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A MULTIDISCIPLINARY ASSESSMENT OF CYBER CAPITALISM AS A NEW MODE OF PRODUCTION

Sayfa 1-19

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Abstract

This study investigates the theme that Cyber capitalism has an accelerating effect on the genetic relationship between capitalism and crisis and its possible impacts on developing economies at the intersection of innovative technology, digital culture, and neoliberal paradigms. Due to cutting-edge digital transformations, IoT electronic devices, the internet, mobile phones, etc., can always be kept in an accessible, visual, and controllable medium altogether to consumers, employees, and people. On the other hand, cyber-capitalism substitutes the market's priorities for society's priorities, trust, accuracy, stability, etc., that keep the community together and hold religious and moral values. As a result, being open to continuous change, inability to adapt to new situations, insecurity, and anxiety negatively affect established moral values and principles. It is argued that cyber-capitalism, with its premises of industry 4.0 on the one hand, replaces new production relation networks in flexible production environments with technological possibilities of artificial intelligence (AI) and mixed virtual reality (VR).

Keywords: Cyber-capitalism, mode of production, industry 4.0, capital accumulation, digital assets
JEL Codes: R10, R11, R58

YENI BIR ÜRETIM TARZI OLARAK SIBER KAPITALIZMIN BIR DEĞERLENDIRMESI

Öz

Bu çalışma, Siber kapitalizmin, kapitalizm ve kriz arasındaki genetik ilişkisi üzerinde hızlandırıcı bir etkiye sahip olduğu temasını ve bunun gelişmekte olan ekonomiler üzerindeki olası etkilerini, yenilikçi teknoloji, dijital kültür ve neoliberal paradigmaların kesiştiği noktada incelemektedir. Siber-kapitalizmin, bir yandan endüstri 4.0'ın öncülleriyle, esnek üretim ortamlarındaki yeni üretim ilişkileri ağlarını yapay zeka ve karma sanal gerçekliğin teknolojik olanaklarıyla değiştirdiği iddia edilmektedir. Son teknolojinin dijital dönüşümleri sayesinde IoT elektronik cihazları, internet, cep telefonları vb. tüketiciler, çalışanlar ve insanlar için her zaman erişilebilir, görsel ve kontrol edilebilir bir ortamda tutulabilmektedir. Öte yandan, siber kapitalizm, toplumu bir arada tutan dini ve ahlaki değerleri barındıran sosyal öncelikleri, güven, doğruluk, istikrar vb. yerine her zaman piyasanın önceliklerini koymakyadır. Sonuç olarak sürekli değişime açık olmak, yeni durumlara uyum sağlayamamak, güvensizlik ve kaygı, yerleşik ahlaki değer ve ilkeleri de olumsuz etkilemektedir

Anahtar Kelimeler: Siber-kapitalizm, üretim tarzı, endüstri 4.0, sermaye birikimi, dijital varlıklar
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1. Introduction

The architects of digital transformation are all of the revolutionary technologies such as cognitive technologies, virus DNA modification, biological weapons, genetic engineering, artificial intelligence, data analytics, cloud technology, security-oriented solutions, blockchain, intelligent robots, the internet of objects, 3D printing, quantum computing, and the cloud services, etc. Since these cutting-edge technologies are continuously integrated and intertwined, innovative giant companies see the fourth industrial revolution 4.0 (4IR) as the whole of these technologies.

The most significant factor that started this new period is the incredible amount of data generated per second and the value obtained from data analytics. Around 20 exabytes of data are generated every day to the extent that the sum of all data generated up to 2 years ago is the same as the data generated in the last two years. This is considered to increase exponentially. However, with conventional programming systems, companies cannot see almost 90 percent of this data because of the general nature of existing computer systems. Of course, the key factors transforming the production process in Industry 4.0 are artificial intelligence embedded in IoT, consisting of a new era of automation where machines talk to each other (M2M), produce&analyze data, and run the production process accumulating information and knowledge. So, there are two essential things for artificial intelligence:

- Big data and
- Computing powers.

With the increase in data and the emergence of quantum computers, artificial intelligence affected all sectors, and therefore, investments in artificial intelligence have accelerated in many sectors. The transition from mass production to flexible production and customizable production, with the widespread use of the internet, heralds the era of science and digital technology and the liberating effect on individuals. This transformation based on innovation, advanced technology, and entrepreneurship profoundly impacts conventional production relations as a requirement of cons minimization and profit maximization strategies of capitalist companies and entrepreneurs. The strategy of taking advantage of global competition based on the high-tech requires cheap labor, natural resources such as oil, innovation-based economy, and management capability, which include new product development capacity and entrepreneurial potential. Therefore, the new world order envisions a new architecture and development model based on innovation and digital technology.

The new capital accumulation model is called "*innovation"* or *"digital economy"*. The transition to innovation capitalism or cyber-capitalism brings ecosystems the most complete and exciting cultural, social, and economic change. Countries that want to design their future based on determinism of science, innovation, entrepreneurship, technology reproduction and complete the global social transformation process by reconstructing their production relations and consumption habits manage the transition processes to cyber-capitalism in the best way this transformation. Cyber-capitalism has started with health and medicine, and there was much intensity around customer relations. When we make research from the Scholar database with "*cyber-capitalism*", we found 74.000 articles but only 8 contain the expression on the header *allintitle*.

Here in this study are the questions that stir our minds in these regards:

- *What is the new form of capitalism with the advent of the cyber world?*
- *Is there any change in the production relations and factors in 4IR?*

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- *Will there be new determinants other than AI and quantum computing on cyber capitalism?*

To find proper answers to the research questions from existing literature, we decided to assess the following interrelated subjects:

- To define a conceptual framework: cyber capitalism as a new mode of production
- Analyze the change of production relations by the rise of capitalist workers and communist liberals
- To assess the effects of the inclusion of super artificial intelligence within the production relations
- To assess the effects of the IoT and droids as a new class between white-collar workers and capitalists
- Make a discussion over Cyberpunk of Cybercapitalism

2. Conceptual Framework: Cyber Capitalism as a New Mode of Production

The aim of study by Laxer and Keating (1999) is the analysis of what Laxer takes to be a new, postmodern "*Cyber-capitalism*," where the triumph of the market and market ideology over social democracy is nearly complete and where class conflict has re-emerged as a major fact of contemporary social existence. Brophy (2001) discussed cycles and circuits of struggle in high-technology capitalism. According to Wilson (2013) Globalization-intensity, extensity, velocity and impact- equates with cyber capitalism. Qi (2014) concluded that the political and economic transitions on both demand and supply sides of China's defense-industrial system have facilitated the country's digital offensive. In other words, China's military expansion has been a product of the mutual reinforcement of strategic and business logics. Efe (2020) argued that cyber capitalism has permeated and transformed our society, culture, body and mind with the advent of Internet of the Things (IoT), machine learning (ML), deep learning (DL) and artificial intelligence (AI). The IoT, which has a time, space and rule-transcending nature with a transnational structure, has enabled the emergence of a whole new world called cyber capitalism. Knaudt (2021) presents a preliminary sketching of research in progress, namely how computers were designed in all best interest of serving human social interaction, how they grew out of their imagined functions, becoming the revolutionary tool of cybernetic capitalism. Janis (2021) put cyber-diplomacy into perspective, and more successfully evaluate its strengths and weaknesses, author will put it in the context of surveillance capitalism, which can be considered as one of the largest threats to cyberspace.

