

The Robot, Unemployment, and Immigrants

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For every industrial robot introduced into the workforce, six jobs are eliminated. - Since a few days, Amazon has started Amazon Go. The idea is simple: a shop where you go in, take whatever you want from the shelves, and the cost goes automatically to a magnetic card that you carry.

Going out, you swipe the card, which goes to your bank account or to a credit card, and that it is. No queues, no cashiers, fast and easy. The first shop, in Seattle, has a roaring success. Nobody is in charge with restocking the items. An automatic system does that. And soon two robots will replace the items on the shelves, now done by two employees. Even the cleaning of the floor is being done by a robot. The goal is to have a totally automatic shop, where no human can make mistakes, get ill, go on strike, take holidays, or bring into the work personal problems.

The American petrol industry calculates that will reduce within three years the staff required at each well, from 20 to five. Small hotels within three years will have a fully automated reception. You will arrive, swipe your credit card, a key for your room will come out, and you are done. If you need anything, you call a central office, where people will answer your questions and do what all the eliminated receptionists were doing. We are already accustomed to automated telephone for bookings and reservations: and to do ourselves tasks at an airport which were done before by clerks. Immigration officers will be reduced to a small team, which will intervene only if called by the immigration's machines. Contrary to what we think, self-driving vehicle are coming fast: car makers think they will be on the market by 2021.

In the United States, according to ABI research institute, the number of industrial robots will jump nearly 300 percent, in less than a decade. And the National Economic Research Bureau, found out that for every industrial robot introduced unto the workforce, six jobs are eliminated. After the auto industry, the strongest user is the pharmaceutical sector. Robots can perform toxic operation, without any protection.

The United Nations Conference on Trade and Development (UNCTAD), released a "policy brief", indicating what would bring this robot revolution, in Asia, Africa, and Latin America. "If robots are considered a form of capital that is a close substitute for low-skilled jobs, then their growing use reduces the share of human labour in production costs. Adverse effects for developing countries may be significant" the report states. In May 2016, the World Bank's Digital Dividend Report, calculated that the substitution with robots of low-skilled workers, in developing countries, concerned two thirds of the jobs. China is going to be the biggest user of robots. The large reserve of cheap labour, coming from the rural area, is dwindling. China plans to become a high technology world leader. The time of cheap imitations is gone. Now China registers more patents than US. Foxconn, a large industrial producer, reduced, last year, its employ strength, from 110.000 to 50.000 in Kunshan, as an example, thanks to the introductions of robots.

The economists call this wave of automatization, the Fourth Industrial Revolution. The first started, at the end of the 18th century, with the introduction of machines to do the handicraft work, like in

textiles. Its impact became visible in 1811, when the followers of a fictional Ned Ludd started to destroy textile equipment, because it left jobless thousands of individual weavers (who became the workers of the factories). The second industrial revolution was in the middle of the same century, when science was applied to production, creating engines and other inventions, creating the real Industrial Revolution. That meant rural populations migrating to towns, to work in the factories. The Third revolution, in the middle of last century, is considered to be the introduction of the Net, which changed again the forms of production. Gone were the jobs of secretaries in companies, the job of Lino typist in newspapers, of accounting, in documentation, libraries, archives and other hundreds of professions made obsolete by the Net.

We see in our daily life, the Fourth Industrial Revolution. But it is like climate. We all know. We have all the data, every year the climate change is in front of our eyes: more hurricanes, glaciers disappearing, extreme weather, record hot summer since recording of temperatures. Yet, the Paris Conference in Climate Change, is now geared to produce an increase of 3 grade centigrade, when it is a scientific unanimous assumption that to go over 1.5 centigrade would be extremely dangerous. We even have a President of the United States, who withdrew from a non-binding Paris' agreement, declaring that climate change is a "Chinese hoax"; and who appointed a Director of the Environmental Protection Agency, Scott Pruitt, who says that global warming is "positive". It is like to put Dracula in charge of a blood bank.

