PATHS FOR PROTECTING THE DIGNITY OF THE HUMAN PERSON IN THE DATA SOCIETY[1]

CAMINHOS PARA A PROTEÇÃO DA DIGNIDADE DA PESSOA HUMANA NA SOCIEDADE DE DADOS

DOI: 10.19135/revista.consinter.00017.02
Recebido/Received 17/03/2023 – Aprovado/Approved 30/05/2023

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Abstract

The present article aims to analyze the legal protection of human dignity within data-driven societies. The main objective is to address how to preserve human dignity in contexts in which human interactions are increasingly permeated by new, big data-driven technologies and by the general digital environment. This research gets its relevance from the assimilation of new patterns of social interaction and the legal protections that need to be constructed in this new social context. This article employed a logical-deductive methodology, based on an analysis of the relevant bibliography, focused on the central topic involving data-driven societies, the digital environment, and the defense of human dignity.

Keywords: *Data-driven society, big data, artificial intelligence, human dignity.*

Contents: *Introduction; 1) Technological revolution; 2) Notes on the data-driven society; 3) Notes on human dignity; 4) Fundamentals regarding human dignity in the data-driven society; 4.1) A proposal to create a healthy artificial intelligence society. 4.2) Information technology access; 4.3) Humans + machines = new labor markets; 4.4) Digital human rights; 4.5) Individual and collective investment in people; 4.6) Law as a barrier against exploitation in data-driven societies; Final considerations; References.*

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INTRODUCTION

Big data and artificial intelligence devices are increasingly permeating human activities. At any given moment, billions of people are directly or indirectly connected to digital devices, experiencing their diverse impacts.

These technological advances have created important changes to our civilizational and cultural environment. The notion of human dignity and human existence itself has been altered in recent years due to these new developments.

The technological advances related to data, virtual connections, communications, and automation, among other innovations, are moving forward rapidly. This evolution creates socioeconomic and legal challenges for our societies.

This technological race is not slowing down any time soon, so for this reason it is imperative that we define the bases in which we can postulate the defense of human dignity in this new context.

This essay is an attempt to highlight the axiological foundations which will allow us to analyze how to safeguard human dignity in the current scenario marked by the so-called data-driven society.

We will seek to understand the role of law in our data-driven society, as a tool to safeguard human dignity.

We employed logical-deductive methodologies in the construction of this article. In particular, we analyzed the relevant bibliography in relation to the central topic involving data-driven societies, the digital environment, and the defense of human dignity.

1 THE TECNOLOGICAL REVOLUTION

The technological tools used by humans have been evolving ever more rapidly, especially over the last few decades. The new technological matrix in use is based on NBICs.

The “N” represents nanotechnologies, which are present in mobile electronic devices. They increase their efficiency and data processing capacity without a need to increase the physical size of the devices. “B” represents biotechnologies, especially those related to the sequencing of the human genome. “I” signifies information technologies, such as those that drive big data and the internet of things. Computerization refers to automation through information, instead of a handmade or mechanical structure. Big data technologies are linked to the large-scale search capacity, storage, processing, and generation of new data, in either its structured or unstructured form. The internet of things (IoT) is related to the connection of objects though proprietary networks. Finally, the letter C stands for cognitivism, represented by artificial intelligence (AI), which is seen as the core of the new technological foundation.

Out of the factors that make up the NBIC revolution, in this paper, we will focus our analysis on the technologies of big data and artificial intelligence.

The Academy of Science and Engineering de Harvard – ASE International Conference defined big data as "large, diverse, complex, longitudinal and/or distributed datasets, generated from instruments, sensors, internet transactions, email, video, clickboxes and/or digital sources available today and in the future"[4].

This term is also defined by Viktor Mayer-Schonberger:

> *[...] big data refers to things that can be done on a large scale, which cannot be done on a smaller scale, that are done in order to extract new ideas or create new types of value. In doing this, they end up changing markets, organizations, and the relationship between citizens and governments, among other things.*[5]

The concept of big data was related to the"3V" proposal, which was later transformed into "5V." The "V" corresponds to volume (related to the large amount of data analyzed and produced); variety (possibility of searching and interacting with structured and unstructured data from different databases); speed (the agility of data processing); veracity (which concerns the analysis of the reliability of the data obtained and generated, in relation to assumed premises); and value (which corresponds to the usefulness of the data and information generated).

In this way, big data refers to the capacity of collecting, storing, and analyzing data on a large scale from diverse databases, with speed and agility. The processing starts from transparent, valid, and acceptable premises in order to produce useful information that can be used for specific functions.

