

## Surveillance Capitalism as a Form of Biopower in Historical Perspective

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### Abstract

*Information has become the most important commodity of markets since the Oil Crisis of 1973. This period is also called as New Economy in which industry lost its previous value while services using the new information technologies are put in the core of economic activities. The rise of information technologies has brought forth new ways to generate profits. IT companies have directed their marketing interests to generate profits in behavioral forecasting models through which future behaviors of individuals can be predicted by means of machine intelligence. Accordingly, since the capital accumulation of the new stage is based on the surveillance of individuals, Shoshana Zuboff called this new stage as "surveillance capitalism". This shift in the market interests can be understood within its historical context in which the management strategies were already being shifted from a sociological bureaucracy to new Taylorist scientific management based on continual surveillance. Thus, surveillance capitalism can be interpreted as a new "technology of the self" aiming at subordination of individuals through psychological manipulations within neoliberal governmentality. This article aims to put forth the historical link between the emergence of surveillance capitalism and the use of individualized management strategies as a new form of capitalistic biopower.*

**Keywords:** Surveillance Capitalism, Neoliberalism, Game Theory, Biopower, Governmentality.

**Jel Codes:** B5

## Tarihsel Perspektifte Bir Biyoiktidar Biçimi Olarak Gözetim Kapitalizmi

### Özet

*1973 Petrol Krizi'nden bu yana bilgi, pazarların en önemli emtiası haline geldi. Sanayinin değerini kaybettiği ve bilişim teknolojilerini kullanan hizmetlerin ön plana çıktığı bu döneme aynı zamanda Yeni Ekonomi adı verildi. Bilgi teknolojilerinin yükselişi yeni kâr üretme yollarını da getirdi. Bilişim şirketleri, pazar ilgilerini bireylerin davranışlarının öğrenen makineler yoluyla tahmin edildiği davranış tahmin modellerine yönlendirdi. Bu bağlamda yeni dönemin sermaye birikiminin bireylerin gözetimine odaklanmasından hareketle Shoshana Zuboff yeni döneme "gözetim kapitalizmi" adını verdi. Pazar ilgilerindeki bu değişme, halihazırda yönetim stratejilerinin sosyolojik olarak düzenlenmiş bir bürokrasiden sürekli gözetime dayalı yeni bir Taylorist bilimsel yönetime geçtiği tarihsel bağlam içinde anlaşılabilir. Gözetim kapitalizmi, neoliberal yönetimsellik içinde bireylere psikolojik manipülasyon yoluyla boyun eğdirmeyi amaçlayan yeni bir "özne teknolojisi" olarak yorumlanabilir. Bu makale, gözetim kapitalizminin ortaya çıkışı ile yeni bir kapitalist biyo-iktidar biçimi olarak bireyselleştirilmiş yönetim stratejilerinin kullanımı arasındaki tarihsel ilişkiyi ortaya koymayı amaçlamaktadır.*

**Anahtar kelimeler:** Gözetim Kapitalizmi, Neoliberalizm, Oyun Teorisi, Biyoiktidar, Yönetimsellik.

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## 1. INTRODUCTION

Since the last structural underconsumption crisis of the 1970s, capitalism has been in a period of transition towards a new system of production which is widely referred as Post-Fordism. The new system is mostly characterized by product variety, flexibility, deindustrialization of the developed countries and industrialization of emerging economies through outsourcing policies of international investments (Tickell & Peck, 1992). Technology plays an important role in this transition as it provides new infrastructures of work, communication and financial transactions which change the morphology of both capital, finance and labor. In the new period the relations of production are founded on the emerging digital technologies to such an extent that scholars debate about a structural transition from industrial capitalism towards digital capitalism (Zuckerfeld, 2017). However, although digital technologies provide in the Post-Fordist period the necessary apparatus to implement new labor processes like in the example of work-at-home jobs, to outsource industries in emerging economies and to manage international instantaneous finance transactions, the social change cannot be merely explained on the deterministic basis of technological change and advancements whereas what is coming forth can be seen as a new form of capitalistic biopower based on surveillance and behavioral control, which Shoshana Zuboff (2019) calls surveillance capitalism.

