

Neoliberalism versus Neolaborism: Dystopia versus Utopia and the future of civilization

Luis F. Copertari

Computer Engineering Program.
Autonomous University of Zacatecas (UAZ).
Zacatecas, México.

ABSTRACT

The ideas of neoliberalism and neolaborism are illustrated using very simple and clear models of reality. What used to work about thirty years ago is no longer valid. Technological incorporation into the economy is forcing us to propose a novel way in which the economies of the world should be managed. The excesses of neoliberalism are leading to a troubling dystopia. Neolaborism, on the other hand, is a new way to approach socioeconomic and political reality, with very practical recommendations and a utopian view of the future of human civilization.

Keywords: Neoliberalism, neolaborism, technology, computerization, productivity, labor.

INTRODUCTION

My wife and I decided to invite our niece to the beach before she committed to her Mormon mission. The important part came later, when we were at the airplane returning home. My wife and our niece sat next to each other on the left side of the plane while I shared the right side of the plane with a stranger. I am very curious and relentless, so I started what was supposed to be small talk conversation. We talked about the oil reforms made in Mexico as well as other matters of interest. At a particular point in the conversation, the man I was talking to said: “do you know what should be done?”. To which I replied: “No, what?”. Then he said: “We should kill all poor people”. For about two seconds of absolute terror, contemplating the simplicity and elegance of such “solution” posed by the way in which things have been going on during the last thirty years or so of neoliberalism, I sat uncomfortably quiet, having nothing to say about it. Then, with a sudden explosion of laughter, I said: “you cannot kill all poor people, you would never be done, because more poor people would pop up”. Regardless of the ethical considerations of no particular relevance in this case, this idea is precisely what the current socioeconomic and political trend of neoliberalism and globalization is going to lead us to. Killing people because they continue to reproduce having no increase in their productivity while at the same time keeping the money offer stable is precisely the dystopia the current way of affairs is taking us towards. This trip was the beginning of the end in the way I thought about the world. This paper is about the ideas I was forced to come up with in order to offer a reasonable and sound response to the “kill everybody” idea.

Neolaborism is a theory proposed by Copertari (2017) which argues that what really matters in an economy is not its Gross Domestic Product (GDP), but rather the total amount paid in the economy for salaries (to workers) and utilities (to investors). This is seeing the economy as a double-sided coin: the GDP which is the aggregated value of all the prices times the corresponding products produced in an economy on the one hand, and the money paid and circulated in the economy on the other hand. Neolaborism states that what matters is not the value of what is produced but rather the amount paid in salaries and utilities in an economy.

My aim in this paper is to easily explain my ideas using simplifying models of reality that not for being simple means they are less accurate.

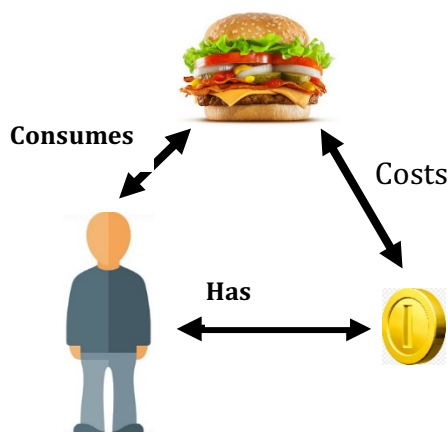
A MODEL FOR SOCIOECONOMIC REALITY

I am an engineer and a scientist. As a scientist I aim to seek the truth. As an engineer I crave for practical solutions to problems. The theory on Neolaborism (Copertari, 2017) attempts to provide an academic response to this challenge. This paper, however, attempts to clarify things by simplifying (but not reducing) reality in order to clearly explain my ideas.

