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## State-Society Relations in the Information Age and Democracies in the Post-Pandemic Period



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# STATE-SOCIETY RELATIONS IN THE INFORMATION AGE AND DEMOCRACIES IN THE POST-PANDEMIC PERIOD

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## ABSTRACT

The COVID-19 Pandemic in 2020 caused the rate of people that use the software in their daily lives to increase exponentially. In this context, the groundbreaking changes brought about by the technological developments in the economy have caused and continue to be revolutionary changes in society. Therefore, political institutions should also be expected to undergo a transformation. The first indication of this situation occurred on January 6, 2021, when the President of the United States was blocked for twelve hours from sending messages to the public on Twitter. This article includes an examination of this issue from the perspectives of the History of Political Thought, Computer Science, and Political Science.

As a result, the changes in technology are expected to create changes in political systems. It is emphasized in this article that the biggest technological change in the Information Revolution might well be expected to be a result of the digitization of social activities. When we exclude the scenarios where the individual or the state prevails in the dystopian sense, it can be expected that the "governance" model will be effective in the political systems of the new era. This can be seen as a guarantee for humanity that the current software developments are not possible in the establishment of a political structure that does not have a human factor, at least at the level of current science. Future studies, on the other hand, should be carried out on how the governance model in question, in which the human factor is effective, should eventuate.

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## Introduction

Many institutions and habits established with the Industrial Revolution either have undergone changes or have given signals of change over time. In the Information Age which we live in, with computers and software-based applications used in portable smart devices, technological developments have begun to affect every aspect of life. Undoubtedly, technology has played an important role in overcoming the limitations experienced during the pandemic, and it still performs an important function today. Obviously, the experiences of the COVID-19 Pandemic, which started in 2020, have accelerated the penetration of technology into daily life. The Information Revolution, whose impact we feel in many areas from the education system to working conditions, is expected to have an impact on "politics" as well. However, it is possible to make various evaluations in different frameworks about how this effect will create change.

Struggles to increase the organizational capacity of the state have an important place and form the basis of studies of the History of Political Thought. Since Magna Carta<sup>1</sup>, it has been seen that individuals and society can take steps against the rulers of the state, and thus, in a sense, against the state itself, at an increasing level in this struggle. It highlights two problematic poles that have emerged today as a result of the change that the

Information Revolution is likely to create in the political system: "Will the state and therefore the rulers become stronger?" or "will society become stronger in opposition to the state?" Even the emergence of a third way in terms of solving these problems might be expected.

Firstly, incidents such as the Cambridge Analytica<sup>2</sup> scandal that occurred before the COVID-19 Pandemic were discussed by those who thought that the state and administrators would be stronger. In this scandal, examples such as the 2016 United States elections and the United Kingdom's referendum on leaving the European Union were analyzed by software using big data, and similar examples emerged. Secondly, the scenario at the other extreme could be seen as the fact that individuals today are superior in their ability to organize against the state apparatus, which has a superior position in its capacity to organize far beyond the capacity of individuals. The most likely scenario for this conflict between the state and the individual would be to find a compromise position at some point in between, rather than having an absolute winner.

In this article, the history of the individual-state struggle, or in other words, the short history of political thought, will be primarily discussed in order to analyze the aforementioned problem. Then, the effects of recent technological developments on the economy and the resulting transformation of politics will be examined. And the stages of the individual-state struggle in the last three centuries will be explained. By means of these first

<sup>1</sup> *Magna Carta* (1215) is accepted as the first document which declared that the king and his government were not above the law. In the aftermath of a political crisis, it aimed to prevent the King of England from abusing his power as a result of the struggle by the rebellious British nobles. UK Parliament Official website, accessed 1 October 2021, <https://www.parliament.uk/about/living->

[heritage/evolutionofparliament/originsofparliament/birthofparliament/overview/magnacarta/](https://www.parliament.uk/about/living-heritage/evolutionofparliament/originsofparliament/birthofparliament/overview/magnacarta/).