Technology is not the determinant of the development whereas these practices are in accordance with the neoliberal managerial strategies which are based on two important intertwined aspects: individualism and game theory. Thus, surveillance capitalism can be understood in the light of the historical trend and the neoliberalism and its main governance tool: new Taylorist scientific management based on mathematically modelled game theory. What Zuboff calls as surveillance capitalism is indeed a new form of biopower based on neoliberal governmentality. By means of commodified information and knowledge, the neoliberal management has established its biopower as it also has dissimulated its ends under the guise of the anonymity of scientific knowledge and product developments. Michel Foucault who introduced the concept of biopower puts the emphasis on the relationship between power and knowledge. According to him, power and knowledge are intertwined, and despite its general representation, power is not outside of its subjects but introjected by the latter through means of becoming an individual, a continuous process which he calls subjectivation. At this point, although knowledge as the set of means of subjectivation seems to be impartial and anonymous, it represents in reality the interests of power. Through subjectivation, subject experiences the self through the knowledge intertwined with power in “a game of truth” (Foucault, 1998: 461) which seems at first glance convenient with subject’s own ends but obviously is not set by the subject.

It can be said that truth is instrumentalized in a type of governance based on the wilful participation of the governed what Foucault calls governmentality. In Foucault’s terms, governmentality consists of the “surface of contact on which the way of conducting individuals and the way they conduct themselves are intertwined” (McIlvenny et al., 2016: 17). Consequently, while individuals believe to follow their own interests in governmentality, in fact they realize the authority’s interests inasmuch as their subjectivity depends on the power-knowledge. For instance, although psychology presents itself as a set of knowledge with anonymous intentions, in reality, what it does is to empower capitalist authority through a “technology of the self”, known as healthism which utilizes individual’s will to health and well-being for the ends of authority (Rose-Redwood, 2006). Likewise, neoliberalism functions in general through the ostensible individual freedom which dissimulates the power relations established through the governance of knowledge. While it deresponsibilizes the political and economic powers, it internalizes authority within the subject through responsabilization of individual, presented under the guise of empowerment of individual (Pyysiäinen et al., 2017) just as Ronald Reagan and Margaret Thatcher did.

This article aims to set forth within a historical perspective the practical use of the surveillance capitalism in the global paradigm shift towards a neoliberal governmentality which deresponsibilizes Big Business and states with reduced responsibilities while the management strategies are moved from sociological bureaucratic methods to psychological new scientific management techniques backed up by calculative capacity of information technologies following the last structural crisis. Accordingly, in the first part of the article the historical background of the transformation towards the new politico-economical paradigm of neoliberalism will be discussed. In the second part, the implementation of new managerial strategies will be examined in relation with the game theory and its presumptive individualistic human nature subject to mathematical predictive calculations. Finally, the biopolitical role of surveillance capitalism will be discussed as a technology of the self in the neoliberal governmentality. The article will be concluded with the future risks of the powerful unilaterality of the uncontrolledly commodified information technologies and a debate about the global sphere in which the occidental surveillance capitalism based on the commodified information is still linked to a concrete industrial system, relations of production and a global division of labour.

## **2. A PERIOD OF CHANGE**

Karl Marx realized that capitalism was structurally and necessarily producing crises due to its propensity towards overaccumulation of capital forming monopolies and leading to underconsumption problem resulting in stagnations (Agnolotto, 2013). Likewise, in an evolutionist perspective, Joseph Schumpeter understood that capitalism was not following a straight-forward continuous process of capital accumulation as capitalism did not only create novelties through investments, but it also destroyed mainly the obsolete technologies and infrastructures in order to open space for the new ones, especially during the periods of recession and depressions marking the limits of a technology paradigm's potentials (Geiger, 2014). According to this perspective, each technological paradigm has its own limits due to the diminishing rates of profit and these paradigms are continuously replaced by new ones destroying the previous technology's infrastructure. The end of a technological paradigm is supposed to be followed by another cycle within a new technology paradigm and the destruction of a technological infrastructure opens space for the new paradigm. Schumpeter called this process "creative destruction" on which Schumpeterian theory puts emphasis for its role in radical innovations and the continuity of capital accumulation. Hence, inasmuch as destruction was considered as inevitable in capital accumulation necessitating the continuous replacement of technological infrastructures, Schumpeter interpreted the history of economics according to the technological paradigms adopted in each period which he called long-wave business cycles. For instance, while railroadization constituted the most important economic activity in the second long wave between 1843 and 1897 whose decline started with the Long Depression, the third long wave was marked by electricity, chemical industries and internal combustion engines appeared after the Second Industrial Revolution of 1920s (Schumpeter, 1939: 178).

