

Georgios Stamatis

The Automation of Production and the “End of Work”

The position concerning an ‘end of work’, according to which the consequence of the continuing automation of production will be that the production of the social product will no longer require any labor, is not a new one. The persistence with which it is currently being propagandized is however novel.

It is quite clear that, if this prospect were a realistic one, then in that society of the future in which automation would have progressed so far that the production of the social product did not require any labor, there would no longer be any income from paid labor, i.e. wages, but rather the entire social product would consist only of the ‘profits’ of the owners of the means of production. But these profits would no longer have as their source the labor expended by workers to produce that part of the net social product appropriated by the entrepreneurs, but rather the ‘activity’ of the fully automated machinery. Such a model of production is by no means new. A great economist of the late 19th and early 20th century, Dmitriev, had put forward the idea of a theoretical model of production without human labor, a model of production with only animal labor. History had already made us familiar with such a model, namely slaveholding. For slaves were not *personae* (persons, human beings) but *res* (things). We can therefore have production without human labor if we regard workers as animals or transform them into things, i.e. slaves.

Thus, the only ‘human’ possibility of production without human labor is that promised by automation. This prospect is suggestive of the technological method for achieving a communist society* – and this is precisely how it is propagandized.

* As far as we know, Marx deals with the automation of production only in *Grundrisse* (Karl Marx, *Grundrisse der Kritik der politischen Ökonomie*, Europäische Verlagsanstalt Frankfurt, Europa Verlag Wien, n.d., pp. 582-590). The subject of this paper is not the Marxian treatment of automation of production. However, there is a specific reason why we are obliged to briefly and indirectly refer to this. In the past, when referring to the aforementioned Marxian treatment of automation of production, some writers maintained that, according to Marx, progressive automation would lead to

The questions, which arise in light of this proclaimed prospect, are the following: Will continuing automation indeed lead to a society without labor? If yes, what kind of society will it be? If, however, it turns out that the prospect of a society without labor – as a consequence of automation – is clearly quite unfounded – then why is it being propagandized with such fervor?

Even if automation proceeds at such a pace that certain specific branches of production no longer require labor and if, additionally, the number of these

the end of work and, consequently, also of wage labor and therefore of capitalism and thus bring about a communist society.

These writers mainly cite the following passage from Marx:

"In demselben Maße... beherrschende Form" (Karl Marx, l.c., pp. 587-88)

["To the degree that labour time -- the mere quantity of labour -- is posited by capital as the sole determinant element, to that degree does direct labour and its quantity disappear as the determinant principle of production -- of the creation of use values -- and is reduced both quantitatively, to a smaller proportion, and qualitatively, as an, of course, indispensable but subordinate moment, compared to general scientific labour, technological application of natural sciences, on one side, and to the general productive force arising from social combination [*Gliederung*] in total production on the other side – a combination which appears as a natural fruit of social labour (although it is a historic product). Capital thus works towards its own dissolution as the form dominating production."]

What is Marx saying here? That (as a consequence of the automation of production), firstly, the labor used is reduced quantitatively and downgraded qualitatively so that capital, through automation, undermines its own basis, namely the exploitation of alien labor, and in doing so works towards its own dissolution as the organizational form dominating social production. He does not say that automation will automatically lead to the complete end of labor and, as a consequence, automatically to communism. What he wants to say, he does so quite clearly a few pages later (p. 589) when he writes:

"Durch diesen Prozeß... Emanzipation."

["Through this process, the amount of labour necessary for the production of a given object is indeed reduced to a minimum, but only in order to realize a maximum of labour in the maximum number of such objects. The first aspect is important, because 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 its emancipation."]

So what is Marx really saying here? He is saying that automation will help wage laborers achieve their emancipation from capital (and build a communist society). This may or may not be correct. However, irrespective of whether it is correct or not, under no circumstances does it mean that automation of production will lead to the end of work and consequently of wage labor and therefore automatically to the demise of capitalism and the transition to communism. This is in any case quite clear from the fact that whenever Marx speaks of automation of production, he speaks of the reduction of labor to a minimum, not an end of labor. And not only does he not speak of an end of labor, but, as we saw when he speaks of its reduction to a minimum, he speaks of its minimization in order "to realize a maximum of labour in the maximum number of such objects [i.e. objects produced – G.S.]".