Big data technologies have the capacity to produce a large quantity of information in a short amount of time and space, through the intensive analysis of data. Furthermore, the development of the internet and the evolution of communication technologies (such as cellphones, nanotechnology, and social networks) have led to profound changes in the way human interactions occur.

Big data Technologies do not act on their own. They need a type of "intelligence" to coordinate their actions, through setting parameters for the searching of and processing of data.

Artificial intelligence (AI) refers to research that was developed through the study of cybernetics, automation theory, information and communication theories, and computer engineering. In 1950, the English mathematician and computer scientist Alan Turing published a groundbreaking study, intitled *Computing Machines and Intelligence.*[6]

In his article, Turing proposes a method for verifying the intelligence of machines. In his own words, Turing affirms: "*I propose to investigate the question*

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4 ERMOLAYEV V., AKERKAR R., TERZIYAN V., COCHEZ M. *Towards Evolving knowledge Ecosystems for Big Data Understading*. In. AKERKAR, Rajendra. Big Data Compunting. Sognal, Norway: CRC, 2014, p. 1.

5 MAYER-SCHONBERGER, Viktor. *Big data: a Revolution that Will Transform How We Live, Work, and Think*. New York: Houghton Mifflin Harcourt, 2013, p. 6.

6 TURING, Alan. The Essential Turing: Seminal Writings in Computing, Logic, Philosophy, Artificial Intelligence, and Artificial Life plus the Secrets of Enigma. New York: Oxford University Press, 2004.

as to whether it is possible for machinery to show intelligent behavior."[7] According to Turing, a machine that is capable of the following things can be considered intelligent: "represent knowledge in order to store what it knows or has heard"; "automated form of reasoning that allows it to use the stored information to respond to questions and produce new answers"; "machine learning that allows it to adapt to new circumstances, detect and analyze patterns."[8]

The evolution of AI reached new levels with the diffusion of the internet. Taking into consideration the focus of this article, we should highlight the thoughts of Kai Fu Lee, a computer scientist, on the four waves of AI which have been developed or will be developed and disseminated in our society.

The first wave is internet AI, which became part of our current routines starting in 2012. Lee signals that internet AI is related to the use of algorithms as "recommendation engines"[9]. They are mechanisms that memorize and understand our personal preferences, in order to direct specific content towards us.

The second wave of AI is business AI, which is related to data analysis done by companies in regards to their business endeavors.

The third wave digitalizes "the world around us, through the proliferation of intelligent sensors and other devices." As Lee shows, this creates an increasingly fuzzy separation between the online and offline worlds. The sensorial expansion of AI is creating new contact points between the real and virtual world, generating "OMO" (online-merge-offline)[10] environments.

Autonomous AI is the fourth wave. It will open the possibility for the production of machines that are capable not just of completing simple tasks, but also of comprehending the world itself and molding it according to its own interests. This will be possible because the machines will be able to both use the information that they were initially programmed with, as well as to analyze the world independently from its programmer, thus allowing the machines to also interpret, react and interact with the world on their own.

As we can see, autonomous AI creates the possibility of independent data interpretation and creation of solutions, beyond the data initially programmed into a machine. These machines would be able to feed off of new data and generate new types of knowledge and new algorithms that will dictate their actions, in a process known as machine learning.

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7 TURING, Alan. *Intelligent Machinery* em B. Meltzer e D. Michie, editors. Machine Intelligence, volume 5, pages 3-23, Edinburgh University Press, 1969.

8 RUSSEL, Stuart; NORVIG, Peter. *Artificial Intelligence: a Modern Approach*. 3th ed. New York: Prentice Hall, 2010, p. 2.

9 LEE, Kai-Fu**.** Inteligência artificial: como os robôs estão mudando o mundo, a forma como amamos, nos comunicamos e vivemos. Rio de Janeiro: Globo Livros, 2019, p. 132.

10 LEE, Kai-Fu. Inteligência artificial: como os robôs estão mudando o mundo, a forma como amamos, nos comunicamos e vivemos. Rio de Janeiro: Globo Livros, 2019, p. 144.

2 NOTES ON THE DATA-DRIVEN SOCIETY

The accelerated advances in data and communications technologies have strongly impacted social relations, from the subjective, affective, and economic perspectives, for example.

