

## Sociological and Marxist Analysis of Surveillance in the Process Leading to Data Surveillance

Veri Gözetimine Giden Süreçte Gözetimin Sosyolojik ve Marksist Analizi

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### Abstract

The aim of this study is to expose data surveillance to sociological and Marxist analysis by revealing different stages of surveillance from past to present. Social outcomes of surveillance with sociological analysis, economic and political reasons of surveillance with Marxist analysis are discussed. However, it is claimed that the modern structure of surveillance has been opened to discussion, and its digitalization and fluidization have given birth to data surveillance as a new surveillance and control form. Therefore, the classical surveillance conditions defined around Bentham's idea of "Panopticon" and Foucault's texts have changed a lot. Since this change is not only structural, the stages of the surveillance mechanism and its aims in the historical process are open to discussion. In the contemporary period, surveillance has also transformed at a point where speed and flexibility determine all kinds of everyday actions. In order to understand this transformation, this article examines how surveillance reaches a more fluid and mobile form, and the actions performed in digital environments are followed on the data axis instead of tracking the body. As a result, it is concluded that the forms of surveillance move away from oppression, individuals are included in surveillance voluntarily, data surveillance is used for economic and political interests, and data provides much more efficient, individual and instant information without any time and place limits.

**Keywords:** Panopticon, Surveillance, Information Technologies, Data Surveillance, Sociological and Marxist Analysis

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## Öz

Bu çalışmanın amacı geçmişten günümüze gözetimin değişik safhalarını ortaya koyarak veri gözetimini sosyolojik ve Marksist analize tabi tutmaktır. Sosyolojik analiz ile gözetimin sosyal çıktıları, Marksist analiz ile gözetimin ekonomik ve politik nedenleri ele alınmaktadır. Bununla birlikte gözetimin çağdaş yapılanması tartışmaya açılarak dijitalleşmesinin ve akışkan bir hal almasının yeni bir gözetleme ve denetleme biçimi olarak veri gözetimini doğurduğu iddia edilmektedir. Dolayısıyla Bentham'ın "Panoptikon" fikri ile Foucault'nun metinleri etrafında tanımlanan klasik gözetleme koşulları fazlasıyla değişmiştir. Bu değişim sadece yapısal olmadığı için gözetim mekanizmasının ve amaçlarının tarihsel süreçte hangi aşamalardan geçtiği tartışmaya açılmaktadır. Çağdaş dönemde hızın ve esnekliğin her türlü gündelik eylemi belirlediği bir noktada gözetim de dönüşmektedir. Bu dönüşümü anlayabilmek için makalede gözetimin nasıl daha akışkan ve hareketli bir forma ulaştığı, beden yerine dijital ortamlardaki eylemlerin takibinin veri ekseninde gerçekleştirildiği incelenmektedir. Sonuç olarak gözetleme biçimlerinin baskıdan uzaklaştığı, bireylerin gönüllü olarak gözetime dahil edildiği, veri gözetiminin ekonomik ve politik çıkarlar için kullanıldığı, verinin herhangi bir zaman ve mekân sınırına takılmaksızın çok daha verimli, bireysel ve anlık enformasyon sunduğu görülmektedir.

**Anahtar Kelimeler:** Panoptikon, Gözetim, Enformasyon Teknolojileri, Veri Gözetimi, Sosyolojik ve Marksist Analiz

## Introduction

In this study, the transformations of surveillance in the historical process are analyzed by using sociological and Marxist methods. Since the panopticon designed by Bentham in 1791, the transformations of surveillance in the process that have come to this day are being discussed both in terms of quantity and quality. For this purpose, a descriptive explanation is made for each period, accompanied by the prominent concepts and thinkers of surveillance studies, and how and to what extent each proposal on surveillance differs from previous conceptualizations is also examined. This study discusses how the 30-year accumulation of surveillance studies exposed since the late 1980s and early 1990s has laid the groundwork for data surveillance on the axis of continuity and breakthroughs. This study can play a distinctive role in conveying the historical process of surveillance. In addition, it can show how contemporary forms of surveillance work and what they consist of, and how data surveillance works economically and politically. In this context, the basic approaches of sociological and Marxist analysis in Arthur Asa Berger's "Media Analysis Techniques" (1991) are taken into consideration.

There are a few issues that are important here and that constitute the claims of the article. The first is that surveillance has become more fluid and flexible with the contemporary period. The second is to follow the data instead of the body to have much more instant and detailed information in line with the economic and political goals. The body's field of action is limited to a certain time and space. However, all kinds of actions performed in digital environments become independent of time and space within the global network logic. Therefore, the nature of surveillance has changed to monitor what people are doing in these areas. Now, what people do on mobile phones, credit cards, social media accounts, platforms such as Google or YouTube is followed, and surveillance is maintained in a data-based manner by providing a much more flexible and instantaneous information

flow. When the nature and meaning of this new surveillance form is considered in terms of Marxist political economy, it is seen that certain power mechanisms make the process much more functional and efficient. Since every moment and different situations of a person's life can be monitored on the data axis, the surveillance of the body has decreased.

