



Dispos^aible Labour and Structural Unemployment

Society faces deep transformations as robots
steadily displace people at work

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THE PROSPECT OF LONG-TERM, PERHAPS PERMANENT MASS UNEMPLOYMENT IS becoming real. In the USA, the economic recovery has not produced a satisfactory regrowth in jobs. In Southern Europe, “austerity” takes its toll. The Pope has spoken of the evils of a “disposable culture,” in which the unemployed, along with the young and the old, are discarded (McClure, 2013). But if that is to be our future, what are its consequences, for those affected and for all of us? The problem is at last being recognised, with a spate of articles in both general and specialised media (Arthur, 2011a; Freeland, 2012; Nourbakhsh, 2013) and some reflective books (Brynjolfsson and McAfee, 2013; Muehlhauser, 2013). Their message is sufficiently clear, but it tends to be focused on immediate trends in replacement of jobs by robots. We need a deeper analysis of its technological roots and its political and cultural significance.

For some time now, permanent unemployment, particularly among the young, has been bad in all the European countries and is, of course, worst in the South. It is totally endemic in the Arab world. This time the unemployed are not being officially blamed for their plight, perhaps because so many of them come from previously secure, educated families. The

devastating consequences are fully appreciated, but aside from palliative “make work” or training schemes that depend on jobs being available, nothing is being done because nothing can be done. For a time, it was hoped that “growth” would solve the crisis, but now that “growth” itself is problematic, that idea too has faded.

What will the social world be like when we have had generations growing up without hope? There have always been some on the fringe of advanced, prosperous countries, recognised as a hard core of the multi-generation unemployed, perhaps unemployable people. Now we will have many of them, educated, articulate, not proposing to blame themselves, and who are well aware of how the social order is ruining their lives. The campaigns of “indignation” will develop a very clear focus. How it will play out politically is at this point impossible to predict; but the presence of a totally alienated large and growing minority, which moreover possesses advanced intellectual and practical skills as well as roots in the elites, is a recipe either for deep instability or for radical growth, or both.

Where there are no matured institutions to cushion the effects—material, social, and spiritual—of permanent unemployment, the reactions of the youth will be even more strident. Some will doubtless adopt simplistic solutions, political or religious. But in their debates, there can develop new understandings of the characteristic contradictions of modern market society, where the “cash nexus” serves to annihilate those without a legitimate claim to the cash, called a “job.” Religion and spirituality might well enter in these debates, as the plausibility of a dehumanised cosmos, interpreted in a dehumanised social vision, becomes challenged. Certainly, the “pie in the sky” solution of established churches will not gain support.

To gain perspective on the present problem, we should first recall that unemployment is not a new thing. It coexists and blends in with underemployment and working poverty. Throughout the history of civilisations, inequality, oppression, and expropriation, even enslavement and annihilation, have been the dominant story. In recent decades it seemed that “full employment” had been achieved, and so it became a right to be guaranteed in any society that thought itself civilised. But even this may have been due, in large part, to the special conditions of the earlier post-war period in the Euro-American Empire. Once the supply of cheap energy had stopped

when the oil suppliers took advantage of America's defeat in Vietnam and OPEC created a real market, the advanced economies went into a stasis that was masked by debt, speculation and eventually swindles on a global scale. Before then, there are memories of Depression, and of the miseries of industrialisation with Marx's "reserve army of the unemployed."

We might therefore see the present spasm of structural unemployment as something "normal" for capitalist economies. It would seem that just as the production of food and fibre on the land has required an ever decreasing proportion of the population, now the production of all commodities is able to dispense, increasingly, with human producers. Putting it crudely, jobs have been rapidly disappearing in most of the advanced economies, thanks to the increasing contribution of robots and coolies, the unskilled manual workers. The former take over ever more of the tasks involving information, and the latter are quite competent to do the more manual jobs, even using high-tech tools. In China now, with its growing shortages of skilled labour, the coolies are using more robots, and will doubtless eventually be swallowed up by them. How long will it be before an automated machine fastens a piece of cloth to a form and then cuts and binds it into a garment, even more cheaply than any human could afford to do? Then what?