The technological evolution in the areas of information, communications, and automation has transformed human relations themselves. The speed of interactions has increased, and so has access to information and social networks, leading to a constant exchange and control of data and information. A society is constituted on the basis of relations established between individuals and their institutions. Thus, by changing the forms of human interaction, we construct a new type of society. Manuel Castells clarifies the question:

> *A technological revolution concentrated in information technologies is quickly remodeling the foundational material of our society. Economies around the world are now becoming interdependent, creating a new relationship between economies, States, and societies, in a system with uneven geometries.*[11]

This emerging society, which is structured around data technologies, can be called a data-driven society.

In this society, knowledge of the world, people and how they interact socially, is achieved through the accumulation and analysis of data and information, giving rise to a belief in "dataism". The American journalist, writer and political analyst David Brooks already identified this new philosophy of data in 2013:

> *If you asked me to describe the philosophy that is most relevant today, I would say that it is the philosophy of data. We have the capacity now to collect enormous quantities of data. This capacity brings with it a certain cultural underpinning – that everything can or should be measured; that data is a trustworthy and transparent lens that allows us to filter out emotions and ideology; and that it will help us do amazing things, like foretell the future. […] the data revolution offers us an exceptional instrument to understand the present and the past.*[12]

Referring back to the point made at the beginning of this topic, the only thing better than data is more data. For this new philosophy, data has been transformed into something sacred. Yuval Noah Harari states that in a computerized and technological environment, data, not deities, will be revered by the population.

Dataism will be the technoreligion of our time, and the totality of the "universe consists in a flow of data, and the value of any entity or phenomenon is determined by its contribution to data processing."[13] We can say that religion

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[11] CASTELLS, Manuel. *Era da informação: economia, sociedade e cultura*. 2. ed. Trad. Roneide Venancio Majer. São Paulo: Paz e Terra, 1999, p. 21.

[12] BROOKS, David. Available at <www.nytimes.com/2013/02/05/opinion/brooks-the-philosophy-of-data.html>, Accessed on May 23,2022.

[13] HARARI, Yuval Noah. *Homo Deus: Uma Breve História do Amanhã*. São Paulo: Companhia das Letras, 2016, p. 370.

corresponds to "any thought system and action shared by a group, which gives an individual a specific orientation and object of devotion."[14] In this sense, we can consider dataism a religion-philosophy.

Dataist thought believes that human beings are unable to deal with the flow of data and information that these times demand. Due to this, their decision-making process becomes highly imperfect. This perspective points towards a turn away from subjectivity, arbitrariness, and systemic errors stemming from an antiquated, imprecise or weakly intuitive way of thought. In this sense, Chris Anderson states that:

> *This is a world where large quantities of data and applied math substitute any other tool that could be used. Forget all the theories on human behavior that come from linguistics or sociology. Forget taxonomy, ontology, and psychology. Who knows why people do what they do? The point is that they do certain things, and we can track and measure what they do with unprecedented accuracy. With sufficient data, the numbers speak for themselves.*[15]

Meanwhile, for Byung-Chul Han, dataism assumes that all ideologies can be left behind, but it is an ideology in and of itself, which could lead to digital totalitarianism, through perpetuating the belief that everything can be reduced to data and what the data signals. So, according to the author, a "third enlightenment" is necessary to shine a light on how "digital enlightenment" can easily turn into servitude.[16]

Nevertheless, the excess of information and the constant and accelerated search for new information, in addition to hindering the capacity to conduct deep reflection, can lead to issues such as anxiety and even Information Fatigue Syndrome (IFS), which is characterized by an inability to develop analytical thinking.

Furthermore, the major players in the digital turbo-capitalism of surveillance seek as much information as possible about the population. "These types of information are stored by controllers, which "catalog" them, thereby developing our "profiles." Using this information, "it becomes easy to deduce what we want, directing specific ads and content to each person, in this way inducing them to carry out defined actions"[17].

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14 FROMM, Erich, Psychonalysis and religion. New York: Bantam Books, 1972, p. 22.

15 ANDERSON, Chris. The End of Theory: The Data Deluge Makes the Scientific Method Obsolete. In *Wired,* 16/07/2008. Available at <https://www.wired.com/2008/06/pb-theory/>. Accessed on May 26, 2022.

16 HAN, Byung-Chul. Psicopolítica – O neoliberalismo e as novas técnicas de poder. Belo Horizonte: Ayinê, 2018, p. 80.

17 FACCHINI NETO, Eugênio; DEMOLINER, Karine Silva. Direito à privacidade na era digital – uma releitura do art. XII da Declaração Universal dos Direitos Humanos (DUDH) na sociedade do espetáculo in Revista Internacional Consinter de Direito, year V, number IX. Available at <https://revistaconsinter.com/index.php/ojs/article/view/174/328>. Accessed on 28/05/2023.