fully automated branches continuously increases – even then there will still always be branches of production which use labor. Even if we have full automation in only certain branches of production – which while not being completely inconceivable, is in the final analysis totally impossible in practice – the number of which continuously increases, we will never have full automation in all branches. For, if all the branches of the economy are without exception fully automated, we would have an overall social process of production, into which certain quantities of goods enter but no quantity of labor enters and from which these same goods exit in quantities equal to or greater than those in which they entered, as well as new goods which up to now had not been produced. This is however, from a physical point of view, impossible. It would be like a game of roulette in which the bank and all the players on each spin of the wheel take more than the bets placed by the players. It would be as if the social product was no longer a produced commodity, but some kind of manna from heaven. As if we had at long last discovered the *perpetuum mobile*. So, one can conceive only of the full automation of some, not all branches.

Let us now assume that, as a consequence of continuous automation, an increasing number of branches become fully automated, without all of them becoming automated. In such a case, the economy will continue to use labor. The question is: what happens here with regard to the absolute figure for employment and what happens with its rate (or, conversely, with the rate of unemployment).

It is known that automation and the consequent increase in the productivity of labor today go hand-in-hand with an increase in employment. This is a consequence of the fact that the social product increases at a higher percentage rate than productivity. So, as the social product increases at a higher percentage rate than productivity, automation will not reduce and certainly will not eliminate employment. What was said with respect to employment holds also for the rate of employment – the only difference being that this depends also on variations in the labor supply. But because the labor supply has nothing to do with automation, we can disregard it. Thus, for a given development in the labor supply, the rate of employment depends only on the – as a consequence of automation – increase of productivity and on variations in the social product. Consequently, it can rise despite increasing automation and productivity. And at all events, increased automation and productivity do not constitute, in general, a cause for a continuous reduction, let alone elimination of the rate of employment. Naturally, they may bring

about, in combination with an increasing labor supply and a more or less static social product, its reduction. This however is a widely known possible repercussion of the usual increase of productivity.

But even if we accept that automation will lead to full automation of all production and therefore to a laborless society, this society of ‘the end of work’ will entail, for all the non-owners of means of production, a much more onerous social situation than that entailed by present-day society for today’s non-owners of means of production, who look for but do not find work, i.e. today’s unemployed.

It will hold in store for all the now non-workers, non-owners of means of production, i.e. for the overwhelming majority of its population, the fate held in store by present-day society for a relatively small percentage (approximately 10%) of all the non-owners of means of production who are available for work, i.e. the unemployed. This large chunk of its population will live worse than today’s unemployed. Because what will it live on, given that the only possible income will now be the income appropriated by the owners of the automated means of production, for the operation of which labor will not be necessary and consequently wages will not be paid?

If this is the case, then why do neo-liberals propagandize with such ardor the prospect of ‘an end of work’? Quite simply because it serves a number of purposes which are very important to them. It presents the situation in which approximately 10% of those who are able, are obliged and therefore want to work, but do not work because they cannot find work, i.e. the situation of unemployment, as a desired (by the unemployed themselves) beneficial consequence of automation, as a first, perhaps painful, but necessary stage in the – through automation – transition to a laborless society of the blessed. In other words, it is an ideological argument – decidedly religious in nature – that the present-day misery of unemployment is nothing more than the first step towards a future ‘promised’ society.

According to the above, the position that automation today reduces employment, which Rifkin sets out in his book for the layman ‘The End of Work: The decline of the global labor force and the dawn of the post-market era’ (Putnam Original, NY, 1995) is false. In spite of the automation processes which he eloquently describes, employment is not falling but rising, because the percentage increase of the social product is – despite its small size – greater than that of productivity. (The problem today is that productivity is increasing only slightly, not that it is increasing at such a rate that it threatens to eliminate labor and lead us, whether we like it or not, to communism).

The fact that unemployment and the rate of unemployment are rising simultaneously is, of course, another matter. This is simply the consequence of the fact that the percentage increase of the labor supply is greater than – by the percentage increase of the productivity of labor reduced – the percentage increase of the social product, that is, greater than the positive percentage increase of employment.

The issues relating to the repercussions of automation on the organization of the labor process, labor conditions and labor relations are most certainly of great importance also. But these issues are the subject-matter of technologists and sociologists.

Author: Prof. Georgios Stamatis, Kountouriotou 10A, 15562 Cholargos, Athen, Griechenland.