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Cyberspace society
(platform society, metric society, data society

by Béla Pokol

Summary

The confinement and isolation forced by the pandemic has led to the intensification of technological change spreading which was achieved in the last quarter century, and the shift of intellectual work to home office, as well as in the case of higher education to video group meetings and video lectures, and the parliamentary sessions, constitutional court hearings and other decision-making sessions to video conferencing. This society is organized on the Internet, and since it emerged as the world Internet partly spontaneously and partly through the deliberate spread of its influence to the world due to the domination of the first Internet tech companies under the U.S., the subsequent spread of the Internet has intersected with state sovereignties.

Cyberspace society is largely organized around Internet platforms, some of which (e.g., Google, Facebook, Twitter, etc.) already serve and control the activities of billions of people, or one-third of humanity. But network platforms that go beyond this (e.g., e-government or internal networks of decision-making bodies) are also partially connected to the Internet. The seamlessness of the Internet is thus a basic requirement for the functioning of society, and as the Internet of Things (IoT), the cloud-connected operation of self-driving cars, becomes prevalent in the coming years, it will be the most important basic requirement.

The shift of society to cyberspace platforms on the Internet creates a digital trail of comprehensive record of social activity, as opposed to the largely undetectable nature of social activity that used to take place in physical space. Everything we do here leaves a digital trail of our thoughts and actions, and by linking these trails, individuals become more known to the external observer who has access to these trails than they are to themselves. This is the total data explosion in cyberspace, and the billions and trillions of data generated every hour and every day are processed by lightning-fast algorithms in seconds to draw conclusions.

Individuals and the data society will become measurable and classifiable in thousands of new dimensions, rather than the few dimensions (demographics, health metrics) in which they have been measurable, and a metric society will emerge. With the new grouping of data into

thousands of dimensions, hundreds of new, previously unknown indicators will be created, and individuals will be evaluated against the indicators on a new set of scales. Instead of the massive sameness and perceived equality of the past, the differences that will be highlighted and visible to all will have thousands of new implications for the metric society.

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In the last thirty years, millennial social practices and modes of functioning have disappeared, or at least are already showing signs of their final disappearance after their collapse. The new tools of artificial intelligence are the most obvious cause of this, but they have also given rise to new modes of social functioning, or the outlines of them are already visible, so it is necessary to analyze them beyond artificial intelligence to grasp the changes. As a brief introduction, here are some thoughts.

1. Society in cyberspace

In '94, a Hungarian-American professor visiting Hungary asked me for my e-mail address, and I sheepishly told him that I had heard of it, but that we didn't have one yet, but in the fall of 1996, I e-mailed my current publicist's article to the editor of daily *Magyar Nemzet* from Regensburg, where I was on a study trip. At that time, the Internet began to spread in Hungary with the help of the World Bank at universities, as it did in many places in the West, but after the turn of the millennium, with its rapid spread, an ever larger part of the population began to use it, and at the same time, activities increasingly shifted to the Internet, in addition to the initial e-mail traffic and newspaper reading. Today, two-thirds of the world's population uses the Internet, and everything from public administration to shopping to watching TV to transferring money can be done online. And the current epidemic has meant that, for example, constitutional court hearings, university lectures, elementary school classes, etc., are all done over the Internet, not to mention the thousands of jobs that can also be done over the Internet for years but are not done out of habit. And in five to ten years, the 5G Internet of Things, already in development, will make the shift of social activities from physical space to cyberspace online many times greater than it is today, through smart homes, smart cities, cloud-connected self-driving cars, etc.

Barely 25 years have passed since the aforementioned wonderment of email, and if we add ten years to the proliferation of the 5G-based Internet of Things, it is still only 35 years in which the millennial features and determinants of familiar social functioning have been largely forgotten. In that short span of time, so much has changed before our eyes and in our lives that millennia of social functioning have been eclipsed and we often find ourselves stumbling in the new world and having to apply our old concepts to the new cyberspace reality. About five years ago, after living in this change and realizing the magnitude of this change, I began to look for philosophical concepts to understand this change, following *Ray Kurzweil*'s synthesis, and applied *Nicolai Hartmann*'s theory of ontological layers of being to theorize artificial intelligence.[1] According to this theory, the biological layer of being evolved

[1] Béla Pokol: Philosophical ontology, artificial intelligence and moral. 2021, Jogelméleti Szemle (Vol.22.) 2021 No.1. see:

over billions of years of evolution above the layer of being of the physical world, and then, at higher levels, the psychic layer of being, beginning with mammals, and then, especially in primates, the overlying mental layer of being, which is truly distinct in humans and their societies, and all of these give a four-layer reality. The anchoring of human sense in norms, concepts, knowledge, and symbols, which new generations continue to acquire, has formed the reality of human societies for hundreds of thousands of years, above which artificial intelligence has begun to rise in the last seventy years or so. What transcends our biological existence, and signifies the very sociality, are these structures of meaning, which in recent decades have been augmented with increasing speed by machine intelligence. The self-learning machine intellect, the robots of artificial intelligence, already do much of the physical work today, and their algorithms can perform the activities of many mental occupations faster and more accurately than humans.

If we relate the growing societal role of AI in our lives to the problem of space, it becomes clear that this also means that societal activities are being moved out of the physical spaces of our reality (land, water/sea, air, and more recently, outer space) into a new space, cyberspace, created by the global networking of computers. Following the shift of activities into cyberspace that began with email, millions of us sleep and eat at home only in physical reality, but are in cyberspace as soon as we wake up next to the computer, and - especially in the current epidemic - we meet with students via videoconference, hold board meetings with colleagues, and then read our favorite online newspapers and magazines, academics get the *"academia. edu"* online community portal, where they get automatic notifications and comments about where and by whom their discussion articles have been read at that online community portal, from Africa to Latin America and Asia. And in ten to twenty years, with self-driving cars, smart homes, and smart cities and neighborhoods, all people will be almost completely connected to cyberspace for most of their daily activities, aside from sleeping and eating. In other words, society will have shifted into cyberspace, and physical space will be even more devalued than it is today.

But the meaning of physical space is not so easy to describe. Humans can live only in culturally and morally cohesive communities, and among these, national communities are the most enduring community framework, and among these national communities there is a constant struggle for material wealth and power dominance over one another. But even among these, market groups, cultural groups, territorial communities, and even criminal groups are in a constant struggle for wealth, influence, and the subordination of other groups. State organization and state boundaries are therefore essential to regulate this and maintain order, which is firmly built on the boundaries of physical space. This is one of the fundamental problems of the tense coexistence of physical space and cyberspace, into which society is increasingly moving and which is being built at a rapid pace.

The Internet that created cyberspace in the 1980s was developed in the United States for close military and academic research communications, and even after its release to civil society it continued to evolve with technical protocols and programs written without central control, and was therefore initially conceived as a world Internet, the *"World Wide Web."* By 1994, when it was already being used by many thousands of people and there were efforts to spread it around the world, some IT experts who circulated it pointed out that it could be dangerous to do without central control, but the Clinton administration at the time thought it better that the U.S. dominate the collection of information in the world through its technology companies without interference from other user states. This only became a problem when Estonia, for example, forged ahead in this area and connected its entire administration and

electricity system to the Internet. However, when it clashed with Russia over an issue in 2007, hackers from the Russian military's now-established cyber division shut down Estonia's entire electricity and government administration system in response, throwing all of Estonia into chaos for weeks. In the same way, Moscow not only subdued Georgia's military adventurism with military counterstrikes in 2008, but also crippled half the country with its hackers before that. Today, all countries have cyber defenses against cyberattacks - like border guards in physical space - and even larger countries have cyberattack departments that number in the thousands. But it's not just states that are behind cyberattacks; in some cases, large criminal groups, competing industrial groups, and extremist political groups are as well. And as societies move further into cyberspace, the potential impact of cyberattacks becomes more catastrophic. The fact that state sovereignty, built on the narrow confines of physical space, cannot exist in cyberspace, which is already a world Internet, makes defense hopeless from the outset. The U.S. elite now sees the damage as the presidential election approaches and routinely fears campaign manipulation by Russian hackers.

