

Digital technologies, big data and ideological (neoliberal) fantasies: threats to democratic efforts in education?

Tecnologías digitales, big data y fantasías ideológicas (neoliberales): ¿amenazas a los esfuerzos democráticos en educación?

Tecnologias digitais, big data e fantasias ideológicas (neoliberais): ameaças aos esforços democráticos na educação?

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ARTICLE



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Abstract

Many fantasies hold that digitalisation can construct democratic spaces for discussing experiences about educational matters. However, based on thinkers such as Rancière, Žižek and Agamben, it is argued that increased big data production in education through digitalisation does not support such democratic spaces. Instead, it mirrors a neoliberal fantasy and a form of instrumentarian power that distributes the sensible in mechanical (numerical) ways. Democracy in education is at risk of being dismantled by perceptions that democratic conversations and struggles are unproductive and do not contribute to the desired numerical visualization of learning results, achievements and competitiveness of students.

KEYWORDS

Distribution of the sensible, Instrumentarian power, Numerical imagination, Digital pictures.

Resumen

Muchas fantasías sostienen que la digitalización puede llegar a construir espacios democráticos con el objetivo de discutir experiencias sobre asuntos educativos. Sin embargo, pensadores como Rancière, Žižek y Agamben, argumentan que el aumento de la producción de *big data* en la educación a través de la digitalización no es compatible con los espacios democráticos. En cambio, refleja una fantasía neoliberal y una forma de poder instrumental que distribuye lo sensible de manera mecánica (numérica). La democracia en la educación corre el riesgo de ser desmantelada por la percepción de que las conversaciones y las luchas democráticas son improductivas y no contribuyen a la visualización numérica deseada por los resultados de aprendizaje, los logros y la competitividad de los estudiantes.

PALABRAS CLAVE

Distribución de lo sensible, Poder instrumental, Imaginación numérica, Imágenes digitales.

Resumo

Muitas fantasias sustentam que a digitalização pode construir espaços democráticos com o objetivo de discutir experiências sobre temas educacionais. No entanto, pensadores como Rancière, Žižek e Agamben argumentam que o aumento da produção de big data na educação por meio da digitalização não é compatível com os espaços democráticos. Em vez disso, reflete uma fantasia neoliberal e uma forma de poder

instrumental que distribui mecanicamente (numericamente) o sensível. A democracia na educação corre o risco de ser desmantelada pela percepção de que as conversas e as lutas democráticas são improdutivas e não contribuem para a visualização numérica desejada pelos resultados de aprendizagem, as realizações e a competitividade dos estudantes.

PALAVRAS-CHAVE

Distribuição do sensível, Poder instrumental, Imaginação numérica, Imagens digitais.

1. INTRODUCTION

Problematizing digitalisation is a 'risky business' as many fantasies are attached to the phenomenon. Digital technologies seem to be both inevitable and necessary if we are to be able to cope with the destined future. However, what future is that? We, as human beings, play vital parts in the future through the ideas, beliefs and convictions in which we invest. That said, the future is not a coming event. It has already arrived, so to speak, not in a finished form but in an unfinished form. Critically engaging questions about the future requires reflecting on what influenced them in the past and the present and how ideological fantasies about the future also influence them. To problematize our contemporary modus operandi, (what we do to cope with the future), we must focus on how the past, present and future are always intertwined so that no final endings or beginnings exist.

We must bear in mind that the future is being used to support many investments made to digitalise modern societies. Powerful forces such as politicians and private corporations exploit altruistic arguments to legitimise digital investments. The arguments sound like the following.

Digitalisation has the potential to strengthen future democracy by allowing people to connect, communicate and share information with each other. Digitalisation can be used to install order and harmony in a disorderly, inharmonious world. Digitisation can bring more transparency to matters such as what goes on in state institutions, so nothing is hidden from politicians and the public.