<sup>2</sup> Zoe Kleinman, "Cambridge Analytica: The Story so far," *BBC News*, 21 March 2021, Accessed 1 October 2021, <https://www.bbc.com/news/technology-43465968>.

two sections, the capacity of technology to be decisive in terms of the transformation of social life will be determined. In the third part of the article, determinations about the transformation we are going through will be unveiled. In the fourth part, the capacity of Computer Science and its algorithms to solve problems raised by social events will be examined. Under the fifth subheading, "governance" will be discussed as a solution. This is Political Science's response to the need for change as a result of the technological transformation in relations between the state and the individual. It is not intended to determine whether the state or the individual will be more powerful in the governance process, which is presented as a possible solution in the conclusion section, because there is currently not enough data available to suggest a concrete answer to this question. In the end, the real question will be reached, not the answers: will the state add a new one to its past defeats or concessions toward the individual since the time of Magna Carta by accepting "governance"? And this question brings up the question of whether Computer Science has the capacity to fulfill every function of the state. At this point, it should be noted that there are problems relating to social activities that algorithms cannot solve, and the current highest level of mathematical science is insufficient to meet this need. Mathematics must solve the remaining questions in order to digitize the entirety of existing social life. This is a case where algorithms will need to be developed further.

## A Brief Overview of the Individual-State Struggle

The price to pay for what people do against nature has manifested itself in the danger of climate change today. Humanity is trying to take steps to combat and overcome this risk. In fact, there is general agreement among scientists that we are too late and we can only minimize the damage if we start protecting nature right now. However, didn't humanity originally start its struggle against nature in great desperation? When humanity realized that it was inadequate operating as individuals, it formed social groups. It tried to turn society into a perfect organization and designed the state, in order to be in an advantageous position in its centuries-long struggle against nature.<sup>3</sup>

The achievement of technological developments such as discovering fire and inventing the wheel are important cornerstones of humanity's struggle with nature. Fire burns when lightning strikes or when a volcano erupts, that is, when "nature wishes". Being able to control fire and use it whenever wanted, gave humanity an important power. Compared to today, this power was as important as accessing satellite maps with our mobile phones. For society to survive, people who perform such different functions as those of stonemasons, healers, hunters, seamsters, etc. are needed. Thanks to the division of labor, people were thus able to meet their limited needs. However, as people met their needs, they continued to feel the need for more, and they continue to do so. As

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<sup>3</sup> Bican Şahin, "State-Society Relations of the Information Age in the Post-Pandemic Period," *Global Academy Talks*, 9 June 2021,

Accessed online 1 October 2021, <https://www.youtube.com/watch?v=3IFc-NwQfbw&t=1775s>.

they needed more, they sought a more perfect organization, namely the state.

Plato, in his work entitled *The State*<sup>4</sup>, in which he defined the ideal state, declared that a total of 5,040 families were needed for a state to operate. In his work, he listed the division of labor as between managers, combatants, and employees. Of course, according to Plato, who did not rank the slaves in society in this utopian state, it should be noted that the perfect state described is perhaps far behind the current level, but it was far ahead of its time in terms of equality between men and women. Undoubtedly, today the state has gone far beyond what Plato thought it could. In terms of population, the number of people living in residences in a luxury neighborhood in Istanbul or London is almost equal to what would be the case in Plato's ideal state. If time travel were possible and he had the opportunity to see the greatness that the utopian state he described had achieved by the twentieth century, Plato would be quite surprised.

It is possible to talk about two major negative consequences of the organizational capacity that the state has reached today: namely, the waging of wars and the destruction of nature. In addition to the size of the state, the fact that it waged wars with such a perfect (!) organization that would cause the deaths of hundreds of millions of people throughout the twentieth century is the first negativity in question. Interestingly, humanity could not be successful in its struggle against nature when acting as an individual, and it had to choose to be

better organized and form society. As a result of this choice, it is very thought-provoking that humanity's victory over "nature"(!) has resulted in today's climate crisis.

