

THE EMERGENCE OF NEUROCAPITALISM IN THE POST PANDEMIC WORLD

Muzamal Tariq

MPhil Research Scholar, Department of Sociology, School of Social Sciences and Humanities.
University of Management and Technology
muzammiltariq90@gmail.com

ABSTRACT

This paper aims to present a holistic view of neurocapitalism in the post pandemic world: the understanding that how capitalism has transformed with the structure of economy and has reached to a new evolutionary form of neurocapitalism. This is how the modern technology is connected with the structure of capitalism. This paper is the result of analysis based on multiple studies reviewed by researcher in economics, psychology and sociology. Furthermore, this research demonstrates that how cognitive decision-making affecting profit and capital creation is shaped by the non-localized, simultaneous and intensely hi-tech connected economic activity. In short author of this paper conclude that neurocapitalism is nothing but creating capitalistic advantage by the consumption of human brain activity at the speed of light.

Keywords: Capitalism, Emergence, Neurocapitalism, Phases of Capitalism, Technology and Neurocapitalism, Cognitive Decision Making's

INTRODUCTION

The term capitalism is not a new phenomenon for our society especially after the rise of industrialism, the great social scientists like Karl Marx and Engel worked extensively on it in the past. To understand the simple definition of capitalism Ritzer (2016), stated that there are two types of classes in capitalist system the one who sells their labor and the other who purchases the labor by giving a minor profit to its labor and this system exists just because that capitalist class owns the means of production. To understand the complexity of capitalism which has been elaborated further in this research, Korstanje (2015), explained the capitalism by comparing it with the terrorists, he said that in terrorism the terrorists attack on innocent people, whilst, the capitalists also attack on labor, they also spread a threat or fear in labor class which today has become our culture, a culture of fear by capitalism. Capitalism is the world's most and secret phenomena which is not exists only in few countries but in almost every country. Murillo and Sung (2013), presented capitalism in Korea where this system is called as Chaebol, Chae Means wealth and Bol means person or a party, they stated that few families enjoying the business in Korea by exploiting the labor class and now they are as powerful and strong as they have become the strong contributors in GDP of Korea. Obviously, capitalism is an economic war or system in society where many countries measure their economic stability from Gross Domestic Product (GDP) but Hanauer and Beinhocker (2014), raised a question about economic measurement, they said that economy could not measure the prosperity in a country; so, it can be assumed that capitalist system focuses only on economy not on prosperity and here capitalism presented as a cruel system which is just for wealth.

With the evolution of societies, the capitalism is defined as Legal Institutionalism in which the legal system has established to protect the owners of the means of production where the legal system protects the private properties and ownership of the resources with shield of contracts and again the exploitation of labor class started but in a new form of legalism. (Hodgson, 2015),

Phases of capitalism

Arrighi and Moore (2001) said that the periodize of capitalism which we say the phases of capitalism are largely dependent on our observation. The phase of capitalism means that how the system of capitalism evolves in different shapes as Ritzer, (2016), Talked about the perspective of Karl Marx which he termed as historical materialism which elaborates the social system and social conditions change with the structure of its economy. Khalid (2018), argued about the three stages of capitalist society, he called the first stage as slavery stage the very first society of human beings in which the system of wealth introduced in the shape of slaves and masters on the bases of having the material

objects. The second stage is of an aristocratic society in this society the ownership of lands introduced the system of serfs and lords in which the serfs labored and the lords benefitted over the production and its profit. The third stage is the most advanced stage of its time, the capitalist society in which the author states that the previous lords changed the way of their domination and entered into the age of esteem engine. The industrial revolution in which the one class was a bourgeois who owned the means of production and the other was a proletariat class who gave their labor on the bases of wages. The whole procedure throughout the history explains that from the beginning till now the capitalist system exists in the shape of different phases. Amadeo (2020), highlights the new phase of capitalism which he calls the late-stage capitalism, the modern way of owners in which they are legally winning the game and by pretending themselves as anti-capitalist, he gave an example of factories which are giving low wages and getting high profit and with this they are also damaging the environment, to understand the meaning of the term the late-stage capitalism. All the above stages have been linked with the fact of controlling human by the human in past with objects, economy and lands but now in modern age it is called a neurocapitalism.