We need to portray reality with a simplifying model, without losing important details while doing so. Suppose for a moment that the entire population of the world is represented by one person. Also, suppose that the entire money offer in the world is represented by a one-dollar coin¹. Finally, the entire production of the world consists of one hamburger. In this case, the person portrays everybody: people with employment, people without employment, students, entrepreneurs, government officials, politicians, children, the elderly, and so on. Also, the one-dollar coin represents all of the money offer in the world. And the hamburger represents the entire production of all goods and services in the world (see Figure 1).

Thus, the hamburger costs one dollar, which the person has because he works in order to produce such hamburger, which he/she is able to pay as a result of receiving his/her salary (or profit). So far, so good.

Figure 1. The starting simplifying model of the current socioeconomic order in the world.



NEOLIBERALISM AND INFLATION CONTROL

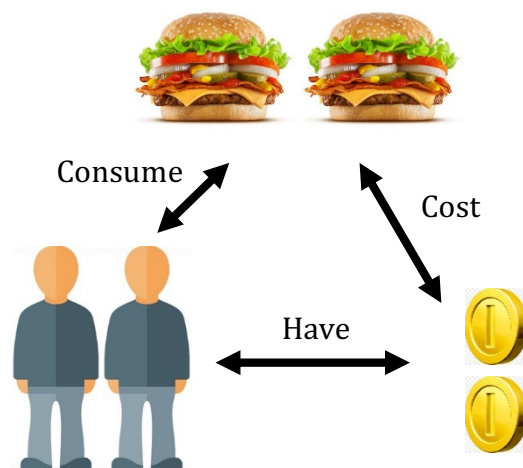
Neoliberalism (Harvey, 2005), which is the socioeconomic and political philosophy of more than the last thirty years, used to work just fine during the 80s and peaked during the 90s and perhaps even part of the 2000s, but it is certainly showing signs of exhaustion during the 2010s (Harvey, 2014). Nevertheless, let us not forget that Reaganomics propelled the western world to “victory” over the Soviet Union (its collapse) and the ideas surrounding communism based on a totalitarian regime. More importantly, it marked the end of the “iron curtain” and the Cold War. But the Cold War has been over for about two decades now.

What has Reaganomics promoted? It freed market forces to produce as much as they can with the available technology. In terms of our simplifying model, it increased production while keeping demand relatively constant. In an ever increasingly globalized world, with fierce

¹ It is of no relevance whether one-dollar coins exist or not. In this case they simply represent money.

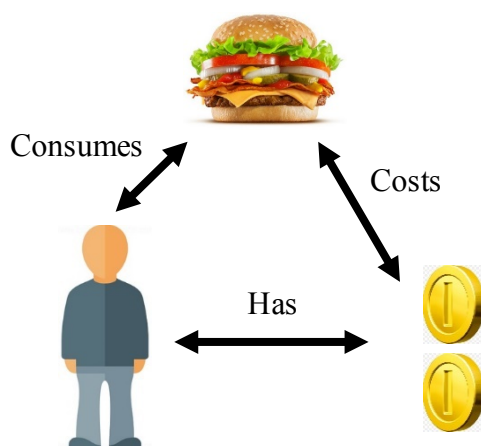
competition and free markets everywhere, outsourcing even the smallest parts of the production system, neoliberalism has reached its peak. It is time for change. But, what change precisely? Figure 2 illustrates neoliberalism properly working. The population doubles, which results in doubling the production of goods and services and allows duplicating the money offer without causing inflation. Figure 2 is basically the same as Figure 1 with the exception that there is a doubling of everything.

Figure 2. Neoliberalism properly working.



The key concern in neoliberalism is to avoid inflation by keeping the money offer down. What would it happen if the money offer doubles having the same population and the same production, as illustrated in Figure 3? Well, now we have two dollars made and earned by the same person, who still has only one hamburger to consume. Clearly, this leads to inflation, since now one hamburger costs two dollars (see Figure 3) instead of one dollar (see Figures 1 and 2).

Figure 3. Inflation in the typical socioeconomic order.



