

ABSTRACT

In his famous work *'Discipline and Punish'*, Foucault introduced the concept of disciplinary society; in order to create productive members for a well-functioning social body, institutions of such societies (schools, factories, hospitals) are designed to shape/measure individuals according to prescribed standards of normality. Even though disciplinary structures are still present today, more and more cultural critics claim that modern societies are primarily non-disciplinary; acts of self-observation and internal control have become more influential than external control itself. In our presentation -through the theories of Deleuze, Fisher, Han, and Zuboff - we attempt to examine the extent to which disciplinary mechanisms are still present in our age, explore what role current informational technologies play in external/internal control systems, and attempt to shed light on the possible challenges the future holds.

Keywords: *foucault, disciplinary society, control-society, global capitalism, information technology*

ÖSSZEFOGLALÓ

Foucault a *Felügyelet és büntetés* című művében írta le először a fegyelmező társadalom működését. A fegyelmező társadalom egyes intézményeiben (iskolákban, gyárakban) csak az számít, hogy a normalitás előírt mércéjéhez alkalmazkodjon az egyén, és ezáltal hasznos testként funkcionáljon. Azt nem állíthatjuk, hogy a fegyelmező struktúráknak napjainkban nincs szerepe, ugyanakkor több kultúrkritikus írt arról, hogy a globális kapitalizmus fejlett társadalmi elsődlegesen nem fegyelmező, hanem teljesítményelvű társadalmak, és a külső kontrollnál nagyobb szerepe van az önmegfigyelésnek, a belső ellenőrzésnek. Deleuze, Fisher, Han és Zuboff elméleteire alapozva, előadásunkban azt vizsgáljuk, hogy a könyvben leírt mechanizmusok mennyiben vannak jelen a globális kapitalizmus korában, hogy a modern információs-technológiai vívmányok milyen szerepet játszanak napjaink külső/belső kontrollrendszereiben, illetve kísérletet teszünk a jövőben elének táruló lehetséges kihívások feltérképezésére.

Kulcsszavak: *Foucault, felügyeleti társadalom, kontroll-társadalom, globális kapitalizmus, információs technológia*



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THE LEGACY OF DISCIPLINARY SOCIETY – HOW RELEVANT IS FOUCAULT’S THEORY TODAY?¹

A fegyelmező társadalom öröksége – érvényes-e még Foucault felügyelet-elmélete?

*Nasleđe disciplinskog društva – da li je još uvek važeća
Foucault-ova teorija nadzora?*

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1. Foucault on biopower and disciplinary society

In Volume I. of ‘*The History of Sexuality*,’ Michel Foucault introduces the concept of *biopower* by analyzing modern sexual politics and the sexual ‘*strategy*’ of the 19th-century bourgeoisie. According to Foucault, the reason why control over sexuality became more general at that time is related to the decisive changes of power that have taken place across Western Europe since the 17th century. In previous centuries, the sovereign had the privilege to *rule over life and death*, symbolized by the sword: the right to take away the life of any subordinate if the ruler’s law was broken. However, from the 17th century onwards, there has been less and less emphasis on expropriation. The era of the sovereign ruler, based on the right “*to take life or let live*” (Foucault 1979 p. 138), slowly gave way to new forms of power that were more interested in “*the administration of bodies and the calculated management of life*” (Foucault, 1979, p. 140). Compared to sovereign forms of control that were more visibly coercive, these forces were undoubtedly softer, less physically violent. It aimed less to submission and more to the *efficient organization of life*; it became the guardian of life, it became: bio-power. Power over death was complementary to this power; bloody modern wars were no longer launched in the name of one ruler but launched in the name of the entire community, aiming to preserve the life and security of its people. (Foucault, 1979: 125-127). According to Foucault, biopower manifests itself in two different forms; The *anatomo-politics* of the human body and the *biopolitics* of the population. The subject of the first form of biopower is the human body perceived as a machine, and it aims to create disciplinary systems (*schools, barracks, factories, hospitals, prisons*) in which people function as obedient/docile bodies. In *anatomo-politics* the regulation of

movements and behavior plays a decisive role, and enhancing productivity holds utmost importance. The second form of biopower is *biopolitics* emerged in the middle of the 18th century. It focuses on the biological body and the overall management of the population as species (achieved partly by collecting and evaluating statistical information of a given sample, e.g., birth and death rates, productivity rates, health records, etc.). As Foucault explains; '*it focuses on the species body, the body imbued with the mechanics of life and serving as the basis of the biological processes: propagation, births and mortality, the level of health, life expectancy and longevity, with all the conditions that can cause these to vary*' (Foucault, 1978: 139). The emergence of biopower was a prerequisite for capitalist development, but later - since capitalist systems needed the growth and physical strengthening of the population as well as greater obedience from the individuals in that population - capitalism contributed to the advancement of biopower technologies. The issue of sexuality may have become this eminent in modernity, Foucault argues, since it is located at the very intersection of two political-technological forms of life: it plays a role in disciplining bodies and is relevant for population regulation (Foucault, 1978: 133-144).

Foucault discusses the first form of biopower in his book: *Discipline and Punish*. By the 19th century, the use of violent torture as a *general punishment* diminishes in the West, and incarceration steps in its place as the most prevalent form of punishment. The public spectacle of suffering was disappearing, and physical pain was gradually given less and less importance. The novel goal of punishments was to induce *mental suffering rather than physical ones*. In the age of the Enlightenment, public torture and executions were beginning to be seen as unnecessary cruelty, and more humane penalties were called for. People were already well-aware of both the cruel nature of public torture and execution and the unnecessary suffering it entailed; as Foucault points out in his book, jurists used those very descriptions (cruel /excessive suffering) for these forms of punishment, albeit without any critical intent. The acceptance of cruelty was justified on the grounds that public torture and execution should display the severity of the crime to the public. Since the offender had also offended the ruler, power should take revenge (as criminals were seen as the enemy of the ruler), and for *power* to show its supremacy, it must destroy cruelty by increasing cruelty (Foucault, 1978: 1-93). How can it be explained that *public torture and execution* were eventually "*replaced*" by *incarceration*? According to Foucault, this follows logically from the way how 17-18th century disciplinary society operated. After disciplinary techniques had already been established in various institutions (*schools, barracks, factories, and hospitals*), they eventually got employed in the penal system as well. As Foucault asserts, the practices of disciplinary society could not be restricted into one area of life as they were "*destined to spread throughout the social body*" (Foucault, 1979: 207). But disciplinary systems operated on different principles than 17-18th century criminal law and penal system originally did: it did not simply condemn acts based on law, but rather put pressure on the subjects (*workers, students, soldiers*) with a dual system of *reward and punishment*. In order to correct non-standard behaviors, the disciplinary power imposed penalties, hierarchized, compared, and ranked according to the degree of compliance with the norms it wanted to

impose, thus acting as a *normalizing power* (Foucault, 1979: 231-256). First, the interpretation and formulation of criminal law, then the executions of the penal system begin to function more like *normalizing power*. The changes eventually led to the diminishment of punishments that entailed unnecessary suffering, like *public torture and execution*, and let incarceration become the dominant form of punishment (Foucault, 1979: 240-241). The penalty of imprisonment agreed well with disciplinary society since the very mechanism of how disciplinary power functions shows unmistakable resemblances with Bentham's famous prison design; the *panopticon*. As Foucault asserts, prisons that function as *disciplinary normalizing machinery* stand closest to Bentham's panopticon – a utopia of perfect disciplinary order (Foucault, 1979: 328).