One researcher involved in the development of the system said a few years ago that the Internet world of cyberspace would have to be rebuilt from the ground up to safely prevent future horrific cyberattacks because the system built so far made it impossible from the ground up. China began this fundamental rebuilding a few years ago, announcing a new Internet world built on the sovereignty of cyberspace that Russia, Brazil, and even India have enthusiastically joined. [2] In parallel with the bipolarization of the new world order, the breakup of the Internet world is also predicted in the coming years, and Hungary, which is one of the small European states oscillating between the two poles, will also have to learn the lesson that it must adapt to one of the two systems and that it is difficult to imagine an "uncommitted third" intermediate formation.

2 Cyberspace and Sovereignty

Some of the computer scientists working on the development of the Internet in the early 1990s were already somewhat concerned about the potential public safety problems that might arise from the mass proliferation of the Internet, which was conceived from the beginning as a global Internet and as uncontrollable. [3] But until the Russians hacked into Estonia in 2007 after a crash that crippled the power supply and the entire state administration for weeks, it seemed to be a research problem for world leaders. Equally worrisome was Russia's response to the 2008 Georgian "adventure," when Georgian leaders, relying on the turmoil of the burgeoning global financial crisis, undertook a military expansion into neighboring countries, but were met by a counterattack by the Russian military that crippled the entire country in cyberspace. It was then that top leaders realized that a whole new field of activity had emerged, with a whole range of military, economic, political and other threats that could no longer be dealt with using previous tools and solutions.

The first response was organized by the Estonians most affected. In 2008, at a conference of outstanding international lawyers and IT experts, they tried to find answers to the emerging problems by combining and adapting existing international legal concepts and rules. This resulted in the *Tallinn Manual*, which seeks to answer, among other questions, whether an

[2] See Adam Segal: China's Alternative Cyber Governance Regime. Council on Foreign Relation paper, march 13. 2020.

[3] M. Mueller: ICANN and the internet governance: sorting through the debris of „self-regulation". *info* (Vol. 1.) No. 6. 497-520. p. https://doi.org/10.1108/14636699910801223

armed attack by one state against another in cyberspace can be considered an armed attack that forms the basis for a military counterattack under international law. This raises several sub-questions about how seriously such a cyberspace attack must affect the functioning of another state's organs and infrastructure to justify a counterattack. But it also raises the question of whether collective defense in this area is possible under international law. In other words, if it is not the attacked state that carries out the military counterattack - it would not be able to do so, for example - but an ally orders one at its request against the state responsible for the cyberattack. But another sub-question is: is a state responsible for a cyberattack even if it was not carried out by its organs, its military cyber department, but only by private organizations on its territory? For example, when it turned out that the cyberattack on the Estonians originated from a cyberspace infrastructure on Russian territory, the Russian state leadership assumed that "patriotic Russian hackers" who were angry about the unjust actions of the Estonians were probably to blame and expressed deep regret to the Estonians. The response was that the state would then also be responsible under international law for cyberattacks against another state and would have to do everything it could to prove that its actions had sought to prevent such attacks. The problem, however, is that the ultimate uncontrollability of the Internet makes this impossible even within the best-controlled state, so even if the leaders of that state know from which state the cyberattack originated, they can only throw up their hands in regret.

Since then, the Western powers have only belligerently asserted in their declarations the possibilities of counterattack under international law in the event of a cyberattack, but in the cases that have occurred after the alleged cyberattack state's denial, nothing actually happens. For example, Russian hacking attacks proven in the U.S. to influence the outcome of the 2016 U.S. presidential election campaign only elicited angry statements, but nothing happened, as in the case of the French election. In contrast, Russia, China, Brazil, Iran, India, and a number of other states in Africa, Asia, and Latin America - led by China - are trying to exert greater control over Internet users in their countries, in addition to the current capabilities of the global Internet. On the other hand, they are supporting China in international forums to replace the basic Internet protocol (*TCP/IP ver4 and ver6*) with a new one that would remove the current decentralized state of the Internet and allow centralized control at the source. For example, in November 2019, Russia passed the "Law on the Sovereign Internet," which mandates that all domestic Internet users can access the Internet only through Internet service providers registered in Russia-and only under a real and verified name-and that they are required by the central Internet authority, *Roskomnadzor*, not to provide access to websites on their list. Compliance with these regulations is constantly monitored, and any foreign ISP that violates them is immediately banned from Russia. The technical backbone for this centralized control system is reportedly being provided to the Russians by Chinese technology company *Huawei*, just as Huawei sells centralized Internet system technology around the world. But Huawei's IT engineering guard was also behind China's proposal to the UN's expert body on Internet governance (ITU), which in 2018 proposed a new protocol to replace the current basic Internet protocol already developed by Huawei, recommending a centralized and fully controllable Internet for the future.

It is foreseeable that when, in five to ten years, the proliferation of the Internet of Things (*IoT*) will make a wide range of services available through the interconnection of cyberspace and organization into national or even broader regional systems, today's vulnerabilities will become prohibitive. Today's Internet and its TCP/IP protocol, which is incapable of providing ultimate security, must therefore be replaced. The question naturally arises as to how the Chinese Internet protocol, which provides for complete control over every minute of every citizen's life, can be modified to ensure a level of individual freedom common in European culture while providing adequate security.

Given the real power struggles in the world and the two world power poles, with the U.S. and China providing the countervailing power, it seems more likely that there will not be a unified Internet in the future. While the Western world will likely retain the basics of today's only partially controlled Internet, the new Internet protocol of China's solution may catch on in the BRICS countries and in some countries in Africa, Asia, and Latin America. The big question, of course, is how *Elon Musk*'s thousands of Internet satellites, which will provide direct, blanket Internet access across the planet in the coming years, will hinder nations struggling to maintain their sovereignty in cyberspace. Whether this is a new "*Radio Free Europe*" for a number of states to overthrow their internal dictatorships, or simply a military satellite Internet penetration by a globalist world power, remains to be seen.

3 Cyberspace and Time

Until the late 1980s, the joy of a research grant abroad was followed by the arduous search for a hotel room, dormitory, or apartment abroad, and it took at least two weeks to get a reply after ten days, so there was little chance of exchanging information on the subject before a month had passed. Even in a mildly problematic case, it could take up to six months to find an apartment, and the uncertainty in the meantime made life difficult while one prepared. The advent of the fax, where a fax message was answered within half an hour and you could be on your way, was a great relief for organizing a study trip. The same time savings are even more pronounced when activities shift to cyberspace, e.g., a two-hour videoconference of a constitutional court session in cyberspace no longer takes a full day, with changing clothes, an hour and a half or two hours in rush-hour traffic, the obligatory talk, a long lunch, a lunch break to recharge with coffee, then another two hours in rush-hour traffic on the way home, and an exhausted evening reading only the lightest book. A society that takes advantage of this efficiency, in contrast to one that hardly uses it, simply takes a different development path and achieves many times more resources for the same number of inhabitants and workers.