It is difficult to deny that digital media such as Facebook, YouTube and Twitter can facilitate political conversations from which democratic agoras (public spaces) can emerge and lead to live action. Consequently, such media can be (and have been) used to mobilise demonstrations such as Occupy Wall Street, a protest against economic inequality and the power of financial institutions. Digital media can play vital roles in political changes, as we have seen in the Middle East (e.g. the Arab Spring), and they can support non-profit organizations that advocate democracy, human rights and enlightenment. Here, we can mention the organization Ideas Beyond Borders, whose purpose is to empower individuals oppressed by totalitarian regimes by giving them access to, for example, online information, knowledge and perspectives that can support critical thinking,

engagement and democracy (see <https://www.ideasbeyondborders.org>).

However, we must not forget that digital media regulate and structure the conversations that can take place in such agoras, thereby possibly (re)producing different inclusion and exclusion mechanisms. For example, if we do or say something that does not meet specific standards, norms or values, we might be put in jail. That is, blocked and excluded from participation by Facebook. Our freedom to communicate with others as democratic citizens thus “is strictly prescribed by the coordinates of the existing system” (Žižek, 2019, p. 4) and the underlying logic that frames and structures this system. Digital media are not only public spaces or agoras in which we, as free human beings, can communicate in democratic ways. Digital media are also spaces in which big data and information about others and us are collected and produced. Big data, though, is a contested term that has many meanings and can be produced and used in many ways. As Williamson states, it is “simultaneously technical and social” and has “the power to change how and what we know about society, the people and institutions that occupy it” (Williamson, 2017, p. xi). Furthermore, myths, ideologies and fantasies of objectivity are attached to big data and are being used for political purposes (Jurgenon, 2014).

Collection of big data about our behavioural activities sustains what Zuboff (2019) calls instrumental power. This form of power mirrors an ideological fantasy (Žižek, 2008a) that human behaviour can be engineered and predicted by scientifically generated data, numbers and statistics. This fantasy supports a utopian desire for societal safety, harmony and order. Moreover, it sets aside subjective idiosyncrasies and transcends the uniqueness of particular contexts. It thus installs automated decision-making, freeing us from the burden

of decision-making. That is, from the tyranny of choices that can “increase our anxiety and feeling of inadequacy” (Salecl, 2010, p. 15). We presume that by relying on big data and digital technologies, we can avoid such burdens and can be guaranteed certain outcomes. In other words, there is a strong belief that we can use big data to figure out things (e.g. how to learn in the most effective way) and produce risk management strategies to protect ourselves from unpleasant surprises such as “our absence of completeness”. However, many factors (e.g. ethics, mind-sets and values) cannot be studied and understood by relying only on big data and the patterns and correlations that seem to exist between different sets of data (Eynon, 2013; Herzogenrath-Amelung, 2013).

Big data, though, remains widely used. It is closely connected to the well-described neoliberal agenda in which comparisons, transparency and competition are seen as means to make humans, public institutions and private organizations more efficient and productive (Harvey, 2007; Mau, 2019). Brown (2015) stressed that a particular form of reason configures political and democratic matters in economic (measurable and data-based) terms. Brown’s (2015) basic argument is not that the market logic corrupts democracy; instead, she argued that neoliberalism converts political and democratic matters into economic and numeric ones, as Clarke and Phelan (2017), Mau (2019), Rose (1999) and others have also argued. Following Brown’s (2015) line of thought, one of the main threats to democracy is the powerful belief that competition is the driving force within almost all spheres of society, including education. This belief installs a particular logic in which we, as human beings, are understood and must understand ourselves as ‘firms’. This firm logic encourages us to focus on our competitiveness and the value of our capital in the eyes of others. To optimize our positions in the (labor)

market, we constantly ask certain questions: How do I look in others' eyes? How do they see me? What can I do to be seen and heard in ways that increase my capital value? Learning seems to be key here, particularly, instrumental forms of learning that politicians and learning experts can govern, control and measure (Biesta, 2010; Lewis, 2013; Simons & Masschelein, 2007).

Digital surveillance technologies are used in education, often uncritically, as learning management systems to produce, monitor and present big data on, for example, students' behaviour, well-being (e.g. moods, thoughts and feelings) and learning results. Politicians and the public rely on such data to judge whether schools, teachers and students meet learning expectations and objectives. More than ever, digital technologies govern learning processes in schools and produce huge amounts of data that inform whether learning takes place in the most effectful and productive way.