Inside a panopticon, *everyone surveils and supervises everyone* else; supervision operates as an all-pervading network - from top to the bottom, bottom to the top, all sides in every direction - in which supervisors are also supervised (Foucault, 1979: 275). Loud and violent manifestations of control are not necessary anymore; here, the constant movements of well-calculated gazes play the essential role, and power exercised over bodies is based on the laws of optics and mechanics. According to Foucault, in a disciplinary society -- similarly to a panoptic cell- members of the population are distributed in *space* in such a way that they can be well observed, and their *timetables* can be well regulated. Power operates in the time-frame of these spaces, and the subject never ends passing from one *closed space* to another (each having its own rules and laws, e.g., regulations in school, orders in the barrack, working schedules in the factory). Here, individuals are organized according to particular functions and exposed to regular examinations. The expected movements and tasks are forced on the body during training periods - e.g., compulsory exams in the education system - and all available forces are combined for the purpose of creating the most effective and productive *machinery* possible. As Foucault puts it, the division of individuals into separate functional spaces serves as a strategy to regulate behavior while creating a way to "*derive maximum advantage and to neutralize the inconvenience*" (Foucault, 1979: 142).

2. The road from a disciplinary society to a society of (self)-control

2.1 Deleuze on the crisis of disciplinary institutions and the emergence of a control society

In his essay '*Postscripts on the Societies of Control*' published in 1990, Gilles Deleuze claims that *disciplinary institutions* are in crisis – due to social/technological changes started then intensified after World War II - and reform efforts could only prolong their inevitable diminishment; eventually, disciplinary society will be replaced by a *society of control*. According to Deleuze, old disciplinary institutions could be understood as '*molds, distinct castings*,' while the new formulation of control society shares more resemblance

to a *'self-deforming cast'* that constantly changes from moment to moment. Deleuze illustrates the difference between disciplinary and control society by presenting phenomena that occurred around the time of transformation. In the second half of the previous century, with the advent of post-industrial capitalism, the increasing demand to produce immaterial goods and various digital services led to a change in the traditional production sites. *Factories* prevalent in disciplinary society (possessing a *'distinct body'*) were replaced by the *corporations* of control society (*merely 'a spirit, a gas'*). In contrast to the static, predictable environment of the factory, corporations operate under *perpetual metastability*; workers are kept in a state of *constant competition*, wages are continually changing as they are based on the latest performance evaluations. Traditional *school* settings (in which the individual received education for a certain period of time, then moved forward to the next enclosed space) lost their appeal to lifelong learning and *perpetual training*; at the same time, *constant examination* became more relevant than traditional exams. In a disciplinary society – since control took place in separated, *enclosed systems* – one always started a process, finished it, and then started all over again. In a society of control, the course of such processes knows no end: all previously separated, closed spaces (workplace, education system, armed service) are now acting as *metastable states* – *'coexisting in one and the same modulation, like a universal system of deformation'* (Deleuze, 1990: 2). As Deleuze points out, disciplinary society could be characterized by *apparent acquittals* (receiving explicit penalties as a result of breaching specific rules of law), while control society operates with *limitless postponements* – a notion borrowed from Kafka, signifying a procedure that could never come to an end.

In a disciplinary society, the subject had two features; the *signature* and the *number*; the former is associated with the subjects themselves, the latter indicates their position inside the *mass*. There was no contradiction in both features being present *at the same time* since disciplinary power simultaneously *individualizes* and *masses* (integrates into a whole). In control society, however, this duality of individual and mass is no longer present. The individual who was previously subjected to disciplinary power is no longer exists; being at the very heart of a constantly modulating network of institutions (*universal system of deformation*), the individual inevitably transforms into something Deleuze calls *'dividual'*; an abstraction of aggregated data points, an intangible piece of the *mass*. Dividuals – as the word implies – are in a state of constant division. Their identity is in a continuous state of modulation; how its temporary shape manifests itself always depends on which institution of control is currently assessing them. One has different formulations according to their work-performance evaluation, Scholastic Assessment Test (SAT) score, criminal record, or – at present days – internet browsing history. The form of control exercised over dividuals manifests in a different shape than disciplinary control did; If disciplinary society regulated *bodies* in a closed, distinct space, control society regulates *access* in a constantly modulating (cyber)space. As Deleuze asserts, *military passwords* (*watchwords*) used under disciplinary power are now replaced by *code-based passwords* – codes that decide whether to grant or decline *access* to *dividuals*. In the center of this

universal system stands one of the most influential innovations of the 20th century; the *computer*. A machine that is able to analyze huge amount of incoming information in real time, and can reach an assessment-based decision whether to grant access to individuals in seconds afterward.

In his essay, Deleuze elaborates on Félix Guattari description of a possible future city 'where one would be able to leave one's apartment, one's street, one's neighborhood, thanks to one's (dividual) electronic card that raises a given barrier; but the card could just as easily be rejected on a given day or between certain hours; what counts is not the barrier but the computer that tracks each person's position' (Deleuze, 1990: 3) Some details in Deleuze and Guattari's vision of a possible future city share undeniable resemblances with certain decision-making procedures prevalent today; when large amounts of information are needed to be structured and evaluated in a relatively short period many public institutions, law enforcement agencies, and even criminal courts rely on a novel data-based method commonly referred to as *citizen scoring system*. These systems involve *categorizing, rating, and ranking* members of the populations according to various datasets. With the help of automated algorithms, they are most commonly used to help *allocate various services*, identify particular *risks* and *predict specific human behaviors* (Dencik et al. 2019: 13). It seems Deleuze could accurately predict the directions of societal-technological changes. There is a noticeable trend towards a future where one's E-card – i.e., the scores accumulated on it- can influence what possibilities become available to them. What Deleuze could not foresee, however, is the ever-expanding scope and pervasive nature of this '*universal system*.' A few sentences later in his essay, Deleuze writes: '*A mechanism giving the position of any element within an open environment is not necessarily one of science fiction*. The very idea of a '*mechanism giving the position of any element*' turned out to be manifesting itself in a much shorter time-scale than the realm of science fiction usually wanders; only after nine years, still in the same decade in 1999 the first 3G connected GPS integrated mobile phone – the Benefon Esc! – was released, opening a new era of a ceaseless stream of geolocation data. Since then, numerous tools that convert human action and other outside phenomena into quantifiable, digitized data have become available (e.g., smart devices, sensors installed in public, the whole ecosystem of the Internet of Things). As a result, both the offline and online life of *dividuals* can be monitored, digitized, analyzed; thus, their divisions became immense, hundreds of digital profiles created from a wide variety of sources exist at the same time, and all are constantly changing as one's daily actions affect the data points (*codes*) minute by minute. In the last section of this paper, we will elaborate on the possible social ramification of the development listed above.