The political approach to automation is similar. The World Economic Forum of Davos of 2016 was dedicated to the Fourth Industrial Revolution. The founder and director of the Forum, the economist Klaus Schwab, even took to the effort of writing a book on the subject, for the conference: a book in which he expresses his concern. Previous industrial revolutions liberated humankind from animal power, made mass production possible and brought digital capabilities to billions of people. This Fourth Industrial Revolution is, however, fundamentally different. It is characterized by a range of new technologies that are fusing the physical, digital and biological worlds, impacting all disciplines, economies and industries, and even challenging ideas about what it means to be human. We need to take a concerted approach in the world, to make the positive impacts overriding the negative ones. The theme was practically ignored at Davos 2016, because politicians discuss now only themes at a short term: what has to be treated during an electoral period. In particular, Schwab called for leaders and citizens to "together shape a future that works for all by putting people first, empowering them and constantly reminding ourselves that all of these new technologies are first and foremost tools made by people for people. "Clearly, that goes against the tide of nationalism, the new vision for the US, India, Japan, China, Philippines, Hungary, Poland, Great Britain, Turkey and so on.

Well, like it or not, the Fourth Industrial Revolution is here. Today automatization accounts already for the 17% of production and services. It will account for 40% in 15 years, according to the World Bank projections. But we should also take into account the surprising speed of development of the Artificial **intelligence** (AI, also machine **intelligence**, MI) is **intelligence** demonstrated by machines, in contrast to the natural **intelligence** (NI) displayed by humans and other animals. We have already robots which can be reprogrammed, and change their functions. We have no space here to look into the vitally important relation between AI and societies. Suffice to say that the most vibrant debate today is how our economy is mutating into an economy of algorithms and data and how this is impacting politics. The Austrian economist and thinker Karl Polanyi, saw all this coming, when he made a simple observation: capitalism, without controls and regulations, does not create a market economy, but a market society where whatever is necessary for survival has a price, and that is submitted to the laws of the market. In that kind of society, the state has no alternative, but to sustain the system with laws, courts and police who protect private property, to secure the good functioning of the market. The explosion of social injustice, the privatization of common goods, the

fiscal support to the richest, are all consequences of Polany analysis. Add to this how monopolizations of data in a few giant companies, like Facebook or Amazon, and their impact in the social, cultural and economic sphere, and you can see where we are going. We have become data ourselves, and we are on the market. The 4th Industrial revolution will further reduce the centrality of the human, who was before the centre of society, and has already been substituted by the market, since the fall of the Berlin Wall...

All this opens another crucial debate, for which we have no space either. Labour was considered an important factor of cost in production. And it was how much the workers had rights to the resulting benefits, that sparked the creation of trade unions, the modern left, and the adoption of universal values, like social justice, transparency, participation, basis of the modern international relations. The machine's relations with the distribution of the benefits of production, has inspired several thinkers, philosophers and economists over the last centuries. It was generally assumed that a time would come, in which machines would eventually do all the production, and humankind would be free of work, maintained by the profits generated by the machines. This, of course, was more a dream than a political theory. Yet today, all managers of Artificial Intelligence and Robot's production, maintain that the superior productivity of robots will reduce costs, therefore enabling more consummation of good and services, that will generate new jobs, who will easily absorb those displaced by the machines. The data we have do not show that at all. The Economic Report of the President of the US, say that there is an 83% chance that those who earn 20 dollars an hour, could have their job replaced by robots. This proportion goes to 31% for those who make 40 dollars per hour. The new economy is an intelligence economy, based on technical knowledge. You have a future, if you are able to adapt to that kind of society, for which new generations are much more attuned. But what will do a taxi driver, who did not have a technical education, to recycle himself? The statistics show that today, when somebody lose his job at a certain age, if he finds a new one, it will be almost always at an inferior remuneration. So robotization will affect, above all, the lower middle class, with a new generational divide.