It is already known that a society that relies on computerization moves from linear to exponential development, as its underlying information technology tools require little material and energy and rely more and more on better organization and increasingly miniaturized storage of machine intelligence algorithms. *Ray Kurzweil*, in a discussion of computer simulation of the human brain, said to his discussion partner, who assumed a thousand years based on the current state of computer processing speed, that if the rate of growth were linear, it would indeed be a thousand years, but if one considers the exponential acceleration of the last fifty years, which has now made possible a million-fold increase in processing speed, then a thousand years is only a good twenty years in the future. And this shortening of time with the increasing cyberization of social activity is partially transferring the exponential acceleration that is driving information technology to human activity. So the changes in society moving into cyberspace are likely to accelerate in the future. The familiar slogan of the "*acceleration of time"* will now become increasingly real.

The philosophical problems of space and time in the context of a cyberspace society will thus become renegotiable. In fact, space as extension and distance disappears here - and that is its essence - and we only need to use the term "cyberSPACE" because our established thought patterns do not allow us to express the overall framework of communication and information exchange between people outside the mind in any other way. According to our established thought patterns, this can only happen in space. Time does not disappear so radically in cyberspace society, but its dramatic shortening makes it largely irrelevant in human relationships. What I think up and write in my Facebook post can be refuted or taken over in a

minute by a fellow Hungarian commentator in Australia, and it can spread faster there than here in town in Hungary, and trigger a debate on a Hungarian radio station there more quickly.

From a temporal point of view, however, it is important to note that the information technologies that create cyberspace radically reduce the time-consuming nature of information exchange only in the first phase. For example, someone sitting in front of a computer can complete an email exchange or a response to an argumentative comment on a Facebook post in a matter of seconds, where an exchange of information based on prior correspondence takes at least a few days, but the actual completion of that exchange through conscious processing of information is outside of cyberspace. Here the same unchanged conscious-mental processes prevail as they have for millennia. Here, the consistent slowness stands in stark contrast to the lightning speed of information exchange itself between two (or more) participants. One consequence of this is that the previously more covert nature of each participant's slow perceptions is now brought more strongly to the surface, and possibly made unbearable by the prolonged performance of the inherently slow information exchange. This is, of course, avoided in part by the fact that humans, with their slow cognitive processing capacity, are increasingly completely turned off from information exchange in cyberspace, where it is accelerated by information technology tools, and that artificial intelligence algorithms also perform the associated information processing tasks after the information exchange, then transform their previous premises through self-learning, and receive the new information with the newly learned premises. While this takes minutes or hours for the human mind, even for the nimble mind, and days or weeks for the dumber mind, for the self-learning AI algorithm, at today's operating speeds, this can happen hundreds of thousands of times per minute, and it can receive and process information and send information in response to its partner algorithm just as often. In a few years, as the speed of operations increases (see *Moore's Law)*, it can do the same task millions of times in seconds. Time and its quantity do not disappear in cyberspace - unlike spatial extent and distance - but they become almost meaningless with the predicted acceleration.

The above-mentioned tension between the lightning-fast exchange of information and the slowness of human conscious processing, even as humans surrender a significant portion of their total information processing to algorithms, may raise the question in the future of developing conscious pedagogical methods to overcome today's barriers, emotional distractions, and the reception barriers of established thought patterns. Among the many "stumpers," only the nimble suffered from slow perception of their partners, but accelerated information technology means that society as a whole will be slowed down if the etalon character of stumpers does not change. Accelerated time must be kept.

Another consequence of the change described above is that it breaks down barriers between previously closed knowledge communities by moving intellectual activities into cyberspace and making the intellectual products there rapidly available to everyone. Indeed, this earlier compartmentalization has contributed significantly to the fragmentation of the disciplines of science and has severely compromised quality by cutting off much of the context from close scientific communities. Most academics who remain in science universities do no academic work at all, teaching students only the textbook written by the "professor." But professors are also cultivating a narrower and narrower range of knowledge, leaving aside a number of contexts, claiming that it is no longer their field. For example, in the field of law, where there has been an extreme fragmentation of legal fields throughout Europe, but especially in Hungary, there are almost only a few old professors in a given field of law who regularly read and understand even a narrow area, and a few young university teachers who cover only a small part of it. The reason for this is the difficulty of getting information, but also, of course, that monopolizing information in a narrow field made it

possible to increase the prestige of academia with a small amount of work. But with the availability of cyberspace to everyone, this monopolized knowledge is quickly and easily accessible to all, and this is causing the walls between closed disciplines to come down. So the acceleration of cyberspace is also forcing changes in traditional social domains.

4) Individualization versus social atomization

Urbanization is known to create impersonal relationships, as opposed to the intense communal connectedness of village life, and the sense of isolation that comes with growing up in a village and moving to a city persists for a long time. However, this is diminishing as individuals become accustomed to impersonal relationships, and the physical space of being with strangers on the subway, on the streetcar, in supermarkets, and in corporate collectives provides the necessary communal contact and resulting sense of community. In the last twenty years or more, however, the increasing shift of our activities to the Internet and thus from physical space to cyberspace, radically exacerbated by the epidemic, has reduced face-to-face contact to a minimum, vastly increasing the isolation between people compared to the past.

However, this isolation can have two very different effects, as was the case with the first urbanization. On the one hand, under certain conditions, it can strengthen the individual's freedom, which, if intellectually restrained, can also easily maintain the individual's ties to the larger community. In this way, it also maintains the mental makeup of an individual who, by virtue of his biological-emotional constitution, necessarily needs a community. On the other hand, instead of leading to what can be considered healthy individualization, isolation in some people can lead to social atomization, which results in psychological loneliness and disconnection from the community and can lead to a decline in activity and, in more serious cases, to psychological breakdown. Since it is likely that much of the activity shifted to cyberspace will be replaced by telecommuting, distance learning at university, corporate decision-making via videoconferencing, etc., and the role of interpersonal relationships in physical space will thus be largely reduced, the two opposing effects of social isolation need to be analyzed most urgently.

What are the conditions for the effects of individualization and, conversely, what are the conditions for the negative development of social atomization? It is possible at the beginning of the analysis to highlight only the communications in Facebook, because the social network of Facebook is a good platform for the analysis of the situations of atomization and individualization. In contrast to atomization, individualization is characterized by the fact that the isolated individual on Facebook does not simply cling like a drowning man to any communication community or group offered to him, but tries to build a communication community dictated by his sovereign personality, or, if he joins existing communities, these serve the construction of his sovereign personality in a sub-area, and he himself chooses autonomously in the choice of his community. If he bridges his physical isolation in cyberspace in this way, then the members of his cyberspace communities, chosen by his stable personality, can develop the same feelings after a while as if they had met in a café and had a coffee conversation. The transmission of knowledge, the maintenance of emotions, the cultivation of community feelings can take place in this way just as in a physical space. Even in the most physically isolated environment, if you have had several of these exciting community discussions, ironic banter, and intellectual exchanges in your cyberspace

communities during the day, you can go to bed at night with a stable personality that is also fortified for tomorrow's new beginning.

Conversely, if a person with minimal intellectual activity almost seamlessly interwoven with the emotions of physical interactions falls into a state of isolation, he will almost drown in any communication that occurs on Facebook. Inevitably, all that emerges from its communication is its virtually nonexistent personality, which allows it only a community of similarly isolated human wrecks. This kind of isolation leads to atomization rather than individualization, and so, by extension, one can conclude that for those with a diminished intellectual layer of existence, the real loss is migration from physical space to cyberspace. Those who have already shifted their center of gravity in their four-layered existence (physical, biological, spiritual-emotional, intellectual) to the intellectual-spiritual layer come home to the cyberspace world, which essentially enables intellectual communication. Those who have not done so can only suffer in the cyberspace world because of their living conditions, socialization and genetically determined personality.