After thirty years of the publication of '*Postscript on the Societies of Control*', it is also clear that – in some aspect - modern control society has developed differently compared to what Deleuze envisioned in 1990. The type of control Deleuze described – an *E-card code* closing the barrier in front of a dividual - shows similarities with how *disciplinary techniques* operated in the past. (Till this day, disciplinary structures have not disappeared

entirely, where they are still present, they got combined with new digital control technologies, i.e., the infamous Social Credit System initiative in China). However, the underlying mechanism of contemporary neoliberal capitalism is not interested in old 'normalizing' practices; closing barriers is not as appealing as it was before. On the contrary, the way control embodies today is no explicit prohibitions but endless opportunities and temptations. The private sector understood - and then effectively formulated- the rules of this new era. Market actors - in search of profit maximization - transform individuals into active data-mines and passive consumers. For that transformation to be successful, specific emotions, ideas, desires, etc., have to be implanted into the minds of those individuals. In a disciplinary society - as subjects were expected only to enhance their productivity - emotions represented unnecessary *disturbances*. The neoliberal market, however, learned to weaponize emotions as a means of behavior modification. The target of those techniques is not external bodies anymore, as was the case with disciplinary and biopower. The new target is located inside the skull; a modern control society under a neoliberal veil would attack the psyche. As Byung-Chul-Han asserts, '*Psychopower is taking the place of biopower*' (Byung-Chul Han, 2017: 78). In the following sections, we will attempt to explore the subtle ways our psyche was/is targeted under different formations of capitalism.

2.2. *A pervasive consumer culture that impels self-control*

People living in a state of constant expectation - facing an eternal 'trial' - begin to monitor themselves to ensure they won't miss out on something that could potentially make them feel more fulfilled. Modern control society moves away from the notion of responsibility and engages in an endless pursuit of happiness. Happiness, of course, is defined by the interests of contemporary neoliberal markets: global consumer culture links happiness to the consumption of products, genuine enjoyment, therefore means the satisfaction derived from consumption. On the other hand, neoliberal education and work culture link the sense of fulfillment to continuous professional/personal development and better performance rates. Today, many have already incorporated those values and strive restlessly to live up to them; it is no surprise then that the current era of obsessive happiness-seeking is also the *era of a global mental health crisis*.

In his book *Capitalist Realism*, Mark Fisher accepts Deleuze's observation about how societies of control operate under the notion of Kafka's *indefinite postponement*. Nothing ends, nothing starts, everything merges into each other; he astutely summarizes it, '*Working from home, homing from work*' (Fisher, 2009: 22). A consequence of this 'indefinite' mode of power, Fisher argues, is that *external surveillance* transforms into *internal policing*. As he elaborates on his recent teaching experiences at an English college, he draws some vital conclusions. First being that old disciplinary measures employed through body regulations (sitting straight in a chair) along with the old *disciplinary segmentation* of time were both utterly absent in the classrooms: most of his students have not even tried to sit up straight in their chairs; they were instead *slumped all over their desk*. They also had

no consideration of any time schedule; they were non-stop chatting with each other, eating snacks, sometimes even putting their earphones on during the seminar. Fisher also concludes that the discipline techniques were mostly eroded by pleasure-seeking *systems of perpetual consumption* (eating snacks, listening to music). When Fisher told one of the students to take off his earphones, the student persisted he did not do anything wrong since he was not even listening to music on that device at the time. At another class, when a student put the earphones around his neck and was called to account for it, he explained; he could still pay attention to the lecture since the music was playing at minimum volume. As Fisher writes, these little episodes exemplify a much greater theme he calls '*interpassivity*': even in classrooms, students can't disconnect from the *entertainment matrix*. The earphone around the head, a softly played music streaming from a smartphone, reassure students that the *matrix* is still there with them (and will let them reconnect right after the class ends). As a direct repercussion of consumer culture, if something fails to serve immediate gratification, if it is not pleasant or eye-catching enough, it will automatically be doomed as boring and not worthy of attention. For instance, many of Fisher's students refused to read more complex, thought-provoking texts that could disrupt their perpetual cycle of desire fulfillment. Attention-deficit hyperactivity disorder (ADHD) is not a deviation but a norm in late capitalism, Fisher argues, as the culture of *hypermedia consumerism* produces *entertainment addicts* with a short attention span and a fragmented subjectivity. There is no external motivation for students to change their behaviors either, Fisher writes, since they would not be expelled even if they failed to carry out their obligations – the English college system in question was overly dedicated to keeping its students enrolled as the number of the registered students impacts the distribution of scarce financial resources. (Fisher 2020: 46-50).

Most phenomena Fisher has touched upon are even more relevant in present days. His book was first published in 2009, since then, *smartphones* have become indispensable accessories of everyday life, and the amount of time people spend on social media has skyrocketed; both of these tendencies can potentially push individuals even deeper into the *consumer culture matrix*. Smartphone addicts experience a genuine urge to post, like, comment, preferably as often as possible, since they feel alive the most while interacting with their phone. Paradoxically, this is what prevents them from living their life to the fullest (except, of course, if they consider events occurring in *cyberspace* real). Following various online influencers who display and monetarize their entire lives on social media platforms can also exacerbate addiction, not to mention its apparent negative influence on the mind and self-esteem of young people. Although some primary schools do not allow bringing cellphones into the classroom, students of such schools experience genuine relief when reconnection to the matrix becomes possible. In universities, usually, there are no such restrictions; thus, it is not uncommon for lecturers to only see heads facing down since many college students find a purely academic lecture boring and lacking in alluring stimuli. Jean-François Loytard coined the term; *commercialization of knowledge* decades ago. He observed that many hard-working students do not enroll in university

with genuine curiosity about the world. Their main goal is not to acquire a wide range of general knowledge but to gain a particular set of skills that would enable them to thrive in the market environment (Lyotard, 1993). Success-oriented students are aware of what their peers - who are still trapped in consumer culture - usually do not; all of them have to thrive in an uncertain, unstable, unpredictable environment of global capitalism. Of course, the extent to which the aforementioned examples are present could vary from university to university, from faculty to faculty; still, these are very much existing phenomena of our times.

In the age of digital capitalism, *consumer culture* constantly forces individuals to *self-monitor*: they feel compelled to be acutely aware whether their body, clothing, or lifestyle correspond to what is conveyed to them as ideal. The advent of the digital age did not serve as a prerequisite to consumer culture (albeit with the advancement of information technologies, its scope, volume and influence extended massively.) Consumer culture itself developed decades before the technological revolution occurred. Between the first and second World War, across all states of the United States, modern advertisements began to target - via printed media, radio, and television - the rapidly growing middle-class population. The aim of those advertisements was straightforward; to create previously not existent needs and desires amongst the targeted groups. The techniques used to achieve such goals usually involved beautiful and healthy-looking people (mostly slender women) situated in a desirable environment or setting for the sake of conveying persuasive, powerful emotions to potential consumers. As western celebrity culture emerged, more and more often famous movie stars, singers, successful athletes, and other well-known, respected personalities were paid substantial amounts to participate in the process. Beauty and the notion of an ideal body have become a core element of advertising, which brought about the not-so-subtle message; a perfect body is vital for true happiness. Fashion and ever-changing clothing trends also invaded the mainstream culture; how one dresses cannot be a negligible part of life anymore. After all, physical appearance matters a lot; the guarantee of personal, social, and even professional success lies not in one's *character* but their *attractive personality*, which very much involves attractiveness for the eyes too (Featherstone, 1997: 72-86).