A number of economist and influential people, over the years have come out with the idea of a Universal Basic Income. It is time to cushion the society from tensions, instability and unemployment by giving to every citizen a fix income, so to give him a dignified life: and by spending its UBI, he would generate wealth and increase demand, which would stimulate therefore growth, and make a society just and stable. Martin Luther King was an early proponent, like the neoliberal economist Milton Friedman. Now the billionaires from Silicon Valley, like Elon Musk, Mark Zuckerberg, the venture capitalist Mark Andreessen, the democrat senator Bernie Sanders, have all expressed support to the idea of a UBI. And in the coming presidential American elections, a New York tech executive, will run with UBI as his political platform. He observes that Trump did particularly well in Michigan, Ohio, Pennsylvania and Wisconsin, states which have lost four million jobs because of automatization. "Higher the concentration of robots, higher the number of disgruntled people who vote for Trump." He plans to cover the two trillion dollars that UBI would cost (half of the US budget), with a new Vat tax, and taxation on the companies who profit from automation. Of course, in the US the idea that people who do not work receive public money, is the closest thing to communism, and UBI faces formidable cultural obstacles. But Andrew Yang, the candidate, says we will have otherwise in a few years "riots in the streets: just think to the one million of truck drivers, who are 94% males, with an average education of high school, suddenly all jobless..."

This brings us, to conclude an article where is more what is left out than what is in, to make two political considerations and a concrete proposal, for the sake of thinking positive.

The first consideration is that Trump, and all the other politicians who want to restore a past glorious future, are totally ignoring this debate (unfortunately, is not in any political debate) To restore jobs in mines and fossils, for example ignores that the technological development has already

shed many jobs, and will continue to do so. The data of the petrol companies are definitive, So ,to rally disgruntled people, as was the case in Europe with Brexit, is a consequence of the poverty of the political debate, where traditional political parties(especially on the left), instead of explaining clearly the world in which we are, and the one in which we are going, are trying to piggy back the feeling of the victims of the neoliberal globalization, taking often the banners of the nationalists. The coming elections in Italy are a good example. The centre-left party of Matteo Renzi looks to get the least number of votes, because of its confuse identity, which is difficult to distinguish from the other parties.

The second political consideration is that migration have become a major theme in elections. Trump was elected on a strong anti-immigrant's platform, which continues in his government. Governments in Hungary, Austria, Poland Chekia, Slovakia, are based on refusal of immigrants. All over Europe, from the Nordic countries to France, Nederland's and Germany, anti-immigrant feelings are conditioning the governments. In the Italian election, the old fox of Berlusconi, to take votes away from the xenophobe Salvini (who is the Italian counterpart of the international nationalist, with Putin in Europe and Trump in the world as leaders), has promised that he will expel 600.000 immigrants, if he wins the election. Renzi government is presenting the reduction of immigrants by sea, as one example of his good governance (little mention that this was done by distributing money to all Libyan factions and to the immigrant' s smugglers). The fear is that immigrants are stealing jobs and resources to the legitimate European citizens. The statistics from the European Union tell us that the total number of non-EU citizens living in Europe (some for a long time), is now 35 million people. Of those about 8 million were Africans, and seven million Arabs. Those figures included also illegal immigrants. That, in a population of 400 million. All statistics point out that more than 97% of the immigrants are totally integrated, that they pay in average more taxes than the locals (of course, they worry about their future), and up now those who do not have a job are about 2.3 million people, who are still waiting about their juridical situation. There is not a single study who claims that immigrants have taken the jobs of European in any significant way. It was the same story against the entry of woman in the labour market. An increasing proportion of women have joined the labour force over the last 30 years, but these increases have not coincided with falling employment rates for men. A study on Brexit proves that immigrants helped to increase the National Gross Product, and the increase in productivity meant a global increase of employment. But we have reached a point where nobody any longer listens to facts, unless they are convenient...

And now the concrete proposal. It is clear that the real threat to employment for the large majority of citizens comes from robotization, not immigration. No employed person has been fired to be substituted by an immigrant, unless we talk of non-qualified jobs, that Europeans do not want anyhow. Truck drivers, taxi drivers, bus drivers, school drivers, to take the most imminent example, do not fear immigration for their job. Well, in very few years, their job will become obsolete, and there will be no plans or preparation for that. When the problem will blow up, politics will start to look at it. M