My ambition in this article is to problematize the phenomena of digital technologies and big data and their impacts on democracy in education. What ideological fantasies are they formed by, and which do they contribute to forming? How do they regulate the distribution of the sensible, and what are the consequences for democracy? I analyse, discuss and reflect on these questions, drawing on Jacques Rancière's work on aesthetics and politics, Slavoj Žižek's work on ideological fantasies and Giorgio Agamben's work on what it means to be a special being and seen as a pure singularity.

Against this background and through examples from different educational contexts, I illustrate how a digitally based instrumental form of power supported by neoliberal ideological fantasies contributes to erasing time and space for democratic matters in education. I do not aim to argue against digital technologies. Instead, I argue that we need to free ourselves from the

ways in which digital technologies are used to monitor, regulate and produce numerical data about students' (learning) behaviour, progress and results in school. We, therefore, must set such technologies free from their proper uses and places in education and discuss whether they should and can be used otherwise (Agamben, 2009; Lewis & Alirezabeigi, 2018). If this is to be possible, however, we must be aware of the ways in which digital technologies regulate the distribution of the sensible, as elaborated in the next section.

2. IDEOLOGICAL FANTASIES AND THE DISTRIBUTION OF THE SENSIBLE

According to Rancière (2004, p. 13), politics and democracy revolve "around what is seen and what can be said about it, around who has the ability to see and the talent to speak, around the properties of spaces and the possibilities of time". Put differently, a certain form of the aesthetic-political distribution of the sensible installs a regulative (aesthetic) regime that historically determines a priori what is judged as (dis)orderly, what something or someone is described and defined as and what is (in)visible (not) sayable and (not)audible (Rancière, 2004). Within such a regime, "the partition of the sensible is dividing-up of the world". For example, the division of people and political matters within that world (Rancière, 2010, p. 36). In other words, a regime has consequences for the ways in which our aesthetic sensibilities are framed and the ways in which we engage in various (e.g. political and educational) matters in the world (Sjöholm, 2015). In an education dominated by a digital-data and number regime, as Taubman (2009, p. 52) described it, it becomes difficult to employ vocabularies and concepts that transcend the regime. Consequently, to be deemed legitimate, idiosyncratic

and concrete, qualitative and sensible experiences must be translated into and expressed by abstract and quantifiable numbers. What cannot be quantified does not count, and only what can be counted has quality. The more we are convinced that others take such a mechanical and numerical starting point seriously, the more we too take it seriously, and vice versa (Mau, 2019, p. 49).

According to Žižek (2008b), a given regime is ideological par excellence. An ideology relies on a phantasmatic background. Indeed, “the fundamental level of ideology, however, is not that of an illusion masking the real state of things but that of an (unconscious) fantasy structuring our social reality itself” (Žižek, 2008b, p. 30). For example, an ideological fantasy supports a common belief that meaning exists in a ‘meaningless world’ (we only have to find it). In other words, a fantasy provides us an “illusion which structures our effective and real social relations. Thereby, masks some insupportable, real, impossible kernel (conceptualized by Ernesto Laclau and Chantal Mouffe as ‘antagonism’: a traumatic social division which cannot be symbolized)” (Žižek, 2008b, p. 45). An ideological fantasy makes us believe and act as if a ‘natural’ logic lies behind the structure of social positions and roles within a certain social and symbolic order, although we know that is not the case.

Žižek (2009a) gives us a concrete example of how an ideological fantasy often paradoxically works in our digitalized societies. On one hand, the state and big companies control and penetrate our lives in undemocratic ways, while on the other hand, we find state regulation necessary “to maintain the very autonomy it is supposed to endanger” (Žižek, 2009a, p. 32). In this case, the fantasy conceals this paradox, “yet at the same time it creates what it purports to conceal, its ‘repressed point of reference’” (Žižek, 2008a, p. 6).