Contrary to common belief, these emerging tendencies were not extraordinary nor unprecedented; even the Victorian era's notoriously 'restraint' environment shows similarities; 19th-century citizens also cared deeply about their bodies. Their attention mainly focused on the health of the body as a means to increase its efficiency. Efficiency, productivity, and health are still primary drivers in the modern age, albeit today- due to the influence of psychoanalysis - the perceived way towards a healthy and efficient body leads through *sexual liberation* and the careful *maintenance of the body* (sexual revolution, says Foucault, is nothing more than a tactical shift in *sexual strategy*, Foucault 2014: 132-135). Of course, due to the relentless efforts made by advertisements, magazines, movies, and television, nowadays the obsessive "mania" of body maintenance is shared across all seg-

ments of the population. According to David Riesman's theory - with regards to social conformity-, from the middle of the 20th century, the so-called '*other-directed character*' becomes prevalent. Contrary to '*inner-directed characters*' this new type of person is less shaped by traditional values or close family connections and more influenced by his peer groups and the ever-present external signals of mass culture (Riesman, 1996).

By the second half of the 20th century, for masses living in welfare societies, the consumption of products, services, or even unique life experiences became a vital source of enjoyment. After carrying out daily duties when afternoons, weekends, or holiday seasons arrive, they are eager to dwell in the act of consumption. The individual who is temporarily released from the burdens of daily responsibilities does not even realize that by mindlessly consuming and by welcoming unrealistic, manufactured ideals, he is trapped inside the network of social expectations - and to escape from it (to meet with those expectations), he has to subjugate himself under repressive self-control (he treats his body like an object, a consumer goods; something that in need of constant maintenance; Featherstone, 1997: 87). In the age of digital capitalism, when consumer culture through digital devices infiltrates into all aspects of life (the separation of work and life will be eliminated in the following section), people are endlessly bombarded with incredible amounts of messages about an imaginary ideal. Under the spell of artificially manufactured health and beauty cults, individuals constantly monitor whether they select the right products labeled as healthy and follow the most recent dietary trends advertised as revolutionary. They make fashionable tattoos and buy unique accessories to express their 'individuality' regularly visit gyms and fitness classes since an overweight or out-shaped body is immediately associated with the notion of failure. Since any pornographic content is within a few clicks reach today, the image of 'good' sexuality is also heavily influenced by the contents available online. Sexuality, thus, is under control just as it was in the Victorian age, only at this time the ones imposing control are not family members or other traditional institutions, but the self itself; it will make efforts to align itself to the 'appropriate' way of sexual satisfaction.

2.3. *Work and (self) control in global (digital) capitalism*

At the beginning of the 20th century, Ford Motors, a US-based automotive company for the first time in history, managed to manufacture massive amounts of products in a ceaseless flow; its success marks the beginning of a new economic era; Fordism; the age of *mass production*. Ford's unique innovation was the integration of *assembly lines* into the manufacturing process (Tomka, 2009). By the 1950s and 1960s, similar production models - characterized by the repetition of a few pre-trained movements and constant, strict supervision - became widespread around the world. A few decades later, a transition to *post-Fordist production* once again brought about significant changes in production, most notably; the elimination of assembly lines, specialization, increased labor skills, greater flexibility, the introduction of teamwork culture (Tomka, 2009: 178). While under Ford-

ism, workers enjoyed some form of protection (collective bargaining agreements, social security schemes, etc.), in the era of post-Fordism – as companies and firms often adapt their policies according to current market changes – their position has become much more unstable. In digital capitalism, additional changes with adverse effects materialized; companies more and more often consist of two distinct groups of employees: a small closed circle of high-level CEO-s, and outside of the circle a growing number of underpaid, exploited, expendable employees (Staab and Nachtwey 2018: 115-116).

In the post-Fordist era, there are four trends relevant to our subject:

(1) As workers' vulnerability generally increases in the era of post-Fordism, there are fewer and fewer people who can *successfully manage to separate their professional and private life*. Even in our dreams, *Capital haunts us*, Fisher says, *The factory-hall and living room merge*, Han notes (Fisher, 2020: 60, Han, 2019: 100). This is especially relevant in the age of digital capitalism; Work-related e-mails, messages, notifications are constantly flowing through computers before and after working hours. This, of course, works the other way around as well; anyone working from home can not separate personal matters from professional duties entirely. Because of digital devices and the internet, our attention is more fragmented and scattered than ever; getting distracted by digital contents of the internet (news sites, social media, streaming/entertainment platforms) has never been easier; thus, those who sit in front of a computer at the workplace can also find themselves inside the consumer matrix for shorter – sometimes longer – periods.

(2) Even though neoliberal institutions are rather anti-bureaucratic, with the reduction of traditional bureaucracy, new forms of bureaucratic procedures emerged. Fisher mentions the *culture of auditing* (as a hybrid of bureaucracy and PR), in which a vast amount of data is utilized solely for promotion (a phenomenon present not only in private companies and firms but amongst the institutions of the public sphere). Employees have to provide data on their activities since there is a demand to quantify everything – even things that cannot be quantified. That way, the “Big Other” (using the concept of Lacan and Žižek) is always positively reassured. In reality, what consumes propaganda and PR is nothing more than collective fiction, a symbolic structure. Just as the “Big Other” under socialism could never see how the system really worked, under capitalism – even though everyone knows how cruel they are – the prevailing narrative of the “Big Other” still desperately focuses on the friendly, amiable faces of big corporations (change generally occurs when the ignorance of the “Big Other” can no longer be sustainable, when the “Real” behind the ‘reality’ becomes apparent). Fisher uses the term *market-Stalinism*: similar to Stalinism, capitalism of our time does not care about actual *achievements*; what matters is only its representation. Since self-representation is expected from employees, they are forced to become their own *self-supervisor* as they constantly evaluate their achievements. This type of self-supervision can be linked to the form of *self-control* mentioned in the previous section: individuals regularly examine whether their performance is sufficient for success. However, the degree of success

can only be measured at the level of achieved accomplishments; thus, they shape those achievements in a way that makes the “Big Other” satisfied with the results (at least with the *data* it receives and analyses). Fisher mentions “*hard*” (more supervisors, constant class visits) and “*soft*” (mostly based on internal performance evaluation) audits in English college education, which can correspond well to the difference mentioned before between ‘*apparent acquittal*’ and ‘*indefinite postponement*’ (Fisher, 2020: 66-84). Evaluation systems are becoming more and more widespread in Hungarian universities as well, forcing lecturers and researchers to orient their focus and attention from working in line with their genuine interests to a constant state of *self-monitoring*. Their new goal is to collect as many credit points as possible in their performance evaluation procedures. Naturally, those who fit best to the prevailing neoliberal conception of the higher education system can reach the most points; that is, designing popular courses, conveying “marketable” knowledge, publishing articles in high quantities.