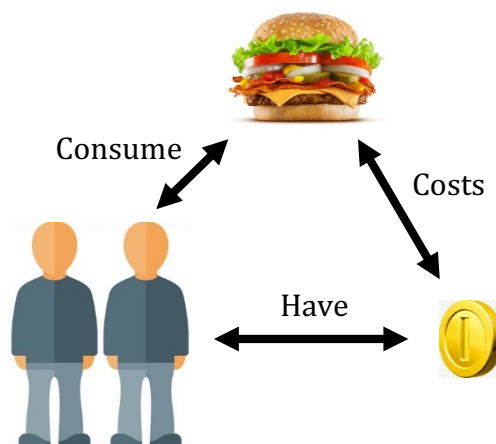
TRADITIONAL GROWTH MODEL EXHAUSTION IN A TODAY'S GLOBALIZED WORLD

The emphasis on keeping inflation under control worked in the past because there was a considerable lack of production. The vibrant and thrusting capitalism of the 80s and 90s basically doubled everything in the system. But now, production plants tend to sit partly idle or at least they have a huge growth potential not being used. The promotion of the supply side of the economy is not working anymore, because in the past there was an excessive demand.

People had an easy way of living and it was easy for people to find any kind of job allowing them to afford a comfortable life. This became the basis for the “American dream”.

But not anymore. People work harder to make the same salary in order to afford the same (if not less) amount of goods and services. This situation is illustrated in Figure 4. Now we have two people with one dollar and one hamburger. Clearly, each one has the right to claim half a dollar to purchase half a hamburger.

Figure 4. The exhaustion of the traditional neoliberalism model in a globalized world.

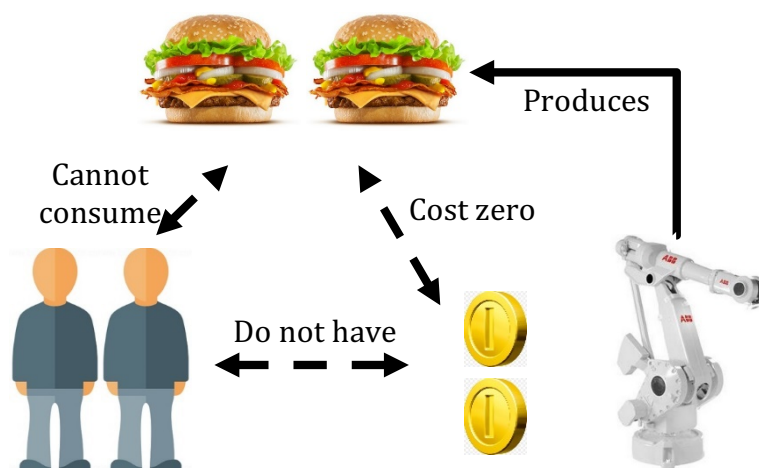


THE DYSTOPIA OF NEOLIBERALISM AND TECHNOLOGICAL IMPROVEMENT

If the *status quo* continues as it is, and as technological improvements, particularly in Artificial Intelligence (AI) and the computerization of the workforce start to substitute human labor (Frey & Osborne, 2013), things begin to look very bad and the idea of “killing all poor people” start to make an awkward sense.

Figure 5 illustrates the dystopia of neoliberalism policy. Now we have two people, two dollars and two hamburgers. However, there is a robot that performs all the labor people used to do in producing the hamburger. Since people are no longer needed, they have no job and, as a consequence, receive no money for their work. For people having no money means nobody can buy the two hamburgers, since the robot requires no payment and no food. We have a situation that should be a utopia: people having money and food without the need for working. Instead, we have a dystopia: people are no longer required as part of the economy and so they become useless. Who would ultimately be in charge and benefit from the work of the machine is not clear, but certainly the reason why I lived through two seconds of complete panic when facing the idea of “killing all poor people” becomes clear.

Figure 5. The dystopia of neoliberalism if the *status quo* continues.