The biggest problem, however, is that the socialization of growing children and their yet-to-be-formed personalities are inextricably linked to interpersonal relationships in physical contact, and the erosion of these relationships is already having dramatic effects, both in research and in everyday experience, especially with the proliferation of smartphones in recent years. But more on that in the next post.

5. The socialization problem of a smartphone-addicted childhood

The problem of computer game addiction among young adolescents had been known since the 1980s, but the proliferation of social media on the Internet from the turn of the millennium exacerbated it, and when, from around 2012, the increasingly convenient possibility of communicating with smartphones via the unfolding social media tempted adolescents to do so en masse, the minimization of interpersonal relationships among them alarmed psychologists. Because of the short time period, this has only been studied in depth in the U.S., but a reading of developments there reveals problems that are also occurring in every country of the world. While for adults who are already socialized and have a consolidated personality, minimizing interpersonal contact and communication by moving into cyberspace is only an initial inconvenience while they build their communities and other forms of contact in cyberspace on social media, minimizing direct interpersonal contact can be a socialization drama for young people with immature personalities.

Jean Twenge's study in *The Atlantic* analyzes surveys from the United States that lead the way in this drama, in a 2017 article alarmingly titled: *"Have smartphones destroyed a generation?"* [4] The shared solitude of children, with images of schoolchildren sitting side by side, engrossed in their tablets and smartphones, is a familiar image, but Twenge describes the process by which smartphones are becoming the main form of contact for all adolescents, almost without exception, and completely separating adolescents in the United States from family even in the same living room. There, they eat dinner together in silence, as the child is still in the midst of chats on Snapchat, Instagram, Twitter and Facebook that have just stopped. The family community doesn't really work anymore, despite the physical togetherness; the child has moved entirely to groups in cyberspace, which he may not know personally, but which are his virtual communities. The abuse and bullying of adolescents that

[4] Jean M. Twenge, The Atlantic, september 2017 issue.

is common in face-to-face relationships is compounded here in cyberspace under the guise of impersonality and can ruin the entire day of more sensitive adolescents, especially girls, and affect their academic performance and in worse cases lead to suicide. According to Twenge, suicide rates for girls ages 12 to 14 in the U.S. have tripled since the advent of smartphones in the 2010s, while they have doubled for boys.

But more generally, surveys have also shown that feelings of dissatisfaction and unhappiness with life increase as young people spend time online. So they disengage from the people they are with in physical space, or they build this to the highest degree outside the family by developing cyberspace interactions, but as they become increasingly dependent on cyberspace, they are plagued by constant depression, tension, and dissatisfaction. Gone are the days when a teenager's first desire was to drive a car and have a driver's license as a symbol of freedom of movement and independence! But the "date", which is the basis of relationships between girls and boys at this age, is gradually becoming a thing of the past, as are other personal contacts. The old dates and first awkward kisses are being replaced by Likes. According to surveys in the U.S., dating between boys and girls under 18 has dropped from 85% at the turn of the millennium to 56% in 2015. But sex is also down 40% in this age group compared to the 1991 surveys. It's true that the positive side of this can be seen in the 67% drop in the birth rate for teenage girls over the same period, but when we put this in the context of the general decline in face-to-face contact between boys and girls, and more generally the decline in all face-to-face contact, we see a trend that overlaps all of human history. Add to this the rapid development of sex robots that can increasingly simulate intelligent conversation, and it is easy to see that the erosion of biological needs will soon take the form of degraded relationships between men and women. This has been an area of conflict and tension, despite the fact that there have been a number of tried and tested socialization mechanisms and pattern transmissions that have been built upon and oriented around this personal contact. These are largely being destroyed as interpersonal contact disappears, and let's face it, it's difficult enough to move from cyberspace to harmonious sexual relationships surrounded by emotion, without conflict. On the other hand, there are submissive sex robots as an alternative to the biological needs that buzz impatiently in this age. If the horror of demographic collapse was already the greatest concern of Western civilization, it will only intensify.

To summarize Jean Twenge's analysis, it is not only a new drama of youthful socialization within a generation, but also an intensified bankruptcy of human reproduction as a whole. I do not believe that a society that has moved into cyberspace will return in any significant way to the earlier social forms of physical space in the future. But then new forms of socialization for children and young people, which can only come about through interpersonal contact in physical space, are urgently needed.

6 The Cyberspace Society as a Platform Society

In the preceding pages, I have used the term "cyberspace" to refer to a society that has risen above physical space, because this feature is the most striking in the history of social change over the past thousands of years, since change until now has always been limited to a society that has remained in physical space. However, this philosophical-ontological formulation shifts the focus away from the more concrete aspects of this change, so sociological-theoretical analyses that focus on just that, in contrast, can be of great use in understanding the particulars of cyberspace sociality. In 2018, three Dutch authors presented an analysis

entitled "Platform Society" in which they focus on online communication platforms, and indeed the shift to cyberspace is more precisely defined as activity on platforms running on the Internet. [5] The Dutch authors' more concrete sociological perspective puts the new sociality in perspective and highlights the difference between it and the earlier sociality of physical space.

The platform society is distinguished by three main mechanisms, the first of which is "datafication." Previously, the details of one's actions were more or less reflected upon and consciously controlled only in the context of goal orientation, but after the action, even these details have largely disappeared from consciousness. But actions via online platforms persist through the enforced digital record, both the conscious details of the action and those that were not known to the actor at all, but which external analyses reveal in retrospect important information about his motivations, emotional states, political opinions, ideological views, education, and so on. And the platforms that analyze hundreds of thousands or millions of people whose activities interact or even parallel each other reveal data and trends of change in society as a whole that would not have been apparent without these summaries.

Datafication, then, means the revelation of platform societies in data, and this indexing, the constant processing of billions and trillions of data and the extraction of processes from them, is performed by increasingly sophisticated algorithms in fractions of a second. The societies that emerge from physical space thus increase their individual, group, and total societal self-reflection a thousandfold, reflecting every detail of the mind-conscious mechanisms in their new space, cyberspace, through datafication, and become instances of an unfolding sociality instead of the dull, flickering meaningfulness they have functioned as until now. (Just as a side note, in some ways one might see this difference in the Age of Enlightenment, when much of the educated elite began to live lives of intellectual reflection through constant diary writing, while the lives of peasants and workers were largely confined to the purely biological.) If in the successive layers of being of reality the top layer, the intellectual layer, has always constituted the specific "substance" of the social, now, with the advent of data and the millions of constant intellectual reflections they generate, the social is experiencing one of the greatest leaps in social evolution, with the expansion of social activities into previously unknown details. The transformation of cyberspace into a platform society is thus hardly comparable to previous social evolutionary changes, perhaps only to the emergence of literacy.

Of course, it should be noted here that this unfolding social reflection, magnified billions and trillions of times, could become the permanent surveillance machine of a total state with a thousand aspects, as well as the surveillance of every single human being by profit-oriented global tech giants. Or, conversely, it can become part of a partially protective society in which each individual can decide for themselves what to store and keep as data about themselves. Of these versions, the first, Chinese state control based on artificial intelligence, already exists, the second, unfortunately, is emerging in our Western world as well, as the *Snowden scenario* shows, and the third, the ideal, is still a dream, but let's hope for its realization.