In addition to these negativities, the journey of establishing the state, which humanity established in order to fight against nature, showed incredible developments compared to the point it started from. Humanity not only established the state but has also continuously improved on the functioning capacity of this organization. Each development of the state organization has faced different challenges, and each time it has been possible to evolve by adapting to these challenges.<sup>5</sup> The first major challenge in the growing state was the question of who would rule, thus one of the most basic fields of study of Political Science emerged. Initially, this was easily resolved, and in Ancient Egypt, the Pharaoh was able to appear before the people and declare "I am God". Undoubtedly, this was one of the first great contracts made between society and the rulers. Frankly, when we think of the era of the Pharaohs, it was not a bad deal for the society to think that the ruler was the creator in return for the society being controlled by an orderly or political operation. As a result, this situation was the price to pay for the stability of the economy, and therefore the political system, which was established within the framework of the possibilities offered by science and technology, not due to the average intelligence of the people living in those years. To sum

<sup>4</sup> Platon, *Republic*, Türkiye İş Bankası Kültür Yayınları, transl. Sabahattin Eyüpoğlu, M.Ali Cimcöz, İstanbul, 2006.

<sup>5</sup> For detailed information on the subject, see: Mehmet Ali Ağaoğlu and Levent Köker, *İmparatorluktan Tanrı Devletine*, İmge Yayınları, Ankara, 1990; Levent Köker and Mehmet Ali Ağaoğlu, *Tanrı Devletinden Kral-Devlete*, İmge Kitabevi

Yayınları, Ankara, 2013; Mehmet Ali Ağaoğlu and Filiz Çulha Zabcı, *Kral-Devletten Ulus-Devlete*, İmge Kitabevi Yayınları, Ankara, 2017.



up, as people developed their level of organization, they experienced a transition from the ruler being a creator to them being representatives of the creator and then these people executing the creator's orders. Alongside this representation of the creator on the stage of history, especially with the development of science and reason, there was a transition to dynasties. Dynasties did not last very long in the historical process. We have moved on to a system where the rulers' power to rule is derived from those ruled over, rather than from a divine source or a dynasty. This system has led to the emergence of an understanding called the "Social Contract", which is expressed in the passages of Jean-Jacques Rousseau.<sup>6</sup> This system, which was explained as the transfer of the power of governing the society to those who want to govern, was put into practice in the form of a "republic".

The fact that the rulers took the power to rule from the people meant being accountable to the people. Therefore, it is necessary to think that the rulers get their power to rule from a divine source or a dynasty on one side, and on the other hand, they get it from the people; because, another reading of the History of Political Thought should be understood in terms of the struggle between the state and the individual. When we think about it in this sense, the fact that the power to govern originates with the people means that the rulers share the power they have or which the state has with the people. At this point, the following question comes to mind: how did the state consent to derive its power from the very people it once ruled over with absolute authority, and even be regulated by them? Here is the answer to this question; it is in the form of a decrease in humanity's need for the state

apparatus in its struggle against nature, after the developments in science, technology, production tools, and production methods. In other words, as a result of these developments, the degree of the individual's need for society has gradually decreased in its struggle against nature. Thus, the need for the organizational capacity of the state has also decreased. An individual with limited capacity to fight alone in the wild was creating an alternative to extinction in nature, by obeying a chief or magician in a tribe and doing a job assigned to them. In return, the individual could also act as if the ruler was the creator himself and even work on the construction of a pyramid for his burial when he died. In the Middle Ages, in return for living within the walls of a castle or city-state, the top person could be obeyed as a king or queen who owned everything.

But when the need for the protection of a state in their struggle against nature decreased, that's when they started to struggle with the state. They opposed the payment of taxes and drew up the Magna Carta. For the king, signing the Magna Carta only meant consulting when he was going to collect taxes, and this would not reduce his income. However, it was inevitable that he would sign it, and five hundred years later, this time the King's taxed tea would spill into the sea in Boston. Or, in the nineteenth century, those who ruled by social contract would have to give their citizens basic human rights such as the right to live, the right to travel, and the right to be educated, while taking the power to rule from the people. These developments can be summarized as follows: the struggle first began between the individual and nature, progressed through the creation of the state.

<sup>6</sup> Jean-Jacques Rousseau, *The Social Contract*, Türkiye İş Bankası Kültür Yayınları, transl. Vedat Günyol, İstanbul, 2006.

In the second stage, it resulted in the fact that the created state was seen as an element to be struggled against by the individual. While the struggle between the individual and the state is still continuing, the increasing climate disasters in recent times are unfortunately a reflection of the destruction inflicted on nature.