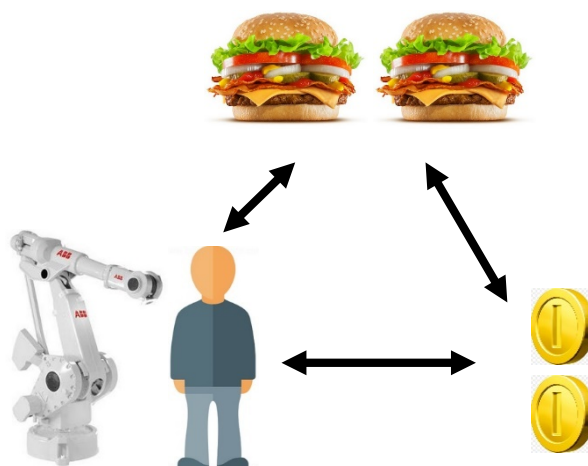


WORKING HOURS REDUCTION: A REASONABLE POSSIBILITY FOR THE FUTURE

What should the solution to the problem posed in the previous section be? Clearly, people should not be left out of the socioeconomic system. People should be empowered by technology, not replaced. If the introduction of technology into the workforce is carried out while people continue to produce, this time aided by technology, which increases their productivity, there should be no problem.

Figure 6 illustrates this alternative situation. Now there is one person producing two hamburgers with the aid of one robot. Since two hamburgers are produced, in order not to have deflation, two dollars exist in this economy. Thus, each hamburger continues to be worth one dollar, and since the robot does not require such product or service, the person now has two hamburgers at his/her disposal. Apparently, this is the best situation, but it is not. Consumerism continues to be promoted. Now there are two hamburgers in the economy, which means more resources (raw materials) are required and more contamination (damage to the environment) is created as a result of an increase in the economic activity.

Figure 6. Merging man and machine in the socioeconomic system.



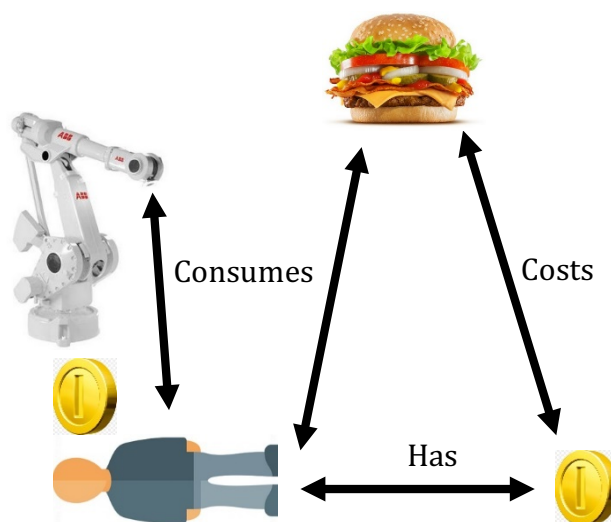
How could we practically reach this kind of situation, even if troubling for the environment? Remember that increasing the money supply (doubling it in this case) while at the same time

increasing production (also doubling it) does not create inflation. Neolaborism proposes that a practical path towards the situation depicted in Figure 6 could be to reduce working hours. If labor time is reduced, say, by half, while productivity is maintained, it means in reality doubling the salary, because now one person can have two jobs paying both the double amount of money they used to while working the same amount of time. Reducing working hours is also a good idea, because people need time to devote themselves to a capacitation program that would empower them in the use of the new technological tools incorporated into the workforce.

THE UTOPIA OF NEOLABORISM

What is a utopia? It is something that people can aim at, without perhaps never reaching it in practice. What is a utopia good for? I know that if I approach my utopia by walking ten steps, the utopia always remains in the horizon by getting farther away by ten steps. So, what is the reason for having a utopia? Precisely that, to keep walking.

Figure 7. The utopia of neolaborism.