Another overarching feature of the platform society is that data-driven activities are becoming commoditized - at least in the societies of Western civilization and the Third World countries it controls - with some global platforms both interconnecting (and in some cases buying each other out!) to make their mass of data even more valuable, and selling the data mined on the platforms from millions and billions of users, along with their algorithms tailored to process it. As more and more takes place on platforms - news media, education, scientific research, artistic activity, commerce, etc. - and, in addition to the reduced number of

[5] See J. Van Dijk/T. Poell/ M. De Vall: The Platform Society. Public Values in a connective world. Oxford University Press 2018.

human activities, only the physical handling of production processes is left to robots, Marxist theorists have already coined the term "*platform capitalism*" for this in recent years. [6] But the shift to cyberspace platforms has only really accelerated in the last year as a result of the closure forced by the pandemic.

Finally, the third change trend mentioned by the Dutch authors is the fact that in platform societies, professional evaluation of activities and products by closed groups is receding into the background and being replaced by direct evaluation mechanisms by the mass of people using the activities as services. Reputation, prestige and brand hierarchy are increasingly no longer determined by how a closed clique within expert groups evaluates each other and products. (See in science the co-optation into the highest academies by vassalage, or the practice of letting dominant actor cliques into the training of the College of Dramatic Art in Hungary the young people only on the basis of strict adherence to the principle of "puppy of our dog," and in general the blatant distortions of "professionalism" in a number of sectors.)

In any case, it is difficult to grasp in detail the changes indicated, since even these analyses, which go beyond philosophical un ontological depth, represent epochal changes. But one is only at the beginning of these changes anyway, as 5G and then 6G-powered artificial intelligence will raise the technological foundations for these changes to millions of times what they are today, and that will only be a development in the next ten to fifteen years.

7. The dilemmas of the metric society

In the 1980s, I was surprised in my extended study visits to the humanities departments of German universities by the condemnation of competition. It was not appropriate to play soccer for goals between university colleagues and students. It was explained with a good-natured smile that instead of harmony it brought a vicious spirit of competition, and a real elite student of the social science faculties did not need to explain this, anti-competition was in his blood. The performance society was untenable for most of them as a stark testimony to capitalist dislocation. Admittedly, strict grading in the humanities and social sciences was a foreign concept there precisely for that reason, and a professor of political science in Hamburg I knew - otherwise a very nice person - once remarked somewhat disapprovingly that at the law faculty of his university the law professors are so strict in their grading that they even fail. I did not agree with this attitude, and this tolerance seemed distorted to me, just as I did not agree with the fact that at universities in Hungary, since the late 1990s, the posting of students' grades for show on departmental bulletin boards for orientation was forbidden. For those with lower grades, this was embarrassing in front of others and was therefore banned as sensitive information and a matter of privacy. However, the grade not only shows the student and the teacher what level he or she is at, but also spurs him or her to perform better in the eyes of the collective as a whole. This is only possible if the collective knows where the individual members stand in terms of performance, and it is only at a very young school age that exceptions should be made to protect children from being negatively evaluated by their peers.

In the Western world, the promise of a meritocracy, a social order based on merit rather than a birth hierarchy, went hand in hand with the demand for democracy in modern societies, and meritocracy or democracy emphasize objective measurements. And the accelerated shift of activities from physical space to the cyberspace of Internet in recent years has multiplied

[6] Nick Srnicek: Platform Capitalism. Wiley. 2016.

this measurement potential enormously. According to a U.S. author duo, the number of activities on the Internet and in cyberspace will increase 300-fold between 2005 and 2020, and today the average city dweller leaves about 5,000 digital traces and data on the Internet and in the smart things around him every day, even if he is not aware of it. And these are summarized in seconds by a multitude of algorithms to make predictions about the behavior of both individuals and large groups of people. The resulting potential problems are known to stem from excessive control by individuals and must be avoided. On the other hand, the vast amount of data can also help create a meritocracy, and this feature of the metric society (a society based on measurement) should become more prominent in the future.

The metric society transforms individual judgment from being solely based on experience to being embedded in an enormous broad experience base and measures all participants against a common indicator. This dissolves previous hierarchies based on incomparable characteristics and creates a hierarchy of gradients alongside a single indicator that becomes purely quantitative. This allows the person at the bottom of the hierarchy to see what and how much they need to improve to get to the top based on a precise number. Steffen Mau, a German sociology professor and author of the 2019 book *"The Metric Society"*, takes an in-depth look at how the metric society develops according to the principle of comparability within each activity, creating hierarchies within groups of people engaged in an activity based on universally accepted indicators. [7] This has an enormous competitive effect and allows an explosive development of the field of activity. Comparability, measurement, competence and development - this is the basis of the metric society. The anti-goal soccer of the German humanities faculties as a symbol of hostility to performance - if it still exists today - is admittedly not a good complement to this.

8 The Parasites of the Metric Society

If it has become commonplace in society to be guided by the rankings displayed by metrics, then a large proportion of people will avoid those at the bottom of the list and choose those with high numbers, be it a hospital, a university, a television station, a political party within a political camp, or whatever. Thus, each competitor has the opportunity not only to do well, but also to take control of the scorecards and their creators, thus presenting themselves to the public as quality producers. Let's remember how the British BBC or the American CNN were presented as models of quality mass media in Eastern Europe in the early 1990s, thus making the mass media in this country accept their political values and proposals, while in recent years in Hungary, for example, information about CNN's darkest political manipulations, i.e. about business activity that is far from the ideal functions of mass media, has been spread. However, as long as those with a vested interest in the public dissemination of measurement data can control it, they can abuse the trust in measurement and the reputation it gives them at will, turning the promise of quality in a metric society on its head. The oldest measure of value, money, and its counterfeiting is thus used as a model here as well, and the "counterfeit money" of the most diverse measurement lists is produced by these parasites.

Perhaps many people in Hungary still remember the attempt by the left-wing liberals preparing for the 2014 elections to replace the Orbán government by founding the *Bajnai party "Together"*, when friendly pollsters saw the party, which had come out of nowhere, at

[7] See Stefen Mau: The Metric Society. On the Quantification of the Social. Polity Press 2019.

14% barely a week after its founding. The party, which had been artificially placed in the lead, then began to attract a stream of left-liberal activists, and this accumulation was to ensure that it would in fact become the largest left-liberal force. Of course, its true weakness soon became apparent, the electoral farce failed, and the whole thing collapsed, but this manipulation of polls and the arbitrary shaping of processes by them has been present in politics ever since. The well-known Hungarian left-liberal political scientist *Zoltán Czeglédi* should know this, for he complained somewhat bitterly on a left-wing online portal the other day that in left-wing struggles the party *"Momentum"* is fragmented by the tendentious "downward measurement" of opinion polls, and that this is also the case in multilateral intrigues. (We won't take a position on this now, but this inside knowledge of the parasites of metrics may be an important witness to demonstrate this now.)

But the tendentious political distortions of measurement have also been the midwife of entire movements, perhaps the most egregious of which involved American *Alfred Kinsey*'s measurements of the prevalence of homosexuality. [8] Kinsey, who was bisexually inclined, often combined his sexological research with group sex practices that he performed and filmed with his colleagues, advocating for the liberation of sexuality in 1940s America. In the results of this research, he then found that at least 37% of white males in the U.S. had had some type of homosexual experience in the years following puberty, and about ten percent could be considered to be in a permanent and exclusive homosexual relationship. The Rockefeller Foundation and a number of political foundations enthusiastically supported this researcher's work, and it is thanks to this work that today's gay and lesbian movement has gained the enormous political clout it has today. "Kinsey's statistics helped make homosexuality visible as a minority that could be organized politically." -wrote an American study. In the English-language wikipedia study on Kinsey, one can of course read about the tendentious distortions that researchers have subsequently discovered in Kinsey's working methods and figures, but the theses of today's "gender studies" that are based on them can only be questioned with great political courage. [9] Just think of how many politicians in the U.S. and some countries in Western Europe have gotten off scot-free in recent years for being labeled homophobes.