In the discussions that have been carried out for a long time around surveillance studies, the point that every name accepts without exception is the existence of the surveillance society. In other words, no one denies the existence of the surveillance society and tries to understand and describe it with its different aspects. In any case, the phenomenon of surveillance affects and transforms the last period of modern social history very seriously. While facts such as information, globalization, and capitalism are important in order to understand the current social order, explaining the surveillance associated with all of these will contribute to the understanding of others. According to Giddens (1991), the institutional dimensions of modernity are divided into four: capitalism, industrialism, military power and surveillance. Surveillance in this order is one of the best examples showing the transition from a traditional society to a modern structure. While traditional ways of doing business are changing in the modern order, the idea of monitoring workers in production processes and the practical dimensions of surveillance come to the fore. In short, surveillance is "control of information and social supervision". In this process, as Foucault mentioned surveillance can be direct in institutions such as schools and prisons. However, it is generally indirect and focuses on the control of information. Surveillance is the basis of all types of organizations that have come into existence with modernity. The nation-state or military power are some of these organizations (pp. 56-59). It can be claimed that surveillance is one step ahead among the four main points that Giddens emphasizes. Because the management of capital or military power is provided entirely by control mechanisms. At the same time, surveillance cannot be addressed by reducing it to certain areas. Because surveillance increases its spread and intensity every day in terms of modern societies. Every area of life is subject to more intense surveillance practices over time. People are not only monitored to ensure the efficiency of working order in the factory, but also their political preferences, consumption and leisure practices are also subject to surveillance.

At the same time, it is claimed that the panopticon cannot be evaluated as a historical phenomenon or a form of surveillance today, but the panoptic thought is updated and maintained in digital environments. It is seen that a new stage has started with the digitalization of surveillance and it is possible to call this stage as data surveillance. Social media is mentioned along with many applications and platforms that enable data surveillance. This historical narrative is subjected to a critical analysis on the axis of the changing nature of surveillance. The important point here is that all human actions are subject to surveillance through Bentham's Panopticon.

### **Panoptic Surveillance and Updating Panoptic Thinking**

Two names come to the fore when it comes to surveillance: Michel Foucault<sup>1</sup> and Jeremy Bentham. Foucault examines the phenomenon of surveillance with reference to the architectural

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1 In terms of David Wood (2003), Foucault is the founding figure of surveillance studies and analyzes the role of surveillance

structure called the panopticon, designed by Jeremy Bentham and in which surveillance mechanisms can be adapted to many institutions. In short, panopticon consists of the Greek words and means “all-seeing place” (Bauman & Lyon, 2013, p. 16). Panoptic structure refers to a situation where everyone and everything can be seen from a central point.

For Bentham, the essence of the panopticon lies in the centrality of the observer who sees without being seen. In this surveillance house, visible people are everywhere, whether the observer is in the tower or not. Thus, people are kept under surveillance for the widest period. From the point of view of the observer, those who are watched are only a mass and they are isolated (Bentham, 2017, pp. 12-13). Foucault (1995), on the other hand, explains the relationship between the surveillance society and power through the panopticon. The panopticon functions as the laboratory of power and it is possible to perform all kinds of experiments on humans. It can be used like a machine to change and train individuals’ behavior (pp. 202-203). Mattelart (2010) also thinks that for Foucault, the panopticon is a device that shows the existence and ubiquity of the power that exercises its authority over modern society.

Jeremy Bentham’s Panopticon is a representation of disciplinary modern society. A large prison structure under the control of the central government is planned. The body of the tortured criminal has been replaced by a closed, complex, and hierarchical structure that submits to the power of sovereign. It assumes a “generalizable mechanism of panopticism” in terms of all living spaces in the modern age (Foucault, 1995, p. 115; 216). Surveillance is associated with disciplinary social mechanisms. There has been a transition from the social structure based on torture and punishment to the modern discipline logic. Punishment, and especially torture was carried out in public. In the discipline phase, as controlling the body and normalizing the actions came to the fore, violence was replaced by a power structure based on surveillance (Foucault, 2003; 2007). Disciplinary society has led to the disappearance of punitive devices with the punishment process. In accordance with the logic of discipline, a single person monitors and controls dozens of people at the same time in the panopticon. The panopticon is circular as the architectural structure idealized by the modern discipline society, and there is a tower with huge windows in the centre. The entire social order and the control of individuals are provided by the people who have the ability to watch from the central tower. The observer is invisible, but can see everyone. Since the prisoners cannot be sure whether they are being watched at all times, they shape their attitudes and behaviors with the feeling of being watched. While the Panopticon builds a new form of sovereignty around the idea of being permanently visible, its ultimate aim is to ensure that surveillance is internalized and becomes the norm, without the need for bars and chains. The most advanced version of this situation is clearly implemented in the form of data surveillance and will be discussed in the following sections.