The utopia of neolaborism is illustrated in Figure 7. In this case, the person produces one hamburger by working half the time. This case is ideal for the environment because it does not require more resources to produce more hamburgers (just one hamburger is produced). But there is also a robot. In this case, the robot gives massages to the person (having the production of a service instead of a commodity, with minimum impact on the environment). Thus, now the economy can have two dollars without creating inflation. The first dollar is used to purchase the hamburger. The second dollar is used to pay for the massage. Who receives the payment? Well, it would be the entrepreneur offering the service, who in this case is also represented by the one person pictured here. Thus, people can live a better life, the economy grows, inflation is not created, and the environment is not further damaged.

DISCUSSION AND CONCLUSION

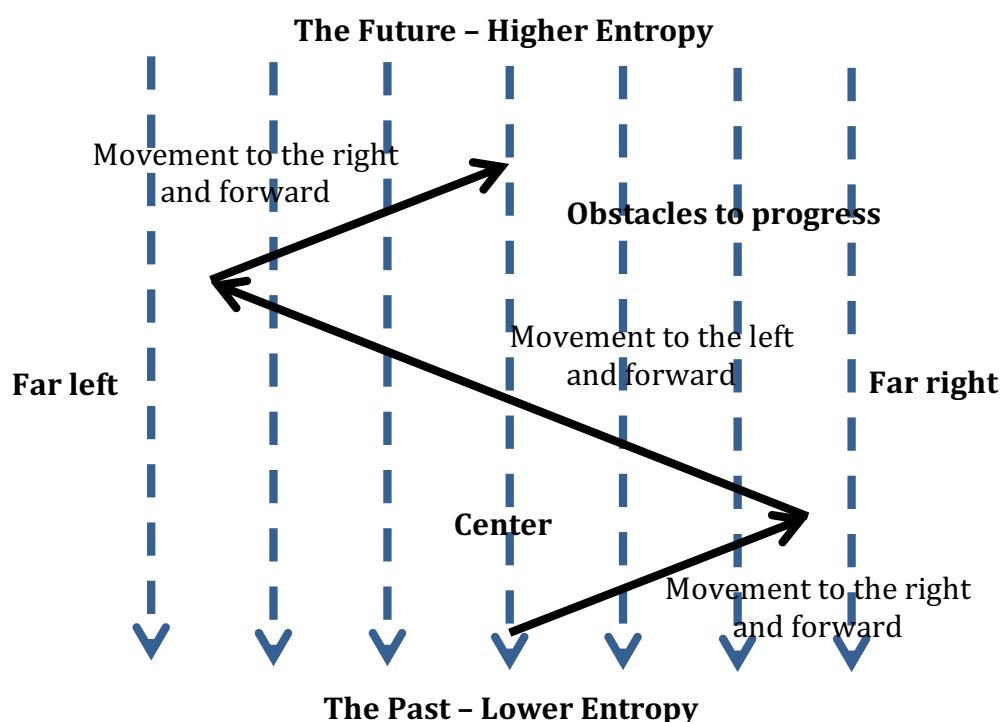
I believe not capitalism nor technology are the problem, that the system can change by changes within the system itself (Reich, 2016). Part of the solution may be innovations in the way money functions (Lietaer & Dunne, 2013; Greco, Jr., 2009). The problem is how we apply technology in a capitalistic system. I think capitalism has the capability within itself to transform its ways into a new form of economy that is not capitalistic nor communistic, but rather blends the advantages of both, while at the same time keeps in control their flaws.

One major advantage in capitalism is the market mechanism. However, the market mechanism requires intelligent guidance that should not become totalitarianism. It is important to continually debate and test new and old ideas. For this reason, a believe a fully functional and healthy democracy is useful, although not indispensable at least not in the short to medium term. Nevertheless, when considering the long term, a democratic system that allows for the peaceful transition from right-oriented to left-oriented governments, and back and forth again, is very useful.