I further argue that such an ideological fantasy regulates and contributes to the ways in which the sensible is divided. And a particular division of the sensible can explain why we see and hear persons or things as reasonable or noisy, why we believe there is no opposition or social antagonism between freedom and control (as mentioned) and why we act against our better knowledge that state regulation, control and surveillance that suppress our freedom cannot simultaneously support autonomy and democracy. In other words, we act as if we do not know it, even though we know it. Moreover, fantasy structures our desire. However, do we even know that we desire security, control and regulation along with freedom, autonomy and non-regulation? That is what a given fantasy tells us that we must desire such opposite matters that are seemingly illogical on one level but quite logical on another if we want to live in a democratic society. The point is that ideological fantasies can mask absurd arguments, so we find them reasonable and act based on them as if we really believe in them.

To problematize such a paradoxical fantasy and how it divides the sensible, one must try to observe oneself, others and the world from another point of view. To avoid any misunderstandings, let me state here that we can never grasp reality itself by shifting to a more ‘appropriate perspective’. Every perspective is “always-already framed, seen through an invisible frame” (Žižek, 2009b, p. 29). Something always eludes a given perspective and perhaps can be grasped by another perspective, which in turn produces a void that other perspectives must fill, and so on (Žižek, 2009b). Žižek (2014) provides an illustrative example of what it means to problematize a given fantasy by observing a situation from another perspective:

A loss of the phantasmatic frame is often experienced in the midst of intense sexual activity—one is passiona-

tely engaged in the act when, all of a sudden, one as it were losing contact, disengages, begins to observe oneself from outside and becomes aware of the mechanistic nonsense of one's repetitive movements. In such moments, the phantasmatic frame which sustained the intensity of enjoyment disintegrates, and we are confronted with the ludicrous real of copulation. (Žižek, 2014, p. 28)

To problematize such a given phantasmatic frame is difficult. When we begin to disengage ourselves from the activity or game, we might experience a loss of enjoyment as we dissociate and exclude ourselves by questioning the “mechanistic nonsense” in which we are participating. That might be the reason why we play the digital game even if we know that by doing so, we might support anti-democratic tendencies. This playing might explain why the unequal distribution of roles and positions within a particular classification and categorization regime can be sustained and avoid criticism.

Agamben (2007, p. 59) puts it thus: “The transformation of the species into a principle of identity and classification is the original sin of our culture, its implacable apparatus”. It seems impossible to be an unrepresentable or indistinct, special being free from any determination. Stated differently, it is impossible to participate in communities “without affirming an identity” (Agamben, 1993, p. 86). It is a problem if we are never given the possibility to emancipate ourselves from the classifications and categorizations that ascribe to us certain identities. Moreover, the lack of such possibilities can maintain unequal positions from which we cannot free ourselves.

For example, typifying students is a common practice in the educational field. However, if students never have the possibility to remain “indistinct and unrepresentable and free of any

determination to be or not to be set in advance” (Lewis, 2013, p. 41), they cannot be free in a democratic sense. Our ability to see and hear students as special beings—that is, as “more than the sum of their abstracts” (de la Durantaye, 2009, p. 162)—is a basic condition for supporting democratic spaces. If only the few and not all can play different roles and occupy different positions, and this situation can never be reversed (but is irreversible), then time and space for democracy vanish (Rüsselbæk Hansen & Toft, 2020).

Where then are we left? What democratic possibilities exist in a time when ever more things and thus more aspects of our lives are turned into machine-readable data and numbers? What does it mean “to be recognized, if the object of recognition is not a person but a numerical datum”? (Agamben, 2011, p. 53) Before turning to these questions, we need to take a closer look at the contemporary form of instrumentarian power that supports and is supported by the ideological fantasy that produces a contemporary desire for digital technologies and big data.

3. NEOLIBERAL LOGIC, COMPARISON AND OTHERS' EYES

Today, a mix of state, public and market fields structure the social in complex ways. How this looks is difficult to observe as these fields do not have clear borders between them. Although such borders have never been clear, it still seems reasonable to claim that state politics had a different character in the past than the present. Think, for instance, of Adam Smith's ideological fantasy of the invisible hand assumed to regulate the market and to automatically achieve equilibrium without any state or government interference. Today, few seem to believe in such an invisible form of regulation.