For Foucault, the panoptic order meant that power took on a disciplinary role in a much more complex network by opening to the outside in the 19th century (Los, 2004, p. 16). Discipline is defined as the technique of constructing useful individuals (Foucault, 1983). Therefore, the main issue is to purify power from its punitive and destructive dimensions and to integrate individuals

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in the history of modern man in detail in his book “Discipline and Punish” (p. 235).

into the system and make them efficient. From Foucault's point of view, surveillance is an effort to enclose, normalize, and discipline. In the first surveillance studies carried out around the panopticon and afterwards, the main issue is always to have information and more detailed content in terms of power and to take foresighted steps. In this context, Fuchs' (2011) claim is that, according to negative approaches to surveillance, surveillance is generally defined as systematic information acquisition in connection with the use of coercion, domination, and violence (p. 135). Giddens (1985; 1995) similarly defines surveillance as symbolic material stored by an institution or team. The institution that primarily builds and uses this order is the modern nation-state. Surveillance is actively used in the management of state power. Especially for this purpose, information is stored and kept under control.

The nation-state had already kept track of official statistics for a very long time. In this context, birth and death, marriage and divorce, ethnic origins and religious beliefs of people living in a particular region were recorded and followed (Giddens, 1985). On the issue of surveillance, Giddens takes a more moderate approach than Foucault. In general, surveillance aims at keeping the government following the required documents for administrative and bureaucratic purposes. For Foucault and Giddens, the central issue in surveillance is the actions of the state. However, with the inclusion of the Internet in everyday life in the 1990s, both the scope and the intensity of surveillance studies have transformed in very different ways.

In this context, a special definition other than the panoptic approach was made by Thomas Mathiesen (1997) with the concept of "synopticon". Mathiesen reassesses Foucault's idea of the panopticon in his text "The Viewer Society", opposing the fact that a small number of people watch large crowds. In this new situation majority watches few and explained with the concept of synopticon. The concept is derived from the Greek words "syn" meaning all together and "opticon" meaning visual (Mathiesen, 1997). Briefly, synopticon means that "the many watch the few". Mathiesen (1997) put forward the synopticon by examining the transformation of the panoptic structure. Because he thinks that with the widespread use of mass media, the phenomenon of surveillance cannot be explained by panopticon. Based on Foucault, Mathiesen updated the phenomenon of surveillance with his own words. However, he does not think that the panopticon has completely disappeared and mentions the necessity of considering the panopticon and synopticon together. Because panoptic thought continues to exist in its essence.

Today, the panopticon continues to operate together with the synopticon. Going a step further, the synopticon is a form of surveillance without surveillers (Bauman & Lyon, 2013, p. 63). In the synoptic structure, there is a situation where people can watch others without changing their physical space. For example, television makes it possible to see a small number of famous people. In this order, the role of information and communication technologies is of great importance. Because the phenomenon of surveillance is created around the logic of the global network.

While the panopticon has a local boundary, the synopticon has a global nature. Even if the people who share the watcher position in the synopticon are physically in a fixed space, they are detached from the local context, globalized, and combined in cyberspace. Forced surveillance of the

panopticon evolves into voluntary surveillance in the synopticon (Bauman, 1998, p. 52). As in the panopticon, people are directed, controlled, and disciplined in the synopticon (Mathiesen, 1997). Even though the control mechanisms change, the purpose does not change and the existence of surveillance with different methods is maintained strongly. Mathiesen's judgment is that the place reached today is much worse than Foucault imagined. Due to the transformation of surveillance in the historical process, synopticon also cannot adequately explain the contemporary period. Because now, all kinds of time and space limits disappear, information and communication technologies are developing day by day, creating a global network. There is a new mutual situation in which almost everyone is watching everyone.

The omnipticon was first used by Jeffrey Rosen (2004) in his text "The Naked Crowd". Omnipiticon means that everyone can observe everyone without any time and place limitations (Rosen, 2004; Sprague, 2007, p. 2). Omnipiticon crosses temporal boundaries under the leadership of the Internet, allowing everyone to follow each other non-stop. In this process, it is not clear who is watching whom or who is the audience and who is being watched. The new situation in which people watch each other in cyber environments also shows that surveillance has turned into a voluntary state (Rosen, 2004). It is possible to say that the omnipiticon has emerged as a structure that will allow everyone to watch each other, especially with the contribution of the internet. The literal meaning of "omnipiticon" comes from being everywhere at the same time which is called "omnipresence". In this case, everyone is voluntarily watching each other and is aware that they are being watched. With the widespread use of mass media and the internet, everyone is inevitably involved in surveillance processes.