The progress of civilization seems to occur in the same way a sailboat advances against the wind: moving towards the right and forward, then moving towards the left and forward, and so on, advancing in zigzag into the future, in a series of moves that ultimately lead civilization to progress (see Figure 8).

The idea illustrated in Figure 8 constitutes my political philosophy. Sometimes it is necessary to move towards the right, while in some other times it is necessary to change towards the left, but always trying to keep the forward direction. This means in practice to avoid destroying the achievements of the right during the movement to the left transition period, as well as avoiding destroying the progress of the left during a transition towards the right. A right oriented arrangement tends to promote the forces of the market. A left oriented arrangement tends to promote the forces of the state. Both are needed in more or less degree in different historic times. The trick of civilization success is to support the correct approach without destroying past achievements.

Figure 8. The zigzag progress of human civilization towards a better future.



There is something called the arrow of time. It is the direction of time for the physical laws of the universe, at least from a statistical point of view (Hawking, 1988). Time flows towards the future, towards systems with increased entropy. Entropy is the degree of disorder existing in a system. To illustrate using the typical example, consider having two containers. One is empty, the other is full with a highly pressurized gas. What is likely to happen? The usual would be for the gas in the highly pressurized container to escape and occupy both containers. This is the

direction of increasing entropy and towards the future. It would be extremely statistically unlikely for the gas to accommodate in the original container by itself. Doing so requires the expenditure of energy, and the production of such energy requires increasing the entropy of an even larger system encompassing all of the above. Another example is having an egg resting on the corner of table (Penrose, 2014). The most likely thing that can happen is for the egg to fall to the ground. If we see two pictures: one with the egg resting in the corner of the table and the other one resting broken on the floor, it is easy to realize what happened first and what is the arrow of time.

In the case of socioeconomic and political societies, moving towards the future implied increasing entropy, and as a consequence, the overall degree of chaos in the system. That is why moving forward into the future leading to a better situation requires a lot of work in order to ensure that, although the overall system has increased its entropy (being the overall system Earth and the Sun, where the Sun burns hydrogen, increasing its entropy, and Earth borrows part of that entropy credit), the socioeconomic and political systems are, although more complex, also more ordered, with lower overall entropy. That is the reason why it is so easy to destroy and so hard to create and build a better future.

The market and neoliberalism thinking tend to promote free entrepreneurship at the expense of increasing inequality (Stiglitz, 2013). Regulations and neolaborism tend to promote government investment in necessary kinds of infrastructure and education, required so that the free forces of the market can act by themselves in the direction of human progress.

Technology is not evil by itself. It is simply a tool that should be applied intelligently, at the right moment, and in the correct place and circumstance.

Neoliberalism is a manifestation of a movement towards the right. But I believe that now the time for neoliberalism is mostly over. Today, a transition to neolaborism is required, keeping in mind that the neolaborism recipe will not last forever. We may reach a point where reduction in labor hours becomes ridiculous, such as someone having eight different jobs lasting one hour each and flipping from one job to another with a simple mind decision sent to our intelligent agents working in collaboration with us. The human brain, even if enhanced, has practical limits.

The technological danger of computerization of the workforce is not all that problematic as having an artificial mind able to create previously unknown technology out of the blue by quickly and efficiently learning all that is known to science. Keep in mind that technology is simply a tool and letting potentially dangerous new technology loose in the world is a risk. But, what are the odds of creating a truly intelligent artificial mind?