The parasites of metrics are also at work in the political shaping of citation indices used to measure academic reputation, and at least in the social sciences, editors of highly politicized journals are obsessed with allowing the publication of articles from journals of constitutional law, political science, sociology, moral philosophy, global economics, etc., if they support, or at least do not openly challenge, certain viewpoints and implicitly political goals. The scientists and researchers who serve this purpose - often funded by foundations in the background - are then regularly cited in their studies and, like citation masters, touted as internationally recognized scientific giants on friendly television networks and in the press.

But in a metric-driven society, it is inevitable that metrics are also produced to highlight the worst - or, to be more accurate, only the worst according to the metrics' organizers - often aimed at "tarring and feathering" and shaming those who side with political opponents. When they then publicize the "winners" of these negative lists to a media audience of millions, they can achieve a high level of character assassination. Maybe I'm a bit biased, but I've only heard of such lists from left-liberals, and right now the 2021 *Golden Raspberry* awards, designed to shame their winners as negative Oscars, are all over the media, and somehow those close to Donald Trump got the top prize in every category for the movie *"Absolute Proof"*, about the fraud in the presidential election that led to Trump's defeat and Joe Biden's victory. It's a bit

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[8] Alfred Kinsey/W. B. Pomeroy/C. E. Martin: Sexual Behavior in the Human Male (1948) Indiana University Press 1998 reprint edition.

[9] But, for analysis of the biases of Kinsey and his research group see David Spiegelhalter: Sex by Numbers: What Statistics Can Tell Us About Sexual Bahavior. Wellcome Collection, 2015.

like what happened several times in Hungary with István Csurka's far-right party around 1995, when he and his party could only reach voters by driving 60. 000 people into public squares - and were completely shut out by the media. But the organizers of his outcast immediately organized a group of *Arrow Crossers* (fascists) around *Albert Szabó*, who had suddenly appeared from abroad, and they swarmed into the 60,000-strong crowd of Csurka's party with six to eight people waving large fascist flags. In the evening, the television news and all the daily newspapers at home and abroad were dominated by fascist flags the next day, and Csurka's fascist character was not visible only to the blind.

9 Datafication and the figure of the statistician-warrior

In the previous section, I pointed out the most parasitic biases in the shift to datafication and the metric society, but this can be analyzed more broadly to provide a more nuanced picture of the biased use of statistics. For when we begin to see and evaluate everything in light of the data of recent decades, the struggles of democratic politics naturally become contrasting statistical representations. Since the thousands and millions of facets of reality can only ever be reflected in reduced form - reduced by the aspect deemed important - it is the aspect deemed important that determines the statistical representation of a particular section of reality. And political struggles are usually about opposing considerations of importance, so that the presentation of alternative statistics is also a form of representing these struggles. If one looks at the daily political debates in the media, it can be noted that almost a third of them are already conducted in some form through the tendentious presentation of statistics, with the opposition touting the government's blatant outrages or poor performance as a list of numbers, and the government touting theirs as proof of their superior performance.

Hence the saying of writer *István Csurka*, sometime in the early years of the 1989 regime change in Hungary, to debunk the "professionalism" arguments against politics: "Professionalism is just a Bolshevik trick!" This was an exaggeration, but Csurka instinctively sensed that here acting with numbers in the name of professionalism was just a deception to hide the underlying political intention. Professional prison statistics, for example, are only about how many people are in prison, but when it comes to NGOs representing the ethnic black population in the U.S. that makes up a large part of the prison population, or the bourgeois political camp that embraces them intellectually and politically, they emphasize who is mainly in prison, and one of their answers is "because the police are racist!"

But equally, the struggle for a political goal is also a struggle for a representation of reality that promotes that goal, and a struggle against the contrary representations of reality by others. The pro-migration NGOs produce charts showing the horrendous costs of deporting illegal immigrants, and are generously supported by statistics, while the proponents of deporting immigrants counter with the appalling numbers of crimes and rapes they commit. The statistician backbenchers of the environmentalists have cleverly invented the *"ecological footprint"* numbers and made all of humanity out to be evil and irresponsible, and the construction of the figure of the naive, self-righteous, smug little girl *Greta* is the culmination of this construction. However, this is also the case with the use of statistics in other sectors, and it has helped civil service unions make a new case for the use of suicide statistics by large organizations. For example, the *France Telecom company* union has caused a worldwide sensation with its statistical tables, pointing out that a significant percentage of the company's employees have committed suicide, surpassing the rest of the population in this respect, and that this is solely due to working conditions and the required pace of work.

The current pandemic is no exception, and just as in democracies any problem gives the opposition the opportunity and hope to criticize and possibly overthrow the government, so it gives the government the opportunity to present the success of its actions. This has been evident in all countries of the world in recent months, and in Hungary it was reflected in the statistical battle in which the government and its media triumphantly proclaimed Hungary's role as the world champion in immunization statistics, while opposition politicians, their media, and their background intellectuals expressed dismay that Hungary was doing poorly in terms of mortality as a percentage of the population. (In parentheses, both statistics were true.) In doing so, the government accused the opposition of a "death campaign," and the opposition attributed every death to the government's actions, as if there were no epidemic around us in the world.

So the battle with opposing statistics already existed in the world of politics, but in recent years the shift of an ever-widening range of social activities from physical space to cyberspace has accelerated rapidly, and the resulting cyberspace society unfolding on Internet platforms is generating billions and trillions of digital data trails every day, creating a new situation. Today, this abundance of data is already perceived and is called the age of Big Data, but gradually all sectors of society are being attuned to its functioning, and the entire arsenal of political struggles is being reshaped. The truly professional political parties and especially the globally organized NGO networks are already masters at harnessing the potential of statistical battles, but the time for this is just beginning. There are no political movement statistician-warriors disguised as academics (or groups of "Radical Statistics "in English) in Hungary yet, but they are already known, for example, in the United Kingdom and in the French statistical sector. In the United Kingdom, the Radical Statistics Group (*Radstats*) has been an association of left-wing statistical warriors for many years, and their political struggle based on numbers is an expression of the imitation depoliticization of politics. There are only the party-political polling institutes in Hungary as precursors of *Radstats* alongside the major political camps, but it is only a matter of time before the divisions of the statistician-warriors are set up alongside all the major political camps according to the logic of pluralism. Just as democracy, which has evolved into a juristocracy, has in recent years produced the figure of the "defender of fundamental rights" - who comes largely not from the legal but from the humanities - so data-driven, metrics-based governance of social activities and processes is producing the figure of the *statistician-warrior* alongside the scientific statistician.

10. The "biological self" as exclusive environment

Humans control their environment, which is what makes them human. But what we control as environment - that is, what our everyday mental decision-making is directed toward - is quite different. A young girl, before she leaves the house in the morning, makes a multitude of decisions about what to wear, changing the clothes she finally decides on from one color to another; how to comb her hair; what makeup to wear, and then she makes many more decisions throughout the day about how best to present herself to her counterpart, and this is true even when some of these decisions, once they become fixed routines, no longer require any actual decision-making. In contrast, most men, especially as they get a little older, no longer make decisions about their clothing, and entrenched routines govern everything in this area. For a scientist, even his immediate environment is largely out of his control, a routine greeting to a neighbor, to a colleague he happens to meet, but his total environmental control is directed, for example, to the entire political system, by reading and informing himself of the

mass of newspapers and online portals, or by keeping abreast of general trends in law, science, economics, or by watching the collapse of the entire European civilization. In order to do this and reflect it as a comprehensive environment, he must turn his attention away from the problems of his own body - at least until it hurts - and in the same way he must leave attention to his immediate surroundings to routines and essentially live an abstract life, detached from himself and his micro-environment.