3 NOTES ON HUMAN DIGNITY

With regards to the core of human dignity, we can adopt the thinking posed by Ronald Dworkin, which, *mutatis mutandi,* is also defended by Luis Roberto Barroso, minister of the *Supremo Tribunal Federal* of Brazil. The author signals that human dignity can be found in two principles, which he denominates the principles of dignity. The principles of dignity and their efficacy before the State and society, will make it possible for individuals to try to fulfill their own personal goals as well as live a "good life." Together, both principles constitute a conception of human dignity which demands respect for oneself and demands authenticity[18].

The first principal of dignity presented by Dworkin is self-respect. According to the author, "each person should take their own life seriously. They should accept that having their life be well-planned and successful is an important goal, which should not leave space for lost opportunities."[19] We can affirm that the principle of self-respect is rooted in the necessity to take int consideration the inherent value or importance of life.

The starting point is the consideration that man is an end in and of himself, in the Kantian sense, and that human life possesses an objective, universal importance. It has a value that must be recognized, regardless of personal (special) attributes or subjective views. This importance must be recognized by each and every individual. And since life has an intrinsic value, it should not be wasted. Thus, it is up to each individual to cultivate self-respect, to acknowledge their abilities, even latent ones, and to pursue a "good life".[20] In other words, each person has "the sovereign ethical responsibility to transform their life into something of value, just as the painter transforms their canvas into something of value."[21]

Dworkin's second principle of dignity is authenticity. Authenticity demands that we take stock of our own abilities and of what we consider success for our lives. It forces us to act in accordance with the projects and values that we identify with. This principle indicates that individuals should seek to live up to their full potential.

In order to comply with these aforementioned principles, individuals must assume an ethical responsibility, by acting with self-respect and authenticity, but at the same time, also working to extend the principles of dignity to all. In this sense, Dworkin offers us a clear concept of human dignity. It means that each individual must live in conditions of equality and liberty, in order to develop their own self-respect and authenticity.

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18 DWORKIN, Ronald. *A raposa e o porco-espinho*: justiça e valor. São Paulo: WMF Martins Fontes, 2014. p. 311.

19 DWORKIN, Ronald. *A raposa e o porco-espinho: justiça e valor.* São Paulo: WMF Martins Fontes, 2014. p. 311.

20 Dworkin's position, on this point, seems similar to stoic-Aristotelian thought, in which each of us, as a member of the cosmos, must play out the role for which we were designed, in search of Eudaimonia.

21 DWORKIN, Roland. *A raposa e o porco-espinho*: justiça e valor. São Paulo: WMF Martins Fontes, 2014. p. 22.

As mentioned above, Luis Roberto Barroso's vision is similar to that proposed by Dworkin. The Brazilian jurist proposes a minimalist conception of human dignity. His idea corresponds to (1) the intrinsic value of all human beings and (2) the autonomy of all individuals, which could be mediated by certain legitimate restrictions imposed in the name of social values, State interests, or community values[22].

Therefore, it would be appropriate to address the issue of human dignity in situations that directly affect the principles of dignity and that are subject to judicial review.

By "direct impact" we mean those situations that can affect or disrupt the principles of dignity in such a way that their realization becomes impossible. Therefore, situations that rob individuals of their liberty, that devalue the objective value of all human life, or that interferes with "ex ante" equality that guarantees parity, would directly impact human dignity. On the other hand, the issue of human dignity would not come into play with respect to situations that only indirectly relate to self-respect and authenticity or that would only infringe on the principles of dignity if they were sustained over time or taken to extremes. As we have observed, Dworkin's thought and the existentialist hermeneutic perspective take human dignity into consideration as an interpretative concept.

The constructivist perspective suggests that spatiotemporal alterations in our culture and our human *modus vivendi,* indicate changes in what we understand to impact human dignity. In this sense, we will attempt to solidify the concept that we are researching, avoiding generic, overly broad definitions that in many cases end up serving as tropes, repeating common rhetoric and justifying any kind of positioning.

4 FUNDAMENTALS REGARDING HUMAN DIGNITY IN THE DATA-DRIVEN SOCIETY

4.1 A Proposal to Create a Healthy Artificial Intelligence Society

The technological advances in the areas of big data, artificial intelligence and robotics have been enormous and irreversible. Any attempt to run away from this reality would be reactionary or in vain (or both). The question is, how can we understand this new scenario brought upon us by these technologies, and how can we seek out more appropriate ways of dealing with its impacts and guiding any next steps.

