Journal of Economy Culture and Society

ISSN: 2602-2656 / E-ISSN: 2645-8772

Theoretical Article

From the Internet of Things to the Objectification of the Human Being: Sociopolitical Construction of Technology and a Critique of Society 5.0

Cahit BAĞCI[1]

[1]Asst. Prof Dr., Van Yüzüncü Yıl University, Faculty of Letters, Department of Sociology, Van, Turkey

ORCID: C.B. 0000-0003-4091-4248

Corresponding author:
Cahit BAĞCI,
Van Yüzüncü Yıl Üniversitesi, Edebiyat Fakültesi Sosyoloji Bölümü, Van, Türkiye
E-mail: cahitbagci@yyu.edu.tr

Submitted: 31.12.2021
Revision Requested: 18.05.2021
Last Revision Received: 05.07.2021
Accepted: 16.07.2021
Published Online: 16.12.2021

Citation: Bagci, C. (2021). From the internet of things to the objectification of the human being: sociopolitical construction of technology and a critique of society 5.0. *Journal of Economy Culture and Society*, 64, 337-355. https://doi.org/10.26650/JECS2020-851620

ABSTRACT

The Japanese government announced Society 5.0 on November 7, 2016 as a development project with the goal of a technology-themed and human-centered society with the aim of improving human lives. Japan explained the main mission of this program as facilitating and serving human life through technology and contributing to a comfortable and long life. This announcement discussed the organic bond between Industry 4.0 and Society 5.0; the goals of Society 5.0; the aspects affecting, changing, and transforming individuals and society within this framework; the new relationship networks and cultural elements; and their impact on values and meaning, individualization, and objectification of the individual. Since the inception of the idea of panopticon, the control, inspection, and surveillance of public and social order have been treated as a culturally romantic and engineering critique of technology in the connection of the power-individual relationship. This article examines if Society 5.0 will be able to accomplish a postmodern structure through a new culture (i.e., acculturation). In the search for answers to these questions, this article analyzes the situations that would occur in place of human relations and the structures that will be changed in the targeted social order.

Keywords: Society 5.0, internet of things (IoT), artificial intelligent, algorithms, objectification

1. Introduction

Understanding and explaining how technology affects society, human life, human relations, institutions, and life in general and making predictions based on existing information are some of the primary knowledge production areas in the social sciences. According to Durkheim, social scientists should focus on more common actions that are thought to represent normality or are a means of understanding society. This method indicates that relationships and facts should be focused on more than individuals. According to Durkheim, social phenomena are something different and greater than the sum or average of human actions (Kösemihal, 1971, p. 35).

While the individualist approach to the knowledge of the positive sciences provide is more as an acceptor, the approach to the knowledge and estimates of the social sciences provide generally has a more skeptical feature. Regardless, this article presents evaluations regarding the possible social relations, social structures, and socio-political and economic order based on an analysis of Society 5.0, which is the fifth stage of the classification of industrial society within the social phases and the social order of the future (JBF, 2018).

Approaches on explaining the economic and social transformations of humanity are more centered on the use of technology and have been generally outlined from 1784 to 2011 as having passed through three phases. Those are hunter-gatherer, agricultural, and industrial societies. The fourth age will be robots and artificial intelligence (Reese, 2018, p. 18). Undoubtedly, this classificational view is a separate topic of objection and discussion. Based on this classificational approach, the concept of Industry 4.0 was first introduced in 2011 at the Hannover Messe in Germany as the fourth phase of industrial society and a new situation firmly impacting industrial relations systems at the beginning of the 21st century. In October 2012, the proposed name of the 4th Industrial Revolution was prepared by the Henning Kagermann and Robert Bosch GmbH company, who formed a study group; they presented this to the German Federal Government. Industry 4.0 has come forward as a production model where information technologies and industrial activities merge into a form of production relations with advanced AI-supported automation systems and aims to play a role in production (Deguchi et al., 2020). New generation software and hardware, device-based Internet access, and cyber-physical systems create the infrastructure for digital technologies. Computers, the Internet, and AI and robotics (i.e., digitalization) have only been the technological triggers of this transformation.

Shortly after Industry 4.0 was introduced, the concept of Society 5.0 was revealed as a way of life and social order resulting from industry and production relations. Society 5.0 as a concept was first featured in Japan's 5th Science and Technology Master Plan with the goal of a prosperous human-centered society. Society 5.0 was drafted in the 5th Science and Technology Basic Plan by the Council for Science, Technology and Innovation and approved by Cabinet decision in January 2016 (Salgues, 2018). On November 7, 2016, the Japanese government through Prime Minister Abe announced Society 5.0 alongside phrases like "a technology-based and people-centered society", "for the betterment of human lives." Society 5.0 was presented to the public as one of the goals of Japan's Fifth Science and Technology Basic Plan for 2016 to 2020 at the Summit organized by Japan's Science and Technology Agency R&D Unit (H-UTokyo 2018). The Japanese government presented this as an investment, publishing the goals of Society 5.0 in the Community 5.0 Summit Report under the name Future Services & Societal Systems in Society 5.0 with seven chapters and 254 pages. The presentations of more than 40 scientists in different fields were thoroughly discussed in many sessions at this summit. Society 5.0 has also been described as a knowledge-intensive and data-driven society due to the fact that it offers excellent opportunities

in accessing AI-derived information. Industry 4.0 and Society 5.0 were respectively put forward by Germany and Japan, defeated belligerents of World War II, with their deeply rooted infrastructure and know-how in industrialization. Undoubtedly, even this feature has particular importance in understanding the actors, potentials, and powers in the global power struggle of the 21st century. The concept of Society 5.0 has turned into a phenomenon that has produced 319 million results in the Google search engine during the approximately four years since its introduction (Center for Research and Development Strategy [CRDS], 2016).

Undoubtedly, industrialization-oriented models are seen to have been implemented in some European countries similar to the content of this plan. In particular, the policy document related to the Industry of the Future the Macron Government implemented as an action plan of the Third Industrial Policy has certain similar aspects to Industry 4.0 and Society 5.0. The plan was presented with the title of The New Face of Industry in France and is actually comprised of a total of 34 industry-based sectoral plans. The New Face of Industry in France aims to achieve and ensure that future products appear with a Made-in-France label (Öztuna, 2019, p. 16).

A strategy involving a series of priority transformation plans has similarly been implemented in Turkey as a roadmap for achieving its 2023 goals; Turkey announced the transformation programs would be implemented under 25 topics. The plan is to support development efforts through comprehensive reform in economic development and social fields in order to accelerate the Turkish economy's convergence with developed countries and to remain among high-income countries. Each priority transformation plan has different sub-components and activities, and cooperative institutions and organizations have been identified who will be responsible for achieving the goals. Detailed action plans have been prepared in this context for each of the priority transformation programs. The programs will be implemented with 90 components and over 1,300 action plans in total. In this process, a total of 35 ministries and institutions/ organizations have been appointed as program coordinators or component managers. A realization time has been determined for each action, and the Electronic Public Information Management System (KAYSİS) has been established to control the entire system. In addition, a public investment policy has been aligned to prepare the groundwork and media for implementing all the priority plans (Ministry of Development, 2015). Borrowing and spending strategies with the build-operate-transfer (BOT) model and public-private partnership (PPP) models have resulted from the liberal political economy to ensure the functionality of the plan.