## The Effect of Technological Developments on the Economy and Politics

The tendency that the history of political thought has taught us is that humans created the state to fight nature, and after the state became stronger, individuals began to restrict the powers of the state. The determinants of this trend are directly proportional to the decrease in the need for the state. Developments in science and technology have led to changes in production methods, and therefore the changes in the workforce. The change in the division of labor has led to changes in political systems. In this context, it is not surprising that in the First Industrial Revolution, the harnessing of steam power and the birth of nation-states are parallel. There is a parallelism between the Second Industrial Revolution and the end of colonization after the development of the chemical industry and production methods. There is a reason why we call the period we live in the Information Age because the developments in science and technology are associated with changes in production methods, the division of labor, and even the economy. In fact, communication and transportation come to the fore as areas where change is being experienced in this period. The effect of this was a blurring of the sharp borders between states, the decrease in the individual's

commitment to regionalism, and the transition to a global dimension. On the other hand, the digitization and countability of social events indicate a revolutionary change.

Studies in the field of political economy reveal the relationship between economics and politics. The control of fire, the invention of the wheel, advances in mathematics, or breakthroughs in chemistry were reflected in production methods. In fact, technological developments aside, intellectual developments have enabled the development of technology. Undoubtedly, it is no coincidence that scientific thought and developments in art advanced together in the Age of Enlightenment, which was crowned with reform and the Renaissance. The most important thing was that humanity destroyed the chains of dogmatic thought desired by the church and switched to rational thought. The establishment and acceptance of scientific thinking, the reflection of positive thinking in discussions, and, of course, not prevent the emergence of new theories or ideas were the result of long struggles. The inquisitions or accusations of witchcraft point to setbacks in these struggles. The history of scientific thought tells us the bitter details of this process. However, the changes in the intellectual field in the Age of Enlightenment were also reflected in the means of production and then in the political structures.

In the sixteenth century in Europe, dynasties promoted positive thinking to take away the ruling power from the church, and ultimately achieve their ambition. In this way, states with borders, citizens, and legitimate administrations, which we refer to as the modern state system, were able to emerge in Europe. Thanks to the

studies carried out by science and reason in this period, for example, the mapping that took Greenwich as the starting point, and the British developing the capacity to navigate the seas, all of this resulted in them being able to establish the British Empire. On the eve of the nineteenth century, steam-powered engines led to a series of changes, from the formation of nation-states to the abolition of slavery, leading to the era called the Industrial Revolution. (The abolition of slavery followed the Industrial Revolution. Editor)

In fact, it is highly expected that the changes in science and technology will reflect on the economy and this will change the division of labor. What is undesirable is that the changes in the division of labor in their turn change politics; because politics always resist change. After the Age of Enlightenment and paving the way toward positive thinking, there was no obstacle to holding back scientific development. It can be argued that the reflection of this on the economy was not very difficult within the dynamics of the economy itself, compared to the resistance of the political institutions. However, the reflection of this change in the means of production in the economy, first on the division of labor and then on politics, had relatively greater difficulties. As a result of the changes seen in the economy with the Age of Enlightenment, we cannot say that feudalism immediately accepted the emergence of the bourgeoisie. For the bourgeoisie to survive, feudalism had to be abolished. On the other hand, after the First Industrial Revolution, great struggles were made for the abolition of slavery. But when it comes to the reflection of

scientific and then economic changes on politics, great disasters have been experienced. It is no coincidence that The Age of Enlightenment and the Thirty Years' War, the Industrial Revolution and the Napoleonic Wars, or the American Civil War and the Second Industrial Revolution and the resulting World Wars took place in that order. The basis of these wars was the resistance of political institutions to the transformation brought about by scientific development and economic change.<sup>7</sup> Despite everything, it was inevitable that the institutions of politics could not resist the expected change and eventually experienced the transformation required by science and technology. In the meantime, it should be noted that the change in the political institutions since Magna Carta has occurred as a result of the struggle between the state and the individual, and this has progressed with the individual gaining possessions from the state each time. The problem of the empowerment of the individual in relation to the state, thanks to the technological developments in the period we live in, is analyzed in the rest of this article.