Instead, it is believed that a state-driven, visible hand is needed if we are to learn to act like individuals (not collectives) that are driven to compare, compete and measure ourselves against each other in the market. We seem to need to learn to accept that unreasonable “demands, setbacks, humiliations and failures have to be chalked up to oneself—and we then just have to wait cheerfully for new opportunities” (Nachtwey, 2017, p. 134). Such a logic stigmatizes and disciplines losers and places winners in positions they are so afraid to lose that they fight even harder than before.

Despite the dysfunctionalities this logic obviously produces, a strong belief exists that the market is a special realm in which ‘miracles’ happen. Rhetorically asked: Who wants to say no to miracles? Political initiatives are developed to install what Brown calls a neoliberal governing rationality (a form of state-initiated market logic) into spheres traditionally based on other rationalities, with the following consequences:

both persons and states are construed on the model of the contemporary firm, both persons and states are expected to comport themselves in ways that maximize their capital value in the present and enhance their future value, and both persons and states do so through practices of entrepreneurialism, self-investment, and/or attracting investors. (Brown, 2015, p. 22)

Our competitiveness becomes the overall issue, and we are strictly commodified as homo economicus and homo calculus who can calculate our own (economic) value and that of others. On one hand, we are liberated to enhance our “human capital, emancipated from all concerns with and regulation by the social” (Brown, 2015, p. 108). In a Marxian sense, we are free from ownership and have the freedom to sell our labor power. On the other hand, we are on our own due to the decline of collective solidarity.

We possess (pseudo) freedom from all constraints, except the rule of the market. We are encouraged not to act politically but to focus on our individual human capital and the ways in which others can invest in it. I engage with others, but not politically; others are only interesting in so far as they can make me look good in the (job) market. Not every looks count; only the ‘right’ symbolic looks count. Consequently, I must strive to achieve looks derived from valuable symbolic positions. To paraphrase Kant, others are treated not as ends in themselves but instead as (symbolic) means to strengthen my ‘firmability’.

Typical ways of judging the value of others’ capital and our own include data gathering, measuring and comparing. Using numbers allows us to rate and create tables and graphs to make complex (e.g. learning) matters simple and visible. We must not forget, however, that numbers isolate information from their particular contexts and are blind to diversity:

Numbers translate the idiosyncratic, the individual and the unique into universal and compatible codes which effectively strip away all the specifics of the case and, by that very act, make links across temporal and spatial boundaries. (Mau, 2019, p. 34)

The clarity and certainty attached to numbers are nothing more than a fiction supported by an ideological fantasy. Many know that but still act as if it is not the case.

The reason for our ‘number-fetish’ might be that something sublime emerges in numbers and the many assumptions attached to them. First, they are the language of ‘real evidence-based science’. Second, they are magical and mystical because they can simplify complex matters. Third, they come in many disguises such as lucky vs. unlucky, good vs. bad, and value laden vs. neutral. Fourth, they can be commu-

nicated by and to almost everyone. Fifth, they can transcend cultural borders and cover up social antagonisms. Sixth, they can tell us about our happiness, intelligence and learning achievements and potential. Thus, we are told by the so-called experts.

But why do we listen to such nonsense? Why do we not act as thoughtful human beings and problematize the ideological fantasy that tells us that numbers possess sublimity? Why do we not mix poison into such a fantasy “in order to increase its degree of toxicity to the limit of what can be survived” (Steinweg, 2017, p. 66)? An answer to this question might be that thinking, despite its advantages, is not always considered to be worth the time spent on it. Thinking is not always pleasant and sometimes is the opposite. Thinking can raise radical doubts and open up unpleasant views on the reality: “Oh, I did not know that!” “Looking at it in this way makes me sad!” “I don’t want to know this, and instead, I prefer to hold on to my pleasant belief!” Moreover, thinking does not guarantee security and requires a break from our ordinary conceptions of reality. Thinking means that one loses oneself and gets “lost again and again” (Steinweg, 2017, p. 2). Consequently, we can be encouraged to not think or poison an ideological fantasy with ‘dangerous’ critical thoughts. Another reason to avoid thinking is that fantasies do thinking for us. Often, they set us free from the burden to think for ourselves. Is that not what phantasmatic numbers do? Is that not the reason why we stick to them and act as if we believe in them even though we know that doing so is problematic?