The industrialization process that started with Japan, Korea, and Taiwan in Asia has undoubtedly changed remote areas to an extent. Countries such as Malaysia, Indonesia, and Thailand have emerged as the second-tier or second-generation South-East Asian newly industrializing countries. China has turned into a global power by closing its deficit in this process with a rapid investment move supported by foreign capital. In 2015, China published a strategic plan with a Made-in-China vision; China is seen to have based its development on exiting from industrial dependency by putting forward its production goals with the support of high technology domestic products from import-substitution production as the goal for 2025 (Hass & Thranert, 2020).

The examples of Germany, France, Turkey, and China clearly show that, upon entering the 21st century, both the stage in which industrialization had come and Internet-based knowledge are considered as a mandatory manifestation of the policy documents and strategic objectives put forth from business processes and individual expectations to service delivery and prosperity in many areas of change and transformation. Alongside globalization, the confusion of origin in products and service provision, the existence of multinational companies, the public offering

method in global markets and stock exchanges, and ownership and nationality issues created new approaches and policies that have regulated the whole area. In this respect, Society 5.0 defines a broader transformation that ensures technology's compatibility with social life (Öztuna, 2019).

2. Methodology

This research is a descriptive research examining all kinds of studies on the subject and scanning interviews, speeches, books, and articles. The research evaluates discussions and case studies related to the social and technical dimensions of the subject and performs a descriptive analysis of the case by making a situation assessment based on all these views. This article produces some predictions and inferences about the future in the context of the sociopolitical construction of technology in terms of the construction of the machine-human relationship as a result of industrialization and technological developments.

3. Literature for Society 5.0

Although the reflection of Society 5.0 when it became a current issue in the West was primarily perceived as a social transformation plan in Japan, the mission of Society 5.0 is considered as globally transformative and seen as the society of the future. In this evolution, Society 5.0 exists as an information society built upon Society 4.0, and total quality management (i.e., the combination of participation, continuous improvement, and managerial support) are accepted as critical in building a prosperous smart society because this philosophy was claimed to have been influential in Japan's rapid recovery and progress after World War II. Adapting to technology and its changes is the primary goal of Society 5.0. This aspect defines the broader transformation of society (Öztuna, 2019). In this respect, limiting Society 5.0 only to aging would be an incorrect definition. Technology-based solutions must be produced by accepting getting older as a reality in Japan to eliminate the possible problems older individuals have to be able to take care of them in the future (Granrath, 2017). In this respect and unlike Industry 4.0, the main feature of Society 5.0 is that it also has an inclusive and encompassing mission. Society 5.0 has also been viewed as a sociality emerging as a natural result of industrial progress and opportunities in information technology (Gardingen, 2018). The most striking point here is technology itself. Technology production is considered an external force for people and society, one that increasingly controls individuals and social change (Bauchspies, Croissant, & Restiuo, 2019).

In Society 5.0, the primary mission is explained as facilitating human life through technology, serving human life, and contributing to a comfortable and longer life (CRDS, 2016). In one sense, an industrial and social life supported by advanced technology and AI predicts a super-smart society whose infrastructure is supported by digital technologies. The basic philosophy and magic potion of future societal projections are mostly based on facilitating the free movement of individuals, ideas, and goods. Many social scientists who have approached this subject in an ontological and epistemological context oppose Society 5.0 as the guru of Industry 4.0, listing the organic link between Industry 4.0 and Society 5.0, the aims of Society 5.0, its aspects affecting individuals and society, its changing and transformative nature, new networks of relationships, and the elimination of cultural elements and values as the gray areas sourcing their opposition. These forms of evaluations have been viewed as a culturally romantic and conservative technological criticism in the contexts of the relationship between power and the individual using the understanding of control, inspection, and surveillance of the public and social order that has existed since Jeremy Bentham's concept of panopticon in the 18th century (Çoban, 2019, pp.112). However, electronic

surveillance has replaced architectural control these days. In other words, the era of technological panopticon has begun (Bentham, Watkin, & Werret, 2008). Society 5.0 can be defined as a new situation in terms of the 21st century, as well as approaches that perceive it as a postmodern construction of a new culture and new form of globalization. What this involves is seen to mostly be the areas of a super-smart society with an urban character that takes care of human relations, nature, friendship, neighborhood, sports, and similar needs (Sim, 2019). Society 5.0 explains a situation related to a comfortable life due to investments in advanced technologies. Society 5.0 promises quality and comfortable life for people in all areas of life beyond the comforts of one's personal space, from energy to transportation, health, education, work, shopping, and leisure. That will ensure this life will be realized by collecting information from the real world and cyberspace and weaving them together with a system where each mutually supports the other (Deguchi et al., 2020).

Society 5.0 was primarily perceived as a social transformation plan of the Japanese government. Although the subject is presented as an investment project of the Japanese government because the issue may have some social challenges, the Hitachi and University of Tokyo Joint Research and Development Laboratory (H-UTokyo) Lab was established in 2016 in cooperation with Tokyo University and Hitachi to examine and eliminate unpredictability and negative aspects in this regard. This laboratory pioneered the industry-academy collaboration model, which gathered its strengths rather than followed the traditional industry-academia partnerships focused on solving specific problems. Under this model, a new research and development style that aims to address possible social difficulties and turn vision into reality has been followed in order to realize Society 5.0 (JBF, 2016). In this respect, the aim is to progress based on a 5.0 science policy and an investment project philosophy. Industry 4.0 is actually a roadmap for Society 5.0 as a production model; neither one opposes the other.

Davos summits and forums have always attracted attention, although not as much as the participating politicians and businesspeople. The aspects of Society 5.0 were discussed as an agenda of the World Economic Forum at the Davos Summit in 2019 At this juncture, Society 5.0 has been presented as the name of the new technology-based and human-centered digital social life, which will reveal the production relations interwoven with artificial intelligence, digital economy, and advanced automation systems where human beings are placed at the center of technology as a problem solver (Kato, 2020). Another definition of Society 5.0 has been put forward as "an integrated production model with a high level of cooperation in which humans and robots divide the workload, but the humans play a more controlling role and a lifestyle supported by robots" (Önday, 2020, p. 39). As a result of this integrated system, a super-smart society is envisioned as a system where the transition is from the information society to the society of mind where the increased digitalization, mobilization, industry, and social life is controlled by AI. The generation that this order will undoubtedly require is Generation Z. Meanwhile, Generations X and Y are seen as the generations and workforce whose digital literacy needs to be increased. This is because Generation Z is the first generation of digital natives with the highest digital literacy and ability to adapt to novelty. Finding solutions to problems that their parents and grandparents were unable to solve is seen as their role (Broadbent, Gougoulis, Lui, Pota, & Simons, 2017). Unlike the Information Society, Society 5.0 is also defined as a data-driven society in which data collected through the Internet of Things are transformed into information. The difference here is the knowledge-value relationship. The Information Society derives value from information. A data-driven society derives value from data (Deguchi et al., 2020, p. 16).