Of course this process of displacement has its own history. It is best chronicled in the case of the independent textile workers of the earlier Industrial Revolution. Their skills and independence were progressively destroyed by the progress of mechanisation that moved from one phase to another of the process of turning fibre into clothes. And then those that survived in the mills were eventually made redundant when the machines were sold to the colonies, where cheaper labour was just as effective. Of course, clothes became cheaper everywhere, and so long as a European worker had a job, he could dress quite well. Some, including Karl Marx and Henry Ford, saw that the problem was not overproduction but underconsumption; and Ford had the insight to pay a wage that enabled his employees to buy the cars they were making! But not everyone could get a job for Ford, and the current fate of Detroit, as an icon of the American rustbelt, reminds us that the structural problem is deeper than Ford imagined.

How are we to make sense of it all? Marx had a vision of the structural

problem, when he spoke of the contradiction between social production and private appropriation. This manifested in the difference between the amount produced by the worker, and the amount he could buy with his wages. For (and this is the core of Marx's theory), his labour-power is a commodity in a market, and it is (in the long run) worth only as much as is needed to reproduce itself. This can be more than brute-level subsistence, especially for work involving any measure of skill. But under modern conditions of production, it will always be less than he produces! So, in aggregate, in this very simple model, there will always be under-consumption, seen as overproduction, and hence periodic crises in "the business cycle." Only a visionary like Henry Ford could try to correct the imbalance with high wages, and his vision collapsed when his workers wanted to have their union rather than depending on his personal benevolence.

Marx appreciated the significance of capitalist enterprise, not only more productive than ever before but also constantly self-transforming toward greater productivity. And through most of his career (after 1848) the leading European societies seemed to cope with their essential contradictions. In spite of periodic crises, the condition of the masses was improving through later Victorian times, thanks to technology, both in cheaper commodities and in public-health reforms. But the First World War and the Depression showed that something still seriously needed correction. And then came a pace of development that would have astounded even Marx: information technology, described by Moore's Law, with a doubling of just about everything every year-and-a-half. This is the key to the working out in our postnormal times of Marx's root contradiction of capitalism, and it is worth considering some responses.

The role of revolutionary technology in eliminating employment has been analysed by George Spencer. According to him, the key difference between the technologies of information and all previous technologies is that this one is independent of any particular material realisation (Spencer, 1996). It is about pure control. No particular properties of matter or energy, as in earlier technologies, set limits to its powers; hence in principle there are no limits. This means that any "job" that involves the routine processing of information can in principle be replaced by the computer-driven machine. Spencer gives no time-lines and made no predictions. Those are to be learned empirically, and that is what we are starting to do now.

A clear statement of the prospect has come from the distinguished philosopher of economics, W. Brian Arthur. In a recent exchange on “structural joblessness,” he gives a vivid image of the effects of the new technology: “Certainly in advanced economies, automation and digitization are like an ever-rising-tide causing whole categories of jobs to disappear under water. What is left are islands of jobs—being a lawyer, or medical diagnostician, or scientist, or musician, or therapist—that require intuition and human judgment. When computers eventually develop these faculties, the waters will rise still higher.” He goes on to say: “I hope jobs will be created, and maybe they will. More likely, the system, as so many times before in history, will have to readjust radically. It needs to find new ways to distribute the wealth” (Arthur, 2011b). It was not part of his remit to discuss how “the system” could accomplish this task.

If we keep Spencer’s explanatory thesis in mind, we are better able to appreciate some earlier visions that provide perspective on the problem. The first is from Norbert Wiener, one of the founders of “cybernetics” and control theory, and himself a visionary and prophet. The title of his popular book tells it all: *The Human Use of Human Beings* (1950). He was well aware that throughout the history of civilisation, the conditions of productive work made life “nasty, brutish, and short”—although not solitary as in Hobbes’ model. With the new technologies that degradation would no longer be necessary. Hard physical labour, as in digging, loading, and carrying, would be done by machines, and dangerous or polluting factory environments would be sealed off from humans. A similar vision with an explicitly social dimension was expressed by Murray Bookchin in his *Post-Scarcity Anarchism* (1971). Wiener was not naïve about the prospect; in his *God and Golem, Inc.* (1964) he warned of the selfish and irresponsible use of the powers of science. Since he claimed descent from the legendary Rabbi Loeb of Prague (the master of the Golem), Wiener was particularly sensitive to the possibility of evil applications of scientific power.