(3) Under neoliberal market capitalism, *power* - according to Byung-Chul Han - is no longer interested in disciplining, regulating, or constraining the body (Han, 2017: 14). It is operating differently than its previous counterparts (sovereign, disciplinary, bio-power) did. It has finally reached its next evolutionary stage; it became *smart power*. The aim of this power, of course, has stayed the same; it wants to control. But *smart power* realized that it is much more effective to impose control on people who want to subject themselves to it *voluntarily*. As Han writes, this new power ‘*say yes more often than no*’ ‘*it operates seductively not repressively...Instead of making people complaint it seeks to make them dependent*’ (Han, 2017: 14). A power that *relies on violence* can never reach its utmost potential. Power that relies on coercion, violence, torture is all too eager to display its muscle to the eyes of the public. A sovereign power used cruel public spectacles to demonstrate its strength. Disciplinary power stopped employing public torture and execution centuries ago; imposing its will through *regulation, rewards*, and much less severe punishments turned out to be the better strategy. But still, a power like that is too visible, which at some point would give a chance to subjects to rebel or fight against it. Even if it feels counterintuitive first, the truth is that a loud and clear demonstration of power is not a sign of great strength. On the contrary, ‘*The greater the power is, the more quietly it works.*’ (Han, 2017: 14). And the reason why *smart power* can operate in such an invisible and silent manner; it has moved *inside* our bodies. It moved inside our head; it infiltrated our psyche (thus Han calls the politics of our time *psychopolitics*).

Even though *smart power* manages to stay invisible most of the time, when that is not possible, it makes sure to put on a ‘*friendly face*’, one that radiates *positivity*, one that never uses *prohibitions* or *commands*, only *initiatives* and *motivations*. One that holds the promise: if you believe in yourself, you can achieve anything you want; everything is within your reach. Under the realm of *smart power*, there are no *orders* of “should” only *imperatives* of ‘can’. Everyone *can* be successful; everyone *can* be more productive; everyone *can become* a better version of themselves. With all the incentives bombarded

on the subject, the old disciplined, *obedient subjects* eventually transform into the new archetype of this era: the *achievement subject* (and post-disciplinary, post-control-society becomes an *achievement society*).

Of course, this achievement-oriented society surrounded by fake affirmations and positivity is far from being either content or free. Individuals only *believe* they are fulfilling their dream and reaching for their genuine goals. Most of those ideas possess no real meaning to them, but since it was signaled through media many times, they believed they do; that is the *wicked logic* of neoliberalism. Even more sadly, if they reached their goal, it would still mean very little to them. Han sometimes calls the achievement subject the *subject-project*, since he refuses to think about work as a duty. Instead, he believes that work is a project. He expects to get enjoyment as doing the work and wants to be driven by an *achievement imperative*. There is nobody to exploit the subject; he voluntarily exploits himself. But despite how it sounds, it is terrible news for him. If he is no longer exploited by *another* there is no one who acknowledges the accomplishment he achieved; thus, the feeling of satisfaction after finishing the task will never arrive. The sense of lack then drives him to launch another 'project'. He *is* never happy; he is always in the process of *becoming* happy. At some point, the *excessive success drive* and continuous *self-exploitation* would inevitably lead to exhaustion, depression, and burnout (Han, 2019: 21-27, 71-94). "Fortunately," if one intends to prevent the (inevitable) burnout, he can always turn to self-help/self-development culture. There is a rich ecosystem built around it these days; self-actualization, wellness culture, positive psychology and the law of attraction, modern pseudo-philosophy, new-age spirituality, hustle culture, various self-management workshops, motivational retreats, etc. Naturally, this whole new network perfectly integrates into the fabrics of achievement society. Some of these technics may help the individual strengthen his personality, get into better shape, find new meaning in life, but they will never give him the chance to step outside the grasp of control. The knowledge and wisdom one accumulates will only be seen as new tools for *becoming* the better, more authentic self (Han; 2017: 29-32).

It should be added that Han's notion of the *achievement subject* does not apply to everyone. An excessive drive for success/productivity can stem from other sources than viciously implanted internal motives. The workings of *smart power* are indeed a force to deal with but external circumstances, especially if financially related, are still decisive factors. For instance, -as mentioned before- since the post-Fordist mode of production disrupted traditional working structures, and atypical forms of employment are more common nowadays, workers' vulnerability increased significantly. This can easily lead to an excessive *productivity drive* as the successful implementation of a work-related project could be the very condition of keeping a job; therefore, the external factors force the individual to constant self-monitoring (as one wants to perform better and better). Žižek writes that today's individual is an "*entrepreneur of himself*" who invests in his own future while also taking all the risks involved. In that sense, the individual shares more resemblance of Deleuze's *indebted subject*, who must behave in an expected way to be able to repay his loans (Žižek 2016: 76-92).

(4) Disciplinary structures and strict regulations of work-related activities are still present in certain workplaces – only these days are combined with modern digital *surveillance technologies*. Staaab and Nachtwey use the term *digital taylorism* to refer to the current conditions at Amazon's warehouses; even though algorithms and applications have replaced assembly lines, workers are as much of plain accessories next to machines as they were in a taylorist work organization. With the help of digital tools, a continuous flow of information can be gathered on the activities of warehouse workers (their location, how many goods have passed through their hands, productive working hours, etc.). These devices 'help' workers do their job as efficiently as possible, e.g., the manual equipment barcode scanner used by the employees would show them the shortest path to the goods waiting to be collected. The microphones and cameras installed in these devices are the modest price workers have to pay for greater efficiency. There is less and less surprise in such policies; as Stasab and Nachtwey assert, to stay afloat in a competitive environment, companies need to reduce prices /increase production, which leads to the rationalization of their workflow, which consequently has led to increased digital supervision of all aspect of the production process – including the supervision (surveillance) of their employees.

The logic is straightforward: more data about the workflow means a greater understanding of its underlying mechanism, which leads to more effective implementation of it, leading to higher productivity rates, which finally ends with greater profit. But of course, in Amazon's case, it is not the whole story; its surveillance practices scatter into all directions. In fact, the company got its unbelievable success in terms of size, scope, and influence – also made its CEO Jeff Bezos the world's richest man – because its entire mode of operation was built on surveillance technics. It tracked, collected, evaluated as much data from its customers' online activates as possible so it could design more and more accurate recommendations for the product it sells – first books than 'literally' everything else. But Amazon has not done anything extraordinary; it only followed the business model and some of the most fundamental principles of a new, emerging form of global capitalism.