The fourth long wave which started after the end of the Second World War concentrated on petrochemical industries, electronics, and aviation and it was dominated by the Fordist production paradigm's mass production-consumption cycles. It eventually arrived its limits with the structural crisis of 1970s and gradually left its place to the fifth wave in around 1990s in which digital networks and information technologies became the most crucial aspects of the new technological paradigm (Castellacci, 2006). The end of the fourth wave also indicated the end of the Fordist mass production paradigm which dominated the two previous long waves. Especially, Fordism reached its limits in the Oil Crisis of 1973 while the decreased demands for standard goods produced in mass production preceded to underconsumption. Eventually, Fordism came to an end and was replaced by a more flexible production system known as Flexible Specialization which was one of the most critical moments of creative destruction as it led to the deindustrialization of the Western capitalist

countries whereas capital accumulation had always been considered in relation with industrial investments (Piore & Sabel, 1986). The new period was referred as Post-Fordism and it was even described as the Third Industrial Revolution starting in 1969 with the radical innovations in electronics and telecommunication technologies (Rifkin, 2011).

In 1970s, the politics also passed through fundamental transitions as the Keynesian New Deal implemented during Roosevelt's authoritarian government started to be gradually replaced by a new political paradigm called neoliberalism (Palley, 2005). Following the failure of the social movements of 1968, 1970s witnessed the abrupt rise of individualism while people lost their faith in politics and its great projects (Wagner, 2002). Business which started to complain about the high taxes recompensing the expensive Keynesian welfare institutions seized the opportunity to regain its power lost since the presidency of Franklin D. Roosevelt and successfully used the increasing individualism trend along with the bankruptcies of public institutions like in the example of the bankruptcy of New York City to which David Harvey tracks back the rise of neoliberalism (Harvey, 2007). Eventually, conservatism could turn back with Margaret Thatcher government in the United Kingdom and presidency of Ronald Reagan in the United States while Keynesian bureaucratic state supervising the markets could be replaced by neoliberalism mostly defended by the economist celebrity Milton Friedman. In reality, although the new political paradigm was called neoliberalism, there was nothing new in it as Friedman was merely advocating the ideas of Friedrich von Hayek, the economist who opposed to John Maynard Keynes during the 1930s. Following Hayek's arguments, Friedman (2020) identified free market capitalism with democracy and freedom and rejected state interventionist under the pretext of despotism and freedoms. Consequently, the state intervention was limited to the extent that the state started to shrink by way of abandoning its welfare politics and the bureaucratic management strategies were replaced even in state institutions by corporate management science's techniques debuted by Winslow Taylor in 1914.

This aspect of the new economic paradigm was known as "New Economy". The term first appeared in 1983 (Alexander, 1983); yet, it became famous in 1990s (Stiroh, 1999). Following the deindustrialization process of the developed countries, New Economy indicated a transition from a manufacturing economy to a service economy as well as the intensive use of information technologies. Peter Drucker (1993), another one of the most prominent neoliberal economists of the epoch, argued that New Economy would not be based on manufacturing concrete goods anymore while knowledge was becoming an emerging resource along with other three basic commodities: labour, land and capital. According to him, knowledge was "the only meaningful resource today" (Drucker, 2013: 38). Likewise, the former Chairman of the Federal Reserve who served during Ronald Reagan's presidency, Alan Greenspan claimed that under the paradigm of New Economy, politics should let markets alone while markets should use the help of computer based models to forecast economic risks and developments by means of their management science and techniques ('Monthly Review | The New Economy', 2001).

The passage towards Neoliberalism and the emergence of New Economy was accompanied by the return of conservatism which was known as Neoconservatism. Indeed, the political support for the economic transition was obtained by using the archaic symbols and discourses just like Hitler once did. Neoconservative politics debuted in the United States in 1960s and it started to challenge not only Roosevelt's New Deal but also Henry Kissinger's Realpolitik which aimed at protecting the delicate equilibrium of power in international affairs (Vaïsse, 2010: 6-11). The defenders of neoconservative ideas urged on the basis of Neo-Kantian philosopher Leo Strauss who put forth the allegation that individualism weakened the American values and America had to turn back to its Christian roots (Peters, 2008). Thus, America had to be great again. They claimed evangelical politics demanding that the United States had to step in and confront first the Soviet threat, then Islamist terrorism instead of just protecting the status quo which was at their advantage according to

Kissinger. Although they were considered as extremists challenging the unquestionable power of Kissinger in the beginning, following the decline of the New Deal and the Vietnam defeat they became influential in American politics during the presidency of Ronald Reagan who was not a neoconservatist but elected by not just using his famous discourse defending individualism and empowerment of individual but also by obtaining a large part of Protestant Christian votes. Consequently, although it was contradictory with his election discourse promoting a smaller state apparatus, Reagan declared that the United States had to finally use power in order to prevent the spread of the Soviet evil. He even declared an American Crusade against the global evil and villains (DePriest, 2018).

