

FROM THE CYBERNETIC WORLD WAR TOWARDS A CYERNETIC CIVIL WAR**Gabriel A. Mendez Hincapié¹****On the Road to the Cybernetic World War**

Energy is essential for the production and movement of “things”. Using an assemblage of machines the industrial revolution exponentially increased the energy available to human society; however, such machinery required human supervision and control to attain its objectives. There are basically three “ideal types” of machines: those that convert matter from one form of matter to another; those that convert energy from one form of energy to another; and, those that exchange information. Cybernetics deals with the latter. In that sense, the Internet may be conceived of as an immense machine encompassing the breadth and length of the planet that has the real-time capacity to interconnect and put in common all of human kind, an embryonic global civil society.

The next evolutionary leap is now underway, the Internet of things (IoT) which, as inferred from its name, will permit the connection of “things” to each other as well as to human beings implying that, like today’s cybernetic machines, “things” will soon possess a degree of “intelligence”. In conjunction with certain functions (*e.g.*, the capture, recording and transmission of information), such intelligence will equal or exceed that of humans.

Based on the foregoing, what Karl Marx’s anticipated as a “social brain” is emerging before our own eyes. Since ancient times, humans and things have formed a single system (human society) comprised of a single socio-technical object in the sense defined in actor-network theory (ANT) by Michel Callon and Bruno Latour.¹ In the latter, humans provided the desire and intelligence and “things” the energy and transformation of matter, even if “us” and “them”, humans and machines did not intercommunicate (converse). Now, however, a subtle disruption is occurring as “things” begin to acquire varying degrees of intelligence and thus conversation and a new kind of synergy appears plausible.

Such disruption was anticipated by Marx in his famous *Fragment on Machines* (1857) where he wrote: “The accumulation of knowledge and skills of the general productive forces of the social brain is thus absorbed within capital.” (Marx, 1980, p.220). There (see Notebook VI-VII of

¹ PhD in Political Science, Universidade Complutense de Madrid. Professor of Universidade Autônoma de Manizales.

the *Grundrisse*), in what he referred to as “general intellect” or the “social brain”, the German philosopher anticipated the process through which vampire like capital has imbibed knowledge and abilities from the productive forces of society, violently extracting² it from its workers. According to Marx, such extraction in the form of the class struggle has shaped the history of that which is real, *i.e.*, “the material world reflected by the human mind, and translated it into forms of thought”.³ Insofar, this conception of the human brain as a generic or social being, is precisely what is fundamental for the derivation of a theory of knowledge (epistemology) from the theory of value, which means one basic thing: that the brain “is” social.⁴ Today, such reality is referred to as “virtual reality” or “Big Data” although it would be more accurate to refer to it as “encrypted reality”.⁵

The privatization of Big Data (or the social brain) explains how Silicon Valley’s media stars now dominate the world. In the words of Slavoj Žižek:

How did Bill Gates become the richest man in America? His wealth has nothing to do with Microsoft producing good software at lower prices than its competitors, or “exploiting” its workers more successfully (Microsoft pays its intellectual workers a relatively high salary). Millions of people still buy Microsoft software because Microsoft has imposed itself as an almost universal standard, practically monopolizing the field, as one embodiment of what Marx called the “general intellect”, by which he meant collective knowledge in all its forms, from science to practical knowhow. Gates effectively privatized part of the general intellect and became rich by appropriating the rent that followed. (Žižek 2012, 146).

When such privatization reaches its final stages, capital will require very little living labor for its reproduction. By then, without state intervention, the risk will be that most workers will be hurled into the hell of unemployment and instability. However, in doing so, capital will have undermined its own foundation, “surplus value”, which can only be created by “living labor”. In Marx’s words: “Capital thus works in favor of its own dissolution as the dominant form of production.” (Marx 1980, 222).

More recently, Stephen Hawking, the famous British astrophysicist, drew our attention to the same phenomenon:

If machines produce everything we need, the outcome will depend on *how* things are distributed. *Everyone* can enjoy a life of luxurious leisure if the machine-produced wealth is shared, or else, most people can end up miserably poor *if the machine-owners* successfully lobby against wealth redistribution. So far, the trend seems to be toward the second option with technology driving *ever-increasing inequality*. [Emphasis added] (Hawking, 2015).

If Hawking’s prediction comes true we will arrive at a situation where virtually every product will be machine made with little if any living labor involved. But, as pointed out by Bruno Milanovic (2015): “Isn’t this in some ways ... very similar, to Marx’s process of increased “organic

composition of capital” eventually leading to capitalism’s euthanasia (to use Keynes’ term in a Marxist framework)??”