3. The control of future possibilities

3.1. *The future is on sale*

In her recent book '*The Age of Surveillance Capitalism*', Shoshana Zuboff introduces an entirely new economic model based on data, algorithms, and predictions. She does an excellent job making the readers understand how it formulated into its current state and how it differs from the old capitalist modes of production. She claims that 20th century Ford Motor Company is in many aspects analogous to Google LLC of the 2000s. In its early years (established in 1998), the company followed the industrial capitalist mindset. Zuboff uses Google's online *search bar* as an example; Every time users typed something into the search bar Google received big piles of usage data. They analyzed the incoming

information and - similarly as *surplus* would function – used the value extracted from it to upgrade and advance their search bar (to innovate their *means of production*). What eventually changed Google's whole business model was the discovery of massive amounts of additional datasets streaming from users' online engagement; they called it; *data exhaust* (Zuboff, 2019: 64). Those piles of random, non-correlated, low-quality datasets first seemed utterly futile. It was the combination of advanced analytics, clever data scientists, and some luck that helped to realize that the company – and most service-based, online platforms - were sitting on a potential goldmine. Google learned one of the most fundamental principles of the age of Big Data; all pieces of information, all fragments of a digitized dataset, are valuable - if one accumulates enough. They begin to use the enormous amount of data exhaust in their hand (metadata like; time of user login/ activity on the platform, users' typing speed/ability to type correctly, etc.) to better understand the users, their behavior patterns, personality traits, desires, and ultimately; to create predictions about their future actions. That marks the advent of *Surveillance Capitalism*. From that point forward, users ceased to be the customers in Google's business model. Today, it is still a popular conception that if you are using a product but not paying for it –like people most using social media platforms entirely free –it means; *you are the product*. Zuboff disagrees with this notion. As she writes, the reality is even darker; customers were altogether downgraded to mere raw material; *'Instead, we are the objects from which raw materials are extracted and expropriated for Google's prediction factories. Predictions about our behavior are Google's products, and they are sold to its actual customers but not to us. We are the means to others' ends* (Zuboff, 2019: 83-84). The real products are *prediction production*; the new customers are; *advertisers*, the new means of production are AI-driven *algorithms*, and the name of the new marketplace is *behavioral future market* (Zuboff, 2019: 14). The intention to sell better and more accurate predictions brought about new incentives as well; if data companies want the create more reliable predictions, they need as much data in their servers as they can handle. To achieve that, they must convince users to engage as much as possible, spend as much time on the platform as possible, and interact as often and as diversely as possible. Zuboff calls this: the *extraction imperative*.

Besides increasing the data pool of valuable information, the other major way to improve prediction accuracy is; *behavior modification*. Data companies can steer people to behave more aligned with the group of predictions they plan to sell. Higher probability rates mean higher selling prices; advertisers are willing to pay more if they know for sure they will fish new customers. If companies possess enough behavior data, dot together enough correlations, draw accurate psychological graphs, and throws some statistics into the picture, it is not overly challenging to provoke certain actions. It is also worth noting that both the scope of possibilities data analytics can offer and the size of valuable data pools are constantly growing at an accelerated pace (as more and more online platforms and services, smart devices/infrastructures are connected to the digitalized ecosystem). The means of behavior modification have never been so wide, and all evidence point to an even greater extension in the future. It is hard to imagine that surveillance capital-

ism will only be a short, temporary phase in human history. It developed faster than any earlier stage of capitalism and already affects most of the globe, including almost all its population - even if one is unaware of its direct impact. At present days it seems nearly impossible to hide or escape its shadow, as Zuboff writes: '*Surveillance capitalists' interests have shifted from using automated machine processes to know about your behavior to using machine processes to shape your behavior according to their interests. In other words, this decade-and-a-half trajectory has taken us from automating information flows about you to automating you. Given the conditions of increasing ubiquity, it has become difficult if not impossible to escape this audacious, implacable web*' (Zuboff, 2019: 310).

3.2. Digital age on 'Trial'

Many people could instinctively understand what Zuboff describes in her monumental book '*The age of Surveillance capitalism*.' Less than three decades have passed since the *World Wide Web* has become an integral part of everyday life; still, the enormous transformation it provoked in our understanding of the world is indisputable. While the advent of this new digital age held countless promises (e.g., the democratization of information, interconnectedness, more economic opportunities, and greater freedom to all, etc.), the fulfillment of those promises turned out to be more ambiguous than hoped before. Arguably, in many aspects, the last twenty years of digital transformation could not just deliver but overshoot expectations, but along the way came an army of uninvited intruders too. There are numerous phenomena we got used to today, which either had very little significance or were non-existent a generation ago (e.g., online surveillance, Pegasus-software and Amazon Alexa/ echo chambers, filter bubbles, and online rabbit holes/ russian-bots, disinformation, and fake news/ social media addiction, short attention span and ADHD). Targeted ads and online behavior marketing practices are also "members" of this group of intruders. The reason why many were not utterly shocked by reading Zuboff's book on Surveillance Capitalism, partly stems from the fact that our societies have already experienced a handful of micro-shocks as they went through the ongoing chains of events of the last two decades.

After the US Patriot Act in 2001 and Snowden's NSA-PRISM scandal in 2013, it became generally accepted that surveillance practices are permanent visitors of this century. In the first half of the previous decade, parallel with the time when Eli Praiser's book '*The Filter Bubble*' came out, the growing network of echo chambers in every corner of cyberspace, the increasing polarization, and the resurrecting social/political tribe-mentality could not come as a genuine surprise anymore. Around 2014 with the new wave of fake news, society was suddenly found itself in the era of *post-truth*; after that, the slow but steady decline of the Fourth Estate seemed like a logical episode on the constantly unfolding events. In 2016, after the Cambridge Analytica scandal erupted, the complicated relationship between users and their browsing history arrived at its end for good. The way browser cookies behaved for years probably raised suspicion in many, but the realization that a policy advisory firm can deduce one's political preferences and psychographic

profile based on digital footprints put the last nail in the coffin. Although it did serve as a good lesson on how online behavioral marketing strategies operate, still, after all these experiences, Zuboff could provide much valuable insight and shed light on further essential and deeply concerning issues about the nature of (future) behavioral marketing (e.g., users are downgraded even from the position of being a product, the exploitation and monetization of users can take place in the future now).

Knowing the likely trajectory of the future and what Zuboff implies in her book (i.e. surveillance capitalism will stay with us), it would be wise to fully fathom how vulnerable the average individual is against the BigTech ecosystem. One significant liability is the mind's limited capacity to recognize if it's being manipulated. Modern behavioral sciences (e.g., cognitive psychology, behavioral economics) revealed that people are not as much of a rational agent as it was thought before. Much of individual decision-making occurs subconsciously, passively, and without self-reflection. As people's cognitive capacities are flawed and limited biases, mental shortcomings, and cognitive limitations play a big part in their thinking. (e.g., *System 1 /System 2* thinking; Kahneman, 2013). On the other hand, albeit human decision-making is not always rational at its core, the very process of arriving at a decision itself still shows clear rules and patterns; thus, it is highly predictable. Utilizing well-known biases makes it possible to steer (*nudge*) people's decisions into specific desired directions (Thaler and Sunstein, 2008: 17-40). Thus, automated digital behavior strategies hold great potential since they could be pre-programmed to exploit certain biases and shortcomings (e.g. anchoring bias, availability heuristics, clustering illusion, confirmation bias). Without a doubt, cunning marketing strategists are thinking countless ideas how to capitalize on them - and have done so for years. The commercial sector had many years to get familiar with (and to shape) the complex system of *behavioral marketing* strategies. Fortunately, their practices attract more and more awareness. Partly due to the growing amount of attention already oriented to the private sector, we now turn our gaze to a less explored territory similar practices are deployed; the public sector.