Consequently, since the 1970s, capitalism has entered in a period of fundamental changeover both economically and politically. As digital networks and information technologies have become the dominant sectors suitable for the demands of Flexible Specialization in the Post-Fordist era, capitalism has started to intensively commodify information first through mainstream media, then by way of the Internet. However, even though the advancements in digital technologies are in the heart of the infrastructure necessary for the new paradigm, despite all technocentric arguments (McLuhan, 2016), technology itself can still not be seen as the main determinant of the transition because technology as means of production is only a reflection of the relations of production through which labour process is realized. Thus, the change and the role of digital technologies in the new episode of capitalism must be understood in relation with the change in the relations of production, thus in neoliberalism, its unrestricted non-intervened economic activities and its New Economy paradigm underlining the commodification of information and knowledge. Indeed, although the commodification of labour, land and money was regulated by institutions and laws to protect the society against the destructive forces of the markets in the previous episode of capitalism which Polanyi (2001) considered as the self-protection mechanisms of society, information could be commodified without restrictions in accordance with neoliberalism empowering ostensibly the individual but in reality the Big Business to the detriment of politics, public institutions and its bureaucracy. Hence, information was illimitably commodified to fuel a new market in which individuals were continuously surveilled in order to develop mathematical models predicting and controlling their future actions in the use of sophisticated Taylorist scientific management techniques within a new form of biopower called surveillance capitalism.

### **3. FROM A SOCIOLOGICAL BUREAUCRATIC MANAGEMENT APPARATUS TO A PSYCHOLOGICAL NEW TAYLORISM**

In the Keynesian epoch, state bureaucracy was one of the most important apparatus of management (Bornemann, 1976). Indeed, management was based on regulations and institutions whose interests were considered as being naturally in accordance with the interests of whole society as they were thought to represent the public interest. The purpose of the bureaucratic structure was to supervise the markets to resolve the contradicting interests and to prevent the recurrence of any possible destructive crisis and unemployment in the future. However, with the failure of collective action and the rise of individualism in 1970s, even the loyalty of state servants was started to be questioned to the extent that they were accused of discursively using public interests to dissimulate their own interests. Accordingly, James M. Buchanan, one of the most influential economists of the epoch, defended that what was called as public interest was nothing but the interest of the selfish bureaucrats and he proposed that public institutions should be run just like big corporates by managers who were merely motivated by their self-interest for money (Buchanan & Musgrave, 1999). He proposed the public choice theory through which he claimed that the political decisions should be made on the basis of the liberal economics and game theory considering all the agents as self-interested actors. The ideas of Buchanan influenced the future of the political organizations while he even won the 1986 Economics Nobel Prize thanks to his theory.

Although, during the Keynesian New Deal period, individualistic greed was seen as responsible of the previous devastating economic crisis and the new state policies were favoring feelings of mutuality necessary to finance the massive welfare state institutions, in the new neoliberal era individualism was embraced by masses to the extent that it was even received as “ethical egoism” as defended by Ayn Rand whose ideas became influential mostly in 1990s (Duggan, 2019). Likewise, psychologist R.D. Laing (1999), one of the key figures of the Anti-Psychiatry Movement (although he refused to be a part of it) and the Counterculture, defended that even love, the highest altruistic feeling of the human nature, was nothing but individualistic. By way of applying game theory techniques to understand familial interactions, he urged that love was nothing but a way to strategize in personal relations and conflicts in order to obtain power. This period also witnessed a return to Descartes’ animal machine, yet without even the agency of any spiritual mind opposing the mechanical body in a universal Cartesian duality, to such an extent that biology started to interpret human actions merely as a way of selfishly propagating genes on the basis of John von Neumann’s conception of biological beings as “self-replicating machines” (McMullin, 2000).

Parallel to the return of individualism at the expense of altruistic convictions promoting welfare politics, game theory which was used in the Cold War to anticipate the possible future actions of the counterplayer who was considered as completely hostile and strategizing became an important apparatus in the new management paradigm. In the quest for this new management, John von Neumann was one of the most important theoreticians of both game theory and digital technologies (De Pina Cabral, 2003). After working on the Manhattan Project served to the development of the nuclear weapons during World War II, Neumann became a part of United States Atomic Energy Commission’s General Advisory Committee which worked on the policy of mutually assured destruction (MAD) aiming at hindering a thermonuclear war, a military strategy developed by Neumann which kept the balance through the possible complete annihilation of both sides in case of full-scale use of thermonuclear weapons. According to Neumann’s game theory, it was hypothetically always possible to find a state of equilibrium which could not be unilaterally deviated under the condition that all the players knew precisely all the available options (Méró, 1998). Game theory was consequently used as a useful apparatus to protect the delicate balance of terror in the age of the Cold War (Sagan, 1991).