This general picture is now beginning to change with the mass of sensors that monitor our biological processes and can be built into our bodies to constantly monitor our blood pressure, heart rate, calorie consumption, kidney and liver function, and thousands of other things. On the one hand, this data is transferred to the cloud and processed by health software to give us nightly commands/advice on what we should and shouldn't be doing, and on the other hand, it gives us real-time feedback on how to change our cadence, breathing rate, etc. instantly. While I don't have personal experience with this, a recent study on the subject points to the *Apple Watch*, *Pebble Watch*, *Fitbit*, and *Jawbone* devices and apps for these functions. In this way, their own body becomes their most important environment almost every minute of their day, and just as only very young girls used to care about their beauty, now the mass of these *"Quantified Self"* (metric self?) people only care about their own body as a controlled environment. So far we have said that an egoist is a person who is concerned only with himself, but this is understood unspokenly only in relation to others. Now, however, a separation must be made, for here the self is already split, and the spiritual self turns to its own biological self, so that its environment becomes itself, eclipsing even its more intimate human environment, not to mention the information of its entire public and social environment.

What is specifically "human" in man is his layer of meaning built upon his physical and biological layers of being, and the "I" is the sum of these layers. This complex of layers of being is being punctured by the advent of smart devices and apps that can control biological processes with minute frequency, and as the proliferation of the Quantified Self movement has shown in recent years, for masses of people a significant part of daily decision making has shifted to controlling their own biological bodily processes. When I read a few years ago in *Ray Kurzweil*'s book about a maniacal computer scientist who, as a precursor to this, took 200 such measurements a day on his body using gadgets and apps implanted in the body - and received the software-processed results from the cloud in the evenings and on weekends - I was horrified and wondered: how is this life, which has moved into full biological self-control, different from the animal life, which is limited to its own biological and species conservation? The animal is controlled and maintained by its instincts, and here there is intellectual work, but the exclusive introversion that this requires is contrary to human nature, to our understanding of meaningful life.

Another important conclusion is that with this biometric toolkit in the computer clouds, the narrow mechanisms of biometric control that have been tied to state population control are not only multiplied, but also detached from state power. Following *Michel Foucault* in particular, biometrics as the biopolitics of power has until recently been framed as a means by which state power can increasingly control the mass of citizens, including individually. This can continue, but the extension of it, along with it, creates the turning of the individual towards his own biological existence and body, and the possibility of this, as it could be seen, this can create a distortion of the human being beyond one level. The now explosively unfolding biometrics can thus be addressed not only as an instrument of biopolitics and biopower, but also in the dimension just indicated, and since many people can go astray in the way they live their lives in this area, it is worth warning about the dangers that can arise in this area.

11. The measured existence

When measurement has consequences, it is troubling. Without it, the position already taken, the status quo, is undisturbed, and if there is no earthquake, catastrophe, revolution, etc., only the disappearance of the age will abolish the status quo. The holders of state power are thus unshakable, the man co-opted by the university and academic lobby becomes a professor and a great scientist even without any achievement and the great actor and musical genius adopted by a lobby remains a great actor and musical genius until his death and can get a stage and a big record any time he wants. And one could list a thousand examples of "bad stability" resulting from a lack of measure. When I was on my first study trip to Vienna in 1980, having fled Hungary behind the "Iron Curtain," and saw *Chancellor Kreisky* on television in the evening and asked him embarrassing questions on the news, it occurred to me that the Secretary General of the Communist Party in Hungary, János Kádár, appears on television at most once every six months, and then only in a solemn, carefully organized, soapbox-like revelation. To say the least, the political system at the time was not under the dampening influence of measurement, let alone single-party elections.

But it was also the case in the academic sphere that professors and highest scholars co-opted their offspring, who had grown up as vassals of their or other professors, as corresponding members and then as full members of Scientific Academy of Hungary, and university professors co-opted their favorite students who stayed on campus as future professors, and the point was often only the willingness to submit - without reservations. But competition and lack of merit were the rule in other sectors as well. The Soviet one-party empire ultimately collapsed for reasons of power politics, but in reality behind it was a lack of performance and total inefficiency that permeated the entire society.

This is also worth emphasizing because in Eastern Europe, as an ex post narrative, we emphasize the political character of regime change as the elimination of the anachronism of irremovable one-party power. This is true in that this is essentially all that really happened, but it does not make clear that the fundamental lack of measurement and incentive to perform remained unchanged for decades. Co-optation by those in power is as prevalent in universities and colleges as it is in the theater and film sectors, with the complicating effect that the internal management lobbies that are not coerced or influenced by performance are the most politicized in the political currents that dominate intellectual life. And that's pretty much the left-liberal political-intellectual camp that has dominated the entire Western world for the last half century, and where government policy has slipped more in the national-conservative direction, it's basically facing the entire intellectual sector, the academic-university sector, the film world, and the ruling lobby system of the theater world.

To "equalize" them in the right direction, i.e. to link them to continuous performance measurement, would mean that these groups of university leaders, heads of Scientific Academy of Hungary, theater directors, etc., based on internal co-optation, should be linked to the evaluation of the whole scientific community, theater community, etc., and that in these sectors academics, academic leaders, professors, theater scholars must be highly evaluated by the whole community. How the scientific community evaluates its individual members by citing and criticizing their scientific works, and whoever has the highest citation rate has the greatest scientific achievement. In the natural sciences and engineering, this has become accepted in the world and also in Hungary, but in the social sciences, legal science and humanities, it remains completely foreign in Hungary. Since the conservative regime change in 2010 in Hungary, these university fields have exercised their academic autonomy

independently of the state, but also of their underlying academic communities, and this autonomy is by no means asserted against the left-liberal political camp that dominates the intellectual life of the Western world.

The only way to break this bond in the current situation is to free university and college governance by law from the hands of internal academic lobbies, and to subject university-academic communities thus freed from the lobbies to the evaluative assessment of the entire academic community. It is important to emphasize that university and college autonomy is essentially based on the freedom of scientific research, the derivative of which are the scientific communities of individual disciplines, and if individual universities use this autonomy as a pretext to break away from it and become inbred and locked into the system of "university barons" and "academic barons", then this is an abuse of autonomy. The link to the academic communities is established by linking them to citation indicators, and only a university lecturer with a higher citation indicator is eligible to become a professor, and only such a professor can become a dean, rector or vice-rector. In the academic field, there is already a public register of citation indicators in Hungary, which has been managed by the Scientific Academy of Hungary in recent years (this is the *MTMT),* but it does not play a role in the universities of social sciences and legal science or in the universities of arts. The system of inefficiency and lobbying in the universities and the ties to political camps can be abolished only when this reform is carried out and the universities and the Academy of Sciences are reconnected to the scientific community as a whole, instead of the current system of co-optation.

12. The masters of metric power: On the way to "scientific Capitalism?"

The drivers of datafication and the shift toward a metric society are the private monopolies of global large technology companies, and while this shift has produced a number of good things in recent decades, it has also raised a number of fundamental problems. Digitization, the shift from physical space to cyberspace, has produced more changes in the last two decades than any other technological change in the last hundred years. Among these changes, it is now worth emphasizing that while earlier technological changes did not undermine the ground of simple common sense transparency - and thus did not problematize state power based on democratic public opinion - the billions and trillions of data of social activities on the platforms of cyberspace society increasingly provide a social reality mediated by algorithms that is becoming inaccessible to millions of citizens. Even the mass of ordinary computer scientists can only manage these algorithms, but only a narrow elite of them, intertwined with the private ownership circles of the major global technology companies, can actually see the goals and consequences they shape and become the masters of a society that has moved into cyberspace.