3.2 Control through calculations – the era of quantified individuals

In their respective theories, Deleuze, Han, and Zuboff used different conceptions to talk about one phenomenon; Deleuze called it *dividual*, and Zuboff referred to it as '*the object from which raw material extracted.*' In his book '*Psychopolitics*', Han calls it the '*quantified self: The body is outfitted with sensors that automatically register data. Measurements involve temperature, blood sugar levels, calorie intake and use, movement profiles and fat content. The heart rate is taken in a state of meditation: performance and efficiency still count when relaxing. Moods, dispositions and routine activities are all inventoried as well. Such self-measurement and self-monitoring is supposed to enhance mental performance. Yet the mounting pile of data this yields does nothing to answer the simple question, Who am I?*' (Han, 2017: 60). All of those three concepts (*dividual*, *quantified-self*, the *object*) refer to an individual whose identity is shattered into meaningless pieces, broken into

tiny fragments of codes, datasets, waiting to be collected, evaluated, ranked, and stored for eternity. Whether it is an *E-card* closing a barrier in front of a dividual or a *personalized news recommendation* on social media, it entails a decision based on the individual's specific characteristics. A decision that - to some degree- influences its life but is reached without the individual's direct participation.

Deleuze's concept of a *code* positioned in a dynamically changing system while deciding on access for its subjects is close to a book-perfect definition of Big Data-related technologies employed in the public sector today. As mentioned in the second section, the most common automated assessments techniques used in public administration are *citizen scoring systems*. They *categorize, rate, and rank* members of the populations according to a variety of datasets. They can *identify/predict behavior* patterns, create groups, sub-groups, and even calculate risk factors /error factors in any sample (Dencik et al. 2019. 13). The history of such citizen scoring systems dates back to approximately seven decades ago. The financial sector introduced the first version of the procedure: that was called *financial credit scoring*. Using previously collected personal information of credit applicants, these systems created personalized score indexes, which later could help the institutions assess whether the applicant was trustworthy (Thomas, Crook, and Edelman, 2017: 8). It functioned as a risk assessment tool that combines collecting, storing, analyzing, and classifying different credit elements and variables to assess the final credit decisions (e.g., compares the score index of the applicant with other earlier customers to detect correlations and patterns).

Today, 70 years later, essentially the same methods are employed by many (governmental) institutions and agencies as well (e.g.: social welfare systems/ traffic management systems/ national tax authorities/childcare systems/law enforcement agencies/criminal courts, etc.). They are primarily used as data-evaluating systems when large amounts of information must be evaluated in a short period of time or errors/anomalies need to be identified in real-time. For instance, tax authorities use algorithms to identify individuals' and companies' tax avoidance practices, or various welfare systems use them to identify households requiring more attention and special care. The whole procedure here is very straightforward and not much different than it was before its digitalization - only faster, cheaper, and more effective.

It constitutes a more ambiguous practice when critical sectors like the justice system, policing, or law enforcement agencies turn to similar techniques. For instance, the trend of *automatic justice* promises to alter the whole landscape of justice systems; the ongoing changes – mediated by Big Data-related technologies – can affect crime investigation, prosecution sentencing practices, and the administration of criminal justice in general (Amber, Bowling, and Keenan, 2015: 1-34). To illustrate the changes in sentencing practices, the US-based COMPAS system serves as a good example: it helped to reach many judicial decisions. By processing, categorizing, and evaluating data linked to particular cases, the program is able to predict the likelihood of the accused's re-offending (it makes pro-

files based on 137 data points). The algorithm helps judges assess reasonable bail amounts and decide whether sending someone on probation would have merit. Contrary to speed management or tax evaluation systems that only detect certain anomalies in a vast pool of data – here, future predictions and assessments are made based on correlations in a great sample. The way algorithm-driven decision-making operates, however, suggests that they can be objective and impartial only to the extent the data they work with are objective and impartial as well. In reality, data collected and analyzed often consist and reflect past biases and prejudices deeply integrated within the fabrics of society. Big Data related technologies are considered useful because as they analyze and evaluate huge datasets, they can discover and reveal previously unrealized patterns and connections in any given sample (Cukier and Schönberger, 2014: 60-85). Yet, recognizing a certain pattern and evaluating it as an inherent structural feature –if the data in question already holds biases - can eventually lead to the unintentional legitimization of previously existing discriminatory practices (Barocas and Selbst, 2016: 673-691). According to a study made by ProPublica, the COMPAS software – due to those very reasons - showed bias against African American people. It was not intentionally programmed into the software, but because the training data it accumulated during its operation consisted of more African-American citizens (as more black people faced the criminal courts and were subjected to sentencing), it made the connection if the accused was part of that group, it had a greater chance to commit crimes again. Naturally, it is discriminatory on a massive scale to be influenced by something others committed in the past, but getting the '*tabula rasa*' is very hard when the whole functioning of an assessment system is based on training data, which is by definition built on past events. Very similar concerns are present in predictive policing; after the program establishes and identifies patterns of suspicious behavior, it lists people who show potential signs of threat; it attaches risk scores to their profiles and then ranks them. Based on this ranking, the algorithm is said to be able to determine even the likelihood of possible future crimes. With the intention of executing pre-emptive measures (e.g., NSDA operating in the UK) – Philip K. Dicks's wildest imagination could manifest in front of everybody's eye.

Today, the most ambitious country in exploiting the potential of data and citizen scoring systems - not just parts of the public sector but the whole operation of governance - is the People's Republic of China. Their nationwide program called Social Credit System (SCS) was officially announced in 2014. According to a national policy document (Planning Outline for the Construction of a Social Credit System) issued by the State Council, it will function as a massive extension of the rating and ranking system Chinese banks employed for decades (the online available English version of the policy was translated by a post-doctoral scholar at Oxford University; Dr. Rogier Creemers). It will monitor, report, and actively promote trustworthiness (honesty/ integrity/ sincerity/morality – the original word is highly context-dependent according to Creemers) throughout the whole fabric of Chinese society. The four main areas of focus would be Government integrity, Commercial trustworthiness, Judicial integrity, Societal trustworthiness (*a moral society, which values honesty, work, and family*). The Social Credit System is still developing; thus,

how it will function in its entirety is not certain yet; however, some grounded observations based on already available information could still orient. In the center of the system, there are both data collections by central, regional, and municipal government bodies and data analytics by advanced Big Data technology. Based on rating/ranking evaluation, various lists (red list/ black lists) are created. Behavior deemed as good and desirable (e.g., donating blood) means points addition, inadequate behavior (e.g., not paying tax in time) means point deduction on the list. How the ratings/rankings will work at the official program is still unclear, but considering the pilot programs already operating in bigger cities, it could be points from 0-1000, perhaps letters from A-D etc. (For now, most lists work independently, but one centralized information system seem feasible in the future). Depending on the accumulated points/position on the list, rewards and punishment (prohibition to enroll certain universities, exclusion from specific lines of works, bans on the usage of public transport) are to be imposed (Chorzempa, Triolo and Sacks, 2018: 2-8).