The *Good AI Society* model that we propose is linked to values, with a central focus on the values of human dignity. In this sense, Corinne Cath and her collaborators state the following:

[22] BARROSO, Luis Roberto. Dignidade da pessoa humana no direito constitucional contemporâneo: a construção de um conceito jurídico à luz da jurisprudência mundial. Belo Horizonte: Fórum, 2013, p. 72

> *The Good AI Society projects could take advantage of the concept of human dignity, as a lens through which we can understand and project what a good AI society should be. Of course, there are some disadvantages to utilizing the concept of human dignity in this context. Many argue that it is an empty concept. It certainly does not signify the same thing for different groups of people.*[23]

Many researchers decry that it is impossible for the field of Law to accompany all the current technosocial changes. In pursuit of the free development of its productive activities, data-driven capitalism "equates government regulation with tyranny".[24]

In this context, it was proposed that computation and digital interaction could substitute the communitarian forms of political life and of government.[25] However, we understand Law as an unfinished task, a permanent process of reconstitution. It seems reckless to forego the collective construction of Law in the definition of rules, the meaning of principles, and legal understandings, in the name of fetishism of market spontaneity.

In its broadest concept, Law can and should take into consideration socioeconomic and technological advances. Judicial regulation and posterior scrutiny can allow us to come up with guidelines regarding the development of new activities related to AI, big data and data-driven capitalism. These guidelines, in turn, can help guarantee compliance with the core of fundamental rights linked to the promotion of human dignity.

4.2 Information Technology Access

With this understanding of a Good AI Society, we can now look at the connections between human dignity and new technologies which permeate the data-driven society.

Firsthand, we must address the question of access to technologies and to information. We cannot construct a Good AI Society, without taking into account who has full access to these digital tools. With respect to information technologies,

> *Information, in addition to being a right or a duty, is a creator of the new environment. It is an immaterial locus, a spectral presence, with broad ease of access, agility, and scope. It is responsible for the creation of the virtual dimension of human life. It reveals the insertion of a new lived time with broad instantaneity (real-time monitoring of communication) and timelessness (temporal collage between spectator/interactor where the source of the research loses chronological focus; time*

[23] CATH, Corine; WACHTER, Sandra; MITTELSTADT, Bret et al. Artificial Intelligence and the Good Society: the US, EU and UK approach. *Sci. Eng. Ethics,* 20 jan. 2017/accepted 19 mar. 2017. DOI: 10.1007/s11948-017-9901-7. Accessed on November 14, 2022.

[24] ZUBOFF, Shoshana. A era do capitalismo da vigilância – a disputa por um futuro humano na nova fronteira do poder. Lisboa: Relógio d'água, 2019, p. 478.

[25] ZUBOFF, Shoshana. A era do capitalismo da vigilância – a disputa por um futuro humano na nova fronteira do poder. Lisboa: Relógio d'água, 2019, p. 278.

> *is controlled by the research and not by the human source) that situates users in community isolation while simultaneously pertaining to a network.*[26]

A large percentage of the global population still is blocked from having any contact with the digital world, with robotics, or other new technologies.

The United Nations International Children's Emergency Fund (UNICEF) provided an idea ofhow many children and adolescents have access to the internet and the possible impacts of this in their report *How Many Children and Youth Have Internet Access at Home?*[27] Henrietta Fore, Executive Director of UNICEF, affirms that the lack of access to the internet for some creates a "digital canyon." She also states that

> *The lack of connectivity does not just limit the capacity of children and young people to connect online. It impedes them from competing in the modern economy. It isolates them from the world. And with schools closed, as they are now for millions of children due to COVID-19, this lack of connectivity means that they lose access to education. In summary, the lack of access to the internet is compromising the future of the next generation.*[28]

The "compromising of the next generation" mentioned by Fore reaffirms our statement that it is impossible today to promote human development without having any access to technologies and to information, which are in large part brought to us through digital access, that is to say, the internet.

This fact leads to an inability to integrate into the current social fabric, which is permeated in large part by technological precepts. From this point of view we can say that the technology-information binary creates a "digital banopticon" as well as a "digital panopticon." This "digital banopticon" socially excludes all those who do not have access to technology and to information. Chul Han signals that "in the epoch of access, those who do not have money are permanently excluded, through the banopticon".[29] We can take the author's argument further, and propose that those who do not have monetary resources and access to technologies and to information, will remain permanently excluded. This "digital banopticon" acts to exclude people from economic, social and political life. In turn, this creates the "disconnected masses," who are removed from the benefits of contemporary projects to strengthen civility.