Capitalists, whose sole purpose is to increase capital accumulation, use technology to increase competitiveness, reduce costs, reduce dependency on skilled and experienced workers, and increase their control over the production process and workers. Capitalists need skilled workers to profit, and the unskilled labor force with high costs due to competitive pressure. Therefore, digitalization in production processes increases the risk of losing their jobs, primarily middle-aged and non-highly educated workers. Defending these workers' jobs already stands as one of the most important tasks before the unions and socialists. With the spread of robots and artificial intelligence, the possibility of production being done entirely by machines has been frequently mentioned in recent years. If robots produce robots and other means of production without humans, the question will arise for whose benefit this production will occur. The bright professions of the future described for Industry 4.0 will inevitably have to experience similar disqualification processes (Özyıldırım and Özbay, 2020).

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We have been strikingly observing how digital technology has touched every aspect of our lives in recent years. The history of capitalist production processes on the economic and social transitions between agriculture-industry-service-finance-ICT sectors, from lean manufacturing to complex manufacturing, from mass manufacturing to innovation and digital technology-based production models, from classical liberal policies to macroeconomic policies, and then to the rise of neoliberal policies has witnessed. This new mode of production and consumption, which has led to the emergence of the creative economy by the innovation and entrepreneurial society model, the demand for a new workforce, and the reorganization of labor markets in the format demanded by global capital, can shake up everyone's life.

Digital Capitalism includes all innovative concepts such as digital economy, digital technology transformation, innovation, and technology-based new capital accumulation model, growth and development, social innovation, social entrepreneurship, digital work and labor, global labor markets in terms of the transition from the market economy to the innovation-based digital economy and from conventional social policy to social innovation.

The formation of platform economies and the great importance of innovative ICTs in China's economic development strategies have led to significant changes in class relations in China. First, digital and home-based remote labor with the rise of platform economies became an issue. It has brought more flexible contracts, spatial-temporal ruptures in the labor classwork, and unstable, precarious employment relations. These changes create a new working class in China, the inevitable labor force in China's economic boom, and global IT power. The Chinese working class has evolved differently because of the government's double-track strategy. Social value production and reproduction relationships are considered for a group of people to be a social class. This point seems quite open to debate.

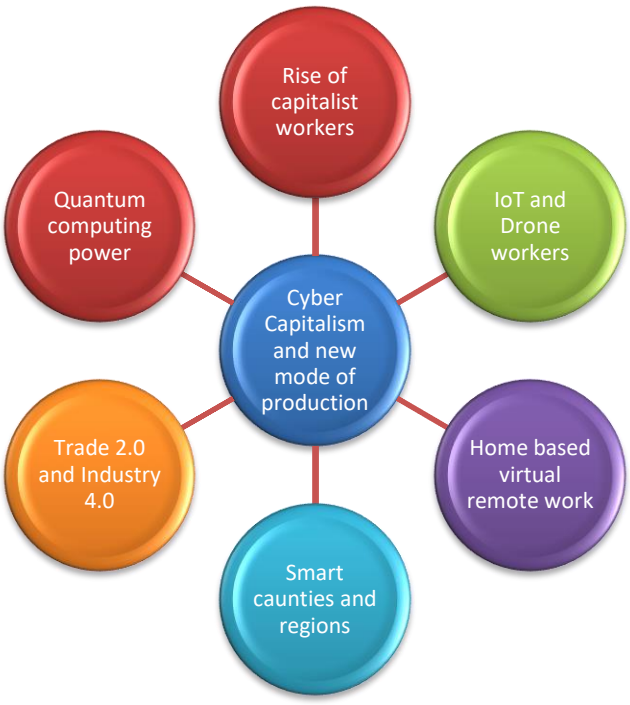

Figure 1. Elements of Cyber capitalism as a new mode of production

As noted above, the working class, which has lost its space-temporal unity, will restrain its ability to act as a class for itself. The fact that labor actions are generally self-employed

can eliminate the working-class methods like collective bargaining. However, this does not mean that the end of the old working class has come. It means further discussions on how digital labor should be organized as a working-class element.

3. Change of Production Relations by the Rise of Capitalist workers and communist liberals

Some socialists see China as an economic force against the US in recent years to gain against imperialism despite the pure capitalist structure of China. So, COVID19 was a strategic action for this purpose. The fundamental nature of the regime in China sought answers to these similar questions rather than the achievements in the economic race with the US and other capitalist countries. Here are the questions that stir the minds:

- *Will the next class be the capitalist workers?*
- *Will the intensive use of IoT and robots destroy the working class?*
- *Will Marxism's residual value paradigm collapse with the expansion of IoT and industry 4.0?*

To have integral answers to these challenging questions, one must grasp the nature of technology, globalization, and the essence of business and production relations. The preconditions and key elements are discussed here:

- The Clarity and Nature of the Globalization Phenomenon
- State capitalism and exploitation order
- Profit rates, Capital accumulation, and corruption
- Living conditions of laborers

3.1. The Clarity and Nature of the Globalization Phenomenon

According to sociologist Anthony Giddens, our age at the end of the twentieth century is very different from before. We can think of globalization as an economic process. The basis of globalization is the enormous changes in communication style and have a significant impact on all relations related to these changes. Communication facilities at our disposal at any time cause considerable changes in the basic structure of life for all people (Giddens, 2000: 24). Along with the fundamental changes in the infrastructures of information technologies, there have been changes from industry to the service sector at the central point of economic relations. Consequently, when services in information, entertainment, electronics, and finance are the most critical financial elements, our whole lives have begun to be shaped accordingly.

On the other hand, depending on communication technologies, information and transportation technologies are so effective that any event globally has become of concern to a person living in another part of the globe. Advances in vehicles also contribute to our global movements by removing geographical borders from our lives (Baumann, 1999a: 20). Along with globalization, the leading developer behind the debates on multiculturalism is monoculturalism. There is some homogenization or separation (Gutman, 1996). With globalization, Western-style economic behavior resembles the rest of the world, and our lifestyle becomes standardized (Yıldırım, 2000: 74). In addition, some claim and criticize that the internet was planned to shape the whole world's thought, as in North Americans (De Benorst, 1996). With globalization, traditions collapse, and the danger of fundamentalism emerges (Giddens, 2000; Thurovv, 1997).