In order to accelerate reaching the goals of Society 5.0, adaptation to digital technology should also be sped up. For this, efforts are being made to prepare infrastructure and human resources with all digital applications (e.g., online games, social media tools, smart devices, cloud technology, navigation, online systems, e-commerce, e-government, e-invoice) constantly being renewed. People who will remain in the labor market in the next 20 to 30 years are seen as the primary target audience whose digital literacy needs to be increased. What purpose would people serve in such a society if machines do most things better than people? The Japan Business Federation announced a vision document through Society 5.0 where the five obstacles or walls that Japan faces must be demolished in order to overcome some challenges such as natural disasters and pollution. In that document (Fukuyama, 2018, p. 50), the obstacles that need to be eliminated are presented as ministries and agencies, legal system, technologies, human resources, and social acceptance. Society 5.0 has been more concretely highlighted in areas where people can easily accept such as preventive health services, mobility, supply chains, smart cities, infrastructure, and new financial services (Önday, 2019, p. 40). Meanwhile, global warming, congestion and segregation, and rapid urbanization are seen as three of the world's biggest challenges in the 21st century (Sim, 2019, p. 31).

The Japan Business Federation's announcement document expressed the need to establish national strategies and integrate the government's promotion system; the need for the Internet of Things system to include a functional think-tank structure; the need to implement advanced techniques; the need to both develop laws and implementation-oriented regulatory reforms for digitization, education reform, IT literacy; and the need to develop advanced digital skills for current human resources, encourage female participation, and most importantly to break the barrier of social acceptance. The Japan Business Federation's announcement document not only emphasizes the need for a social consensus but also takes into account the human-machine relationship and the philosophical dimension of work (i-scoop,2020). In this context, Society 5.0 has been indicated to be a social change project and its realization and success to depend on demolishing certain barricades and walls Salgues (2018, p. xviii) argued Society 5.0 to involve a fundamental social change and this process of change based on the platform economy to be able to transform into a new "social wave" and rapidly become a global phenomenon.

4. An Inquisitive and Analytical Perspective on the Socio-Political Construction of Technology in the Context of Society 5.0

Some inferences have been made regarding the predictions about what will happen in the next 20 years in terms of the life targeted by Society 5.0. Most of these inferences certainly involve the future of technology, industrial relations, social life, and some predictions about the global order.

These inferences and predictions can be listed as:

- 10% of the world's population will wear clothes connected to the Internet
- 33% of people will use a mobile communication device (i.e., mobile phone and Internet) embedded in their bodies.
- 90% of the world population will have a virtual memory (safety box) using cloud technology for free.
- Robots will be found in all areas of life, especially in healthcare.
- Each person will have at least ten digital workers (computers, robots, flying cars, personal drones, and super-smart house devices.
- Schools and education systems will change radically.

- Medium-sized smart cities will be built where all public services are produced using camera data and AI analyses.
- At least 20% of vehicles in traffic will be self-driving.
- 20% of vehicles in traffic will use hybrid and renewable energy sources; strict rules for fossil fuel use will be applied.
- Flying cars will come into use.
- 3D organs will be produced.
- At least 33% of companies will be audited by AI; AI will also serve as a board member in companies.
- Money will go into disuse. Retail banking will completely shift to the internet environment, and banks will merge with financial and credit institutions.
- Binding laws, international conventions, and agreements on AI will be implemented.
- Borders and identities will loosen, and global citizenship will spread.
- Professions will rapidly become dysfunctional and disappear, people and labor who cannot contribute to the digital environment will become devalued, and mass unemployment will arise.
- A discriminatory, individualist, conformist, and pragmatist mentality will spread where the disabled and elderly are seen as a significant social burden.
- With the combination of information and biotechnology revolutions, AI will undermine all authorities (human-institution-state) by revealing big data algorithms.
- Horizontal inter-personal connections will be further severed, and humans will face loneliness.
- By 2050, a world system with 400 members will be established, and this world state will turn into a regulatory and supervisory device that will facilitate service delivery.
- Earth and life will be reshaped and managed according to the rules of giant companies like GAFAM (Google, Apple, Facebook, Amazon, and Microsoft).
- Authoritarianism and totalitarianism will become the political and dominant character of the 21st century.

The global level of production relations for Industry 4.0 and Society 5.0 and the decisions taken within the framework of their political and economic mission, legislative arrangements, and international binding agreements and rules show that the order of tomorrow will be shaped quite differently from today just as today is from the past. In the understanding that sees and constructs Society 5.0 as the society of the future exists a more implicit reference and emphasis on the role and quality of life human beings have through production and relations. In other words, the argument exists that people are only a small part of the process in production relations and this does not reveal their determining, dominant, controlling, and approving role in the economic and social order. This determinist approach prevents ideological opposition and criticism such as labor exploitation as well as alienation. In the assembly of the super-smart society, humans are emphasized to control computers, AI, and robots and to produce the dominant algorithms. The point overlooked here is how humans will become alienated from the production process and the reduced to an object that spins its wheels and ensures the system's smooth operation, just as Adam Smith stated about the division of labor in the capitalist economy. Wallerstein's (2000, pp. 7–8) assessment is that the world has not progressed morally in the last few centuries and that the first half of the 21st century has been disruptive and manifested with deadly crises.

The central principle of science-technology research is that "science, technology, logic, and mathematics are socially constructed" (Bauchspies et al., 2019, pp. 126–128) where the human acceptance and socio-political construction process is again a cultural path produced by humankind. Technology develops with its reconstructed norms. Humanity has overlooked and only recently realized that unlimited progress cannot happen with the planet's limited resources. Nature needs to be supported rather than conquered. The spasmatic pace of this technocentric progress, oceans of unnecessary information, and cheap contemplation will never magnify the human soul; instead, they make it shallower. The triumph of technological civilization has also sown a seed of spiritual insecurity within humanity that will soon suffocate it. Humanity will realize it has lost something pure, sublime, and fragile. Even if a human has free will, the sense of being a minute point in the universe will be lost and individuals will start to view themself as the center of their environment, trying to adapt to the world by adapting the world to themself (Soljenitsin, 2000, pp. 18–20). Distracted by speed, the world's seductive power has never become so irresistible as in hectic lives. In today's world, human life is compelled to live in part as it had before, knowing that each piece to come is different from the previous one and different knowledge and skills are required (Bauman, 2020, pp. 27–42).

As an inevitable consequence of industrialization, the dysfunctionalities caused by the human-machine integration and the increasing threat of unemployment force many segments from policymakers to practitioners to produce solutions. Urban poor, homeless, immigrants and groups who have adopted exclusion from work life as a philosophy of life and ideology are seen as social problems that require large funds to increase their qualifications.