The omnipiticon, in which everyone controls everyone, includes the panopticon and the synopticon together. In this order, as in the panopticon, an observer does not observe all the prisoners; as in the synopticon, the majority does not observe the few. There is a new situation in which everyone is watching each other almost non-stop and uninterruptedly (Pimenta, 2010). While it is not known who is observing whom, individuals simultaneously share both the observed and the observer position. The main thing here is the continuity of surveillance and the formation of the norm itself. In terms of the logic of power, the surveillance mechanism of the panopticon, which is limited to the local level, turns into observing the few by the majority with the synopticon, and a global phenomenon where everyone observes everyone with the omnipiticon.<sup>2</sup>

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2 Since the logic of power has not changed within these new orders, it continues to exist in different forms. A form of power still stands in situations where many see the few or everyone sees everyone. Of course, synopticon and omnipiticon have brought up new power relations. However, since this situation does not represent an absolute break from the past, traditional power relations are continuous. While the general acceptance expresses a situation where everyone watches everyone in the omnipiticon, it actually forgets that a certain group still maintains a privileged form of surveillance. Although almost everyone has the opportunity to observe everyone on platforms such as Facebook and Twitter, the data-based surveillance power held by these applications is not shared with anyone. Rosen ignored this part of the matter because he was discussing how everyone observing everyone regardless of the data. Although the panopticon has lost its validity as an architectural structure, it continues to exist in both synopticon and omnipiticon in its essence. Contemporary surveillance forms such as data surveillance, are much more complex and based on network logic, as will be discussed later.

There are serious difficulties in applying Foucault's panopticon-based surveillance to an order in which a new social and technological development is experienced every day. Therefore, Mathiesen (1997) criticize the idea of the panopticon both because it is one-sided, fixed, and it does not allow for different ways of observing. For example, Fuchs (2011) also thinks that the distinction Foucault makes between 'objects of information' and 'subjects of information' is not appropriate for the internet. This distinction historically explains surveillance. However, on the internet today, people become subjects by communicating with each other, while at the same time they become objects of each other. Sharing photos, videos and location on Facebook shows that you are very active in communication processes. But on the other hand, these shares are the objects of surveillance (p. 140).

Although what Foucault and Bentham said about the surveillance-based structure of power is insufficient to understand the contemporary world where information and communication technologies have become widespread, it can be a starting point to explain the changing nature of surveillance.<sup>3</sup> According to Lyon (1994), Foucault's panopticon idea does not respond to both information technologies and consumerism in terms of contemporary surveillance.

How appropriate or adaptable Foucault and the panopticon are to contemporary surveillance and internet surveillance is a controversial issue and there is no clear answer (Fuchs, Boersma, Albrechtslund, & Sandoval, 2012, p. 8). The form of surveillance that focuses on the permanent surveillance of people confined to a fixed and closed space described by Foucault and Bentham is experiencing a transformation, and information and communication technologies are the basis of this transformation. Mathiesen's criticism is that while the nature of surveillance is transformed by technology, the panopticon is insufficient to explain this new situation. Although surveillance practices have changed, the constant element is that surveillance has become a norm and its acceptance at the social level and its place in daily life has increased. With the opportunities offered by the Internet, digital surveillance has become much easier and has gained different qualities. Therefore, since the 1990s, the emphasis on digitalization and fluidization has been coming to the forefront in surveillance studies accompanied by conceptualizations such as synopticon and omniopticon.

### **Digital Possibilities of Surveillance**

A superpanopticon without walls, windows, towers, or guards is being built over the communication network and databases. Information and communication technologies create different spheres of influence by transforming new forms of surveillance (Poster, 1990, p. 93). Electronic databases are the updated version of the panopticon. Human bodies are compressed into networks and information highways. The human body is also linked to sites that store information. The storage of data in warehouses, the use of a credit card or every shopping creates a superpanopticon. The difference of the superpanopticon from the panopticon is that the people being watched willingly present the data for storage (Poster, 1996, p. 285; 291).

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3 It is not claimed here that Foucault and Bentham have been completely surpassed and are no longer important. On the contrary, the fact that the logic of surveillance has turned into the norm and has taken such a place in daily life shows that both Foucault's and Bentham's claims are strengthened. Structurally, it is possible to say that the era of the panopticon is over, but its existence continues at the ideological level.

According to Gary Marx (1985), one of the first to conceptualize the surveillance society, the obstacles to control in a holistic sense have been removed with computer technologies (p. 26). In the contemporary social order, people are under constant surveillance by people or teams they do not know. Due to the advancement of surveillance technologies, data from different geographies and time periods are easily gathered and analyzed. In this setting, surveillance consists of a purely technicalized process for acquiring data (Marx, 1988; 2002). Surveillance in its modern sense provides the possibility of collecting information and maintaining the administrative structure. Surveillance cannot simply and narrowly be reduced to an espionage activity because it broadly refers to the acquisition and control of information about a community (Dandeker, 1990). Based on data, surveillance areas become unlimited. It is not possible to limit the act of surveillance to an area or a group of people. While the physical nature of surveillance is transforming, different data-based tracking mechanisms come to the fore. In this surveillance, which cannot be limited to only one space and a certain time, people contribute to the creation of the content.

People often fill out the forms themselves, playing the role of both a source and a recorder of information. For example, when a person who connects to the network from his home buys a product, he directly processes information about himself and the purchasing process into the data base. Therefore, people are involved in the mechanisms of surveillance and control over the consumption process (Poster, 1990, p. 36; 93). Superpanopticon is associated with the surveillance of people engaged in consumption activities in the economic field. It should be noted that the superpanopticon is not only related to economy and consumption, but also has political contexts. Because every element stored in the warehouse has a different importance and role.