Fundamentalism means a siege under tradition and nostalgia in a broad sense. Fanaticism and intolerance erupt as rules collapse. The importance of fundamentalism for mental health provides a social tool for violence and discrimination. Today, while the media

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enable us to be aware of all parts of the world simultaneously, they present cultural products through TV series, magazines, sports, and cinema. In this context, the "cultural codes" and "library models" of the sovereign nations that hold the production of cultural information in broadcasting affect the people of underdeveloped or developing countries (Bayhan, 1995).

It is no longer possible to discuss an international economic system that does not consider multinational companies' needs, interests, and goals. Looking at many developments and changes, Paul Streeten describes the process of globalization, new in technology, location, and specific features; it is historically unique in many respects. According to Dicken, globalization is a recent phenomenon and a more complex form of internationalization, implying some functional integration between internationally dispersed activities (Dicken, 1992). Steve Smith and John Baylis say that globalization increases interdependence between societies (Baylis & Smith, 1997). The expected points of many debates on this issue can be abstracted into three points given below:

1. Politically, the nation-state sovereignty is shaken, and the influence of supranational authorities is growing,
2. Economically, the flow of transnational commodities and factors of production (such as money and labor) are accelerating,
3. Socio-culturally, the relationship between people in different parts of the world is getting easier by increasing the development of a global culture with cultural homogenization.

Criticism of these claims has focused on the fact that globalization is nothing new and that nation-states still hold the key to influencing this phenomenon. In addition, it has been stated that TNC (Transnational Company) is not included in the whole globe, but only partially in some parts of advanced countries. Among these critics, Paul Hirst and Grahame Thomson have tried to reveal the myth of globalization by presenting empirical and statistical data (Hirst and Thomson, 1996). These debates about the features of globalization inevitably sparked controversy over the changing role of the nation-state. There are generally two contradictory main theses on how to interpret the effects of globalization, which is the biggest event of today's world, on existing structures and institutions. According to the first thesis, globalization means modernization and development; Therefore, it should be supported if not prevented. According to those who share this opinion, globalization benefits everyone in the economic, political, and international order. On the other hand, according to the defenders of the second thesis, globalization is the name of applying "imperialism" at the beginning of the 21st century (Oran, 2000).

3.2. State capitalism and exploitation order

The most significant difference between the US and the Chinese economies is state capitalism and a free market economy. While these two economies have different capital accumulation models, they constitute two essential elements of the global capitalist order. Analyses of state capitalism refer to specific features of state-business relationships, such as; the government intervention to protect large firms and sectors of national strategic importance and the channeling of government resources to grow private firms' capability to challenge foreign rivals (Zou, 2019). They are engineering rapid growth by adapting core tenets of the free-market capitalist model and embracing globalism. At the same time, they maintain state ownership of key enterprises and varying degrees of state control over the financial sector. While these practices indeed challenge the free-market status quo, the mentality that views free-market vs. state-controlled capitalism as a zero-sum

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game appears unrealistic. Instead, a productive course would view these new systems as viable ways to organize capitalist production and market institutions, triggering measured shifts in the global policy consensus over time (McNally, 2013). Moreover, the Chinese economy is under the control of the Chinese Communist Party. Still, as it also integrates with world capitalism, the party bureaucrats are highly concerned about global capitalism's stability in terms of internal security and long-term interests.

Chinese capitalism has been the world's fastest-growing power in recent years and even the motor power of the world economy. This is parallel to the rapid increase in the qualitative and quantitative ability of the Chinese working class. Approximately 200 million workers joined China's production force from 2000-to 2019. Most of them were workers who migrated from the rural areas of the inner regions to the industrial areas in the coastal regions. In the same period, productivity increased by 9 percent on average annually.

Contrary to popular belief, China's engine power is mega infrastructure investments to attract new investments, rather than exports, factories, machinery, construction sector. Investments in these sectors accounted for 40 percent of GDP in 2019. While China is making such enormous investments in its production processes, it is relatively backward in domestic market consumption. In free-market economies, total consumption per household is generally around 65 percent of GDP, while this item is only one-third of GDP in China.

This enormous volume of investment for capital and infrastructure components stems from the state capitalism of the Chinese economy. The Chinese Communist Party has direct control over 40 percent of the economy through state-owned enterprises and public institutions, which it controls. State-controlled enterprises account for 70 percent of the total value of the capital market. These enterprises account for 30 percent of total fixed capital investments. These opportunities are primarily achieved by using Chinese laborers as a cheap resource. By encouraging the public to turn to savings, the state makes this affordable financial investment a continuation.

While consumption rates are kept low by state policies, in 2012, the savings rate reached 58 percent of GDP. This is because the income of Chinese people is minimal. The state realizes this by keeping the currency's value below market value. In this way, while imported inputs are expensive, foreign investments are encouraged by keeping export products cheap. Thus, instead of consumption, savings are being promoted. On the other hand, interest rates are kept low with the ceiling rates applied to the savings in banks, and the cost of the people's savings is artificially more down than the market value. Some academic research states that these privileges are not provided to state enterprises.

3.3. Profit rates, Capital accumulation, and corruption

Digital transformation is considered a significant factor in boosting economic growth. On the other hand, corruption is viewed as a slowing down factor of economic growth. It is well-thought-out that digitization can generate new corruption opportunities. These opportunities are primarily connected to cyber fraud or the exploitation of well-meaning technology, such as digital public services. Corrupt officials with high IT skills can exploit digital records and public service systems. Digital systems are also vulnerable to cyber-attacks which can interfere with government functions and compromise citizens' privately-owned data, particularly in countries where the administrative capacity is low and security systems are underfunded (IMF 2018; World Bank 2020). This suggests that digitalization has uncertain impacts on corruption (Seikh *et al.*, 2021).

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Industry 4.0 essentially defines the technological developments in production as a new revolution. Based on this, it is predicted that robots will do almost every job that requires manual labor and physical power over time. Like machines, robots, advanced programs, and systems that can develop learning abilities, called artificial intelligence, do not produce value. Each of these is made by workers. Each has a price, and they are purchased from companies. Again, each is used by workers in the companies that buy them. None of the technological means of production can work without the people who use them, who put forth the effort. Therefore, they do not create value. They have costs, and they transfer their fees to the products that come out at the end of production. For example, Horst Neumann, former CEO of Volkswagen, averaged 35 (Neuman, 2014). In Germany, the hourly minimum wage in 2018 was 8.84 Euros (Expatica, 2019). Thus, robots used in production for a long time can reduce the costs of the capitalist. When cheaper produced commodities are introduced, that company can achieve significant sales figures. After a while, it either sinks because its competitors cannot make it so cheaply or reduce costs by putting the same technology or better into production. Thus, the company loses its advantage with technological development over time.