The tendency of digital technologies and automation to replace people in jobs requiring only basic skills has resulted in a significant increase in unemployment among groups whose jobs have been replaced by machinery and software, possibly resulting in less-skilled individuals belonging to low-income households (Lim, 2019, p. 15). Prioritizing the mental skills that can contribute to the technological and digital revolution instead of human beings' physical skills will reveal unprecedented cruel human classifications at the global level. Rapid digitalization can accelerate the forms of remote employment open to anyone who can contribute with their mental skills wherever they are globally, and global citizenship will turn into a phenomenon defended by the operators of the global system. Studies in this field show the sympathy for and acceptance of global citizenship to be relatively high. In particular, attitude studies on Generation Z have shown young people to have an egalitarian, accepting, tolerant, and liberal character, to have increasingly positive attitudes toward immigration and refugee issues, and to support global citizenship (Broadbent et al., 2017, p. 64). In the near future, the particular social costs of those under protection, those caring for children, the elderly, the disabled, irregular migrants, homeless, and unemployed masses will be seen as a significant problem and burden.

Meanwhile, machines that are able to make their own decisions with minimal human intervention required will occupy a large place in the future workforce. Where people tire quickly, robots will be able to operate day and night. They will be employed in recycling facilities with hazardous gases and toxic chemicals, as well as jobs such as cleaning and sewage. Their work will go even further: nanorobots will roam the circulatory system to destroy disease microbes, correct DNA mistakes, remove toxins, and perform many other tasks to ensure physical well-being. Byron Reese (2018, p. 520), who has made very optimistic predictions about this period, described the "new you" as follows:

> *In the future, we are told, microscopic machines will swim around in our blood and repair what ails us, keeping us young and healthy, artificial heart, ear, and bionic eyes can be constructed. More than one company is now developing technology to allow parents to pick out their smartest embryo.*

AI first caught the world's attention in 2016, when Deepmind's computer program AlphaGo succeeded in defeating world champion Lee Sedol of Go, an ancient game; storms broke out in the press and the world of science (Kaku, 2018, p. 61). The central computer Skynet from the movie *Terminator*, David in the movie *AI*, and Viki in the movie *I Robot* bring up situations such as the development of an AI mind that gains self-awareness (Kaku, 2018, p. 134). This suggests the need to be cautious with science fiction. Global masses including China becoming threatened not by labor exploitation but by dysfunctionality will soon be felt more closely and deeply. What purpose can people serve in such a society when everything a human can accomplish is done better by a machine? Automation causes human labor to be more efficient and makes human labor superfluous by replacing it (Graber, 2018). Anxiety toward this matter is increasing, and humanity will have to accept the facts that AI and algorithms, which are a part of the use of advanced technology, are passive robots in a sense and that the machines replacing human beings will cause serious labor losses (Beese, 2018, p. 155).

Digitalization is likely to move quickly from a knowledge-based education system to an education system and a global curriculum in which the schools educates and technology teaches because of the need for a generation that thinks analytically and creatively, analyzes big data, and transforms it into commercial value.

Rapid digitalization and surveillance in particular will transform, weaken, devalue, and destroy privacy, the confidentiality of private lives, personal data, emotions, meaning and values, the conveyors of meaning and value, ancient cultures and human values, family, friendship, kinship, neighborliness, fellowship, ethnicity, and religious and social togetherness. This will turn into a flexible and lonely human condition that loses its social ties, becomes socially insecure, and loses its reference points by having to adapt rapidly to every new situation (Balta, 2019, p. 41). Current situations and phenomena such as individualism, hedonism, utilitarianism, selfishness, and solutionism will be discussed as the reality and character of humans and society. Based on the fact that philosophies, ideologies, institutions, and relations change alongside the dominant culture, the general acceptance is that Society 5.0 will change the relations, institutions, roles, and the world system entirely and will be seen as the society of the future. The concept of global society is also preferred for the society of the future in defining and explaining the original characters involving Generation Z and global citizenship (Broadbent et al., 2017, p. 11).

When focusing on AI and the Internet of Things (IoT), the first thing to come to mind is George Orwell's (1948) novel *1984*. Orwell made a utopian prediction by describing the world order and social system at the end of the 20th century. The determination of Big Brother and the phrase "Big brother is watching you" (Orwell, 1948) were predictions that humanity would soon be subject to significant oversight. Some argued that a new trend of individualism would develop by becoming more robust in the face of the theses that surveillance will erode individuality. The global world is putting unprecedented pressure on attitudes and morals. Each person is caught in countless spider webs lining everything. These webs restrict movement and transmit even the slightest movement to very distant directions (Harari, 2018, p. 15). As a result of the globalization process, surveillance has gained even more persuasive power with the development of new communication technologies. Globalized surveillance provides flexibility and mobilization power to the new economic structure by serving the general economic restructuring of capitalism, which has spread to many parts of the world (Çoban, 2019, p. 7). The individualist and libertarian narrative has resulted in a surveillance society.

The approach where the Internet decentralizes power by weakening the state (Morozov, 2011) gradually carries regimes to an authoritarian and totalitarian structure. Global capitalism has di-

rected the aim of gaining social control through the use of new technologies, especially communication technologies (Bentham, Watkin, & Werret, 2008), as well as through governing societies by influencing the Internet through its control and the creation of local search engines. The kinds of effects and traumas the ideal perfecting approach and understanding can cause in the human mind is often ignored.

States that want to attract investment flows from global markets to their territories market citizenship as a way to make themselves more attractive. Many people around the world consider leaving the country where they were born and raised as a possible strategy in the face of economic and political risks, and this desire to leave offers many clues about personal preference and opportunities and also indicates the reconstruction of the collective (Balta, 2019, p. 82). Today, those who can escape from the yoke of nation-states and insure themselves against risks by acquiring other citizenship are privileged groups with a large proportion of cultural or economic capital. "Scientists are becoming the new slaves of Western society" (Bauchspies et al., 2019, p. 43). In many countries around the world, qualified workforces are seen to rapidly move to countries with more permeable refugee policies. In particular, Germany provides the necessary human resources with an extremely porous refugee admission strategy. Drawing attention to this situation, Bauman (2020) mentioned the rapidly aging population of Europe to be faced with a factual reality and that "immigrants can play a life-saver role" despite the extremely calculated political and racist approaches that turn rising xenophobic sensitivities into votes. Increasingly dispraised societies encounter not just foreigners, but new types of foreigners, people they have never seen before. For this reason, these foreigners are considered untamed and uneducated. These societies try to domesticate foreigners by transforming them according to the social needs, forcing them to accept European values. Social and cultural impositions also assimilate integration with the policies the West implements toward refugees, with European values, and with universal values. Bauman also defined this situation as a universal hypocrisy, saying, "Once again, evil is done in the name of good, discrimination is encouraged in the name of equality, and pressure is exerted in the name of freedom" (p. 105). The ambivalent Western attitude toward refugees should be based on respect for the principles of social contract in order to prevent the erosion of ordinary life between autochthonous (i.e., indigenous residents) and allochthonous (those descended from migrants). The mixing of cultural essences will be a source of enrichment and the engine of creativity for European and other civilizations (Bauman, 2020, p. 10).