The element of surveillance that constitutes power is now information (Poster, 1990). While new forms of surveillance emerge with technological developments, both economic and political contexts serve different power mechanisms. In the economic field, a structure that encourages people to be consumers and analyzes consumption practices to the smallest detail, and a process in which political preferences are both analyzed and directed are experienced simultaneously. These are not separate processes from each other. Therefore, for Poster (1990), people are followed all the time, as all kinds of distinctions such as public and private space disappear. All kinds of content are collected in databases, which are the current version of surveillance, and these databases form the superpanopticon. Communication technologies eliminate old walls and other architectural elements, allowing the “inspector’s constant gaze” and information. At the same time, companies and states are fed by superpanopticon. For Lyon (1994), Poster’s superpanopticon resembles Bentham’s prison, but creates a situation of surveillance that far exceeds it (p. 222). Because the superpanopticon is a computational form and technology of power that provides to control the masses through data. So, developments in information technologies contribute to both the concentration and centralization of surveillance in different ways.

While contemporary forms of surveillance open the classical panoptic structure to discussion, it also presents examples where surveillance is not maintained by pressure. The pressure-based surveillance logic of the panoptic structure is abandoned. However, this does not mean that surveillance is completely abandoned and is not maintained at the ideological level. With new



technologies, especially in data surveillance, individuals become voluntary parts of surveillance. Neil Postman (2006), although not directly related to the logic of surveillance, claims in the introduction of his text “Amusing Ourselves to Death” that the Orwellian form of oppressive surveillance has been replaced by Huxleyian entertainment. Orwell’s discourses in 1984 lose their meaning, and Huxley’s work “Brave New World” is experienced in the world. Instead of the oppressive and restrictive control mechanisms of 1984, Huxley’s depiction of life in a state of drunkenness based on fun and freedom seems to be justified. Similarly, in contemporary surveillance practices, a much more sophisticated logic is created in which “freedoms” are increased instead of oppression, prohibition and Big Brother (Postman, 2006). People have always been aware that they are being watched in the classical panoptic order, but they both forget and don’t think that they are being watched with information technologies. It is now claimed that with a form based on the internet and information technologies, surveillance has become globalized, concentrated, fluidized and digitized.

In this context, according to Bauman and Lyon (2013), one of the aspects of surveillance is “fluid surveillance”. Fluid surveillance is an orientation in which surveillance exists today, rather than being a definition. For example, when it comes to fluid surveillance, there is no need for center towers. Because with real-time communication, distance loses its meaning. There is no need for certain panoptic spaces surrounded by walls for control and surveillance. While the rigid structure of the panopticon was disintegrating, a much more mobile surveillance that was not subject to time and space limits emerged with the new technologies (Bauman & Lyon, 2013). The fluid state of surveillance indicates that the phenomenon of surveillance did not disappear after the panopticon, but on the contrary, it points to a new situation that is much more active and can be included in every aspect of daily life at any time.

The intervention of surveillance systems in daily life is increasing day by day. At the end of the nineteenth century, fingerprints were being taken. There is now a global information age where identification is made both for security reasons and in line with the needs of the market (Mattelart, 2010). The current state of surveillance is described by Mark Andrejevic (2007) as a “digital enclosure”. Referring to the ubiquity of surveillance, the digital enclosure emphasizes the limited possibilities of escape and underlines the possibility of turning everything that belongs to human beings into data/commodity (p. 297; 307). The process is not shaped by external pressures, it seems to be progressing with the desires and wishes of individuals. Therefore, according to Bauman and Lyon (2013), there is a situation in which people transform themselves into commodities instead of being forced into commodities (p. 32).

### **The “Beginning” Stage of Data Surveillance**

For the capitalist industry, collecting information, deepening and combining it with surveillance actually means putting the production processes under tighter control. Already, the basis of the revolutions in the field of communication is the planning and control of consumer behavior by the philosophy of scientific management (Webster & Robins, 1993). Economic surveillance plays a central role in the surveillance society in relation to the surveillance of consumers or businesses

(Lyon, 1994; 2001). Today, not only production but also consumption processes are controlled. When it comes to the market, it is normal for consumers to be centered. In line with the capitalist ideology, it is stated that data is used to manage business processes and increase consumption. However, since the process is not limited to this, it is known that all kinds of individual and social preferences are tried to be both predicted and directed in line with the data. Data surveillance is the digitization of each content and directing it to a specific economic or political interest.

In the modern capitalist economy, panoptic surveillance deals with data obtained, stored, processed, and shared through advanced technologies that are included in people's daily lives. In this surveillance mechanism based on advanced technology, people are defined, classified, and evaluated according to certain categories (Gandy, 2021, p. 29). Although it is possible to see the traces of the panopticon as a norm in data-based surveillance, where the economic emphasis is prominent, it is completely different in terms of its functioning. In this technology-based surveillance form, the power center acts only on the data obtained, while those who are subject to surveillance are expected to increase their involvement in data production. In this new order, surveillance is briefly related to the acquisition, storage, and processing of personal data through certain institutions for commercial and political purposes.