White and black in contrast

We are in the post-industrial world but are we really in the post-industrial world, to answer this we can assume physically that we are in the new postindustrial world where everything is full of technology, development, obviously this word in itself is a positive thing for society but in the world, the one side of society has been developing by exploiting the other side of society. The contradiction between these two classes has been emerging with technology and what if we say the technology is also a mean of production which is owned by the capital class, so, how can we say that the world has been in the process of development but we can say that the capital class has been in the process of development and the labor class has been exploiting via new ways. Sennett (2007), showed that we are on the fresh page of history and who are the modern with technology are the capital classes, in 1880, before the crisis of agriculture in the Great Britain there were four thousand families who owned 43 percent wealth of the nation and in America just before two decades the wealth of top five families has grew, this evidence from eighteenth to twentieth century presents that development is the name which is only for capitalist class and labor class is living in the infrastructure of capitalism or false consciousness. White and black in contrast presents that the labor class were dominated by capitalism and is still under the dominance but now for this time with the help of technology which is a helping tool for capitalists.

Neurocapitalism in the modern world

In the modern and advanced world, the ways of domination or capitalism have changed, with the rise of science and technology, of course, capitalism has worn its scientific mask which we can call the neurocapitalism, there are two dimensions of the modern capitalism or neurocapitalism so far. Banerjee (2008), explains about the destructive practices of capitalists of getting profit by all means, he expresses from the history when east India company and French forces fought a war over the control in the province of Bengal however, when the news of winning the war reached in London the stocks of east India company's increased 12 percent on the spot. So, an answer comes that war without trade and trade without war is impossible and same from this domain we can extract a view that the armed companies getting profit by giving the material of death and when the deaths increase, they get profit in stock market. We are not able to identify the idea of getting profit by armed companies because this is the new and scientific way of capitalism in which our brains are controlled with the ideas of that conflicts are non-material, they are based on the ideologies which in the past opposed by Karl Marx by using the term a false consciousness. Also, by Sombart (1915), who said that the ancient people were unaware about the profit but with the time people became more profit making and all this depends on the structure of economic with which capitalism changes.

The second dimension of capitalism which relates to the field of psychology in which Hess & Jokeit (2010), analyzed the mental disorders such as depression, anxiety, conduct disorder and hyperactivity, they stated that these are the results of social conditions or environment which relate to the social conformity or rebelliousness and these are the ways of living in which one could determines his social status and value, if he is unable to meet those requirement of conformity the person falls in the list of rebels or deviants which results in the mental disorders, but by analyzing critically they created the reciprocal relationship of capitalism and psychological traits, for example, social standards have been set by the capitalist class and the one who is unable to meet like is not earning a daily wage

according to the aim of capitalists he is out of the status of society and faces many disorders and on the other hand the capitalist pharmaceutical industries are launching the different psychotropic drugs and medicines and this dimension is called the neurocapitalism with the reciprocal relation, the thesis, antithesis and the synthesis.

Emergence in the post pandemic world

After discussing the two dimensions of neurocapitalism we come at the ultimate stage of controlling human which we call neurocapitalism.

From the recent years the neurotechnology has been advanced from the simple brain imaging to the thought reading and mind manipulation where the human mind can be controlled via technology, and it can increase or decrease its capabilities to function. Martin (2020) describes about the process of neurocapitalism. He explained that Neuralink an American company with the collaboration of Microsoft has planned to connect human minds to the internet with the fine wires and also the biggest social media platform Facebook has announced its plan in 2017, to develop a brain wave sensor which will enable the human to type hundred words in a minute by their thoughts and also in 2019, they showed a result of their “voice decoders” which they applied on some patients of epilepsy and they read their minds in the process of giving answers of some questions.