Neumann even applied game theory to economics as he saw the economic behavior could be predicted on the basis of zero-sum games (Neumann & Morgenstern, 2020). Thus, economics could perfectly be mathematized. However, there was a problem: “human element” although Neumann thought that this problem could be overcome (Neumann & Morgenstern, 2020: 78). In the Cold War, game theory was applied to hostile interstate affairs while human beings could not be treated as separate units continuously monitoring and strategizing against each other to the detriment of their fellows despite their tendency to altruism. At this point, John Nash’s equilibria in non-cooperative games came to aid of management as it applied the game theory methods at individual level to predict decisions in interactions and reduced even cooperation to an individualistic selfish decision-making process. According to Nash, as everybody was individualistic and selfish, their actions including their altruism could be explained and predicted on the basis of their best possible strategies in any circumstances within their interaction with other players by way of game theory. It was known that Nash was suffering from paranoid schizophrenia and the approach’s human understanding was contradicting social experiments of the epoch some of which were even showing that there were only two groups of people having a similar tendency to narcissistically treat other people as mere objects: psychopaths and economists (Vedel & Thomsen, 2017). Yet, the theory found its place in the management strategies since it was convenient with neoliberalism’s expectations.

In the United Kingdom Margaret Thatcher and in the United States Ronald Reagan came to power by using the collective discontent against the bureaucratic institutions which people accused to be

inefficient and dishonest following their recursive failures and bankruptcies. Both politicians promised to reduce taxes, liberate people from the iron cage of bureaucracy and empower the individual (Hutchinson, 2008). While even the great bureaucratic machine of the state was run by people sharing the same human nature, the new management strategy had to be in accordance with the basic human greed and selfishness. Eventually, once they were elected, they intended to run the state in accordance with the public choice theory like a big corporate in the free market economy. They replaced the old fashion bureaucracy by corporate management techniques based on surveillance and quantitative Taylorist performance management although the system did not function properly as the civil servants started to look for tricky ways to fulfill the expected targets and quotas (Schram & Pavlovskaya, 2017).

Consequently, management's interest shifted from sociological tools ascribing social roles to each agent in society within the functionalist perspective by addressing to their altruistic sentiments, towards psychological methods continuously monitoring and predicting future human actions which were considered to be purely selfish and distrustful on the basis of a biological machine-like human nature. Henceforth, psychology started to collaborate intensively with statistics and tried to develop models explaining human attitudes in relation with statistically described personality traits. Although the ostensible purpose of the studies was to provide useful insights to people to help them improve their psychological situations and become happier individuals in accordance with the rising individualism and its exigence to be happy, in reality they were serving to marketing firms to find new strategies to sell the individualized products of the Post-Fordist flexible mode of production. What is more, psychology was instrumentalized to fit individual in the new economic paradigm through "radical self-authorship" imposing "entrepreneurial self" at the expense of "interdependent self-construal" adapting "self to demands of the social and material environment" (Adams et al., 2019). In this process, anxiety and depression were used to normalize human actions which became more predictable like robotic automaton whose self was "reduced to utilitarian, calculating thinking in all domains of life" (Teo, 2018).

#### **4. SURVEILLANCE CAPITALISM AND NEOLIBERAL GOVERNMENTALITY**

Obviously, behavioral forecasting models and neoliberal governmentality emerged before the information technologies and their behavioral futures markets. Yet, the new technologies provided a useful set of tools for the needs of the management science which was implemented even in the bureaucratic institutions including the American army. Computers were already used in the Cold War to establish the delicate balance of terror in accordance with Kissinger's Realpolitik through game theory's predictions (Cain, 2005). They also became useful instruments of the new management using game theory at an individual level in the age of neoliberalism thanks to their potential to conduct the necessary continuous mathematical calculations for prediction products of the behavioral future markets. Insomuch as measuring is the most important part of the new managerial paradigm to continuously monitor and predict the future acts, computers have provided a convenient infrastructure for modeling and forecasting. Thanks to computers, a virtual image of individual actors can be reduced to the theoretical individualistic entities and transmitted to a perfectly calculatable domain in which only numbers and their precisions are meaningful.