## What the Information Age Brings and How It Forces Change

Auguste Comte, known as the founder of sociology, arranged the sciences hierarchically according to their degree of difficulty. When sorting, he put arithmetic at the beginning, which is like the easiest; he put sociology last, that is, as the hardest. While justifying this explanation, he emphasized the fact that the unknowns are controllable in mathematics but too many and

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<sup>7</sup> See: Eric Hobsbawm, *The Age of Extremes: The Short Twentieth Century: 1914-1991*, transl. Yavuz Alogan, Everest Yayınları, 2006.



uncontrollable in sociology. Mathematics, which really forms the basis of the positive sciences, has enabled the development of the sciences that keep humanity alive, such as physics, chemistry, and even computer science. The social sciences, on the other hand, were analyzed theoretically for many years using historical narrative analysis and mostly qualitative methods, and it was very difficult to express them through mathematical formulae. However, nowadays, social events have become quantifiable, especially thanks to portable smart devices (especially mobile phones and smartwatches). The digitization of social activities, which is still in its infancy, will grow exponentially in the future, and at some point, the mathematical modeling of social events will become more precise. Thanks to these models, prediction methods should be expected to achieve great accuracy. Obviously, to move from today to the above-mentioned stage, the existing digitization must multiply exponentially. In this context, this development should be expected in the not-too-distant future.

Today, we can give the simple example of organizing polls and increasing their accuracy to better predict voter behavior. Although an election is a very important event, the reason why this situation is simple is that the method of estimating the detection of a single behavior - voting - in order to consciously make a prediction, remains quite straightforward compared to quantifying the previously mentioned social behaviors. The analogy in this regard is that by profiling individuals according to their interests while browsing social media or online, the delivery of targeted ads will be more accurate as it involves a more complex process than election predictions.

The advances in science and technology that are happening today are bringing about the Third Industrial Revolution, otherwise known as the Information Revolution. What is occurring in communication and transportation today is changing the economy by forcing the production methods and division of labor to change. It might be expected that the change in the economy will necessitate a change in political institutions, as explained in the previous chapters. The problem that arises at this stage is not whether there will be a change in politics; but what changes will occur. In order to understand this, it is necessary to establish what the changes in production methods are, then what kind of change has occurred in the division of labor, what kind of transformation they have created in the economy, and lastly, it is necessary to determine what functions of the existing political institution pose an obstacle to the continuation of the new economy. Since it is not possible to answer all these questions in the space reserved for this article, only a few fundamental points will be adverted to.

Chief among the differences between the means of production in the twentieth century and today is the fact that geographical distances have become meaningless, and that production chains are planned at the global level. In the distribution of labor, it is observed that the increased use of robots and automation systems has become a challenge in this regard. Undoubtedly, the mobility of the workforce stands out as another issue. In fact, it should be noted that the new production methods and the change in the division of labor, which include details far beyond what is written here, are related to the developments in communication and transportation. These developments are reflected in the economy, and

even currencies that are controlled and monopolized by the states are forced out of the hands of the state with blockchain technology. At this stage, one can easily foresee that the new economy threatens the borders and currencies of the state, at least at first glance. It must be acknowledged that it is not expected that states will not make concessions in this regard. This should be seen as like the inevitability of the eventual collapse of a bridge that appears to be damming a flood. A new bridge will surely be built; however, this bridge should take into account the new way the water is flowing, and adapt to the floodwater so that similar structural arrangements should be expected in politics.

## Computer Science and the Digitization of Social Life

Industry 4.0 and communication between machines were at the top of the list of topics discussed in the pre-pandemic period. With this, it is necessary to see that the new economy began to make progress before it was reflected in people's social lives. The production sector, which had a profit motive, saw this development in Computer Science before it was made available to individuals in society. In this context, a product, for example, is designed in California and starts to be produced in China. At this stage, the employment that would be created through local production in the USA instead of China is not considered. Thanks to the opportunities created by science and technology in communication and transportation, the focus is on increased profitability by utilizing the cheaper labor costs in China. Even after the product has been designed, with the digitization of the production organization methods, all the processes involved, from when the parts

supplied to the production line are going to arrive to which type of product is produced for which store and in what quantity they are made, function with great efficiency. However, it has not yet been seen that this situation has taken a large place in our social life and that social life has been digitized at the same level. It was felt that this could happen one day, and it was known that this capability was being built, but it was not foreseen that the transition to the next level was going to occur so rapidly.