Prototype of the brain interface used by Facebook to read thought, words. Credit: Facebook Reality Lab.

The world is going through the very advanced phase of capitalism which has transformed its meaning in neurocapitalism. The system of exploitation as same as in the history and the false consciousness has been changed into the scientific arguments which the capitalist are using and pretending they are doing for the purpose to enhance human capabilities but some researchers argued about the fact and raised the term of Neuro-rights, Lenca and Andorno talked about a few Neuro-rights, in which people or employees should have a right to decide whether to use the machine or not, people should have a right to choose when to share the data of their mind and in which circumstances, users should be protected from any physical or mental harm while having this machine, people should have a right of continuity of their identity in the real world where these machines can change the personality. The very first words of Karl Marx of historical materialism and false consciousness in this article again should have a place here because that was a prediction about controlling human beings by human which now in the modern world is actually happening. Jagodzinski (2020), distinguishes other domains of capitalism which he calls the “Control Society” he mentions the most pandemic of human history Covid19 which was a biopower to destroy the economy of China and to protect their own borders from invaders as the whole world was in an emergency, so, does it make any sense of controlling the world since we are already witnessed to such predictions about the emergency of the whole world by the most influenced business tycoons of the world. On the other hand. Jagodzinski (2020), highlights the media control on human and he calls it as the “Designer Media” he explains that how the US election was influenced by the media and Russian interfaces via technology and how media highlighted a slogan of Trump “Make the USA great Again” it was a big

example of media that how they control the perception of human which I again repeat the system of capitalism has evolved with the technology.

The arguments of Davis (1997), can bring this study in a simple understanding, he states that the technology and advancement of capitalism was predicted by the Karl Marx who will always be a great predictor of capitalism as he talked about the historical materialism that the change in society is due to the change in economic structure and today with electronic currency like cryptocurrency and many others have been changing the ways of domination even on the worst condition it has been planned to control human function via technology for the purpose of increasing productivity which will give surplus value to capitalists and the labor which Marx called the proletariat will remain in the false consciousness.

Cognitive liberty

Although, the neurocapitalism is the most modern stage which is entering into all the human social, physical, business, mental and even environmental aspects of life as we discussed above. However, there are some scholars who are well aware from the danger of neurocapitalism and insisting about the legal framework for preserving the rights of human beings. Sententia (2004), explained the meaning of cognitive liberty which she refers as a consent of human to enhance his cognitive ability, she explained both sides of the new modern technology aim to enhance human ability or to do such therapeutic cures but in her conclusion one of two points was that people should not allow the new technology to change their mind until we find the clear benefits of emerging aims.

Covid-19: A complete domain

With the rise of technology how high the capitalism system and how strong its roots in society now. We estimate that the pandemics of the history are major turning points of history for capitalism to show its power and roots in the world. Adams (2020) says that covid-19 has been presented a big disaster of the history in US but by the mid of April 2020 covid was the third highest mortality prediction in the US by comparing to the other viral diseases, cancer, diabetes and drug overdoses then how can we call covid-19 as the big disaster of the history. It must arise a question is covid-19 a disaster or not. The healthcare system no doubt, for capitalists is rational for profit in economic domain but the healthcare system is a responsibility of government as an individual is unable to access these facilities especially in covid-19, in this pandemic the markets earned their profit as usual and governments failed to take their responsibility as huge crisis of the individuals have been seen in this pandemic (Cohen J, 2020). This profit system of capitalism in the post pandemic world shows that how this system has been developed with time and how profit motives left behind the humanity. The profit motive and humanity are parallel for capitalists as in this pandemic many companies have fired their employees with the arguments of crises but are that really the crises? If we see the statistics, comparatively, these have been increasing from 2001 to 2020 in pharmaceutical business and at the same point they fired their employees as well (Mikulic M, 2021). None of us had predicted about this pandemic and the severity effecting the jobs in the system of capitalism (Aghion et al, 2021). This pandemic is a win-win situation for the capitalists where they are firing the employees and increasing their profit. To highlight the intensity of this pandemic of the century or we can say the turning point of capitalism. Fanelli and Whiteside (2020), say that this pandemic would be remembered with the name of virus and the future historians will look back it as a transformation of political, economic and social life in the context of capitalism.