Capitalism's assimilation of the power and energy it needs in order to turn its wheels within the framework of flexible acceptance policies should be seen as the objectification of the human being. This is a political paradox, a neurosis of anorexia and bulimia. The conditions of citizenship have been handled as a basic legal issue in many platforms in the last century. While the issue of dual citizenship has been considered to violate international security and stability in the recent past, especially in the EU, countries have been asked to make legal arrangements for this (Fundamental Rights Agency [FRA], 2014). Meanwhile, this situation is seen to have reversed since the beginning of the 21st century, especially due to aging populations; countries have implemented flexible and permeable citizenships and refugee policies. The countries that implemented Industry 4.0 and similar development plans have realized late that they face a major deadlock. They have set out to prepare emergency action plans that will turn the wheels of their rapidly aging populations where fertility is almost zero to meet the labor force required for the desired comfort. They found that, if skills are not available domestically or if education is not quick enough to meet the market demand for certain skills, no other choice exists but for companies' initiatives to open doors for highly

skilled and educated immigrants to enter (Lim, 2019, p. 65). Just as Marx and Engels said at the beginning of the 20th century, the 21st century also sees all established relations to be dissolving and disintegrating through the old values and opinions they had given birth to; anything newly emerging gets old before becoming ossified. Humanity is going through an extraordinary time in which all fixed relations, beliefs, and opinions are dissolving; the old are insufficient at explaining or making sense of the new, but no narrative has been replaced (as cited in Balta, 2019, p. 216). Through globalization, individuals have brazenly and practically unlimitedly increased their visibility, evaluating it as an area of freedom, transforming it into a transparency, and putting it at the disposal of the global eye of AI and algorithms. People are currently leaving huge digital footprints. A holographic image has been created with all this information, one speaks and moves with attitudes unique to both individuals and memories (Kaku, 2018, p. 217). The era of big data algorithms that will observe peoples' emotions, analyzing and understanding them better than people do and sending reminders of individual needs before they arise, deeply affects the relationships that people establish with the world. Digital individuals leave digital traces behind them every day, providing an unprecedented dataset about the world population with personal data that individuals voluntarily share about themselves (Balta, 2019, p. 163). Disciplinary and panoptic powers see descriptive datasets produced about each individual by assigning the role, task, and mission of a profile analyzer in AI using algorithm training methods. With individuals' assets increasing in the digital world, their consumption behaviors, all social media shares, personal data, comments, likes, and followers are available to anyone as unremarkable spontaneous data sets. All e-commerce algorithms produce a mental link in the onset that will drive new consumption behavior. However, all kinds of digital traces from individuals provide panoptic powers, and thus intelligence organizations, with robust and reliable footprints to facilitate profile analyses.

Capitalism is transforming into total surveillance capitalism. Platforms like Google, Facebook, and Amazon observe and manipulate individuals to maximize their profits. Every click is recorded and analyzed. Humans are carried around like puppets by algorithm streams. Nevertheless, humans feel free. The world is witnessing a freedom dialectic that is transforming freedom into servitude. Can this still be called liberalism? While Harari (2018) defined current developments as a redesign of life, he also described these developments as "Companies and entrepreneurs [sic] undoubtedly driving technological revolutions" (Harari, 2018, p.54).

In recent years, companies have developed strategies to save time, space, and resources and corporate control for home workers by keeping employees under surveillance and making them accessible; in the USA, the gig economy has had a long time to transform residences into workplaces. Amazon, which possesses greater economic power than many countries, has also bankrupted small tradesmen and socialization sites by providing access to all consumer goods with delivery to an address. The new situation that Naomi Klein called the Screen New Deal, most importantly draws attention to the alliance of state and GAFA (Google-Apple-Facebook-Amazon). Today, software developers who produce content suitable with the Google algorithm are known to be employed in all e-marketing areas. Each of them in different parts of the globe produces work with their mental skills by designing part of a module or a piece of content, an algorithm of an interface (Cited by Olgaard, 2020). This situation is continually being renewed. Regardless of the danger of mass unemployment, what we need to be worried about more is the shift of authority from humans to the algorithms that can destroy even the remnants of belief in the liberal narrative and pave the way for digital dictatorships (Harari, 2018, p. 55). Undoubtedly, no hypothesis should be ignored on the systemic crisis produced for this field. The hypotheses that

hegemonic rise and decline patterns will change from states to companies, devices, and algorithms may be more remarkable and realistic. However, this evolutionist-developmental worldview may also cause social unrest and a strong objection to the blinded submissiveness that is increasing and intensifying. A new order follows systemic chaos. This is possible by knowing the order one wants and struggling to establish this order (Wallerstein & Hopkins, 2000, p. 306). The modern economic conditions promised by Society 5.0 seem to create conditions for enslaving people, not only financially but also technologically. The evolutionary transformation of humans into a dependent and passive state in the relationship between human and machine also means that humans cannot be viewed as the dominant species (Hancock, 2009, p. 96).

Famous entrepreneur and futurist Elon Musk came to the early conclusion that the risk of humanity's extinction can only be avoided by reaching the exoplanets and stars. Thus, he guided his whole career in this sense by his goal to be making life multi-planetary (Kaku, 2018). How will human output such as art, music, and poetry that are being produced in the postmodern reality appeal to human emotions, awaken people's inner enthusiasm, and emotionally impact them? To these fundamental ontological questions, no reliable studies or analyses have yet been put forward on whether algorithms can be produced that will activate human feelings and thoughts or how effective they would be in practice. Human beings are the ones who will determine the political and dominant character of the 21st century and shape the future economic, political, and social order. Sustainability is doubtful in a system where the views and expectations of life together with all the mental products of human beings and the nature of the human being (i.e., social aspects) will be ignored. While Wallerstein defined globalization as an "age of uncertainty," Bauman conceptualized it as "living in an age of uncertainty" and Baudrillard as "an age of civilized indifference." This reality about the 21st century postmodern culture and the evolving and transforming social structure of the age also overlaps with the definition of risk society as a social theory.

Risk society involves the social, ecological, and individual risks created by the dynamics of regenerating modern industrial society being beyond the influence of the auditing and security institutions of industrial society; the threats outweigh the modernity phase as anomie through its nature, culture, economy, law, science, political action, and decision-making processes as well as all the risks, contradictions, and emerging problems (Bayhan, 2002, p. 192). Class lines (consciousness) in the development of contemporary risks becoming more evident, class inequalities gaining more importance with the increase in the production and distribution of risks, and the consciousness of existence being further developed should not be overlooked (Esgin, 2013, p. 693). According to Morozov (2011), the new global era's super-smart society is defined as an age of uncertainty.