According to Milanovic, a former chief economist of the World Bank, Marx’s assumption is that the process of valorization implies intensification of capital relative to living labor. Thus, capitalists tend to accumulate more and more capital and to eliminate more and more living labor per unit of output. In a Marxist framework, this means a constant diminishing need for payed salary per hour which obviously generates consistently less surplus value. Such diminishing surplus value in inverse relation to increasing capital accumulation means a reduction in the rate of profit until it plummets to zero.

How then will robotization affect capitalism? Karl Marx gives us some clues. As he wrote, each individual capitalist is constrained by the iron laws of the market to invest in increasingly capital-intensive processes to attain a competitive edge over other capitalists; however, when they all do the same, (ignoring counter-tendencies), the benefit rate diminishes for all of them. Thus, in the long term, when all is said and done, capitalists “withdraw from business” or, more precisely, move towards a zero rate of profit.

In any case, living labor will be replaced by machines to such an extreme degree that the bulk of production will be carried out robotically. Employment will become insignificant. According to Marx, the ultimate political imbalance – or terminal crisis – would take place between a vast “reserve army of unemployed workers” and a thin layer of capitalists and successful wage earners. To visualize this imbalance, Milanovic (2015) invites us to

... [I]magine thousands of robots working in a big factory with only one worker checking them out, and with the useful life of robots being one year so that you keep on replacing robots continuously and thus run enormous depreciation and reinvestment costs every year. The composition of GDP would be very interesting. If total GDP is 100, we could have consumption=5, net investment=5 and depreciation=90. You would live in a country with GDP per capita of \$500,000 but \$450,000 of that would be depreciation.

Suppose now that following a Cybernetic Civil War, -similar to the one recreated in the film *V for Vendetta*– and led by a global network of anti-system “hacktivists”, machines become the property of the unemployed and of the other disenfranchised of the system. The same enormous factories crowded with thousands of robots would be retained but their entire net product would be appropriated by the unemployed, who would use the income to facilitate a life of leisure with reduced working hours or perhaps none: gazing at screens and playing entertaining games on their laptops. Thus, cybernetic civil war would be a displaced class struggle.

What, however, would be the “ideology” of the new cybernetic proletarians? Perhaps an invigorated “digitized fetishism” or perhaps, “the kingdom of freedom” as Marx hypothesized?

In the words of Ricardo Sanín-Restrepo (2016):

The wondrous machines of technology and communication are programmed in highly sophisticated languages and in extremely elitist environments that are instrumental for the domination of capital at its best. Even though we are connected irremediably in a network of ever-extending information, as a General Intellect, the cultural language of the machine remains encrypted: its flows and commands are still dependent on the hunger of the market, and its core intellect remains a highly scarce material. Hence, information can only become democratic when the machine—as a point of absorption of power-knowledge—is itself decrypted and politically liberated.

“Wondrous machines” which, while embodying a great promise of human emancipation, still continue to replicate in their “flows and commands” the same moral baseness: racism, sexism, imperialism, capitalism, of the political matrix that bred life into them: Globalized Coloniality

These are the great and disturbing challenges with which globalized coloniality and its encrypted reality confront us.

A Digital Road to Communism

Up to now the world’s most developed cybernetic societies, Estonia, Singapore and Israel, have been: (1) demographically small and politically homogeneous; (2) possess very strong police states; and (3), view widespread elitist education as a state and societal priority. Interestingly, because these societies are incongruously distant from California, the idiotic myth that “everything is invented by Silicon Valley” is being discredited.⁶

However, a transition point seems to be approaching. In a new twist on the current Cybernetic World War (a digital reprint of the Cold War between East and West), during the St. Petersburg International Economic Forum in early June of 2017 Vladimir Putin announced a qualitatively new political program which, judging by the speeches, will involve the full “digitization” of Russian society and of the Russian economy which they plan to extract from their formidable schools of mathematicians and physicists. During that forum Putin and his ministers announced an alliance with Ethereum, a decentralized Internet services system based on Blockchain technology, the technology on which “cryptocoins” are grounded. The technology comprises interconnected nodes of encrypted information distributed throughout the world, functioning as both databases and security backup mechanisms. According to the Kremlin,

President Putin met with the founder of Ethereum, Vitálik Buterin, a 23-year-old Canadian born programmer of Russian decent. Mr. Putin was enthusiastic about Mr. Buterin's ideas and arranged for contacts with potential Russian partners.