Combining the history and present

This article clearly states about the capitalism and the modern ways it changes its faces and exactly it has been presented that how capitalism has been transformed in the shape of neurocapitalism but the main concern here is to relate the previous capitalism to the modern neurocapitalism and to support this what Sajjad & Tariq (2020), stated about the economic determinism, they explained that Karl Marx stated that all the social institutions like family, health, education, religion and politics are dependent on economic structure and these historical facts clearly relates to the present modernism of neurocapitalism, simply, the new ways of controlling human and their ability to function is a phenomena of history which Marx called historical materialism but with the change of economic structure this phenomena has been evolved in the shape of neurocapitalism.

Objectives

- a) To highlight the system of capitalism
- b) To explore the modern ways of operating capitalist system
- c) To visualize the techno-capitalism

REVIEW OF LITERATURE

The capitalism is a phenomenon about which the researchers have been studying and still this under the shadow of different views of different researchers, Hodgson (2015), states about the institutionalism of capitalism which is a legalism for capitalism and its grounds in society, this is the system where legal development is related to the capitalism and capitalism is related to legal development and that is how he presented the connection of money, law, exchange and property which are the pillars of capitalism shielded by the legalism. The roots of capitalism which were identified by the Karl Marx who said that it is a continues process with material structure of society and today economy is the biggest key factor of capitalism which now has become a technology and shaping itself in the new forms of technology.

To make sense of the roots of capitalism, Doogan (2009), discussed the start of new capitalism system from 1960s, he expresses at that time like the early years of technology only those companies were survived in the market who were able to adopt new technology according to the market condition and those who could not adopted new technology could not survived and according to the author this act was the first step through which capitalism entered into technology and with the passage of time now it has become neuro-capitalism, techno-capitalism and industrial capitalism. Capitalism is not a new phenomenon and throughout the history there are evidences of the pandemics and wars via which capitalism changes its faces and emerge into a new form of domination of rich class and inequality in society, the crises of black death was one of the changing or helping factor which contributed to the capitalism to change its face. (Murshed, 2020). Similarly, the covid-19 has changed the shape of global wealth and included more technology over the control of capitalism where the working class has lost their jobs by giving profit to the owners of means of production as the matter of decreasing salaries and increasing profits on the bases of so-called crises during this pandemic, this paragraph is the indirect description of what the author tried to express. (Sell, 2020). How covid-19 has changed the global market and how the states play their role in this pandemic is described by van Apeldoorn and Graaff (2022), they explained that with these crisis the role of the states in the market has increased and also it increases the capitalist system, if pandemic shifts the government attention into the market then of course it effects the political affairs as well, so, the point is that in every era capitalism changes its shapes and always comes more stronger than before and the current era is the most advanced era of capitalism which is logical and systematic too to explain and understand as well. Well, at the last when we are talking about the new technological capitalism, it is an obvious thing that media has its role in the development of this system where media shapes the societies by making social construction of capitalism as the only way of living life where the working class should have to sale their labor and the elite or owner class have a right to get surplus value, for example, covid-19 probably is not as dangerous as presented and continuously reported by the media and this is exactly what from which the capitalist class is getting profit in the form of surplus value, so, the media has a huge role in social construction of society and this is how the modern capitalism works. (Robins & Webster, 1988)

METHODOLOGY

The research methodology is a process to arrange and display the methods of founded answers to research questions in an efficient way so it can be easier for others to have believed in our results. (Mahmood et al., 2019). In this article the Literature Review has done by surveying relevant scholarly articles, books and other electronic and print sources relevant to capitalism and neurocapitalism, Google scholar is used to collect articles from the relevant data. The review provides a summery and critical evaluation of the topic regarding neurocapitalism its phases and way of practices in the modern world.