4. INSTRUMENTARIAN POWER AND ITS EFFECTS

As argued, great interest lies in digitally produced numerical data about each and every one of us. This interest arises from a form of

instrumentarian power that seeks products (e.g. digital technologies) designed to “forecast what we will feel, think and do: now, soon and later” (Zuboff, 2019, p. 96). This form of power is inspired by ideas of radical behaviorism and the promise of behavioural engineering and regulation. Radical behaviorism reduces human experiences to measurable, observable behaviors and has no interest in the meanings of experiences such as pain, suffering and joy. Put differently, our mind, soul and (un)consciousness are not of great interest as they cannot be observed, measured or calculated.

Instead, “instrumentarian power aims for a condition of certainty without terror in the form of ‘guaranteed outcomes’ [...]. It severs our insides from our outsides, our subjectivity and interiority from our observable actions” (Zuboff, 2019, p. 378). Such a regime of power replaces social trust, meaning and understanding with a focus on digitalisation, mathematical calculations and predictions. Human experiences are dispossessed not only by abstractions of concrete experiences but also by the idea that human experiences are raw material for datafication and numerical descriptions (Zuboff, 2019, p. 233–234).

With this short introduction to instrumentarian power, we can see its similarities to the contemporary form of (neoliberal) governmentality that overturns the traditional hierarchical relation between causes and effects. The reason for this is that “governing the causes is difficult and expensive, [so] it is safer and more useful to try to govern the effects” (Agamben, 2014, p. 2). In the focus on effects, not causes, a certain ideological fantasy is at stake: a fantasy oriented towards “what” questions (e.g. What works? What can be measured?) instead of “why” questions (e.g. Why does it work? Why measure it in the first place?). Asking “what” questions more than other types of questions affects the distri-

bution of the sensible, including in education, as examined in the next section.

5. DIGITAL TECHNOLOGIES AND A NUMERICAL IMAGINATION IN EDUCATION

Digitalisation and big data in education, if we follow Han's (2017b, p. 58) argumentation, "free knowledge from subjective arbitrariness". In other words, we will not need to rely on our own judgements, perspectives and practical experiences as big data is assumed to be able to tell us what troubles students, what they have learned so far and what one can expect of those with particular habitus and socio-economic backgrounds. In principle, all we have to do is look at and listen to data on students. Using data in this way eliminates the need for critical thinking as it "empties of sense the language itself" (Han, 2017b, p. 59). Consider this example from an ethnographic study on an ordinary English school class. As we are told, at the beginning of a typical day, the teacher asks the students if they have met their individual "behavior-for-learning target last week" (Livingstone, 2014, p. 5). Then, we are told that:

Teachers entered data live into the computer or recorded it on the white board and entered it later. Thus, at the start and end of each day, the students' data could be read out to the class, making progress or failure visible, and inviting constant reflection on their learning trajectory. Then, behind the scenes, both attainment and behavior are measured, standardized and made available for manipulation. Since class time was heavily occupied in data collection, and since a panopticon-like punishment room awaited those whose record showed too many bad marks, we initially thought the system

would be hugely unpopular with the students. But we were wrong, as both youth and parents explained to us. (Livingstone, 2014, p. 6)

The example illustrates how a particular distribution of the sensible takes place. The teacher describes what she sees and hears as important data about each student's learning, which are presented to the class "at the start and end of each day". The students are encouraged to focus on their successes, failures and learning progress. As we can see in the field notes, the digital technology (or system) is not unpopular with the students. To the contrary, the students find the standardized system to be fair and helpful as it can tell them whether they are on the right learning track. They believe in the system as it indicates that the school has control over their learning. It is also mentioned that the student behaviour is measured, and the data are "made available for manipulation... behind the scenes". The aim is to control future forms of behaviour and punish those students whose records show "too many bad marks". However, what does it do to the democratic space in the classroom when everything that students say and do is recorded and put into a computer as "pure reliable data"? Under such conditions, are students willing to ask critical questions to the social order, norms and values when the teacher and others may judge behind the scenes such questioning as disorderly behaviour and a threat to the school order?