Meanwhile, a global pandemic began to occur due to the Corona disease created by the COVID-19 virus. Humanity had a to-do list to follow, based on the knowledge gained from history, and thought that somehow it would beat this pandemic. However, unlike previous pandemics in history, humankind had the habits brought about by the new economy and did not want to give up on them and has not given up on them yet. If we think that people continue their work, education, and even social life with the help of portable smart devices and online systems, despite the effects of the pandemic at this point, we see that the rate of spillover of digitization in production into social life has been accelerated.

With the pandemic, people had to go into quarantine or were restricted to staying at home. Undoubtedly, initially, big question marks arose about how to conduct meetings, interviews, design, and production processes in schools or workplaces. Thanks to the software and infrastructure that Computer Science and computer engineers have developed over the years, an increasing number of people have continued to run their businesses online. Even in the transactions of states, disruptions could be kept under control. Undoubtedly, income and

infrastructure inequalities around the world have created differences in online solutions. But to put it mildly, for those with the necessary infrastructure, the limitations of the pandemic have accelerated the transition to online life with an exponential increase. For those with limited or totally lacking in infrastructure facilities, it was positive support for eliminating these deficiencies. The medium and long-term consequences of the economic, social, and cultural effects of the transition to the online world began to be discussed.

While all these developments were taking place, on the one hand, people started to create a social bond with each other through online tools. This bond, which already existed, has led to revolutionary changes in social and cultural terms, as well as being productive in life, and it still continues to do so. For example, people immediately began to learn everything online, from information about each other, what others were doing, the news, about government services, even the current morale levels of the political leaders. For example, the previous president of the USA, Donald Trump, was a leader who shared his mood with everyone on *Twitter*. This was an incredible development. The importance of the subject can be better understood if we consider what would have happened if the mood of Roosevelt, Stalin, and Churchill, when they entered the Yalta Conference in 1945, was instantly known to the whole world. Or, what would have happened if the leaders of the USA and the Soviet Union had shared their thoughts with the public instantly during the Cuban Missile Crisis in 1962? It has great potential in terms of Political Science that people are aware of everything in full, and that individuals are in uninterrupted contact with each other. It is very important for Political Science that the individuals in

society do not need a state apparatus to organize themselves, and that they are in instant communication with each other. In fact, perhaps for the first time in the history of humanity, those in society can instantly learn the feelings and thoughts of their political leaders. In a sense, the communication revolution offered by social media means the end of the asymmetry of the state's superiority of organization and the privilege of having unilateral information. Then, perhaps we can say that we have received the signal that the metaphorical needle of asymmetry, which has been in favor of the state for centuries, has begun to turn to the side of the individual in the state-individual conflict. The continuation of this situation, which is still in its infancy, and the capacity it carries may lead to major changes. Whether this change will happen and if it does, how it will happen, and how far it can extend stand as new problems facing Political Science.

What can be the limits of this change; Or will it progress indefinitely? At the beginning of this article, the digitization of social activities was mentioned as the basis of change. Therefore, it is expected that the capacity of digitization will determine the limits of progress. Thus, the question of whether every social activity can be digitized in terms of Computer Science comes to the fore.

Mathematics is the basis of the branch of science known as Computer Science. Computer Science can analyze the data it counts with a theoretical framework and with problem-solving techniques offered by Mathematics. Computer Science produces algorithms thanks to problems that scientists working in Mathematical Science solved decades or centuries ago. Thanks to the

software and hardware produced by Computer Engineering using these algorithms, daily life has become more efficient through automation. Therefore, when Computer Science wants to solve a problem, it can create solution mechanisms by using methods created in Mathematics. Reading this backward, from the point of view of Computer Science, the problems that Mathematical Science cannot solve reveal the last frontier to progress. At this point, the border is shaped by "unsolvable problems" in terms of Mathematics.<sup>8</sup> In other words, digitization has a limit; and this limit should be expected to establish the last place where changes that will affect the shaping of politics can go.