The official policy document –and reports coming out of the country - heavily imply that the system will be keen to shape its society to specific values. By applying the definitions of this paper, it will most certainly act as a *normalizing power*. The reward/punishment system, the clear intention to regulate every aspect of the *social body*, and the explicit norms that are expected to be acted upon (*'carry forward traditional virtues' 'social organizations must enhance the openness and transparency of their operations'*) are all showing unmistakable resemblance to Foucault's *disciplinary society*. It's outside of the scope of this paper to explore further the already existing practices and operating pilot programs, but if one would like to understand how a modern functioning hybrid of a disciplinary-control society formulates in the 21st century – an upgraded version of Bentham's prison design; an algorithmic panopticon - one should turn their eyes towards the east and keep a close look on the Asian country.

After reading some real-world applications of scoring systems, it comes as no surprise that one of the most frequently mentioned risks regarding such techniques (and Big Data-driven algorithms in general) is the possible future growth of power asymmetry between people in charge of such systems and people subjected to it. The possibility of all-powerful governments, along with the rise of authoritarian tendencies, is emerging. It is the nature of these technologies that authoritarian and centrally organized societies can benefit far more from their adaptation than their democratic counterparts; the use of sophisticated data collecting and analyzing systems – such as AI-based surveillance technologies be an ideal tool for both maintaining and extending their power. But of course, besides weakening democratic institutions, these systems hold many other challenges in terms of privacy rights, transparency, accountability, or, as was mentioned before, the resurgence of discriminatory practices. In the last section of the paper, we would like to turn our attention to another core feature of such technology, one that, without doubt, can change the fundamental nature of control – along with the future course of *human* history.

3.3 Who controls the future?

In his book *'Psychopolitics'*, Byung-Chul Han claims, today we live in the age of *second Enlightenment (the age of purely data-driven knowledge)*. In this age, Big Data technologies are our compass and light towards knowledge. However, even though societies accumulate previously unimaginable amounts of data about the world around them, these technologies change something essential in terms of general information comprehension. Han asserts: *'Big Data opens up the prospect of absolute knowledge. Everything can be measured and quantified; the things of the world reveal correlations that were previously hidden. Even human behaviour is supposed to admit exact prediction. A new age of insight is being announced. Correlations are replacing causality. That's-how-it-is stands where How so? once wavered'* (Han, 2017: 68). What Han describes here is parallel to the *Black Box dilemma* often mentioned in connection to algorithm-based decision-making. The term *'Black Box'* points to a specific problem, as in many cases, even developers themselves cannot accurately trace back how an automated data scoring program has arrived at a particular conclusion. They can interpret the outcome but cannot see through the process of reaching the results entirely. There is a clear perception of both the question asked and the answers received, but no understanding or comprehension of the *why?* There are three fundamental characteristics of algorithmic decision-making that are to be blamed; opacity, automation, and machine learning.

Opacity - according to Burrell - divides into three subcategories; *intentional, illiterate, and intrinsic opacity*. It is intentional when the processes behind decision-making are deliberately kept hidden. (e.g., program code of google's search engine constitutes a trade secret). *Illiterate opacity* implies that even if it's not concealed, only a very few can interpret it (the ones who can read complex codes or the ones who created those codes themselves). *Intrinsic opacity* means that some codes are so complex and dynamic that even programmers and highly skilled code-writers would find it challenging to grasp their basic operational entirety (Burrell, 2016: 3-5). The second characteristic of algorithmically driven scoring systems is *automation*, which significantly decreases human participation and engagement (e.g., revision, supervision) in the process. Deliberate commands or requests of human agents are not needed to start or end the process of assessments. Even the implementation of a given result – or the rejection of that implementation - would not necessarily need the approval of human agents (Citron and Pasquele, 2014: 6-8). The third attribute is tightly linked to automation; more and more often, the inner logic behind a conclusion of an assessment is based on machine learning techniques. In its simplest definition, machine learning entails that the structure of the underlying code of a system constantly changes, advances, and upgrades itself as the program can simultaneously learn from both its historical/training data and its own past assessments based on them.

It serves as an intriguing thought experiment to imagine Deleuze and Guattari's vision of a future city sharing these modern characteristics of a scoring system; to be fully automated and driven by machine learning. In this case, if the future city of control society

gets automated – individuals living in that society will get auto-regulated. It could mean that if one possibility is not open – according to the evaluation of the *E-card* – a new adequate opportunity would open up and be offered immediately – most likely one that suits the individual better. These adjustments would mean that the future life trajectory of a individual would constantly alter. However, if there are enough possibilities to offer – as there are in many neoliberal regimes – control society would not feel like real control at all; it would feel like exercising one's freedom through the diverse possibilities that suit them the most. Nobody would force the individual to do something- the automated scoring system would learn from past data and open up new, adequate possibilities. In some sense, this is how upper education systems already operate today, albeit not in a digitized, automated fashion; if one has good SAT scores, he can enroll in the university of their choice. With lower SAT scores, they will be offered to less prestigious university positions or no position at all. With an automated control society, the areas of scoring practices could extend to all aspects of life –and with enough possibilities to offer, even inside an extensive network of calculated decisions, no one could feel genuinely caged in the system.

Of course, one would argue that in order to exercise complete freedom and autonomy, the future must always stay fully open and unpredictable. However, in the age of Big Data –when everything – even future possibilities – becomes increasingly measurable – perhaps the illusion of freedom is the second-best thing to have. The other question then also stands; how can one break down the chains around him if they are invisible? Han's description of a *smart power* fits perfectly here. A force that *relies on violence* can never reach its utmost potential. '*The greater the power is, the more quietly it works.*' (Han, 2017: 14). This modern power – driven by machine learning and automated algorithms – manages to stay invisible while getting more intelligent and more powerful as society gives up its agency in many fields of decision-making (since these techniques are being deployed in more and more areas of life). And, of course, the flow of digital information (*training data*) serves as the fuel for this power to develop further. In this case, members of the population are influenced by the mechanics of both feudalism (sovereign rule) and modern surveillance capitalism: they are both the *subjects* to this power and the '*raw material*' that is creating it.

3.4. Concluding thoughts

This paper – building on Foucault's, Deleuze's, Han's, and Zuboff's theories – attempted to explore various aspects of control that manifest throughout the fabrics of societies. It discussed obvious examples of it, like the punishments used under the sovereign rule (*public torture and execution*) and less apparent ones, like in the case of an *entertainment addict* student who, even during class, could not resist reconnecting to the *matrix*. It also elaborated on externally imposed control (schedules and regulations set in workplaces and barracks in Foucault's *disciplinary society*) and discussed instances of internal (self)-control (the *achievement subject* who willingly exploits himself through the journey of

self-optimization). In the last section, the paper focused on control stemming from the commercial sector (consciously manufactured online advertisements along with the subtle behavior modification techniques applied to steer consumers towards the right direction), and on control coming from the public sector, like the assessment of recidivism and bail sentence based on psychological profile scores in criminal procedures.

Exploring control has always been an intriguing endeavor, and one could argue the most exciting chapter is still ahead. Regardless of how control was formulated in the past, one element was always constant: humans were represented in both sides of the *sword*: they exercised control and were subjected to it. In the 21st century, for the first time in human history, this might not be the case anymore.

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