Recording what students say and do in class can be seen as an innocuous, helpful approach, but what makes sense in one concrete context does not necessarily makes sense in another. Therefore, it is not without consequences to try to understand and govern blurry issues from a distance, far from particular contexts. Transforming blurry concrete matters into clear abstract data supports a form of an "oxymoronic numeric imagination", which can be defined as

the predisposition to seek out certain kinds of quantitative explanations that “have little respect for complexity of the actual human world” (Morozov, 2013, p. 260). Instead, the world is assumed to reveal itself through a numerical imagination. Who has the symbolic positions to do the imaginary work is rarely questioned? It seems to happen by itself; the numbers do the job for us. However, that is not the case. As argued, numerical forms of imagination are difficult to resist because they are supported by a powerful phantasmatic frame. When we rely on a numerical imagination, the social is distributed in linear, factual and quantitative ways; displacing other forms of imagination that could transcend such distributions and provide opportunities to imagine, sense and think about persons and things in non-mechanical and numerical ways (Morozov, 2013, p. 260).

Another example we must consider comes from an article in *The Guardian*, “Under digital Surveillance: How American Schools Spy on Millions of Kids”, published on 22 October 2019. This article illustrates how digital technologies are used in schools in the United States to monitor what students write in their emails, documents and chat messages. If something is considered to be risky and indicates (or is interpreted to indicate) self-harm, bullying or other suspicious matters, schools respond immediately as they are under pressure from politicians and parents to keep students safe and to protect them from themselves, others and the ‘dangerous’ world, if needed.

In the same article, it is argued that monitoring students is important because it prepares them and gives them a “training ground” to learn what monitoring means and what they must be aware of when they are being monitored. They must learn to be monitored in school, we are told, as they can expect to be monitored in their future jobs. Why must schools teach students to accept being monitored? Instead of

accepting this premise, would it not be a democratic gesture to prepare students to fight such forms of totalitarianism that are threats to a democratic society in which they, as free human beings, can think, speak and act politically without risk of sanctions or punishments?

6. DIGITAL PICTURES AND THE MESSY REALITY

Today, we can find many examples of how digitalisation is used to make things more understandable by drawing clear pictures of complex matters. However, we must not forget the lack of understanding that accompanies digitalisation. To understand what is said, it is not enough to focus on what is actually being said. The positions from which we speak and the ways in which things are said (e.g. ironically or mirroring contextual norms and values) must always be considered. Unfortunately, such aspects are rarely taken into account when digitalizing things.

Consider, for example, the digital platform *Aula* introduced in Danish schools in 2019. The purpose of this platform is to collect data about educational matters and to communicate the data to parents and politicians. The data are stored in the Data Warehouse created by the Danish Ministry of Education in 2014. In this digital warehouse, users can shop as customers and find “pre-defined reports and interactive maps, which compare and benchmark schools against municipal and national averages (providing numerical data on, for example, well-being, final exam grades and students’ absenteeism)” (Ratner & Rupert, 2019, p. 8).

The questions are what such data shopping does and what pictures of schools, teachers and students we are ‘sold’ and ‘told’ in the Data Warehouse. They are abstract, numerical imaginative pictures that do not say much about concrete messy reality. That is, what actually

goes on in different school contexts. Seeking abstract numerical pictures indicates a paradox as there is a strong (political) focus on concrete educational matters such as whether students follow their individual learning plans, have the right learning attitudes, are willing to learn in the recommended ways and have the sufficient desire to learn. The form of knowledge that seems to matter to politicians is based on monitoring and can be expressed in numerical and data-based ways. Paradoxically, there does not seem to be much interest in other forms of knowledge that might generate more precise insights into the concrete messy educational reality. Many politicians seem to wish to not approach it but instead to be able to inspect and control it from a safe distance. Confronted with the imperfect school realities, for example, we witness a contemporary political tendency to quantify such experiences when qualitative experiences are reported. That is, translate them into numerical pictures. Thus, they seem more orderly and not as horrifying.

