thinkers have often commented on the way in which meaningful work determines a person's self-respect. John Rawls, for instance, argued that the lack "of the opportunity for meaningful work and occupation is destructive not only of citizens' self-respect, but of their sense that they are members of society and not simply caught in it."⁶ Work empowers us not only to survive, but also to thrive; to improve the lives of others by inventing new solutions to social problems even as our own lives are enhanced by others' creativity.

Keynes' "needs-satisfaction" paradigm is an impoverished way of thinking about our place in the world. Levels of humanitarian engagement with developing countries are soaring in Europe and the United States, even as we work to improve our own societies. We are creating new and more varied forms of art, cuisine, and entertainment as technology and wealth free up people to exercise their creative ability and help others. Keynes' mistake was to miss the unbounded spirit of progress animating these developments. There is much more we can do to improve the condition of humanity, at home and abroad. Over the course of the next century,

⁶ Rawls, John. "The Law of Peoples: With, The Idea of Public Reason Revisited." Harvard U.P., 1999.

technology will lift most people out of poverty as currently-defined, satisfying the material needs of the global population in creative and more efficient ways. We shouldn't lose sight of the fact that true poverty in 1916 was far worse than most "poverty" in the 21st century. If we are able to maintain a society which holds fast to the Western tradition of markets and property rights, we will continue to foster innovation and economic progress.

In the coming years, new jobs will be created in industries that require the cognitive skills of creativity and intense analytical reasoning, as well as in areas where human contact is at a premium. We will see an explosion of jobs in health and senior care, professional coaching of all kinds, e-marketing, and an expansion of executive assistant and chief of staff roles catering to the needs of our swelling upper-middle class. The mechanization of rote tasks will allow Americans to focus on the distinctly human advantages of complex sensorimotor skills, social intelligence, and lateral thinking. Work in the 21st century will be more fulfilling for Americans than the manual labor and "human middleware" jobs that characterized the last half of the 20th century. Temporary spates of technological unemployment will be followed by golden eras of human liberation in which we channel our talents towards improving our society in unforeseen ways.

There is much to be said for Keynes' vision of the world. His macroeconomic calculations were startlingly accurate, and we admire his optimism about the possibility of creating conditions in which all human beings can live healthy, meaningful lives. He was correct to identify technological unemployment as a true social problem. But in conclusion we would do well to remember that Keynes' central view in *Economic Possibilities for our Grandchildren* has not withstood the test of time. We are the grandchildren and great-grandchildren of Keynes'

generation. Yet here in the 21st century — several factors wealthier than Keynes' generation in real terms — we are more fully ingrained in a global economic order than ever. We believe that as the automation of old jobs continues, people will find new and exciting ways to employ their distinctly human faculties. In the spirit of progress, we will continue to transform the world around us into a more beautiful, plentiful, and empowering place. Only in so doing will we cultivate *the art of life* to its most vibrant expression.

This is the first installment in a two part series. Here we unpack the philosophical and evolutionary assumptions at work in the debate over technological unemployment. In Future of Labor II, we discuss the economics of new job creation and chart several industries of the future which will create employment opportunities for American workers. Future of Labor II was published by WIRED and can be read here.

Is the end of labor nigh? Here are a few well-known philosophers and economists who all mistakenly thought so:

Aristotle, "Politics." Trans. Benjamin Jowett, 350 B.C.E. Book 1, Part IV.

"The servant is himself an instrument which takes precedence of all other instruments. For if every instrument could accomplish its own work, obeying or anticipating the will of others, like the statues of Daedalus, or the tripods of Hephaestus, which, says the poet, 'of their own accord entered the assembly of the Gods'; if, in like manner, the shuttle would weave and the plectrum touch the lyre without a hand to guide them, chief workmen would not want servants, nor masters slaves."

Mildmay, (Sir) William. "The Laws and Policy of England: Relating to Trade, Examined by

the Maxims and Principles of Trade in General; and by the Laws and Policy of Other Trading Nations.” 1765.

Under these circumstances the following proposal may be offered to our consideration namely, that since the price of a manufacture depends so much on the wages paid, and the numbers employed in making it, so consequently the fewer that shall be employed about it, the cheaper will be the manufacture: no in order to complete a work by few hands, engines and machines are contrived to supply the place of a greater number...here it may seem strange that in a discourse concerning the benefit of employing our people, a recommendation should be offered of that which must destroy the necessity of their labour: all that can be alleged in answer to this is that since other nations do make use of such engines and are thereby enabled to offer their productions at a low rate, it is in vain for us to preserve in toilsome methods.”

Mortimer, (Sir) Thomas. “The Elements of Commerce, Politics, and Finance: In Three Treatises on Those Important Subjects.” 1772.

“But the machines I never wish to see introduced into a commercial nation, (which is required to be fully peopled, that is, to have a sufficient number of hands for all the classes of life already described) are saw-mills, and inventions of that stamp, which are calculated to exclude the labour of thousands of the human race, who are usefully employed in dock-yards, in those of timber-merchants, private ship, and house-builders, cabinet-makers, etc. A more pernicious scheme could not be devised...It is possible there may be counties in England where one such machine might be wanted, from the scarcity of hands for other branches; but surely every other expedient should have been first tried...”

Kay-Shuttleworth, (Sir) James. “The Moral and Physical condition of the working classes

employed in the cotton manufacture in Manchester.” 1832.

“Population, nevertheless, increases the supply of labour in at least as great a ratio as the demand existing under a restrictive system. Every invention, therefore, which diminishes the quantity of labour necessary to produce the objects of barter, lessens its price, and excludes, for an indefinite period, a great part of the population from employment. By this system the profits of capital are increased, though not in the same ratio as the wages of labour are for a time diminished.”

Ricardo, David. “Principles of Political Economy and Taxation,” 1817. Chapter 31. On Machinery

“I am convinced that the substitution of machinery for human labour is often very injurious to the interests of the class of labourers...the same cause which may increase the net revenue of the country, may at the same time render the population redundant and deteriorate the condition of the labourer...as the power of supporting a population, and employing labour, depends always on the gross produce of a nation, and not on its net produce, there will necessarily be a diminution in the demand for labour, population will become redundant, and the situation of the laboring classes will be that of distress and poverty...the opinion entertained by the laboring class, that the employment of machinery is frequently detrimental to their interests, is not founded on prejudice and error, but is conformable to the correct principles of political economy.”

Marx, Karl. “The Grundrisse: Fragment on Machines.” 1857.

“Capital advances the worker the wages which the latter exchanges for products necessary for his consumption. The money he obtains has this power only because others are working alongside

him at the same time; and capital can give him claims on alien labour, in the form of money, only because it has appropriated his own labor. This exchange of one's own labour with alien labour appears here not as mediated and determined by the simultaneous existence of the labour of others, but rather by the advance which capital makes. The worker's ability to engage in the exchange of substances necessary for his consumption during production appears as due to an attribute of part of *circulating capital* which is paid to the worker, and of circulating capital generally. It appears not as an exchange of substances between the simultaneous labour powers, but as the metabolism of capital; as the existence of circulating capital...capital here — quite unintentionally — reduces human labour, expenditure of energy, to a minimum. This will redound to the benefit of emancipated labour, and is the condition of his emancipation.”