According to the definition known as "Moore's law," as stated by Gordon Moore, one of the founders of Intel, the power of computers with the same price doubles every 18 months, which means that the ordinary laptop in our homes today is much more powerful than the supercomputers of 40 years ago. The rapid development in microchip technology constantly brings more powerful computers to market at less cost. A contradictory result emerges here. The continuous decrease in digital costs can limit the increase in the organic composition of capital and prevent a reduction in profit rates. However, this is about reducing the prices of individual computers (Dyer-Witheford, 2015). We can give microchip production factories as an example of this situation. The most advanced computer and robot technology are used in these factories. While a fab (semiconductor silicon production facility) was established for 14 million dollars in 1966, an investment of 6 billion dollars was required for a fab with today's technology in 2009 (Dyer-Witheford, 2015).

To cope with the trend of falling profit rates brought about by mechanization and competition, companies have to resort to one or more of the three ways Marx mentioned in the capital. It will either increase working hours, increase worker productivity, or lower wages. Automation and digitalization provide the latter, but the widespread use of technology creates profit pressure over time. This makes it inevitable for companies to resort to the first way. It is called flexible working today as if that is a good thing. In fact, in many industries, working hours are extended. However, when this situation becomes widespread, the profit rates decrease again.

Another thing to do is to lower wages. The advantage of countries like China and Turkey is that they have cheap labor power. Nevertheless, wages can also be raised by workers' struggles. Thus, companies in an advantageous position once again lose their advantage over time. The falling profit rates every time is starting to make production meaningless. This situation becomes much more complex with credit cards and consumer loans that increase the purchasing power of workers and the financial system that allows capitalists to hold on despite falling profitability. Inevitably, there is an economic crisis.

Growth is primarily driven by resource mobilization and improved productivity in developed economies in economically underdeveloped countries. Approximately two-thirds of the Chinese economy's growth rate is achieved through increases in capital and labor. This is done by shifting the labor force in rural areas to modern sectors and

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increasing the capital input rates per worker (machinery and software investments). Without the enormous resources of the system and the ability to mobilize the workforce (printing mechanism), China would not have the opportunity to compete in the conditions of global capitalism. In other words, China's state capitalism regime owes its ability to compete with the US and other competitors, mobilize a tremendous number of labor forces, and keep costs low (seizing the rights of laborers). While the capital accumulation process has cheap labor power, the other side of the coin includes party bureaucrats and local administrators who supervise these enterprises. Therefore, the bureaucracy is directly interested in increasing the economy and the workers' productivity.

3.4. Living conditions of laborers

Innovative technologies make it possible to use a virtual representation of physical processes to control and surveillance. Moreover, they allow the real-time exchange of data between machines, humans, and humans and machines and end-to-end ICT-based integration of the various value chain activities (inbound logistics, production, maintenance, outbound logistics, marketing, service, and transport) within and across organizational boundaries (Albano *et al.*, 2018). The Industrial Revolution that emerged in England at the end of the 18th century proved that 'free competition can produce wealth without prosperity. The Industrial Revolution enabled increased production and productivity with mechanical inventions and fixed capital investments at an unprecedented pace. However, the increasing wealth increased the widespread misery; growing production led to a sharpening of class contradictions and loss of social reputation of the producer mass. In short, the Industrial Revolution was accompanied by technological development and mass production, along with unemployment, low wages, poor working conditions, and widespread misery. Let us state that the high-wage case in Ottoman society was why the Industrial Revolution did not occur.

Capital accumulation played a significant role in preparing the Industrial Revolution and modern capitalism. The overseas colonialism and slave exploitation intensified during the Mercantilist period. This kind of economic development is foreign to Islam. The idea of embedding Islam in the capitalist paradigm is still compelling, rather than seeking solutions to the issue within the Islamic paradigm. In this way, it is believed that Muslims will dominate within the capitalist order.

This and similar corruption and privileges are given to bureaucrats also explain the economic inequality in China. According to one calculation, the difference between the wealthiest 10 percent of the population and the most deficient 10 percent is 36 times. While the share of working people in the national income was 61 percent in 1990, it decreased to 55 percent in 2019. This data also explains why China is one of the largest luxury consumer markets in the world. China was ranked second after the US ranked world dollar billionaires last year.

Other examples can be given to income inequality. The national health insurance system is also full of disparities. There are three different health insurance systems in China for workers, non-workers, and rural people, and there are significant differences between these systems. Insurance cover 35 percent of the total health expenditure burden. Workers living in rural areas are forced to pay 41% of hospital expenses.

As a result of its military power, China has a more uncompromising stance on sensitive border issues. Still, China does not have an alternative global view of the liberal world order led by the United States. It has positioned itself to a large extent within the international capitalist order. There is interest in the continuity and stability of this order.

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Although it is part of this order, it can keep up with the competition with other actors and the mechanism of oppression it pursues over its working class.

On the other hand, the rise of Chinese state capitalism means the height of the Chinese working class and struggle. The world working class had never reached such large numbers in any period of history. The rapid industrialization of countries such as China and India also means a rapid increase in the modern working class. According to Max Weber, in his " *Protestant Ethics and Spirit of Capitalism*" book, Protestant / Calvinist ethics cited capitalism as the reason for the birth and strengthening of capitalism. While putting forward his thesis, Weber attempted to explain the emergence of capitalism in Western society, not in Eastern societies, through "religion." The two examples he gave were India and China. Unfortunately, China and India's local culture and religion did not allow morality.

When we came to Islamic societies, the early Islamic societies existed as geographies. Capitalism could not flourish with a religious doctrine that offered to "gain sustenance, not waste." This did not pose a problem for the first period of capitalism because the Arabs and Africans, whose raw materials they had quickly taken from their lands, did not pose a problem. However, the West, when it was searched for more extensive grounds to occupy and market the raw materials seized by usurpation, was necessary to sell the raw material to the obtained lands. However, the "consumption" of those lands' religions, cultures, and traditions had not yet been moralized. Therefore, in the name of the continuity of global capitalism, cultural imperialism came into play as a second tool of exploitation.

The model of classical period capitalism proposing capital accumulation became obsolete when we came to the modern period. In self-replication and providing repetition and continuity, the wheel of capitalism brought the logic of "accumulate capital, earn spending" to the next stage and introduced the "consume, for self, selfish" ethic.