The orgy situation, which expresses the unlimited desire for liberation of the human in a new explosion of modernity beyond post-modernity, is undoubtedly a thought-provoking and worrisome reality and a phenomenon that surpasses the soul. The new social scene appears to be a situation where many individuals leave their kitchen tables where they have dinner with their families and frantically embrace their new appliances, especially designer clothing, and their loneliness (Bauman, 2020). Bauman (p. 123) describes this situation as a civilization with excess, abundance, waste, and waste disposal, explaining it through the concept of "fluid modernity." Mauro Magetti (as cited in Bauman, 2020, p. 25) explained it as "the transition from the understanding of nature as an order to the imagination dominated by an endless process of construction and reconstruction, as the first step in starting to break down all the bricks that establish modern thought." The lifestyle into which today's young generation are born and therefore know nothing else is a culture of "the now" (living in

the moment) that encourages innovation and random change (uneasy and constant change) through a society of consumers. Such a society and culture suffer from the excessive supply of everything, not only desire but also objects of knowledge, and the emergence of new objects at speeds that damage elders' minds (as cited in Bauman, 2020, p. 33). Protective networks such as family and close social ties are gradually weakening. Even the marriage institution, which once functioned as a kind of future insurance, has long turned into a risky institution where commitments to everyday life can be broken at any time, often one where personal desire and happiness are met. Today, such vast opportunities, information networks, and the digital world have been perceived and accepted as a new area of freedom. Information technologies and biotechnology are currently more critical than heavy industry (Harari, 2018, p. 135). Meanwhile, every movement is recorded and monitored with the private IP (Internet Protocol) identity given by Internet service providers due to every individual with Internet access through smart technologies living with a spy device that reports their location. Over time, Internet use and individuals' relations with social media have become so intense as to make up at least a quarter of their daily lives. While many in the West view the Internet as offering an excellent opportunity to revive the least credible bits of modernization theory, the once-popular belief that all developing societies can reach a take-off point with some assistance where they put their history, culture, and religion on hold and simply follow in the policy steps of others (Morozov, 2011, p. 247). These developments have produced new social realities. While individual travel through all the temptations and traps of the virtual world, they become trapped between virtual and social reality, the digital relationship that they see as an area of freedom has transformed into a trap where virtual friendships have replaced real friendships. This can be described as virtual sociality (i.e., "death of sociality;") (Bağcı, 2016, p. 1035). Video surveillance and monitoring at every stage of life has transformed into an irresistible social reality stored digitally and processed by AI; this has resulted in the phenomenon of social control being replaced with power control. Foucault explained this situation as the "claustrophobic insecurity of the world" (Werret, 2019, p. 88). According to Baudrillard (2018, p. 37), all systems today are overweight. Information technologies and communication, memory, storage, production, and extinction are out of control in the societal order. All these memories, archives, and documents that failed to produce an idea; all these plans, programs, and decisions that fail to produce an event; and all these high-tech weapons that fail to produce a war are considered world nauseating, rapidly proliferating, over-inflated, and sterile (Baudrillard, 2018, p. 37).

In Society 5.0, the population's spatial organization and gathering of the needy and poor in cities' modern suburbs show what a closed society can yield. How can people who have the opportunity to live, work, and travel without ever encountering the most disadvantaged in society believe that they belong to the same human family? Meanwhile, discussions exist regarding the side effects and possible difficulties of discriminatory life models in future societies. Does Society 5.0 predict what kind of emotional and mental world this class difference between disadvantaged people (e.g., refugees, foreigners, different ethnic and religious groups, low-income groups) and advantaged (e.g., high-income groups)? Will it turn into a fragmented narrative of society that fears and hates each other, divided into two opposing sides? These questions can multiply greatly and remind of the difficulties of building an artificial social order in smart cities. The prediction that one's perspective on issues related to smart cities and their counterparts in economic and social life indicates more than is desired to see has features that can inform about the possible syndromes and their destructive effects as an early warning. Although all people are subject to similar kinds of uncertainty, anxiety, fear, and insecurity that shape today's societies, saying that everyone feels these extraordinarily rapid social transformations in the same way would be incor-

rect. This is a flexible and lonely human condition that has been disconnected from its social ties, become socially insecure, and lost its reference points by adapting rapidly to every new situation. When completely individualizing life risks, the economic, cultural, or social equity/capital people have for eliminating their anxiety and insecurity will be critical in controlling the present and future. In short, uncertainty does not affect everyone in the same way (Bourdieu as cited in Balta, 2019, p. 19). According to Ulrich Beck (1992, p. 37), the reason for the increased vulnerability due to uncertainty and lack of confidence is closely related to "the person being seen as responsible only for his/ her own life."

5. Conclusion

Marx made the most striking analogy for Society 5.0. According to Marx, individuals' consciousness is not what determines their material living conditions. Although defining these material conditions that determine their consciousness appears to offer an ideological and theoretical view, the situations human beings face in the super-smart society (i.e., the digital era of the Internet, artificial intelligence, and technology) are their dysfunctionalities and instrumentalization. Undoubtedly, this will be discussed extensively by all disciplines, especially philosophy and sociology.

The stereotypical understanding of technology being something you can use for any purpose cannot explain the radical changes and transformations that can occur. This is because the determinist definition where "technologies are doomed to produce certain social, cultural, and political effects" (Morozov, 2011, p. 289) is quite stimulating. The sociological method requires looking at both external contexts and internal networks. The assumption that every movement of people will be seen and what they say will be heard at any moment remarkably becomes an instinctive habit and the reality of having to live with it, just like the Panopticon and the novel *1984*. What is coming is the mechanized human reality through the surrender to the power in the envisaged economic, political, and social system. Countries, institutions, and individuals have experienced the change, adaptation, and acceptance that they would have experienced in ten years. during the coronavirus pandemic. The rapid digitalization of humanity and the unquestioned acceptance of reality will become a separate question for people to think about. The transparency of personal data that has turned into a phenomenon through digitalization has also turned into automatic acceptance as a normal situation without experiencing the problem of legitimacy through the pre-acceptance of objective public control. Meanwhile, "an individuality resembling others in the crowd turns into a mass spirit and a universal necessity" (Bauman, 2007, p. 27). The inherent character of Society 5.0 presents an individual, one with a lonely, hedonistic, obedient, transparent, and objectified character. Loneliness is just one aspect of human existence. Another is the fact that human beings are social, a group-entity. Therefore, aside from accepting that people are ultimately alone, they must also be open to being with others in the outside world. Otherwise, they cannot succeed or develop. Every real experience, every relationship with others keeps the individual away from loneliness. The view that loneliness, defined also as a solo life, is not an increasing problem in modernity; however, as a part of modern life, loneliness must be accepted as a shared view in academic circles (Göka, 2020, p. 19).