Such translation mirrors what is called the Paris syndrome. As Han argues (2017a), this syndrome “refers to an acute psychic disturbance that affects mainly Japanese tourists” who experience fear, anxiety, dizziness and racing hearts when they encounter the “marked difference between the idealized image that travelers have beforehand and the reality of the city, which fail to measure up”. This experience leads to a hysterical “tendency to take photos” which “represents an unconscious defense reaction with the aim of banishing the terrifying truth through images” (Han, 2017a, p. 28). Isn’t it a similar trend that we can see in society in general and in education in particular when more educational matters are translated into “numerical images” to make them easier to handle and enjoy? In mechanical and phantasmatic ways, the problem is that numerical pictures make social antagonisms invisible and, consequently, we lose

our sensibility for the dirty, imperfect, complex (educational) reality.

7. CONCLUSION

When we rely on and use digital technologies to produce numerical data and pictures about ourselves, others and (educational) reality, it has consequences in the distribution of the sensible (Rancière, 2004). We must be aware that technologies always divide the sensible, influencing the questions we are (not) encouraged to ask and what is (not) worth spending time on. Many of us use numerical data to inform decision making instead of basing our decisions on democratic discussions. However, if the decisions already favor and are grounded in numerical data that cannot be questioned and problematized there is nothing more to say or discuss. However, big data and digital technologies can inform, enrich and open up for democratic discussions. Especially, if they are used in ways that can transcend our immediate horizons of experience and let us see what we might not have been able to see before. And if they are used in ways that support critical thinking instead of controlling and monitoring such forms of thinking in education (Thompson & Sellar, 2018).

Monitoring by digital technologies takes place not only in totalitarian states but also in democratic western states. In the educational field, digital technologies are used to generate big data, for example, on students’ learning tracks and results. The data can be used to trace “good” and “bad” learning patterns. That is, which patterns must be maintained or broken through regulations, sanctions and punishments. However, is this what education should be about?

If we want to support democratic experiences, conversations and struggles in education and

thereby the freedom to think, speak and act in ways not mechanically regulated by numbers, we must question the distribution of the sensible in education (Rüsselbæk Hansen & Phelan, 2019). We must:

challenge the opposition between viewing and acting; when we understand that the self-evident facts that structure the relations between saying, seeing and doing themselves belong to the structure of domination and subjection. It begins when we understand that viewing is also an action that confirms or transforms this distribution of positions. (Rancière 2009, p. 13)

Therefore, it is of vital importance that we avoid, for example, capturing students through digital technologies and reducing them to quantitative forms of data that deny their ontological indeterminacy (Agamben, 1993). We should avoid transforming their lives into a “learning game” that supports “willful self-control and reinvention” and makes it difficult to be seen by others as more than numerical data. That is, as special and unique human beings (Lewis, 2013, p. 9).

In addition, we must adopt a strategy that can liberate us from “that which remains captured and separated by means of apparatuses”, in this case, digital technologies (Agamben, 2009, p. 17). By this, I mean that we must try to liberate ourselves from the seductive ideological frames that make us believe (uncritical and without doubt) in instrumental technologies even though we know that they might not support democracy. If we want to support democracy in education we need our freedom to imagine things otherwise (including ourselves and others), our freedom to question things without condition (Larsen, 2019) and our freedom to profane things (to make them inoperative) by releasing them from their normal uses (Agamben, 1993). If we are free to use digital technologies and big data in non-instrumental and mechanical ways and to *play* with them in new/other ways, we may use them to construct different forms of democratic spaces that we should not be without (Lewis & Alirezabeigi, 2018).

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