Actually, the emergence of the Internet was initially hailed with enthusiasm in 1990s by technopopists like the Californian Ideology's cyber utopians who thought that computers had the potential to bring about social stability without the archaic political hierarchies as they could continuously monitor and solve risks in society. Finally, the cyberspace could bring forth a politically free and antiauthoritarian space for participatory democracy (Barbrook & Cameron, 1996; Jacobs, 2021). However, the utopia rapidly came out to be a dystopia following the Internet censorships and surveillance which indicated the arrival of a new authoritarian form. Following the ideas of the

French economist Thomas Piketty, Shoshana Zuboff (2019: 72) explains this reversal through the fact that the uncontrolled cyberspace left to the mechanisms of free market has rapidly transformed into a commercial project whose primary motive is profit maximization inasmuch as raw capitalism without regulations of democratic institutions is antisocial. Thus, despite all utopian hopes, cyberspace has become a laboratory of absolute *laissez-faire* policies beyond the reach of any political regulation to the extent that market is allowed to use anything for its advantage. Zuboff calls this commercial project as surveillance capitalism.

Zuboff (2019: 17–18) claims that in surveillance capitalism, “human experience” is the raw material which is translated into “behavioral data” collected from people treated as users, not costumers, under the pretext of product and service improvements. Although the data is partially used for the pretended purpose, the excessive data is seized as a “proprietary behavioral surplus” fueling a new manufacturing process that Zuboff calls “machine intelligence”. The end product of the new manufacturing process is not any concrete commodity anymore but “prediction products” anticipating the future actions of individuals from whom data is collected. The prediction products are ultimately traded as commodities in markets for behavioral predictions that Zuboff calls “behavioral futures markets”. Thus, the purpose of surveillance capitalism is to develop statistical models with the Big Data collected from innumerable users through machine intelligence in order to predict the future feelings, behaviors, and actions of people.

In the commercial project of the Internet, knowledge itself also becomes a part of surveillance capitalism and capitalist ideology insomuch as collective memory is progressively linked to the monopolistic search engines’ priorities and algorithms. Indeed, the Internet dominated by a bunch of search engines, and especially by one giant monopoly, Google, contributes actively to the commodification of information as search engines’ priority is not to democratize information for objective or any democratic reason, but to instrumentalize information mainly for practical purposes related to the market (Mager, 2012). Their algorithms are developed on the basis of commercial ends as they are “inherently biased towards the advertisers and away from the needs of the consumers” (Brin & Page, 2012). Consequently, they interpret queries on the basis of guessing the most probable user intent which would bring the most popular and recent commercial webpages to the detriment of a large selection of the collective memory buried in the deeps of the Internet. Even the corrections of queries which started to be used under the pretext of developing user experience has become a means to manipulate the queries to make them fit in the most popular, thus commercial interpretations. Moreover, for their commercial ends aiming at each user with individualized products, search engines are inclined to personalize the search results according to particular individual’s interests interpreted through the user’s past experience. However, this tendency reduces all knowledge to subjectivity and menaces the objectivity of collective memory to the detriment of the public good and the general interest (Simpson, 2012).

Search engines are not only shaping what we know, but they also mine the most precious behavioral surplus data contributing to the development of efficient prediction products under the pretext of personalization of products by means of “reflexive process of continuous learning and improvement” (Zuboff, 2019: 110). Eventually, while “electronic agora” turns out to be an “electronic marketplace” (Barbrook & Cameron, 1996) and the Internet is becoming a big shopping mall run by search engine monopolies in which people are considered as consumers using the Internet with dominantly transactional intents to find a bunch of monopolistic websites in the first place, knowledge has become liquid, unstable and manipulative. Business defends these novel practices manipulating our knowledge and producing prediction products for behavioral futures markets on the basis of neoliberalism and the “freedom to launch every novel practice” (Zuboff, 2019: 774). Moreover, since information is progressively commodified in the behavioral futures markets to contribute to the neoliberal governmentality as technology of the self, truth itself is devaluated and has been detached

from universal criteria, which eventually led to the vertex of a period deprived of truth in the game of truth, known as Post-Truth (Keyes, 2004) which becomes even louder and clearer with increasing right wing populism (Rose, 2017); “a lesson learnt by Hitler” and his propaganda machine (Chomsky, 2011).