Despite the high levels of human development and equality seen in some places, such as the Scandinavian countries, attention must be paid to the risks that

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[26] MARTINS, Fernando Rodrigues. *Sociedade da informação e promoção à pessoa*. Empoderamento humano na concretude de novos direitos fundamentais. Revista de Direito do Consumidor | vol. 96/2014 | p. 225 – 257 | Nov – Dez / 2014 DTR201418735, p. 13. Accessed on February 7, 2023.

[27] <https://data.unicef.org/resources/children-and-young-people-internet-access-at-home-during-covid19/> Accessed on May 24, 2023.

[28] Available at <https://www.unicef.org/brazil/comunicados-de-imprensa/dois-tercos-das-criancas-em-idade-escolar-no-mundo-nao-tem-acesso-a-internet>. Accessed on May 25, 2023.

[29] HAN, Byung-Chul. Capitalismo e impulso de morte. Ensaios e entrevistas. Vozes: Petrópolis, 2021, p. 39.

access to information and technology could generate even more global inequality. In this sense, Harari observes that the 21st century could create the most unequal society in history, because although globalization and the internet are bridges that connect distinct spaces and countries, they threaten to widen the gap between classes.[30]

In this way, we believe that it is imperative to "overcome the digital divide that still exists globally and prevents the poorest from benefiting from the opportunities offered by digital platforms."[31] In addition to having objective equality between different groups of people, we should also promote mechanisms to overcome this specific divide, in order to avoid situations of inequality.

4.3 Humans + Machines = New Labor Markets

Participation in the labor market is now directly linked to access to new technologies. These technologies are present in production processes, both as mechanisms to select a human workforce as well as to substitute living workers.

The first point to elaborate on is regarding the possibilities of algorithmic discrimination in the selection of a human workforce, or any other questionable practices coming from talent analytics software. We must avoid at all cost the limiting of workers' access to job opportunities as a result of the use of these technologies.

On the other hand, regarding workers that are already employed, we should watch out for the risks of people analytics that could lead to work performance reviews being entirely based on data. According to Byung-Chul Han, current society tends to try to enumerate all aspects of life, so that everything can be converted into the language of performance and efficiency, with a tendency to quickly discard anything that cannot be quantified.[32] However, we believe that ignoring the human aspect in the name of the absolute, unreachable objectivism preached by dataism, only leads us to data-driven barbarism. It does not help us become more efficient, as the search for efficiency takes us through imperfections and adjustments, that are a product of human creativity. Chul Han concludes by pointing out that "no person should be downgraded to a mere object of algorithmic evaluation," and that such a practice "contradicts the idea of human dignity."

Other strategies can be indicated with regards to the already painfully obvious substitution of human for artificial resources, through the use of robotics and artificial intelligence. The first one postulates that workers can be retrained to work in situations in conjunction with new technologies, and that they can also be reallocated in other segments of the labor market, due to the substitution of their jobs by technology.

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30 HARARI, Yuval Noah. *Homo Deus: Uma Breve História do Amanhã*. São Paulo: Companhia das Letras, 2016, p. 102.

31 SILVA, Jorge Moreira da. *Dire(i)to ao futuro.* Lisboa. Caleidoscópio, 2021, p. 61.

32 HAN, Byung-Chul. *No enxame: perspectivas do digital*. Vozes: Petrópolis, 2020, p. 67.

Another path to adequate the symbiotic coexistence between human and machines in the labor market is to create new modalities of work. Kai Fu Lee points towards the possibility of optimizing new tasks through the use of a human touch. While artificial intelligence can take care of routine tasks, as mentioned earlier, human workers would be needed to provide a unique, creative, compassionate, and empathetic touch. "This will involve the redefinition of existing occupations and the creation of entirely new professions, in which people will join forces with machines to provide highly efficient and eminently humanized services."[33]

The idea of redistributing wealth also is gaining traction within the labor market. In particular, we can discuss policy proposals that, through a variety of different mechanisms, lead to the disbursement of a Universal Basic Income (UBI). This policy would allow for all citizens to receive a minimal monthly income from the government. This plan is different from current welfare benefits or unemployment insurance, as it would be disbursed to all citizens without any conditionalities.