This article has been compiled by doing extensive research of literature. Multiple research articles and books analyzed to understand the system of capitalism and emerging trends in the form of neurocapitalism. Articles and books are searched by typing the keywords related to the topic and

initially abstracts of the articles analyzed then relevant articles selected and data collected related to this topic.

RESULTS AND DISCUSSION

In the modern era where everything in an academic sense is possible. We as the researchers analyze both sides of neurocapitalism, the intended purpose and latent function. However, the Neuralink, Microsoft and Facebook stressing to develop such technology which will enable the human beings to do what he wants but in an efficient way like typing without moving a finger and especially for the disabled persons who can do work with not their arms or legs but with their thoughts through technology. This technology can be used for therapeutic purposes for depression, anxiety and conduct disorder. The industries also in the list of taking benefits from this neurotechnology as we discussed above the government of China is mining data of their employees to determine their capacities to work and same like USA aims to take more advantages from neurotechnology for the purpose of improving and making more competent their army. The other side of neurotechnology is horror because it is going to change the world where the thoughts of human beings can be translated in the form of words. The human beings will be able to enhance their capabilities of work but they will always under the shadow of neurocapitalism and fear of controlling and alteration of their thoughts and beliefs. The presented evidences support the argument that neurocapitalism is an unsolved mystery but so far seems as a threat to humans. The system of capitalism which is coming from the history of societies is at its extreme stage of neurocapitalism, neuropolitics, neuro-devices and neuroeconomic, whose aim to have a digital society which can work in order to make profit no matter what will be the means of making profit and this is not a new phenomenon in our society, this is what which has changed his form of making profit by exploiting others. Covid19 what it is? it is assumed that is a viral disease which spreads rapidly but what are the consequences of this pandemic. If we think rationally, China was targeted as it is going to be the highest economic power in the next few years and what was the total aid for this pandemic for different countries by the so-called humanist but in fact are capitalist and what business has been made in pharmaceutical industries during this pandemic and even after the pandemic the capitalists are making the post Covid profit and as the result of exploitation what we have now is that the injected and mask society.

The term capitalism highlighted by Karl Marx and his prediction by assessing the historical materialism at that time has been proved with the phases of capitalism according to the changing in structures of economy.

The emergence of neurocapitalism in the post pandemic world now has become an unsolved phenomena where the two dimensions exist, the one the intending purpose of the capitalist claiming to serve humanity as they have proved some experiments on disabled person for example, the robotic arms functions according the thoughts and the electrode bracelet which receives the brain activity and can type the words without touching a keyboard, on the other hand the Neuralink company has completed a successful experiment on a pig by reading its thoughts and controlling its emotions and also have an aim to test it on human being, here the question arises why there is a need to read human thoughts and who will read it and what will they read and when. (Dad, 2021),

Keeping this in view, Samuel (2020), presented the four laws which he named as Neurolaws, a person should have cognitive liberty whether he wants to use the neurotechnology or not as the government of China is already mining data from its employees from the wearing caps for the purpose of determining depression, anxiety and fatigue. A person should have the right to schedule his brain data, the involving person in the neurotechnology should be saved from any psychological or physical harm, the last one is that the right of psychological continuity, the involving person should be totally free from any kind of threat of alteration of thoughts and beliefs.

The emergence of neurocapitalism although, pretending the ways to help human beings and to accelerate their ability to work, however, the threat of its consequence cannot be denied as an attempt to control human thoughts which ultimately can create a new world or can reshape any aspect of life like social, political, economic and religious, therefore the emerging neurocapitalism, neurotechnology, neuro-devices, neuropolitics and neuroeconomics are the threats to human and its rationality.