In the networks of cyberspace, individuals are treated as separate units in accordance with the neoliberal management’s understanding of individual based on game theory. Units cannot directly interact in the cyberspace while all interactions happen in accordance with a design mathematically calculating the best action for each unit insomuch as people are accommodated in calculatable domains of computers. In this sense, cyberspace can be analogically compared to Leibniz’s monadology in which monads do not interact but only act following their design calculated by God according to the principle of the best. In this digital monadology which Tiziana Terranova (2017) calls a “neo-monadology of social memory production”, the monads in the digital space are also acting in an implicitly predictable manner through the analytics of computer calculations although they are not aware of the design conducting their ostensible interactions. Yet, the digital monadology of cyberspace is not designed by God but by machine intelligence according to the principle of the best for surplus maximization.

To sum up, surveillance capitalism is a part of neoliberal governmentality based on biopower and in which information technologies are also used as technologies of the self. Just as James M. Buchanan estimates in his book “Calculus of Consent” that the collective action is nothing but a collection of individual actions (Buchanan & Tullock, 2004), in neoliberal governmentality, collectivity is reduced to an agglomeration of individuals acting by way of the same manipulation. The unities are not anymore based on internal motives or any organic tie, but external drives putting monad-like people in the same cluster in the process of interaction maximization for the best design. Although neoliberal politics discursively claims to empower individual and liberate people from the iron cage of bureaucracy, the new management has put people in a new cage which reduces society to a mathematical modelled monadology which was continuously monitored by computers. In this way, the highest degree of the Panopticon was constructed in the cyberspace and dissimulated under the discourse of individual freedom and choice. In this mathematical representation of society, human being is abstracted from the unpredictable agency while human actions are considered to be predictable and collective memory is supervised. Yet, while the commodification of information transformed the Internet into a dystopia for people and their freedom, it was the rise of a capitalist utopia what Zuboff (2019: 624–650) calls “a utopia of certainty”. Yet, Winslow Taylor’s scientific management attained its perfection as the agency was unconditionally transferred to the management and everything became a part of a world designed by engineering techniques founded on optimizations.

## **5. CONCLUSION: FUTURE OF SURVEILLANCE CAPITALISM**

Today we live in digital spaces parallel to our physical world. Following the massive migration to the cyberspace and its networks, society finds a digital image of itself segmented in interrelated fields which are continuously monitored. What is more, cyberspace does not only watch but it also controls through the biopower that it obtains by means of its immense Panopticon device founded on the machine intelligence. While all interactions and communications can be continuously watched, the residual data which Zuboff calls the behavioral surplus is used to develop models not only to predict but also to imprison individuals in fields which are convenient with their calculated ideal types. Likewise, Jaron Lanier (2018) warns humanity about its self-abdication in the cyberspace. As the digital domain is left to the mercy of the free market, companies are developing instruments similar to the state apparatuses in order to protect their benefits. What is more, the Panopticon tower that it constructs in the cyberspace can be linked to the real world through automatically determining the

real time locations of people (Lanier, 2018). On the other hand, the Internet monopolies have the capacity to manipulate and censor contents and knowledge according to region and user profiles (Meserve & Pemstein, 2018). They also want to acquire the authority to intrinsically decide the truth itself through new machine intelligence technologies and algorithms under the pretext of eliminating fake news on the Internet. Similarly, as Angela Merkel pointed out, the account suspensions of Donald Trump following his failed coup attempt shows that social media platforms like Twitter, YouTube and Facebook are progressively replacing the role of the justice and decide who has the right to freedom of expression and who does not ('Angela Merkel Calls Trump Twitter Ban "problematic" | DW | 11.01.2021', 2021). What is even more scary, it is only the visible censorship applied by the giant internet companies and we do not know if they already exercise that power to censor ideas of people less important than the president of the United States. All these developments will obviously entrench the power-knowledge of a few monopolies and lead to a "cybernetic totalism" (Lanier, 2018).

Indeed, the real problem in surveillance capitalism is the unequal distribution of knowledge. While the giant monopolies of the Internet can collect all the data and they have the right to know everything about us, we do know little about their mechanisms and what they do with all their data. Their codes are close to users and their communication of collected data realized through magic cookies is totally mysterious. Even though they discursively use the ideas of the liberal economist Friedrich von Hayek to defend their practices, they also contradict with Hayek's ideas as he also believed that the free market economy would bring forth "equally divided knowledge" as a precondition of freedom (Zuboff, 2019: 776). Hayek defended the free market not to let the businesses to become the new landlords of virtual fiefs. On the contrary, he considered the state-controlled economy was the road to serfdom, a return to Feudalism, for that he believed the values of the political authority would overwrite all individual values in such a politically controlled economy as knowledge would become the apparatus of the authority and "strengthen the belief in the rightness of the decisions taken by the authority" (Hayek, 2001: 164). Unfortunately, as it stays out of the reach of state or any social institutions and regulations, with its absolute *laissez-faire* today cyberspace is regressing to Feudalism to such an extent that the Internet monopolies have become the new digital seigneurs while people are reduced to a new type of serf which is called user in the jargon of the Internet. Moreover, the separation of power, a *sine qua non* precondition of democracy, regresses insomuch as the IT companies become legislators, executors, and magistrates of real interactions' virtual domains under their dominions all at the same time. What users find on the Internet is nothing but the beneficence of digital landlords, and if they want to stay in their fiefs and use their domains necessary for not only leisure but also for quotidian communication, education and labor, they are obliged to comply to the terms of the providers just as Facebook Inc. is now imposing to its users to consent to its data extortion if they want to continue to use their WhatsApp services.