It only takes a small shift in perspective to change from Wiener’s guarded optimism to Orwell’s pessimism in *Nineteen Eighty-Four* (1948). That scenario can be seen as a sort of social thought-experiment in a particular solution to Spencer’s problem: how does a ruling elite survive when the progress of technology has created the conditions of plenty for all, so that there is no reasonable objection to an egalitarian society? The answer is

simple: create artificial scarcity, through a permanent war society. And the politics of permanent war creates the perfect conditions for a totally repressive society, one where Big Brother always sees you through the ubiquitous TV screen. The masses are kept going at a level rather like Marx's reproduction standard, and they are manipulated in all dimensions through the Ministries of Truth and of Love. There is a price to be paid for such social stability. Not only are freedom and dignity destroyed, but the system requires historical reality to be denied. The protagonist Winston Smith had the job of retouching photographs and sending the unwelcome earlier versions down the Memory Hole. By the end, it seemed that the Inner Party needed not merely doublethink, but even a denial of reason: if Big Brother needs $2 + 2$ to be equal to 5, then that's what it has to be. Social stability in the age of structural unemployment can come at a very high price.

Up to now, such extreme measures have not been necessary. The "blacklist" is well known in free-market societies, whereby trade union activists can be kept away from their intended recruits in the workforce. Where the State regulates employment, it is even easier. In the Stalinist countries, dissident intellectuals would be assigned to menial jobs designed to kill their spirit. And in the bureaucratic-market societies where possession of a job is necessary for an adult existence in the systems of social security, denial of a job renders the victim a non-person as much as an unwanted asylum seeker. All such methods of social control are easier to apply under conditions of permanent mass unemployment. For then even the limited possibilities of the informal economy are more difficult to access.

Although such situations would require an imaginative exercise for readers in the rich countries, elsewhere some elements of them are all too realistic. In these, unemployment is just another component of a total syndrome of indignity and oppression in every aspect of life, of ordinary people in the grip of corrupt dictatorship. It was this coherent totality of death in life that led to the protests and revolutions of the Arab Spring. But regardless of how it works out in particular locations, we can be sure that a failure to solve the unemployment problem, regardless of progress on the political front, will eventually produce disillusion and alienation on a mass scale. In today's world, Zbigniew Brzezinski notes, "the millions of university students are thus the equivalent of Marx's concept of the 'proletariat' the restless, resentful post-peasant workers of the early industrial age, susceptible to

ideological agitation and revolutionary mobilisation” (Brzezinski, 2012). Brzezinski does not dwell on the key political difference. Marx’s proletarians lacked the instruments and skills of sophisticated coercive action, and so could be outmanoeuvred and defeated nearly all the time, except when the State was already collapsing as in Russia. Now the “indignant” computer-savvy graduate “precariat” is defined by just those skills, as we saw in the early stages of the “Arab Spring.”

We have considered the structural aspects of modern capitalism that might then come up for debate among these new proletarians; and there are others to be reviewed. We can ask the question that is certain to be raised in these debates: is there really something so special about being human that to achieve that status a person has to possess a ticket called a “job”? Viewed in its world cultural context, the cash market for labour is really very much a minority scene. Leaving aside the lessons of history and anthropology, even in modern societies there is much essential labour that is performed outside the market sector. Within households the tasks are defined and carried out without cash transfers. Occasionally issues are raised about the exploitation of unrewarded workers, be they mothers of the young, or the “carers” of the elderly whose contribution could simply not be paid for by the State systems. The most fervent advocates of the market do not recommend that such services be monetised; it would simply cost too much.