The press release on the meeting disclosed that:

According to Russian [First Deputy] Prime Minister Igor Shuvalov, Putin is "passionate" about the concept of digitization of the economy and new technologies. He said the president brought together a small group of administration and government officials to discuss these issues and only "permitted them to leave" after "one in the morning." In St. Petersburg, Putin outlined the basics of the digitalization program the government has developed on its own. Among its goals is "general digital literacy" with "teaching curricula for people of all ages" and a "new and agile normative basis for introducing digital technologies in all fields", taking into account "the informational security of the State, businesses and citizens." Putin announced actions "to increase our intellectual, technological and professional superiority in the field of the digital economy". In his opinion, "the groundbreaking schools in the fields of mathematics and theoretical physics" allow Russia "to achieve leadership in different sectors of the so-called new economy, especially the digital economy." The digital economy is no longer a branch but rather, "the basis for creating new qualitative business, commerce, logistics and production models, which change education, health, state management and communication formats between people and which consequently create new development paradigms for the State, the economy and society as a whole", argued Putin. Bonet in "El País", (2017).

Might not Putin's strategy encompass the possibility that we find ourselves at the gates of what Alain Badiou has articulated as the "Event": an intervention that cannot be accounted for in terms of its preexisting "objective conditions"?

With Blockchain technology in play, societal wealth is being transformed, not only from an "immense accumulation of commodities" (Marx) towards an immense planetary *synapse*, but because of its revolutionary mathematical structure,⁷ it could also alter the traditional geometries of global power.

Consider: What if in the near future Russia, China and India successfully duplicate Estonia, Singapore or Israel's digitalization models? It will, of course, involve an escalation of the Cybernetic World War with the principal Western Powers.

Nonetheless, because they are all police and capitalist states with opaque, corrupt oligarchies entrenched in positions commanding both the economy and the administration, hacktivists, whether from the East or West, the North or South, will face the challenge of transforming the Cybernetic World War into a Cybernetic Civil War through the socialization of databases,⁸ *i.e.*, decrypting Big Data and freeing all the *potentia* of its collective artificial intelligence from its current hijackers: both state (*e.g.*, the United States, the European Union, Russia, China, *etc.*) and private (*e.g.*, Google, Facebook, Netflix, Microsoft, Apple, *etc.*).

Bibliography:

BONET, P. El abuelo Vladímir Putin se digitaliza. **El País**, 10 jun. 2017, Madrid. Disponível em: <http://internacional.elpais.com/internacional/2017/06/10/actualidad/1497105519_576887.html>. Acesso em: 12 de setembro de 2017.

CALLON, M. Redes Tecno-económicas e irreversibilidad. **Redes**, Buenos Aires, v. 8, n. 17, p. 85-126.

CHARCHEDI, G. Old wine , new bottles and the Internet. **Work Organization, Labour & Globalization**, v. 8, n. 1, 2014.

HAWKING, Steven. AMA Science AMA Series: Stephen Hawking AMA Answers! **The New Reddit Journal of Science**. Disponível em: <https://www.reddit.com/r/science/comments/3nyn5i/science_ama_series_stephen_hawking_ama_answers/cvsdmkv/>.

MARX, Karl. Afterword to the Second German Edition. In: MARX, Karl. **Capital**. Vol. 1. [s. l.]: Marxists.org, [s. d.]. Disponível em: <<https://www.marxists.org/archive/marx/works/download/pdf/Capital-Volume-I.pdf>>.

_____. **Elementos fundamentales para la crítica de la economía-política (Grundrisse) 1857-1858**. Vol. 2. México: Siglo XXI, 1980.

MEDINA, E. **Revolucionarios cibernéticos**: Tecnología y política en el Chile de Allende. Santiago de Chile. LOM: Editions, 2013.

MILANOVIC, Bruno. The Rule of Robots in Stiglitz and Marx. **Social Europe Newsletter**. Disponível em: <<https://www.socialeurope.eu/2015/04/the-rule-of-robots-in-stiglitz-and-marx>>.

MOROZOV, E. ¡Socializad los centros de datos! **New Left Review**, março-abril, 2015, n. 91, p. 47-70.

NAKAMOTO, Satoshi. Bitcoin: A Peer-to-Peer Electronic Cash System. **Bitcoin.org**, [s.l], [s.d]. Disponível em: <<https://bitcoin.org/bitcoin.pdf>>.

ŽIŽEK, S. The Revolt of the Salaried Bourgeoisie. **London Review of Books**, v. 34, n. 2, 26 jan. 2012, p. 9-10. Acesso em: <<https://www.lrb.co.uk/v34/n02/slavoj-zizek/the-revolt-of-the-salaried-bourgeoisie>>.