With the differentiation of surveillance and the increase in its application areas, new business models are also emerging. One of them is the "digital surveillance economy" (Clarke, 2019, p. 62). With the digital surveillance economy, people's personal data is collected, combined, analyzed, and based on these outputs, consumers' behaviors, attitudes, price ranges of goods and services are determined. The digital surveillance economy is a structure based on rapidly using the data obtained by tracking all kinds of behaviors of people in the electronic environment (Clarke, 2019). For Clarke, systematic monitoring of people with communication and information technologies creates a situation called "dataveillance".

"Dataveillance" originally meant the systematic monitoring of all the doings of people. However, over time, it has evolved into a different meaning, especially with the development of communication technologies. Surveillance is now split between physical, and data driven. While physical surveillance focuses on people's bodies and actions, data surveillance focuses on people's consumption practices, pleasures, and interactions (Clarke & Greenleaf, 2017, pp. 2-3). The concept of "dataveillance" is formed by combining the words "data" and "surveillance" and means data surveillance. With dataveillance, the directness of surveillance is eliminated, costs are reduced, physical methods are no longer needed, and a process in which people are monitored and controlled over data is experienced. The importance of data is increasing day by day as the actions of individuals can be recorded as data (Clarke, 2021). It has become much easier to access data with new forms of surveillance. Because dataveillance is a computer-based system and works as "watch and report". As people are monitored through transactions and records, costs are reduced, and traditional methods remain in an auxiliary role. Thus, data monitoring becomes routine both on a personal and mass scale (Clarke, 1988, p. 501). In this process, with the development of technologies and even the discovery of different technologies, both the dimensions and the intensity of data surveillance are increasing. Since there is a direct relationship between data and tools that can be included in every

field of daily life, the dimensions of data are increasing day by day and named in a new way. This new name is called big data, and surveillance processes are undoubtedly included in big data.

“Big data surveillance” is always based on using large amounts of data in much more efficient conditions by controlling collection, storage, and operating infrastructures (Andrejevic & Gates, 2014, p. 190). The economic and political steps to be taken in the next process are predicted with their results and certain behavior patterns are developed with the information obtained through big data. Surveillance processes in which big data is used make both certain predictions and determine behavior patterns, including in every field. Lyon (2014) examines the relationship between big data and surveillance through three main effects: First, trust in software increases and the “human-algorithm” relationship deepens. In the latter, big data focuses more on the future than the present and the past. Finally, the ability to adapt increases.

It is no longer possible to talk about surveillance processes without the presence of technologies. The distance between technologies and people is narrowing and the dimensions of the relationship are deepening. This situation corresponds to one dimension of what Lyon describes as adaptability. Because adaptation means that technologies can transform every element and handle it into data by making them suitable for all areas of life. Thus, information exchange between fields is carried out with very little risk. It is data that connects all these technologies and makes the relationships between them meaningful. Since data is now an integral and meaningful part of life, it is not possible to discuss any phenomenon independently of data. The central importance of data is not only related to surveillance. Since the data itself becomes a value, the elements of life also become meaningful to the extent that they can be transferred to the data. This situation is called “dataism”. Both Chul Han and Harari explain the importance of data as follows. For Chul Han (2017), the name of belief today is “dataism”. Since everything in dataism is related to data and information, there is data totalitarianism or data fetishism. Dataism is a new type of ideology that claims to transcend all ideologies and enables digital totalitarianism. By creating a digital control society, data moves away from subjectivity and arbitrariness. Harari (2016) similarly considers that dataism consists of data flow and the value of each phenomenon is determined by its contribution to the data process. Dataism has applicable practices as a data religion and interrupting the data flow is the greatest sin.

Today, every element, detail or transaction of life is considered as data and becomes a part of the transaction network. In an order that works only with data, life is almost completely transformed into quantitative and is built around numbers. Surveillance also becomes almost completely data-driven, creates a normal situation and people participate in it. One of the most important points in the process is that people always open themselves to the world of technologies and even spend a lot of time online today. The new phases of data surveillance are examined in relation to social media, being online and connected.

### **The Role of Social Media in Data Surveillance**

Based on its name, the book “The Costs of Connection” (2019) claims that connecting in new media is not an action independent of its consequences and demonstrates the potentials of online

communication technologies. “The Costs of Connection” approaches the data phenomenon in line with the logic of colonialism. Data colonialism is the use of social resources for profit by using and sorting them. In doing so, it feeds off colonialism and capitalism. The practical dimension of data colonialism and the ideology of “dataism” are used in online spaces to guide the actions of users and the power of institutions (Couldry & Mejias, 2019). Historically, colonialism has used natural resources for many years. Similarly, data colonialism shapes the environment around people through technologies and builds new spaces with the “Cloud Empire”.