When it comes to the digitization of social activities, the first perceived problem is the concern that social decisions can be made through the use of artificial intelligence. Although this concern is not the subject of this article, Computer Science does not have the capacity to solve every social issue at its current stage. Mehmet Akşit, mentioning ten problems that cannot be solved within the framework of Computer Science, states that it is not possible to optimize the multidimensional value system in terms of the Computer Science philosophy. At this point, his answer to one of the most important philosophical and ethical problems within the framework of Computer Science is that "it is impossible to produce a robot with software that cannot harm people."<sup>9</sup> It is impossible to find the most optimal value system at the

final point where the conveniences are offered by Computer Engineering through the algorithms and automation created by Mathematics. It is important that after the digitization of social activities, an optimization that will carry out politics alone is not possible. Indeed, it reveals the fact that the human factor should not be excluded. In other words, regardless of the level of automation offered by Mathematics and Computer Sciences to humanity, the existence of unsolvable problems guarantees that the human factor will be indispensable. Undoubtedly, if these problems are solved, we will have much newer philosophical and therefore political problems.

The fact that artificial intelligence or automation that excludes people from the field of politics is impossible in terms of Mathematics, at least for now, guarantees us that the influence of the human factor in political systems will not disappear in a sense. But which person are we talking about: the rulers or the individuals who make up society? The answer to this will be the answer to the question of whether the state will remain strong or whether individuals will become stronger in opposition to the state.

## Is Governance a Solution and Will It Be Sufficient?

Our problem, which was explained in the introduction, was the effect on politics of making social activities

<sup>8</sup> The main Unsolved Problems in Mathematics are listed as follows: 1. Goldbach Hypothesis, 2. Riemann Hypothesis, 3. Assumption of Two Primes, 4. Whether NP Problems Are Actually P Problems, 5. Collatz Problem, 6. Palindromic number 196 does not end when the algorithm is applied, 7. Is the number 10 only a number?, 8. Happy ending problem, 9. Finding a Euler brick whose area and diagonal are integers, 10. Determining whether the Euler-Mascheroni constant is rational, 11.

Determining whether there is any perfect odd integer. See: <https://www.matematiksel.org/matematikte-henuz-cozulememis-11-problem/>.

<sup>9</sup> Mehmet Akşit, "State-Society Relations of the Information Age in the Post-Pandemic Period," *Global Academy Talks*, 9 June 2021, Accessed online 1 October 2021, <https://www.youtube.com/watch?v=3IFc-NwQfbw&t=1775s>.

countable. It is possible to talk about two extreme alternatives regarding the course of this problem. The first of these is the total control of what individuals can think by the administrators and an inclination to a dystopian world. The second can be expressed as individuals being organized without the need for the state or the initiation of the effectiveness of non-state organizations.

During the election of the previous US President Donald Trump, Cambridge Analytica used a method similar to the analysis of consumers' behavior by an advertiser, and marketing products accordingly to manipulate voter behavior. In fact, the subject of this article is not whether this has been done or not, but rather the concern that it is technically possible to manipulate voter behavior with such methods. If it were historically possible for the rulers of states to measure with great precision the minimum, they could give to satisfy the demands of the public, would the weekly working hours be much more than 40 hours? In other words, science could be used to reduce the capacity of individuals to fight against the state.

On the other hand, during the raid on the US Congress on January 6, 2021, the president, who would hand over the presidency in two weeks, was blocked from addressing the American society for 12 hours by canceling his Twitter account. Throughout history, it has been seen that heads of state have been hindered by armies, palace intrigues, other institutions of the political establishment, and even by medical personnel. However, for the first time in history, preventing the head of state from taking action by a technology company thousands of kilometers away from the capital, constitutes an

important threshold. *Twitter*, the product of an important social media company that provides the digitization of social activities, forms the basis of major academic studies today. *Twitter* is an important channel that creates a platform for pioneering studies that include, for example, the determination of the behavior of terrorist organizations such as ISIS in various languages through Social Media Analysis and even forewarning a situation involving political violence that may occur in a country. It means that a communication mechanism, regardless of the reason and purpose of the US President's inaccessibility to its citizens, can take away this authority from the administration holding the sovereign authority. However, following J.J. Rousseau's "Social Contract", the people handed over sovereignty to their proxies through elections, and the authority thus given was used until the next elections. Sometimes this contract could be broken through coups or public protests, and a new era was up for debate. The fact that a technology company can enter this mechanism within a few hours means the breaking of the social contract. In this context, it signals the need for a review of the mechanism regarding the transfer of sovereignty from the people to the rulers in the near future. This means sharing the privileged position of the "state".