Although employer and employee relations are old and universal, the workers' issue has emerged in the West as a dimension of the Industrial Revolution. Still, the way it is handled varies by culture and society. Today, the share of labor in total income is decreasing, and income distribution is deteriorating even more. As the elderly possess many abilities needed for industry 4.0 - maybe even on a higher level than younger ones - it is essential to provide them with suitable working environments where they can perform at their capacity. Several measures and solutions should be considered (Wolf *et al.*, 2018).

The morphing of industrialism into informational capitalism occurred with a fundamental change in the meaning and significance attributed to knowledge as well as the changing relationship between capital, labour and knowledge (Parayil, 2005). The main problem of today's economies is unemployment, a moral problem. Underdeveloped (more correctly, less capitalized) countries, primarily Islamic countries, are even worse. Industrial capitalism has humiliated labor while glorifying capital and placed elements of hostility that cannot be compensated among people. The functioning of social life is acceptable by giving relics to the people. What determines the fate of the society is whether the property is given to the people.

Economic life, separated from business ethics today, is the basis of capitalist civilization. Capital owners are establishing reigns with the labor of the people. Because the Western culture that constitutes this lifestyle is based on the ambition to exploit natural resources, expedite outstanding reproduction, encourage significant mass consumption, continuous spending, and materiality. In the past, our economic life was moral. The small producer,

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the small tradesman, trader, and peasant, who form the basis of the system, did not separate economic activity from morality. Therefore, tradespeople associations should pursue the organization's interests and have a moral control feature. It is necessary to save people all their lives from pursuing earnings, to bring their humanity to the fore.

3.5. Dirty Hands of Community Engineering

In the digital age, most of the people get away from their nature with the touch of the dirty hands of human beings, being a prisoner of what they have made and produced, imprisons them in dark dungeons, cannot find peace because they are looking in the wrong places, humanity is looking for ways out of the darkness. Since man is a prisoner of what he produces and does, he has forgotten faith, cooperation, sharing, giving, mercy, compassion and justice. That's why he is restless and unhappy. In today's world, as a result of the ingenuity of dirty hands, it is seen that humanity has gone to an abyss, irreversibly, with the publication of false information, lies, perversions, immorality, and subliminal messages in the digital environment with movies and similar applications.

While considering and discussing writing a paper or a book on a subject, the preparation of a film, a documentary or a play, which is the material of the digital world, should also be considered and should be the first item of the agenda among the discussions. Because the most effective method of communication is to give good materials to the digital world. Everyone has a cell phone. While traveling on the metrobus in Istanbul, I see that everyone is looking at their mobile phones.

Non-governmental organizations, foundations, especially organizations such as TÜSİAD, MUSIAD, ASKON, which are members of wealthy businessmen, should take responsibility in this regard in Türkiye. Developments in the digital world are the manifestation of God's blessings. The way to make these blessings beneficial both for ourselves and for all humanity is through the use of clean hands, who are surgeons. With clean hands, they should find new right ways to have data in every field, especially in technology, digital. Digital platforms and social media tools made by clean hands should be put into practice. Clean hands should explain the concept of goodness and goodness to the whole world with a method that is suitable for the conditions and perceptions brought by the age. Genuine humanity We must offer the universal morality of Islam regarding education, science, trade, economy, art, politics and communication to the digital world and to all humanity with the opportunities it provides. The dominance of goodness in both the real and virtual world is essential for the welfare and peace of people and societies (Kartal, 2021).

4. Inclusion of Super Artificial Intelligence

The radical shifts that have emerged since the industrial revolution permanently moved to an upper stage in which processes, advances in information, and communication have also led to the transformation of capitalism as it has changed the relations of production. In this new stage called cyber capitalism, the dominance of digital and technological tools has begun to be felt in every field, and artificial intelligence is one of the most critical issues to be considered in cyber capitalism. In other words, artificial intelligence is a particular field that should not be considered separately from cyber capitalism. Therefore, within the framework of cyber capitalism, artificial intelligence closely affects economic policies.

Recent advances in Industrial Artificial Intelligence have showcased the potential of this technology to assist manufacturers in tackling the challenges associated with this digital transformation of Cyber-Physical Systems through its data-driven predictive analytics and capacity to assist decision-making in highly complex, non-linear, and often

multistage environments. However, the industrial adoption of such solutions is still relatively low beyond the experimental pilot stage, as natural environments provide unique and complex challenges for which organizations are still unprepared (Peres *et al.*, 2020). It is predicted that some of these effects will accelerate the development of the world economy by increasing competition and productivity. Over the following years, researchers and practitioners will face new challenges in Industry 4.0 to achieve the original vision of an intelligent and self-optimizing factory. We are currently at a crossroads between the first level of Industry 4.0, which was characterized by technologically driven innovations, and the future status of Industry 4.0+, which will be based on data-driven innovation (Rouch, 2020).

The effects of artificial intelligence on social life and the economy are not limited to this. It covers many areas such as trade, taxation, business processes, and the supply of public services and shows a potential for development. Among all the technologies discussed within the scope of Industry 4.0, the most speculated subject is undoubtedly artificial intelligence. There are various reasons for this. The first is the misconception that artificial intelligence has thinking, feeling, and making logical inferences. Whereas artificial intelligence applications based on "machine learning", prevalent in today's computer science, mainly consist of programs that extract a mathematical model from the "labeled" data provided to them and apply this extracted model to data it has not encountered before.

Again, this artificial intelligence is directly affected by all the errors in the training data. If we have marked the chairs as dogs while preparing the data, the chairs will inevitably be called dogs. For example, the online translation program "Google Translate" suggested female pronouns in sentences containing "nurse" and male pronouns in sentences containing "engineer" until Google intervened and corrected it. An experimental bot trained through thousands of tweets on Twitter was making racist remarks in one of its two sentences. This showed that the data used to prepare the AI, not the AI or the programmer who coded it, was racist.

Another reason for the confusion about AI is that there is no clear theoretical path for moving from this single task-dedicated "narrow" AI application to a "general" AI that can work on multiple topics. This ambiguity in computer science inevitably opens up space for science fiction-based speculation, and for this reason, artificial intelligence experiences the problem of "humanization", which is also frequently seen in robotics.

Artificial intelligence techniques such as "artificial neural networks" and "deep learning," whose theoretical infrastructure has not changed much since the mid-1970s, have gained popularity again in recent years thanks to the developments in parallel computing hardware. The fact that these techniques are relatively easy to learn and apply compared to other machine learning methods has brought about the use of artificial intelligence in the industry at an increasing rate.