Covid-19 pandemic provided a handful moment of disaster capitalism to implement the new Feudalism of the cyberspace as the lockdown periods imposed people to extensively use the digital technologies in all social domains including education, work, consumption, socialization and entertainment. Moreover, despite all the hopes of Žižek (2020) believing that the pandemic could finally make people realize the importance of collectivity, on the one hand, the health politics based on individualistic precautions underlined healthism and responsabilization of individual for the profit of neoliberal governmentality; on the other, instead of a global cooperation the pandemic helped to maintain national divergences and inequalities in international division of labor by way of vaccine nationalism. However, as neoliberalism is questioned due to its failures and inhumane consequences like increased inequalities, climate change and its incapacity to deal with the pandemic, capitalism seeks for a reform to survive. In its reform, as Rifkin (2019), the prophet of the Third Industrial

Revolution, points out that “fossil fuel civilization” cannot survive and a “Green New Deal” is inevitable, capitalism prioritizes under the flag of Green Capitalism, Great Reset and Green New Deal sustainability, renewable energy and ecology, which are obviously in accordance with the upcoming fifth long wave business cycle’s expected technological paradigm (Mathews, 2013). Thus, the future of surveillance capitalism is intrinsically linked to the future of neoliberalism and the possible outcomes of potential reforms.

Although individuals may believe that they are in control and can decide the way they use information technologies for their own ends, in reality, what people do is to play a chess match against a computer (like the supercomputer Fugaku with a speed of 415.5 petaFLOPS) billions of times stronger than Deep Blue (with only a speed of 11.38 GFLOPS) which even defeated Kasparov, the world chess champion. Surveillance capitalism as a part of neoliberal governmentality has achieved Hegel’s cunning of reason for that people believe to follow their own ends in the cyberspace whereas in reality they are under continuous and subtle manipulation of a psychologically managed apparatus operating through collective alienation and digital narcissism (Faucher, 2018). It is once again seen that democracy is fragile and necessitates the continuous lucid participation of citizens to protect it against populism which can eventually lead to tyranny as Tocqueville warned long before. Eventually, the lesson learnt from Hitler leads back to Hitler’s tyranny.

## **6. DISCUSSIONS: A DIGITAL WORLD NOT SO VIRTUAL**

Despite the advocates of New Economy who claim that production has lost its value in the new paradigm, the deindustrialization trend in the developed countries dissimulates the industrial basis of the so-called knowledge society. Accordingly, Manuel Castells and Yuko Aoyama (1994) underline that the telecommunication infrastructure should not be overlooked seeing the close relationship between post-industrial services and manufacturing. Likewise, according to Michael Hardt and Antonio Negri (2000: 284–289), even though labor is abstracted from material in society, the infrastructure through which knowledge is commodified in surveillance capitalism is still a produced concrete infrastructure while the displacement of industries in subordinated regions can lead to an illusion of the emergence of a new economic paradigm.

Capitalism is not a national economic system as it necessitates a global frame. In fact, deindustrialization of the West has never meant the emergence of a New Economy. Likewise, surveillance capitalism is only meaningful within a global economy in which international division of labor has progressed to such an extent that while a part of world is proletarianized in competitive markets, the core can focus on marketing and innovations in monopolistic markets, or in microeconomic terms, monopolistic competition. Thus, despite all neoliberal discursive arguments against the state’s role in the markets, capitalism in the core can only coexist with imperialism in the global economy. Thus, surveillance capitalism should be examined within the frame of the global transformation of capitalism through a new phase of imperialism which intensifies the surplus generation by means of fragmented industrialization of the periphery by investments of finance capital and the use of ecology knowledge as a means of governmentality to establish a global scale imperialist biopolitics.

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