Through the cloud empire, it is ensured that institutions, individuals, or all aspects of life are transformed into data and included in data colonialism. This already shows the consequences of “dataism” with the normalization of connecting. Data colonialism is advancing to such a point that it excludes anything other than potentially commoditized materials. Therefore, the distribution of the internet on a global scale and the analysis of the data both economically and politically are important. Human life that can be given on a global scale constitutes the input and natural raw material of capitalism. The cost of connecting and staying connected cannot be expressed with any limits. Because the internet is free from geographical boundaries (Couldry & Mejias, 2019). Surveillance capitalism creates an economic order in which human experience is the free raw material for all kinds of commercial activities.<sup>4</sup> This economic order is based on absolute surveillance and certainty. In surveillance capitalism, people’s future behaviors, emotions and personality are tried to be anticipated to a large extent. Surveillance capitalism, which started with Google, quickly spread to places like Facebook and Microsoft (Zuboff, 2019). In this process the phenomenon of surveillance is spreading to different channels by increasing its effectiveness with information and communication technologies. Almost all of the surveillance studies have now shifted to the internet and social media.

In fact, discussing and updating the panoptic structure has gained a new field in internet and social media studies (Fuchs, Boersma, Albrechtslund, & Sandoval, 2012). The spread and intensification of surveillance practices is possible with the internet and takes place everywhere online instead of acting on a fixed ground. Surveillance over the internet is implemented regardless of tool or application, while the biggest data providers are social media platforms and browsers. Applications such as Facebook, Instagram or Twitter, which are used worldwide, have a very large database.

New generation web platforms such as Facebook are actually panoptic structures as they define, classify and evaluate human-related data (Fuchs, 2011, p. 137). It is known that with the popularity of social media, it uses all kinds of data belonging to people/users for commercial purposes, collaborating with both local and global companies and establishing serious partnerships in advertising and marketing strategies. A similar situation applies from a political point of view. Therefore, as Trottier (2016) states, there are four different actors in social media surveillance: individuals, institutions, marketers, and the police (p. 11) .

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4 There is a direct relationship between Couldry and Mejias’ (2019) conceptualization of “data colonialism” and Zuboff’s (2019) “surveillance capitalism”. These books, both written in the same year, claim that surveillance turns human experience and life into free raw material. All human actions are followed, recorded and processed for economic reasons.

Power mechanisms, which have all kinds of data on a local and global scale, determine their actions and targets in line with data. These mechanisms may be states, opposition groups, media companies and sometimes non-governmental organizations. Contemporary surveillance mechanisms allow the use of data anywhere and anytime for different purposes. Therefore, social media creates surveillance conditions in which people are generally included voluntarily and create their own data.

Social media logic is based on four elements: programmability, popularity, connectivity, and datafication. Although there are certain differences in social media, there is a commonality in the transfer of data. Datafication on social media, while dealing with online appearance, is mainly concerned with extracting data for a monetary gain. Datafication deals with people as a profitable information process rather than where and how they appear with different identities (Van Dijck & Poell, 2013, pp. 3; 9-10). Although social media has different logics, the important structure here is that it both digitizes and fluidizes historical surveillance by enabling data storage and data transfer.

As a result, not only marketing activities are carried out with the instant information provided by the data. At the same time, products or ideas that are not yet demanded by the target audience, but can be requested, are produced and marketed. This applies to both the economic and the political sphere. Companies or states, which should be seen as two sides of a whole, have a very detailed database about the ready-to-consume mass, and they shape the production and consumption processes based on this data, and make economic and political profitability sustainable. While data surveillance operates without pressure on a global scale, it trivializes any borders and walls. There is no need for specific areas, walls, or towers for surveillance of individuals. Because individuals voluntarily participate in surveillance processes by opening their personal walls under the influence of communication technologies. There has been a clear shift from punishment and coercive surveillance to rewarding.

## **Conclusion**

In this study, all stages of surveillance are explained by making a historical reading in order to understand the point it has reached today. By analyzing surveillance in terms of both sociological and political economy, it is mentioned that daily life is subject to surveillance more than ever, and the benefits of this surveillance politically for states and economically for companies are examined. It is possible to explain the transformations experienced in the forms of surveillance throughout the study as follows: The classical surveillance form becomes flexible, accelerated, globalized and fluidized. The coercive attitude of the panopticon evolves into volunteerism in the synopticon and the omnipicon. Now surveillance takes place in a voluntary form. There is no surveillance process independent of information and communication technologies and these technologies are used more and more day by day. The power mechanism only changes shape and function, but the purposes are still the same. Surveillance was made permanent by passing from punishment to the surveillance process. While the closure that replaces the punishment is valid for classical panoptic conditions, individuals are expected to act and produce more information or data in data surveillance. Voluntary surveillance is involved in the synopticon and the omnipicon. The panopticon has not disappeared

and continues to exist at the ideological level. The architectural structure and closed space emphasis of the panopticon lost its importance and gained a digital dimension.