All this confusion makes it easy for capitalists to describe artificial intelligence and robots as "technology that will take all the workload off us and bring humanity to heaven on earth." It is not surprising in this respect that the artificial intelligence sections of many Industry 4.0 reports are full of this and similar fantastic elements. However, none of these propositions reflect the truth about the nature of the transformation. The narrative that artificial intelligence will take over monotonous jobs so that we will all work in "more qualified" occupations strikes a wall against the fact that artificial intelligence firms employ thousands of Asian "data labeling" workers, often insecure and very cheaply. In addition, artificial intelligence is often used not to replace workers but to increase

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productivity. With the desire for capitalist profit, more production is made by keeping employees the same. There is no single example of a post-capitalist transformation in which the machine owner has changed in any production branch using artificial intelligence. In addition to all these, artificial intelligence can be "employed" in senior executive positions in the finance sector (Deyer-Witherfold, 2015).

In industry 4.0, artificial intelligence is used to realize the innovative, intelligent factory model. Preventive maintenance programs predict the maintenance times of the machines in line with the data collected from every corner of the production line. Again, artificial intelligence applications are used to analyze and adapt the band speed and production frequency.

5. IoT and droids as a new class between white-collar workers and capitalists

While talking about the place of robots in our lives and the concentration of their existence pervasively, it is possible to reference almost all social sciences since new relationships and social concerns arise. However, the idea that due to a higher level of sophistication of artificial intelligence, droids and robots will take our business away from us when we have to do business is frightening for many of us. The questions that stir our minds are such:

- *Will the IoT and droids change the working classes?*
- *Are we going to formalize new classes and new production relationships?*
- *Who / what will be the blue and white collars when the IoT and droids can organize themselves?*
- *Will we talk about IoT and droids in the future to make political revolutions, trade union organizing, and strikes in the workplace?*

While the precarious debate in the world is continuing in parallel with the loss of business based on automation, there are significant developments in robotic technologies using artificial intelligence. Many renowned people like Elon Musk from Bill Gates articulate the human mind's subject soon, discussing these ideas with high-level elites. However, Turkey and other developing economies have not fully agreed to split the difference that creates the problem.

Yes, there have been significant developments and debates around the industry 4.0 discourse recently developed in Germany and then spread worldwide. It is typical for Germany, one of the essential central countries of high-tech industrial production, to stand out in technological development. Industry 4.0's Smart Factories envisages a system that senses the business needs in the market with incoming demands and communicates with cyber-physical production systems via the internet and thus responds to demand immediately or even artificially try to trigger customer demand in some areas. It is also suggested that artificial intelligence robots minimize human labor during production.

Industry 4.0 in Turkey, especially in artificial intelligence organizations is debated by capitalists. Because the capital organizations sense *'how to profit from here*,' *'which new markets will be opened*,' *'how the production costs will fall*.' In the world, especially in the early capitalized countries (especially in Germany and the US), there are essential developments in robotics and artificial intelligence (especially in the war industry). Turkey's place in this realm is based on capitalism, i.e., it places a moderate low-tech production of raw materials and finished products. Such technological productions are no longer achieved by discovering a person or engineer at the workbench but by collective work in large scientific organizational organizations and by the labor of a highly qualified labor force. There is not much chance in the face of today's commercial relations and

world monopolies in technology development, and there is no trained labor force to compel it yet.

How will automation and robotics influence the labor field? What can we foresee? This effect has a dual aspect. The first one is the reflection of the consumption materials on the production process. Examination of the production process will be with some restrictions and records. Some thinkers still do not agree that robots will replace the working class and the laborers.

When we look at production worldwide today, we see an unequal distribution of industry, agriculture, services, and the production of closely related knowledge. Technological and innovative production occurs in centers such as the USA, Western Europe, and Japan, where there is a limited number of highly skilled workers. In some enterprises, artificial intelligence is a part of the workforce to be liquidated and transferred to robots. This is the historical trend that will continue using artificial intelligence and intense robotics. However, the interpretation also referred to as deindustrialization here ignores the totality of the process. For example, in the US, the industrial center of Detroit emptied, while similar companies were building factories independent and late-capitalized countries with cheap labor, low environmental costs, and tax facilities. A much faster process than advanced robots in advanced centers in laboring in underdeveloped countries. This process seems to be reversed by the cheap labor of robotics that will enable old factories of the advanced countries to their legacy.

Technological innovations and advances seem to be based on capitalist relations, not on an independent or autonomous field but also on class polarization. Therefore, the capitalist implementation of technology increases class polarization. The advancement of artificial intelligence or robot technology will not end the working class, and the working-class mass worldwide will continue to grow as the population grows. The share of employment in paid employment in Turkey in 1955 was 14%, despite massive advances in years of technology and a reduction in the number of workers in particular factories. In the world's technology centers, the working class is a more significant part of society than in countries where technology is less developed: 88.4% of employees in Germany, 85.7% in England, 83.2% in Spain, 74.8% in Italy, 85.6% in Belgium and paid employees. Because, even if the number of workers in a factory decrease, capitalism establishes new jobs and new labor processes due to the necessity of producing surplus value. Therefore, we can say that other roles and responsibilities will replace the existing jobs.

A scenario in which human beings could create or even become mutants, cyborgs, AI (artificial intelligences) and androids in the future is imagined (Blackford, 2004). AI-enabled cyborgs will be introduced in more advanced capitalist centers in the first phase. However, technically, artificial intelligence does not mean that production will be done with it. While it seems limited to some local samples of high advanced countries, later on, when industry 4.0 became cheaper, it would inevitably spread out to every area. The world textile industry is still going back to Bangladesh, Cambodia, China, and India, where there is still technology and cheap labor. Why not use more advanced technology? Why is Nike making its shoes in Indonesia? Capitalism uses the most advanced technology in production, uses the cheapest labor force, and realizes the most intensive exploitation. Therefore, robots will not enter all production areas, and robots replace robots if they are more expensive than human workers.

Even if there are business lines in which robot technology is more intensively applied, this would mean the emergence of new areas of investment and exploitation, not the disappearance of the working class in the first instance. Thus the displacement of the

working class in the sector is more of an empirical research topic. For example, in journalism, descriptive news with algorithms will remove some journalists from their jobs, perhaps with a sectoral shift. But journalism's analysis, interpretation, columnist, literary elements, and so on. Since it is impossible to do it alone with robots, human labor will be doing much more sophisticated intelligence, experience, and sense of emotion. The algorithms that will use knowledge and understanding of human work will be more efficient when they are continuously fed with data and information through machine learning and deep learning technologies.