Contrasting the two sectors, we get some paradoxes. If a man cannot “find work” on the cash market, he is left in demoralising idleness; but a parent who is prevented from taking paid work because of childcare responsibilities is generally recognised as doing an essential job. By contrast, the economists’ estimates of the “value” of the work of a housewife normally put childcare down near the bottom of hypothetical wage rates, since on the market those jobs are normally performed by vulnerable people for a minimum wage or less. Considering society as a whole, the essential contribution of the voluntary and charitable sectors to social welfare is well recognised (and also exploited by the State ever since Margaret Thatcher in England). Their organisations are partly marketised in all sorts of ways (since jobs in the non-profit sector are a recognised step in the upward career progression); but without a governing non-market ethos, they would soon go corrupt and die.

The point of these examples is that even in modern market economies, society depends on a non-market labour sector for its wellbeing, even for its survival. The situation is reminiscent of that in the state-socialist countries, where the essential contribution of women to the planned workforce was enabled by the grandmothers doing child-minding for free. We can approach the conclusion that the necessity of “jobs” is to some extent, perhaps quite considerable, an artefact of a particular social order. And when it works badly, as now, it is a sign of a defect or pathology in that social order. In the case of unemployment, it is where human labour has been commodified as labour-power as Marx put it; and when it cannot be profitably bought it is, as the Pope Francis said, just disposable. In both of these cases, there is an ideology of contempt for the traditional virtues that have made civilisation, with all its defects, bearable and sometimes even creative.

With this civilisational perspective in mind, we can review some critical insights that were developed even before the present set of contradictions emerged. Foremost among these is Lewis Mumford, who started off as a great optimist, contrasting the sophisticated, clean electricity-based “neotechnic” of the twentieth century with its crude, barbarous “paleotechnic” antecedent. But the happy perspective of *Technics and Civilization* (1934) eventually gave way to a gloomy view. The essentially dehumanised bureaucratic society of the “megamachine,” from the pharaohs to Stalin, becomes devoid of ethics and capable, as we have seen, of the worst inhuman behaviour. Mumford’s politics was well expressed in the title of another book, *The Pentagon of Power* (1970). In such societies, the threat of universal plenty has a rational response in *Nineteen Eighty-Four*. And structural unemployment would not have surprised Mumford at all.

What to do about these dehumanising, self-destructive tendencies of modern technological civilisation is not so easy to determine. I must tell an anecdote conveyed to me by a Professor in the German Democratic Republic, one of the great “capitalism-socialism” jokes. In this one, capitalism is likened to an express train, going at top speed without a driver, heading through a storm toward a river gorge with a washed-out bridge; “and the mission of Socialism is to catch up!” There can be inspiration from the writings of Jacques Ellul, who saw “la technique,” or really our making of means into ends, as the characteristic sin of our civilisation. And there is Ivan Illich, who didn’t attack unemployment as such, but who, in the

manner of the great prophets of the past, conveyed a vision of a society that could be truly “convivial.”

Such profound visions should not obscure the practical steps that can be taken, which could make a huge difference to individuals and societies. One of Franklin D. Roosevelt’s greatest achievements was the Works Projects Administration, which provided socially useful jobs for millions of Americans during the depression. Such a programme could be combined with a Guaranteed Minimum Income. Of course, there would be inconsistencies and anomalies at the borders with the market wage system, but such problems will always occur when the poor are kept above the semi-starvation level. Practical ideas such as this one are now coming into discussion. But it is unlikely that they will be adopted in practice simply as the result of rational debate. Total systems of value and of privilege will be involved. In the past there have been great movements of moral and political protest against particular cruel and dehumanising institutions. Slavery is the obvious case; but witchcraft is another. In the later twentieth century, moral indignation, allied to a non-violent conception of the good polity, became a great driving force. This was behind the campaigns against nuclear weapons, which, although they failed in the short run, did change the consciousness of generations. The “peace” symbol was everywhere, from civil rights and anti-war protests, to movements for the liberation of all sorts of oppressed beings, including whales and rainforests and now the unemployed.

Let us imagine that structural unemployment comes to be broadly accepted as a moral outrage, a totally unnecessary situation where people, families, and communities of all cultures and classes are deemed disposable by a socio-technical system run by and for the elites. Then, the choice between *Nineteen Eighty-Four* and a cooperative commonwealth could become clear. What would be done about it is the big question for our century.

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