Another alternative along these lines would be the Minimum Guaranteed Income (MGI), involving the payment of income transfers only to the most vulnerable strata of society. It should be noted, however, that this measure should also be accompanied by the above-mentioned strategies. If this is not done, there would be a risk of resorting to mere welfare assistance, as well as restricting the participation of a large number of people in socio-economic life.

We are not proposing that new technologies should be seen as labor market villains. The technological revolution taking place generates employment in some sectors and reduces it in others. But this is not a new phenomenon, as Jorge Moreira da Silva states. More than a crusade against the use of new technologies, "governments should do what they are supposed to: prepare more young people for the professions of the future, retrain workers for a new environment of rapid changes, and protect the most vulnerable."[34]

The future paths of the job market are yet to be charted. We believe this is a topic of utmost importance, given that work and income are fundamental to the value of life and full human development, as dictated by the principles of dignity that were discussed previously.

4.4 Digital Human Rights

As mentioned, there is no way to stop technological innovations, and the changes to social relations and the human *modus vivendi* that are inevitably linked to these innovations.

In earlier times, wealth was measured by the quantity of land or gold possessed by an individual. In today's society, the most valued assets are new

[33] LEE, Kai-Fu. Inteligência artificial: como os robôs estão mudando o mundo, a forma como amamos, nos comunicamos e vivemos. Rio de Janeiro: Globo Livros, 2019, p. 249.

[34] SILVA, Jorge Moreira da. *Dire(i)to ao futuro*. Lisboa. Caleidoscópio, 2021, p. 70.

technologies and data. It is easy to make the assumption that in this current scenario, whoever possesses more access and control over new technologies and data, can be considered wealthy. This wealth can then be converted into decision-making power in society.

The possession and processing of data can allow the person who has control over that data, to better understand the environment, determine trends, and even be present in the life of individuals, not in a coercive, but in a more subtle and profound way, revealing their inner psyche.

In order to avoid the above-mentioned risks to human dignity which are linked to the undue use of data, institutional limits should be established.

In this sense, the ex-President of the European Parliament, Martin Schuz, manifested in his inauguration speech that the world needs to create a "Declaration of fundamental digital rights"[35].

In agreement with the proposal to construct a declaration of fundamental digital rights, Byung-Chul Han points towards the need for radical solutions to the potential problem of "data totalitarianism." Some of these solutions include "creating the technical ability to establish limits on access to personal data, so that this access would disappear after a set amount of time"[36].

The adoption of specific rubrics to address digital human rights in international instruments, as well as the inclusion of such rights as fundamental rights on the Constitutional level, seems urgent to us due to the current scenario, marked by the consolidation of an overly digitally-influenced society.

Nevertheless, we must acknowledge not just the urgent need to draft and implement a declaration of fundamental digital rights, but also the promotion of a shift in thinking and awareness regarding the role of digital technology and the access, provision, and processing of data.

4.5 Individual and Collective Investment in People

In a context in which the use of digital media to conduct interpersonal relations is becoming more and more common, and in which data is used more and more frequently not just for information but also to drive production and decision-making processes, we must start reflection on the role of consciousness and the maintenance of human relations.

As mentioned, we believe that decision-making processes, in the legal sense or otherwise, should be tied to the symbiotic efforts of both humans and machines. As we have seen, human participation in decision-making processes becomes extremely relevant, when we address topics that go beyond procedural issues, and enter into the political and ethical realms. Algorithms cannot, at least not yet, make

[35] Available at <https://www.europarl.europa.eu/former_ep_presidents/president-schulz-2014-2016/en-pt/press/discurso_de_tomada_de_posse_de_martin_schulz__presidente_do_parlamento_europeu.html > Accessed on May 10, 2023.

[36] HAN, Byung-Chul. Capitalismo e impulso de morte. Ensaios e entrevistas**.** Vozes: Petrópolis, 2021, p. 47.

coherent, lucid decisions in these realms, as they involve an ethical dimension which is not yet grasped by these algorithms.

In this sense, any development of new technologies, especially in relation to robotics, artificial intelligence, and big data, must also go hand-in-hand with continuous human development. This way, strategies can be developed to manage these new technologies and to adopt decisions based on well-structured arguments with validity and strong reasoning, as alluded to in earlier sections of this article.