The robots cannot replace the working class under the current conditions of capitalism and syndicalism. Because of the production of robots and a society in which a large part of the unemployed can produce the capitalists who will sell, how will it profit? For 30 years, it was said that the working class ended up quantitatively concerning technological developments. The numbers tell the opposite. Of course, technology has significantly impacted the working class, a separate issue. In this process, however, the working class grew quantitatively.

As is known, the leading industry in the use of artificial intelligence is the war industry. Recently, there has been a solid historical and up-to-date link between the world's largest technology companies and the Pentagon, as is evident in the campaign that Google employees have recently launched against the Maven Project to increase the airplane's target-setting success. The second sector that comes to mind is the automobile industry. In Germany, major automobile factories such as Ford, Volkswagen, BMW, and Mercedes are produced by robots and workers, which means they do not interfere directly with the material. This is likely to increase further. Again, in various service production areas, education, health, call centers. Therefore, Turkey may use these technologies as producers and not consumers and import the know-how in these areas.

How much are the trade unions in these sectors prepared for transformation? What is essential is for what purpose and for whom this technological innovation is being used. Today, developments in the scope of artificial intelligence and industry 4.0 are implemented by capitalists. The intellectual contributions of professional chambers and scientists are also significant. Because the trade unions must, of course, be prepared and tackled in the manner they are applied without falling into an enemy of technology and progress. Technology is too critical to be left to capital and their R&D institutions.

Bill Gates proposed a specific tax payment for robotics. Can robots substitute for a significant workforce and ultimately a provider for such a substitute? Considering that production based on the working class and laborers will not end, it can be said that robots will be used more intensively in some sectors or enterprises. They have an algorithm that collects experiences and produces new results (in a way). Gates' proposal is a proposal for protection against de facto unemployment. This proposal does not solve any problem, nor is it realistic. However, the heavy taxation of large monopolies is one of the positive demands regarding income distribution.

How will robots in different industries increase, and how will artificial intelligence become a solution in more areas? First, of course, a certain percentage of unemployment will increase. Nevertheless, it will encourage new business areas. In addition, unemployment is not only a problem with technology. For example, it is impossible under capitalist conditions, but working hours are reduced from 8 hours to 5 hours.

The psychological, moral, and sociological aspects of a multi-faceted complex issue exist. The human body's production, similar to robots (though not natural), seems sympathetic to people, as seen in Arçelik's advertising robot. However, human-like robots (such as

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sex robots), which can be the objects of all kinds of selfishness, hatred, and greed, support the reproduction of the inhuman culture of humanity. People need to talk to each other, cook, offer something, read books, paint, theater, etc. These are not all or some of the robots that need to be transferred to robots. To point out the necessity of each technology to question the convenience it provides. For example, it may not be ideal to know how to cook and press a button, and it may be a form of alienation from human faculties. It can be a robot that can give rational reactions similar to a human. Even in cases where it was impossible to distinguish it from human beings, experiments showed it. Human consciousness is a complex combination of observation, experience, inclusion, monitoring, influencing, rational and irrational, mental and physiological, realistic and emotional reactions, and perceptions.

6. Cyberpunk of Cybercapitalism

The aim of science to use matter most effectively has also framed the horizon of a better understanding of today's mentality. The idea that the material can be saved with a higher level of performance than the existing one is economically reasonable. This idea also has moral and social limits. In economics, the idea of providing maximum efficiency with minimum energy is also valid in many similar areas. Every asset subject to the economy, finance, and trade was the ideal target. Getting the highest benefit from an asset will first require control of that asset. This is a requirement of complete and accurate control. To the asset; physically reaching, obtaining, is to realize the concept of being an economic entity, to create and market a supply suitable for the target audience's needs.

The years when science and technology were mentioned together were when trade led to a turn towards the financial economy. Every product that became a product was accepted as raw material, and sure It has also turned into a financial argument in proportion. Shortly after the productization of the raw material, the first stages of the transformation made itself forgotten in the production, supply, and demand pot for many years. There is the cold war between capital and other production factors (land, labor), factory, and mechanization with a more capital character. Each process gave birth to a new product. In short, cyber frenzy "cyberpunk" becomes the core of capitalism. The market economy based on crops in agriculture has been replaced by the product economy based on urbanization.

Cyberpunk is a subgenre of science fiction in a dystopian futuristic setting that tends to focus on a "combination of lowlife and high tech", (Bruce, 1986) featuring futuristic technological and scientific achievements, such as artificial intelligence and cybernetics, juxtaposed with societal collapse or decay (Michaud, 2008) The period we are in, known as digital transformation and technological transformation, is when many facts become sharper. People's awareness power has become more monotonous than in the past. Many different negative factors have highlighted the urge to conform to most of society. Like this, the members of the society, trapped under the influence of herd psychology, have begun to abandon the idea of being driven, which they feel is the safest harbor.

This point of humanity, which acts with the instinct to protect itself from the unknown, is supported by financial, commercial, and economic centers. The fact that the process we are in is called digital transformation confirms this support. Seeing that high technology and low living conditions goals have been working for many years has made cyberpunk an ancient phenomenon within capitalism. This phenomenon has noticeable side effects on society. These effects manifest themselves in creating a need in the society, establishing the motive of social acceptance and fulfillment of the created need, and strengthening the herd psychology dependency. This culture continues to develop into a

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world culture where science and technology are advancing rapidly, but most societies' quality of life is deficient. Despite the most advanced level of science and technology; The fact that social welfare remains at the lowest level teaches us that the technological opportunities we experience are only user technology. User technologies, capitalist system; It maintains its presence in the market in a sustainable manner with the most expansive demand and the necessity of measures to control the asset and all financial and economic stages of the asset.

7. Conclusion

The instability, chaotic nature of the social, economic, and political, structured through a network of irregular relations, pushes us into a deadly climate of insecurity and vulnerability in almost every aspect of life. The feeling of stability and trust the tradition gives leads to the deterioration of social morality due to the changing and ever-over-turning nature of rational capitalism and the business world. In this highly impatient, mobile, and present-focused society, none of our features hold any lasting value, and the feelings of mutual loyalty and devotion gradually evaporate in the institutional cosmos that is breaking apart and constantly reshaping at every moment. Instead of creating a climate of freedom, virtue, trust, commitment, loyalty, spontaneity, and sharing, with risk-taking, competition, flexibility, and profit orientation, it deforms our fixed tendencies, personality, and character structures in favor of trust and goodness. The high level of insecurity (commercial, political, institutional, etc.) in the new capitalism completely problematizes a holistic moral identity. The social structure inherent in the flexibility, chaos, and fragmentation that came with contemporary capitalism carries with it deep and deep-rooted moral shocks; While it atomizes and individualizes the righteous on the one hand, it loses its meaning.