Meanwhile, the most discussed issues regarding Society 5.0 will in the future be basic sociological issues such as global citizenship, personal data ownership, law and security, the sanctity of private life, transparent lives, and deepening inequalities. Society 5.0 is the state of "being a subject who is constantly being watched over behind a glass wall" (Balta, 2019, p. 164) in a world with no unknowns. Because the systems that build, operate, and employ Society 5.0, from the IoT

to AI, are realized through companies, how can the rights and laws of people who are completely objectified in this system and degraded to a consumer be protected? Current legal regulations do not affect current or future technological developments such as cloud computing, IoT, and big data. Following the adoption of the Privacy Forum and EU Regulation 2016/679 in 2016 due to long-term negotiations, just one study was initiated by a commission for a participatory review of the e-Privacy Directive (Schwanholz, Graham, & Stoll, 2018. pp. 31–47). However, when and how it will finish is a mystery. In the late 20th century, nation-states' normative forces, especially their practice of establishing dominant normative regulations, completely eroded all their capacities. The business world waged a struggle to break away from the sphere of state sovereignty. The economic foundations that enable people to preserve their existence and maintain their well-being have once again been considered politically "beyond borders," just like 20 years ago (Bauman, 2018, p. 299). Nevertheless, globally binding legal and judicial systems have only signs and remnants of the applicable and adhered ethical rules that encompass the globe. Measuring "the life one lives with life as it should be is one of humanity's defining and basic characteristics. Philosophies, ideologies, and institutions change in line with the dominant culture. Those associated with the downfallen culture decline, while those in harmony with the rising culture also take root and bloom (Sorokin, 1972, p. 18). The culture and the form of civilization that emerged in the West with the Industrial Revolution took over the whole world with its inhabitants in two centuries, devouring whatever local had been and devaluing values by eroding them. In this sense, Society 5.0 is in fact not only a social development project of Japan but a new global culture-building process. Humanity is faced with the ontological fact that human beings have been reduced to an animal hanging within the web of meaning they knit with their own hands; robots have become human while humans have become robots. This in a sense is the objectification of people. The gradual monopolization of wealth concentrated in the hands of the 0.1% will cause the conditions and feelings of equality in poverty to reappear. If the boundary is crossed, decency will be revealed. The person who should be the subject becomes objectified. The objectification of the subject, however, dehumanizes the human being (Kutlu, 2020, p. 77). Bauman (2020, p. 50) predicted that "Staying human in inhumane conditions is the most challenging issue and that the future would be a harsh new world in which acquired virtues are devalued is quite thought-provoking but does not have any equivalencies in the real world." On the other hand, many people feel useless, and the emergence of loneliness as an existential phenomenon and as a socio-psychological phenomenon is overlooked (Göka, 2020, p. 13). Perhaps in the 21st century, popular uprisings will be held not against capital owners who exploit people but against capital owners who no longer need them (Hariri, 2018, p. 16). Kaku (2018, p. 1) predicted that the mind-boggling developments in robotics, artificial intelligence, nanotechnology, and biotechnology will be defined as the fourth wave of science and "This science will carry us to the goal of making Mars habitable and building nests among the exoplanets and stars" (Kaku, 2018, p. 8). However, making predictions about the effects these developments, not in quantitative but in qualitative leaps, will have on the human species and what kind of fate they will lead humanity to in the future has been left up to theoretical physicists, futurists, science fiction writers, and screenwriters. What has been overlooked is the admission that AI and robots can never acquire such behaviors and characteristics that the anthropologist Donald Brown defined as "human universals"; these include the characteristics of culture, society, language, behavior, and spirit. As an anthropologist, Brown claimed at least 67 forms of behavior to exist, including gift-giving, joking, religious rituals, spirituality, faith healing, hairstyles, athletic sports, and bodily ornamentation and the processes of forming

most of these are inimitable by machines (Cited in Beese, 2018, pp. 492–494). However, Baudrillard (2018, p. 26) drew attention to the situation saying, "There is no more avant-garde with foresight." Tens of thousands of years ago humanity faced mass extinctions caused by natural events; no one can say that the human species and their generations in the future will not be made by themselves but be produced by biotechnological and other high-tech products and nuclear resources. Irregular, turbulent, and completely profit maximization-based, these innovations expose the Earth and living beings to the effects and consequences of particular factors such as global warming and global pollution, electromagnetic waves, radio signals, UV rays, pesticides, and hybrid food sources. The upcoming reality is the human reality mechanized by a surrender to power. Durkheim's fundamental question of whether production, the relations of production, and order that are beginning to leave human control for understanding the new kind of subjectivity and social relations are based on a solid ethical basis should be asked aloud and answered without delay. Many people express the concern that the moral laws of this business are incomplete and ignored. A moralistic view is in favor of discussing and analyzing clearly what kind of changes and transformations will occur in social life, relations, and institutions through Society 5.0 in terms of what will disappear and replace them. The assumption that people's every movement will be seen, and every word spoken will be heard is turning into an instinctive habit; the reality that people have to live with this is also a point to consider. Marx's statement that "humanity can only solve the problems in front of itself" can be regarded as an indication that the universal character of the dialectic should never be ignored. This indicates that human beings will produce an outlet by accounting for what they do in the universe they live in. All kinds of innovative, progressive, conformist, and inherently hegemonic models and systems that commodify and objectify human beings by ignoring their social aspect and free nature and that rely on the exploitation of unlimited mental labor are destined to collapse with the soulless yeast contained within them as an atomic nucleus. As the anthropologist Marvin Harris stated (as cited in Gardels, 2000, p. 7), the principle that expresses the possibility of analyzing a social life that every sane person can immediately recognize must urgently be re-embraced. Sorokin (1972, p. 15) said, "Historical and philosophical elements of thought were created in times of acute and deep trouble and disaster, or in times of serious, protracted depression. Most people do not pay much attention to socio-cultural shoes before they hit their heel." As a result, the point to which industrialization has currently evolved involves the advanced technologies that shape the world and its operating system, the Internet, AI, a reality achieved through intense algorithmic models, and a life formulation and social evolution of humans who've been reduced from subject to object. Humanity will soon get tired of this system that promises instant gratification, just like the reason that machines took their jobs and increased unemployment in the first years of the Industrial Revolution. With a clear conscience, the Machine Breakers started in England in 1758 and spread to Europe, reaching their peak in 1811–1813. Movements similar to Luddites will turn their back on modernity by destroying all their modern toys and everything based on them, rebelling against the servitude in the consumer economy and losing meaning and value whether its known as Industry 4.0 or Society 5.0. Movements will find a way back to being in harmony with human nature and its essence despite the system. A unique narrative, consciousness, and ideology that will change the human objectifying nature and structure of the global system will undoubtedly flourish and find a way out in a world whose soil is poisoned, whose water is polluted, whose weather is deteriorating, and whose climate is changing. The source of this optimism is undoubtedly found in humanity's longing for freedom, responsibility to others over the self, courage, honesty, hope in life, and most

importantly, its understanding of wisdom and the nature of creation. Despite being undoubtedly unquestioned and accepted without contention, human beings will emerge from this dark, terrible, and inhumane portrait in this social and economic order that leaves little room for family, entertainment, art, sports, worship, friendship, or kinship relations by using the power of nature, foresight, and willpower.

Peer-review: Externally peer-reviewed.
Conflict of Interest: The author has no conflict of interest to declare.
Grant Support: The author declared that this study has received no financial support.

References

Bağcı, C. (2016). Online society and visual socialities: A sociological analysis on social media and new serfdoms of free digital world. *Journal of International Social Research*, *9*(42), 1029–1036.

Balta, E. (2019). *Tedirginlik çağı: Şiddet aidiyet ve siyaset üzerine*. Istanbul, Turkey: Iletisim Publishing.

Bauchspies, W. K., Croissant, J. & Restiuo, S. (2019). *Science, technology and society: A sociological approach* (B. Kuryel, Ü. Tatlıcan, & B. Balkız, Trans.). Istanbul, Turkey: Phoenix Publishing House.