David Beer, in his 2016 book on metric power, describes how the global Internet platforms (Facebook, Twitter, Amazon, Google, etc.) that provide billions and trillions of pieces of data on social activity every day, and the associated data mining and metric measurements, are only the first step, and not the measurements alone, that create metric power. [10] That power only comes about when the results of those measurements are fed directly back to the actors of social action - people, organizational decision makers, lower-level decision algorithms. Thus, those who control the global measurement algorithms indirectly determine the people,

[10] David Beer: Metric Power. Palgrave Macmillan Edition. 2016.

organizations, and the algorithms they run that make the subsequent decisions through this feedback loop. Moreover, the indicators and their ranking of statistical scores that selectively link and measure billions of pieces of data are presented as objective scientific truths. While innumerable selections, background loadings, and prioritizations are deliberately made among the data by the algorithm composers, these no longer appear in the measurement results, in the indicators, and in the rankings thus produced, but are presented as the emergence of objective truth. It is a bit like the representation of reality in television broadcasts, where the cameraman, at his own discretion, when he wants to show the presence of large crowds, moves his camera close to the few dozen present, creating a mass effect even when only a few people are huddled together, and so it can be commented on as evidence of a government overturning mass sentiment, and when he wants to portray its insignificance, he can show the pathetic nature of a few dozen loiterers from a high angle. If the television director sympathizes with the reality he wants to show, he can show young and fresh-looking girls and children with good faces in the news program being recorded by the camera, and if he wants to denigrate them, he can pick out those few faces that give a screaming distorted face, add poorly dressed people in the heat, and the text of the accompanying commentary as an extreme gesture, is the truth for TV viewers because they "saw it with their own eyes".... . ..

While the owners and managers of the major technology companies that have become the masters of society are private, profit-driven corporations, they appear to be driven by their algorithms as the guardians of a social governance mechanism based solely on the results of scientific measurements. For this illusion, which is obviously caused by the youthful memory of the now bankrupt "scientific socialism", I can only think of the formula of *"scientific capitalism"*.

And this association brings out the fact that the resulting cyberspace society in Western civilization is dominated by a few dozen global private technology companies and the IT elite serving them, while in China, which acquired and developed this technology early on, and in some other countries around it, it is dominated and controlled by a state apparatus controlled by an immobile political power elite. The latter has so far emerged as a reprehensible model of power only in comparison with the democratic West, but the changes in Western metrics under private rule shift the two poles of comparison. How much worse is it to have a centralized state apparatus monitoring our every move and thought in cyberspace than a conglomerate of private owners of a few giga-tech companies doing the same?

13. The cyberspace platform-data-metric society.

The confinement and isolation enforced by the pandemic has led to the intensification of technological change spread in the last quarter century, and the shift of intellectual work to home office, as well as in the case of higher education to video group meetings and video lectures, and the parliamentary sessions, constitutional court hearings and other decision-making sessions to video conferencing. This transformation has fundamentally changed the organization of social activities, and cyberspace information technology, which has become the basis of everything and has been harnessed in this way, is evolving exponentially: 5G, which is an order of magnitude faster, is already being rolled out, and 6G versions are being developed in laboratories. All of this means that it is not too early to say that societies that have moved from physical space to cyberspace will, for the most part, be operating in 10-15 years in a different organizational structure than the one they have had for thousands of years, and that, without realizing it, they will already begin to be dominated by different

organizational principles. However, the major changes are already being analyzed, and some of the fundamental differences between cyberspace society and the way society is organized in physical space are already known.

1) This society is organized in the Internet, and since it emerged as the world Internet partly spontaneously and partly through the deliberate spread of its influence to the world due to the domination of the first Internet tech companies under the U.S., the subsequent spread of the Internet has intersected with state sovereignties. More recently, the revolt of sovereign states has triggered a reordering of the foundations of the Internet and cyberspace, with China and Russia at the forefront of the fight against the U.S. and its global Internet. Therefore, the polarization caused by this - about 30 states are in favor of the U.S. global Internet, and the same number of states are in favor of the Chinese model - may be the most important sticking point in world politics in the near future, and sovereignty-friendly Hungary, Poland, and Eastern Europe in general are at an important crossroads here.

2) Cyberspace society is largely organized on Internet platforms, some of which (e.g., Google, Facebook, Twitter, etc.) already serve and control the activities of billions of people, or one-third of humanity. But network platforms that go beyond this (e.g., e-government or internal networks of decision-making bodies) are also partially connected to the Internet. The seamlessness of the Internet is thus a basic requirement for the functioning of society, and as the Internet of Things, the cloud-connected operation of self-driving cars, becomes prevalent in the coming years, it will be the most important basic requirement. By comparison, hostile hacking attacks (by vindictive states or simply criminal groups) are already inevitable precisely because of the uncontrollability of the global Internet. As the U.S. has experienced in recent months following a hacking attack on one of its power generation systems that left millions without power for days.

3) The shift of society to cyberspace platforms on the Internet creates a digital trail of comprehensive recording of social activity, as opposed to the largely undetectable nature of social activity that used to take place in physical space. Everything we do here leaves a digital trail of our thoughts and actions, and by linking these trails, individuals become more known to the external observer who has access to these trails than they are to themselves. This is the total data explosion in cyberspace, and the billions and trillions of pieces of data generated every hour and every day are processed by lightning-fast algorithms in seconds to draw conclusions. For example, when I look up a book in a Google search, a minute later I get an ad telling me what else has been published or is about to be published on that topic, and I'm bombarded with it for days afterward. But it's not just individuals who are becoming transparent through data; it's also large groups of people who are being tracked and revealed by Big Data algorithms. Over the past millennia, humans and their societies have colonized the physical and biological layers of being, creating intellectual formations and reshaping the underlying layers of being, but now their thin intellectual layers are becoming heavy and all-consuming as they process the trillions of pieces of data created by digital traces. The formations of the physical and biological layers of being are thus becoming more susceptible to the reshaping by the intellectual layer of being of humanity because they have become more controllable in the future, and if this is what the ecologists have been complaining about, the problems they have been reporting may now become more serious.

4) Individuals and the data society will become measurable and classifiable in thousands of new dimensions, rather than the few dimensions (demographics, health metrics) in which they have been measurable, and a metric society will emerge. With the new grouping of data into

thousands of dimensions, hundreds of new, previously unknown indicators will be created, and individuals will be evaluated against the indicators on a new set of scales. Instead of the massive sameness and perceived equality of the past, the differences that will be highlighted and visible to all will have thousands of new implications for metric society. On the one hand, everyone will be able to see with their own eyes what they have not seen before, how good or even how bad and weak they are in one dimension, and this will trigger an inner urge to improve and spontaneously perform better. However, the visibility of bad or good performance also gives the organizations, companies and institutions that employ the person the opportunity to remove the bad and reward and retain the good. The measurement and evaluation that results from data-driven performance improvement and competency building can therefore lead to explosive growth compared to what has been seen before. Generally speaking, what I can and do measure, the resulting visible differences create competition and, through competition, growth. The same is true in reverse: if I do away with measuring and evaluating and treat everyone the same, shrinkage will spontaneously set in. This is something I have been able to observe very well in the academic world and in science in Hungary in the last decades, but in the socialist system of the Soviet Empire I was able to "enjoy" it in all spheres of life until I was forty years old.

Of course, it must not be forgotten that in a metric society, where everything can be measured, evaluated and controlled, control can be increased to the point where it becomes unbearable above a certain level. All precautions must be taken against this today, because the news of China's total cyberspace control system is already terrifying people in Europe.