On the other hand, innovative technology confronts humans with undermining the central power of general morality in the holistic construction of sociality. This situation, which we can call the death of the public character, breaks the bond of morality with sociality and pushes social life into the clutches of a completely insecure and chaotic fatality. The individualization of morality, limited to an institutional or professional context, means that a mighty pillar in the survival of the social/political universe is eliminated. Moral forms, whose validity is limited by the institutional cocoon, come to the fore. Ethics of bureaucracy, morality is valid in the business world, or morality of engineers, ethics of medicine, civil servants, workers, police, etc. These morality measures lose their binding on the individual outside the institution or context. Therefore, it turns into a pile of unnecessary norms that the individual cannot affect in his life and relations with others. A good doctor, talented architect, or a successful teacher does not mean a good spirit, moral person, or an honest human at the same time. Institutional morality rational virtues of professional morality do not just replace the excellent character necessary for the experience of sociality but also cause new problems to be on the agenda.

References

Albano R., Curzi Y., Fabbri T. (2018) Work Autonomy, Control and Discretion in Industry 4.0 section in Human Resource Management and Digitalization Book, Human Resource Management and Digitalization, Routledge Publications, https://www.taylorfrancis.com/books/mono/10.4324/9780429425288/human-resource-management-digitalization?refId=3d69786e-176e-4779-9602-597e53fe9986

Bauman, Z. (1999b) Çalışma, Tüketicilik ve Yeni Yoksullar, Sarmal Publications, istanbul

Bauman, Z. (1999a) Küreselleşme: Toplumsal Sonuçları, Ayrıntı Publications, Istanbul

Bayhan, V. (1995) "Globalleşme ve İnternet Örneği", 17-18 Kasım 1. Türkiye Internet Conference, Ankara

Baylis, J & Smith, S. (1997) The Globalization of World Politics: An Introduction to International Relations, Oxford University Press, New York

Blackford, R. (2004). Mutants, Cyborgs, AI and Androids. Meanjin, 63(1), 14–21. https://search.informit.org/doi/10.3316/informit.214062241618356

Brophy E. (2001). Cyber-Marx: Cycles and Circuits of Struggle in High-Technology Capitalism. SIGCAS Comput. Soc. 31, 1 (March 2001), 22–23. https://doi.org/10.1145/572277.572283

Sterling B. (1986) Preface. Burning Chrome, by William Gibson, Harper Collins, 1986, p. xiv.

Dicken, P. (1992) Global Shift: The internationalization of Economic Activity, Second Edition, Paul Chapman Publishing Co.

Dyer-Witheford, Nick, (2015) Cyber-Proletariat: Global Labour in the Digital Vortex, Londra: Pluto Press.

Efe A. (2020) Wisdom in the crises of cyber capitalism, Astana Publication, Ankara

Expatica, (2019) "Minimum wage and average salary in Germany", https://www.expatica.com/de/employment/employment-law/minimum-wage-and-average-salary-in-germany-995112

Giddens, A. (2000) Elimizden Kaçıp Giden Dünya, Alfa Publications, İstanbul

Gutman, A. (1996) Çok Kültürcülük: Tanınma Politikası, Yapı Kredi Publications, İstanbul

Hirst, P. ve Thompson, G (1996) Globalization in Question, Polity Press, Cambridge:Blacwell

Hirst, P. ve Thomson, G. (1998) Küreselleşme Sorgulanıyor, Dost Kitabevi Publications, Ankara

Human Development Report. (1999) Globalization with a Human Face, www.undp.org/

Kartal M. A. (2021) Dijital çağda beşerin bulaşık elinin izleri, https://www.risalehaber.com/dijital-cagda-beserin-bulasik-elinin-izleri-23539yy.htm

IMF. (2018). Measuring the Digital Economy. IMF Policy Paper, Washington, DC

Jānis Gaspersons, (2021) Legal and political challenges of European Union's cyber-diplomacy in the age of surveillance capitalism, Latvijas Universitate, Bachehor Thesis, https://dspace.lu.lv/dspace/handle/7/56536

Laxer J, Keating C (1999) The undeclared war: Class conflict in the age of cyber capitalism, https://www.proquest.com/openview/e5129b524cf5b09d436a8a2f8fbb5a43/1?pq-origsite=gscholar&cbl=30421

McNally, Christopher A. (2013) How emerging forms of capitalism are changing the global economic order, http://hdl.handle.net/10125/26953

Michaud Thomas, "Science fiction and politics: Cyberpunk science fiction as political philosophy", pp. 65–77 in Hassler, Donald M. (2008). New Boundaries in Political Science Fiction. University of South Carolina Press. ISBN 978-1-57003-736-8. See pp. 75–76.

Neumann, Horst, (2014) "A great opportunity for work", Süddeutsche Zeitung

Parayil, G. (2005). Introduction: Information Capitalism. In: Parayil, G. (eds) Political Economy and Information Capitalism in India. Technology, Globalization and Development Series. Palgrave Macmillan, London. https://doi.org/10.1057/9780230595613_1

Peres R. S., Jia X., Lee J., Sun K., Colombo A. W. and Barata J., (2020) "Industrial Artificial Intelligence in Industry 4.0 - Systematic Review, Challenges and Outlook," in IEEE Access, vol. 8, pp. 220121-220139, doi: 10.1109/ACCESS.2020.3042874.

Qi, Haotian, (2014). Cyber Capitalism with Chinese Characteristics? Domestic Sources of China's Digital Offensive APSA 2014 Annual Meeting Paper, Available at SSRN: https://ssrn.com/abstract=2453591

Sheikh, M.R., Rehman, I. U., Abbas, M., and Tariq, M. (2021). Digital Transformation Corruption and Economic Growth Nexus in Asian Countries. International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies, 12(6), 12A6N, 1-12. http://TUENGR.COM/V12/12A6N.pdf DOI: 10.14456/ITJEMAST.2021.119

Wilson J. (2013) Criminogenic Cyber-Capitalism: Paul Virilio, Simulation, and the Global Financial Crisis, Routledge Publications.

Wolf Matthias, Kleindienst Mario, Ramsauer Christian Zierler Clemens, Winter Ernst (2018) Current And Future Industrial Challenges: Demographic Change And Measures For Elderly Workers In Industry 4.0, ANNALS of Faculty Engineering Hunedoara – International Journal of Engineering Tome XVI, http://annals.fih.upt.ro/pdf-full/2018/ANNALS-2018-1-09.pdf

World Bank. (2020). Enhancing Government Effectiveness and Transparency: The Fight Against Corruption.

Zou, M. (2019). China and The Belt and Road Initiative: Transnational Labor Law Under State Capitalism 4.0. AJIL Unbound, 113, 418-423. doi:10.1017/aju.2019.76