While surveillance in the panopticon has an understandable dimension, surveillance in the synopticon, omnipicon, and superpanopticon is much more complex, ambiguous, and intense. However, people find it difficult to realize this situation. In particular, with the increase in the importance of data, surveillance is individualized, centralized and concentrated. This situation causes the political and economic dimensions of surveillance to be ignored. However, politics and the market constitute the two main reasons for surveillance. Nation-states or companies are trying to foresee any future action by keeping a record of information and data. While states attach importance to data for reasons such as political and security, companies also use it to guide the market and consumer. Since data turns into a value and meaning on its own, it is no longer possible to talk about a data-independent surveillance mechanism. As a result, fully individualized data surveillance constitutes the basis of all kinds of economic and political interests. However, this does not mean that other forms of surveillance are not used or ignored.

Understanding contemporary surveillance practices and structure cannot be independent of data. Data can now be stored, processed, transformed, and served to third parties for different purposes. Therefore, data has turned into a value and commodity on its own. In addition, a relationship is established between the data and different clusters are allowed. For example, according to Gandy (2021), the main goal of companies<sup>5</sup> is to classify and evaluate their customers into groups, and mold certain customer behavior to achieve the desired sales figures. Surveillance is included in this process and provides the necessary information in the field of application and provides certain criteria for the classification of people (Gandy, 2021). However, it is not enough to deal with the data by reducing it to the economic dimension. Because this perspective, which is limited to a certain extent, will reduce future surveillance studies to an economic context. In the future, it seems impossible to talk about a data-independent situation from economic and political gains to all aspects of everyday life. It can even be claimed that the value of data will increase and it will have much more direct effects on people's lives.

Returning to Bentham again, it is seen that the panopticon can be applied to different structures such as prisons, workplaces, hospitals, and schools. The power of the panopticon is that it can be applied to all kinds of institutions (Bentham, 2017). A similar situation can be said for data of much more radical dimensions when updated. Since data cannot be limited to a single area, tool, action, or place, it can be obtained from anywhere and can expand the control power of the panopticon. In this context, with the developments in information technologies, people produce much more data every day. There is a serious increase in the production of data with the acquisition of a digital content for all kinds of actions in daily life. Online shopping, time spent on websites and applications,

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5 The transfer of information is gaining momentum within the company with the development of communication technologies. Orders that progress through the chain of command are replaced by e-mail. Internal actions and performances are instantly transmitted to the top of the company (Sennett, 2006). In terms of companies, not only consumer and consumption practices are monitored, but also internal performances are observed and evaluated instantly.

transactions in search engines and social media are recorded and constantly updated. All kinds of data at this level are classified in more detail by dividing them into certain sub-units. Content related to health, economy, education, culture, and politics is recorded and followed. With the collection of all data from different fields and actions, the data is constantly increasing and updated. From these points, the features that distinguish data surveillance from previous surveillance forms can be briefly stated as follows: The meaninglessness of physical distances, the instantaneous flow of information, the absence of the need for designated places surrounded by walls, the intense use of communication and information technologies, the voluntary involvement to surveillance and the increase in participation into daily life.

In this context data creates a new social and economic structure by moving all kinds of elements of life to a quantitative dimension. After the data is constructed in the form of democratic right, with the surveillance power of the states and companies<sup>6</sup>, daily lives of people are turning into resources and raw materials. That is why increasing visibility is demanded everywhere. However, the visibility of the body is not important in data-based surveillance. Now, being visible is provided by recording and following the actions taken in different situations of life. Since all actions based on credit card, social media, e-mail and smartphone usage are converted into data and tracked, visibility has exceeded the relationship between body and eye. Since the actions performed on different platforms provide visibility, the panoptic structure has changes and has become much more flexible and efficient. Companies and governments are persuading people to be even more transparent and open because they have very serious interests in collecting and analyzing data. Many cases cease to be a problem when it comes to data. There is a perception that the process is very usual and transparent. However, the important situation in terms of data surveillance is to have access to digital records of all kinds of actions of people.

As a result, this study drew a theoretical framework and showed the transformations of surveillance in the historical process. The historical conditions that constitute the data surveillance and the current processing methods are discussed together. From this point of view, how and where surveillance will evolve can be discussed in future studies. The relationship of data with colonialism, capitalism, imperialism and ideologies may allow different ways of reading. In particular, Couldry and Mejias' (2019) conceptualization of "data colonialism" can be an important example. It can be thought that different tools that people frequently use in their daily lives will also turn into data provider centers. The increase in the number of information-providing tools as televisions, washing machines and dishwashers, refrigerators or vacuum cleaners become smarter will lead to the fact that all the details of human life can be converted into data. There is a need for both theoretical and practical discussions specific to this new situation where data surveillance will increase.

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6 Consumption practices play a major role, especially in the company aspect of surveillance. According to Lyon, advertising ensures economic profitability and increases consumption through the brand. The factor that makes advertising successful today is the access to more data. Therefore, the main factor that ensures the sustainability of the capitalist economy is the surveillance of consumers (Lyon, 1994). Market research are carried out to understand the behaviors and preferences of consumers so that the advertisement can respond efficiently. With market research, it is possible to define, classify and evaluate the behaviors, consumption practices and interests of customers (Gandy, 2021). Commercial targets are realized in accordance with the data obtained by observing consumers. A similar situation can be applied to political processes.

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