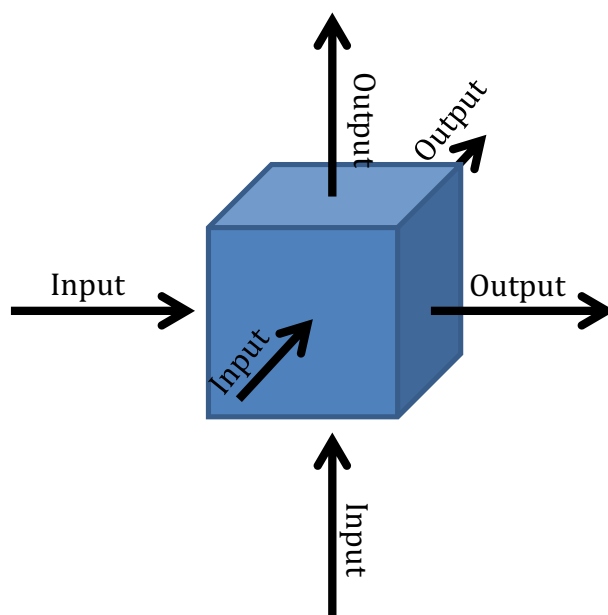
Moravec (1999) estimates that the information processing speed of the human brain is 100 million MIPS², that is 100'000,000'000,000 instructions per second. Current personal computer processing speeds, such as the computer I am using now have a processing speed of around 2 GHz, which equals 2,000'000,000 instructions per second. That means that in order to have the same information processing power of one human brain, we would need $100'000,000'000,000 / 2,000'000,000 = 50,000$ personal computers properly wired to do parallel processing such as the one carried out by the human brain.

² MIPS are million instructions per second. One instruction corresponds to one simple processor operation, such as doing one simple sum (in binary format) or transferring one number (also in binary format) from one memory address to another.

There are several models of how the human mind works (Kotseruba, Avella González & Tsotsos, 2016). Even if we had the right kind of computer cognitive model or combination of cognitive models, working with 50,000 computers is near to impossible. We need computers that are one thousand times faster and yet remain having the same price per computer to make the project plausible, requiring in such case properly wiring only 50 computers. I believe this is the reason why an artificial mind has not yet been constructed in practice. But there is cause for optimism. The Defense Advanced Research Projects Administration (DARPA) is trying to improve processor performance among other things (IEEE Spectrum, 2018). Maybe in a few decades scientists will have the required processing power in order to build an artificial mind.

But multiplying personal computer processing speed by a factor of 1,000 is not an easy task. Typical processors are flat and have their input on one side and their output on the other. By having a computer processor in the shape of a cube would allow to multiply processing power by a factor of three, since there would be three times the input/output operations (see Figure 9). Achieving a thousand-fold increase seems very difficult. The typical process of transistor miniaturization is being exhausted, and new architectures and ways to design electronics is required.

Figure 9. Computer processor in the form of a cube.



In conclusion, we are approaching the limits of neoliberalism. We need a change towards the left so that humanity can continue progressing towards a better civilization. One practical way of start doing that would be to reduce working days from five to four. There are seven days in a week and working four out of seven days means almost cutting by half labor times, if we consider the case of people working all seven days in a week. Since working days would be four per week, somebody working almost twice that much should be able to claim double the salary (keep in mind that the remaining three days should be paid extra for not being part of the regular workdays). I believe we will eventually reach this situation.

Furthermore, as computers make people more and more productive and tend to do the work for us, the day will come when the success of an economy is not measured by how low the unemployment percentage is, but rather by how small the employment percentage is (Domingos, 2015).

I cannot predict the future, but the creation of a sentient machine ushering a whole generation of new technologies is not necessarily a bad thing as long as such machine is also aware of the peril (and not just the promise) of new scientific and technological breakthroughs, so that it releases its inventions in a way humanity can positively absorb. In any case, the creation of a sentient machine is not necessary for the possibility of disruptions. The natural progress of AI and Machine Learning (ML) will continue and it will be introduced in the socioeconomic environment. But that does not justify taking a defensive position. As a rule of thumb, we should avoid being dogmatic and try to approach reality in a practical way, understanding that it is possible to find ways to have coexisting what used to be seen as contradictory positions, such as democracy versus totalitarianism, right versus left, and so on. As usual, the answer to our problems will tend to be a different and intelligent combination of apparently contradictory approaches.

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