Baudrillard, J. (2018). *The transparency of evil: Essays on extreme phenomena* (A. Ergüden , Trans.; 7th ed.). Istanbul, Turkey: Ayrinti Yayinlari Publishing House.

Bauman, Z. (2007). *Liquid times: Living in an age of uncertainty.* Cambridge, UK: Polity Press.

Bauman, Z. (2018). *Society under siege* (A. E. Pilgir, Trans.). Istanbul, Turkey: Ayrinti Yayinlari Publishing House.

Bauman, Z. (2020). *On education* (A. E. Pilgir, Trans.). Istanbul, Turkey: Ayrinti Yayinlari Publishing House.

Bayhan, V. (2002). Risk society. *East-West Magazine*, *19*(3), 187–202.

Beck, U. (1992). Risk society: Towards a new modernity. London, UK: Sage Publication.

Beese, B. (2018). *The Fourth Age Smart Robots, Conscious Computers, and the Future of Humanity*. (z-lib.org). epub, (e-book).

Bentham, J., Watkin, C. P., & Werret, S. (2019). *Panopticon: The power of the eye* (B. Çoban & Z. Özarslan, Trans.). Istanbul, Turkey: Su Publishing House.

Broadbent, E., Gougoulis, J., Luı, N., Pota, V., & Simons, J. (2017). *What's the worlds young people think and feel, generation z: Global citizenship survey*. London, UK: Varkey Foundation.

Center for Research and Development Strategy. (2016, November 7). *Future services & societal systems in society 5.0, center for research and develeopment strategy.* Japan Science and Technology Center, CRDS-FY2016-WR-13.

Deguchi, A., Hirai, C., Matsuoka, H., Nakano, T., Oshima, K., Tai, M., & Tani, S. (2020). *Society 5.0: A people-centric super-smart society.* Singapore: Springer Open.

Esgin, A. (2013). Sociological orientation of the era of manufactured uncertainties: Discussions of "risk society" rooted in Ulrich Beck and Anthony Giddens. *Gaziantep University Journal of Social Sciences*, *12*(3), 683–696.

Fundamental Rights Agency. (2014). *Handbook on European law on asylum, borders and migration*. European Union Agency for Fundamental Rights: Belgium. Retrieved from https://fra.europa.eu/en/themes/asylum-migration-and-borders

Fukuyama, M. (2018). Society 5.0: Aiming for a new human-centered society. *Japan Spotlight*, *27*, 47–50.

Gardels, N. (2000). *At century's end: Great minds reflect on our times.* A.Soljenitsin, İ.İllich, C.Fuentes, B.Herry, A.Levvy, H.Toffler, O.Paz, J.Baudrillard, O.Stone, A.Moritina, D.Rockfeller, N.Mandela and others. (B. Ç. Dişbudak, Trans.). Istanbul, Turkey: Turkey İş Bank Cultural Publications.

Gardingen, V. T. (2018). Industry 4.0 and soceity 5.0- Comparing socio-political initiatives in Germany and Japan. Retrieved from http://politikperspektive.co.uk/articles/a-gardingen-nov-18.html

Graber, D. (2018). *Bullshit jobs: A theory*. New York, NY: Simon & Schuster.

Granrath, L. (2017). Japan's society 5.0: Going beyond industry 4.0. Retrieved from https://www.japanindustrynews.com/2017/08/japans-society-5-0-going-beyond-industry-4-0/

Göka, E. (2020). *Yalnızlık ve umut.* Istanbul, Turkey: Kapı Yayınları.

Harari, Y. N. (2018). *21 Lessons for the 21st century* (S.Siral, Trans.). Istanbul, Turkey: Collective Book.

Hass, M. & Thrsnert, O. (2020). *Strategic Trends 2020.* Zurich: Center for Security Studies

Hitachi and University of Tokyo Lab. (2018). *Society 5.0: A people-centric super-smart society*. Singapore: Springer Open.

JBF, Japan Business Federation. (2016). Towards realization of the new economy and society: Reform of the economy and society by the deepening of "society 5.0". Retrieved from https://www.i-scoop.eu/industry-4-0/society-5-0/

JBF, Japan Business Federation. (2018). Policy proposal for society 5.0- Co-creating the future. Retrieved from http://www.keidanren.or.jp/en/policy/2018/095_outline.pdf

Kaku, M. (2018). *The future of humanity* (A. C. Çevik, Trans.; 2nd ed.). Ankara, Turkey: METU Press.

Kato, K. (2020). *Society 5.0 at "DAVOS".* Retrived from thttp://www.hitachi.com/rev/column/gf/vol02/index.html

Kösemihal, N. Ş. (1971). *Durkheim sosyolojisi.* Istanbul, Turkey: Remzi Publishing House.

Kutlu, M. (2020). *Kalbin sesi ile toprağa dönüş.* Istanbul, Turkey: Dergah Publishing.

Lim, T. W. (2019). *Section on industrial revolution 4.0. tech giants and digitized societies.* Sinagapore: Palgrave.

Ministry of Development (2015). *Öncelikli Dönüşüm Programları.* Ankara, Turkey

Morozov, E. (2011). *The net delusion: The dark side of internet freedom*. New York, NY: Public Affairs.

Olgaard, Daniel Moller (2020*). Reflections on Naomi Klein's Pandemic Shock Doctrine.*

Retrived from https://www.e-ir.info/2020/09/15/reflections-on-naomi-kleins-pandemic-shock-doctrine/

Orwell, G. (2011). *Nineteen eighty-four* (C. Üster, Trans.; 31st ed.). Istanbul, Turkey: Can Publishing.

Önday, O. (2019). Japan›s society 5.0: Going beyond industry 4.0. *Business and Economics Journal*, *10*(2), 1–6. doi: 10.4172/2151-6219.1000389

Öztuna, B. (2019). *Toplum 5.0: Süper akıllı toplum.* Istanbul, Turkey: Ekin Publishing.

Reese, B. (2108). *The fourth age: Smart robots, conscious computers and the future of humanity.* New York, NY: Atria Books.

Salgues, B. (2018). *Society 5.0, industry of future, technologies, methods and tools.* London, UK: ISTE Ltd. & Wiley.

Schwanholz J., Graham T., & Stoll, P. T. (2018). *Managing democracy in the digital age: Internet regulation, social media use, and online civic engagement*. Switzerland: Springer International Publishing AG.

Sim, D. (2019). *Soft society: Building density for everyday life.* Washington, D.C: Island Press Books.

Sorokin, P. (1972). *Social philosophies of an age of crisis* (M. Tuncay., Trans.). Ankara, Turkey: Bilgi Publishing House.

Wallerstein, İ. (2000). *The end of the world as we know it* (T. Birkan, Trans.). Istanbul, Turkey: Metis Publishing.

Wallerstein, İ. & Hopkins, T. K. (2000). *The age of transition trajectory of the world system 1945-2025* (N. Ersoy & E. Abadoğlu, Trans.). Istanbul, Turkey: Avesta Publishing.

Werrett, S. (1999). Potemkin and the panopticon: Samuel Bentham and the architecture of absolutism in eighteenth century Russia. *Journal of Bentham Studies*, *2*, 1–25.