While articulating this article there are opinions and arguments to support this study about the emergence of neurocapitalism which start as what a human being can say even now about himself, are

we the private people? Do you really think in future that what human will have his own which he completely owns? Talking about the privacy Anthony et al. (2017), states privacy is what a person reveals or what he hides and what others acquire and what they ignore, but all depends on the person that what he wants to share with others and what he doesn't but think for a second in the era where many neurocapitalists are planning to control or read human thoughts via technology then where the element of privacy falls? And what will we have to say a private thing? In 1984, George Orwell said that "Nothing was your own except the few cubic centimeters inside your skull" which he meant to say that in the world everything can be snatched from you except your brain and your thoughts which are completely yours but the new era of neuro-devices is breaking the human's concept as the owners of their own brain which is completely of course, against the concept of being human, here, we would say that in future there will be nothing for us to say mine. Samuel (2019), highlights the process and so far, success to snatch human thoughts as he mentions that Mark Zuckerberg's company has been investing in research on brain-computer interfaces that can take the human thoughts directly from the neurons and shape them in the form of words and as we mentioned above, they have already developed algorithm for decoding the words from brain activity and similarly many other companies have been working on this by pretending the purpose is to serve humanity, how can the capitalist serve to humanity as the human being are themselves becoming the slaves of neurocapitalism which Tero and Sampson (2018), explained as Neuroculture, in this stance, they argued that human being have lost their power of rationality and now we call rationality to which what we have to say but the actual meaning of rationality is to think beyond the phenomena or think without limitations of the situation but with logic, they stressed that our brain has the limitation of running condition which can be political, social, environmental and so on, we are in a circle where we have limited options which we consider as our rationality but in fact that is not and this is exactly what the media does as we mentioned above the Designer Media which creates a situation and give the limited options and we stuck in that and what we call it our rationality but near to us that is a bounded rationality in which we are not beyond but bounded in the system of capitalism. In the post pandemic world, we are in a circle of given options which they are convincing us that is the rationality of real world. Although, advancement of technology helps the human beings but when this advancement is used by the capitalists then this is in our sense is a more destructive weapon than any other nuclear weapon and somehow if we consider the advanced capitalism technology as a positive tool to serve humanity then exact on the next step, we will have another dimension of capitalism which is exploiting people, if we take Covid-19 as a naturally spread viral disease and is not a biological war and this is the very soft corner where we as the researchers evaluating the both positive and negative side of capitalism but here again in this dimension capitalism again taking advantage of the situation. Dale and Bhattacharya (2020), state that this covid-19 has exposed the brutal systematic priorities of capitalism of making profit even of lives of people, the pharmaceutical companies are the most highlighted part from the capitalism in this pandemic because these companies have fired their employees in pandemic with the excuses of business crises but as we mentioned above the statistics show from 2001 to 2020 the world revenue of pharmaceutical has been consistently increasing then where are the business crises of these companies as they pretend.

CONCLUSION

In taking holistic view of neurocapitalism this study aims to present the multiple sides of the attempts to control human behavior and thoughts via technology. The conclusion of this study relies on two dimensions. The view of serving humanity cannot be accepted on the evidences of history presented in this study which are on the base of Marxist term of historical materialism. If this idea seems biased then the second dimension of this paper presents the intending purpose of neurocapitalism of serving humanity by increasing their ability to work but there is no such evidence in the literature which truly supports the intending purpose of neurocapitalism, Robert K. Merton presented the functions of society which he named as the intended and latent functions, the intending is one which is supposed to do like a university is supposed to give education and degree on its criteria to students but there are other functions of a university like musical night and sports activity which he named as latent function, we as the researchers assume that an intending function always has a latent function. That is how the intended function of neurocapitalism is something that has a latent function which we stress as, that is a threat to human being and his thoughts to be controlled.

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