It would not be a correct approach to predict whether the individual or the state will prevail in this struggle. History shows us that when such struggles take place, instead of the absolute victory of one of the parties, the state eventually makes concessions in favor of individuals and is willing to share a limited part of what it has. On the last point, we should note that considering that there are problems that cannot be solved by algorithms in terms of Computer Science, we cannot foresee that social



activities will be completely digitized and, in a sense, managed by artificial intelligence, at least at this stage. In this context, the proposed mechanism for the resolution of the conflict in question is “governance”.

The concept of governance stands out as a management method used in situations where state and non-state actors should be involved. The difference between the concept of governance and the concept of government is that in the latter, there is a control system managed from a single center. Governance does not have the function of being managed from a single center. Governance is defined as the sum of the joint relations of public or private actors carried out in different ways. In this definition made by the Global Governance Commission, it is stated that the actors in question can be individuals or institutions.<sup>10</sup> In favor of governance, non-state actors can create joint decision mechanisms in national or international administrations. Execution of the areas under the authority of sovereign states with non-state actors within the framework of a kind of public-private partnership creates the concept of governance. While it is possible to increase examples of this, it is also possible to talk of security governance related to the status and functions of private military companies.<sup>11</sup> In fact, many initiatives are being taken to solve the problem of how to manage cyberspace. The problem is still being widely discussed in the world and suggestions are offered as solutions.<sup>12</sup> Ultimately, it may be possible in the future to propose a middle way that may exist between the ability

to be organized that software offers to humanity and the state's unwillingness to hand over the superiority of such organization, with concepts such as internet governance.<sup>13</sup> Of course, from this optimistic point of view, it represents a constructive solution to solve the problem. The alternative to this is that the state or software platforms prevail, which might be expected to drag humanity into a dystopian future.

## Instead of Conclusion

The effect of technological developments on the economy, and the evolution of political institutions following this effect, is a situation we have encountered throughout the History of Political Thought. We observe that the economy is changing as a result of the Information Revolution of the era we live in. Therefore, at an educated guess, it is possible to expect political institutions to undergo a process of change. The exponential increase in the rate of humanity's use of smart devices, especially due to the pandemic in recent years, has highlighted the possibility of this change occurring sooner than previously anticipated.

If we leave aside the dystopian scenarios where either state or the individual will be victorious over the other, it is necessary to see a constructive transformation of political institutions as probable. The prominent model in this constructive scenario is the so-called “governance”, which includes a partnership of the state and individuals to govern on a common platform. If we go through our

<sup>10</sup> Commission on Global Governance, *Our Global Neighbourhood: The Report of the Commission on Global Governance*, Oxford, Oxford University Press, 1995, p.2.

<sup>11</sup> Burak Tangör and Haldun Yalçınkaya, “Private Military Companies in the Framework of Security Governance,” *Uluslararası İlişkiler*, Volume 7, Issue 25, (Spring 2010), p.127-154.

<sup>12</sup> For one of the pioneering studies on this subject, see: Sinan Ülgen, *Governing Cyberspace: a Road Map for Transatlantic Leadership*, Carnegie Endowment for International Peace, Washington DC, 2016.

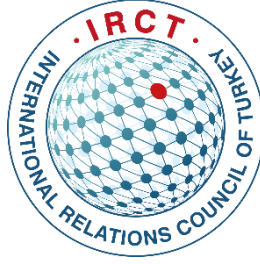
<sup>13</sup> About Internet Governance See: Global Platform Governance Network, online, Accessed 1 October 2021, <https://www.cigionline.org/topics/platform-governance/>.

case study, it has become inevitable to create a governance that will prevent *Twitter* from silencing a head of state in the event of another incident occurring. The same governance system is needed for the opposite scenario. Undoubtedly, although the *Twitter* social media platform and heads of state are given in the example, it should be expected that this situation will cover all software and government levels when governance is established.

The purpose of this article is not to propose how the governance model in question should be, the models related to it can be the subject of future studies. Consequently, the need for Internet governance and the need to model it is a case in point. Otherwise, it is possible to experience tensions between the state and the individual, examples of which we have been observing for centuries. A pleasing point is that Mathematics does not have the capacity to eliminate the human factor; but that is, for the time being!



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