For this, we must continuously invest in people-centered education, in order to adjust our intellectual and cultural vantagepoints to the new social parameters. Harari states that "it would be dangerous to invest too much in the development of AI and not enough in the development of human consciousness, as the sophisticated forms of artificial intelligence coming from computers could then be put to the service of merely empowering natural human stupidity."[37]

Nevertheless, it should be acknowledged that the development of consciousness and of the human psyche, does not occur in isolation, but rather within societal parameters. It should also be remembered that societies are always constructed in relation to an "other." The problem is that in a performance-driven society, otherness is shunned. One cannot love or build with others, but only use them. And we believe that "a person's development is compromised if they claim to be individually responsible for producing what they become."[38]

Furthermore, the capitalist performance-driven society foments extreme social atomization. Members of society begin to focus almost exclusively on themselves as individuals, rejecting a relational approach with others and uplifting their own individual experiences, as entrepreneurs of their own identities. This lends itself to greater observance and domination, ironically using the pretext of greater individual freedom.

Each individual is only given the opportunity to immerse themselves in the masses, including the digital masses. In this way, "both individual isolation and immersion in the masses exclude the exchange of subjectivities as we know it, which involves encounters with the Other."[39] These encounters are essential for the construction of a polyphonic human society which is truly plural and free.

Hence, we put forth a proposal to overcome the unbridled pursuit of self-affirmation, which is a characteristic of the performance-driven society, and to reclaim the validity of the other. Time spent on individual pursuits, on work, on production, and on consumption, should be used instead to "recognize the shared humanity with others."[40]

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37 HARARI, Yuval Noah. *Homo Deus: Uma Breve História do Amanhã*. São Paulo: Companhia das Letras, 2016, p. 99.

38 Pope Benedict XVI, Caritas in veritate, 68.

39 ZIZEK, Slavoj. *Violência – seis notas à margem*. Lisboa: Reglógio d'água, 2009, p. 35.

40 HAN, Byung-Chul. Capitalismo e impulso de morte. Ensaios e entrevistas. Vozes: Petrópolis, 2021, p. 135.

Human development should follow the pace of technological development, so that these technologies can be used to trace paths to enhance individual and collective development in the current data-driven and performance-oriented society.

4.6 Law as a Barrier Against Exploitation in Data-Driven Societies

We should state that we do not consider data or performance in themselves as harmful. Our criticism highlights the frantic and unreflective pursuit of better performance indicators, as well as the imperfect methods of measuring performance. The unchecked production and consumption of data also cause us worry.

The data-driven and performance-oriented society is in large part marked by an exaggerated pursuit of performance indicators, masked by hyperpositivity and hyperactivity. Furthermore, performance is, more often than not, simply transcribed into data that measures all activities to distill them into performance indicators, compacting human beings into a series of lifeless graphs.

This dataist rationality can also be found in the instrumental reasoning mentioned above. This form of thinking is considered pragmatic, as it is supposedly focused on maximizing gains and advantages over others. It is based on accounting principles, arithmetic and a limited set of reflections on the tasks and procedures at hand.

The instrumentalist dataist proposal seeks to objectivize things that are not fully objective. The Earth is not flat. If it was, our comprehension of the planet would not have to be so complex. But reality is truly the enemy of simplification. Human beings are not flat, shallow and objective. Instead, they are round, deep, and subjective. Due to this, we must add much more complexity to our analyses of human activity and human relations.

Furthermore, there is the need to produce, to perform. The only acceptable use of time in a data-driven, performance-oriented society is the productive time dictated by self-exploitation. Torralba reaffirms that "time for disconnection is allowed for, but only in order to recharge batteries in order to reenter productive activity." They go further, stating that "instrumental thinking invades people, at the cost of mental and physical exhaustion, then can only be resisted through the ingestion of any and all kinds of substances that can get the machine running again."[41]

On analyzing the current context, we observe the absence of a clear and consensual project for humanity, behind the rhetoric of performance enhancement and economic growth. This leads Byung-Chul Han to state that "what today we call growth is a cancerous, vagarous proliferation."[42]

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[41] Torralba, fransec. *The alliance between transhumanism and global neoliberalism. The need for a new technoethics.* Available at <http://www.pass.va/content/scienzesociali/en/publications/studiaselecta/dignity_of_work/torralba.html/>. Accessed on May 28, 2023.

[42] HAN, Byung-Chul. Capitalismo e impulso de morte. Ensaios e entrevistas. Vozes: Petrópolis, 2021, p. 7.

The law can, in this way, behave as a barrier to uncontrolled exploitation of humans by other humans (and by new technologies), and as a guarantor of human dignity.

5 FINAL CONSIDERATIONS

New social contours and innovative technological developments can often produce new social models.

These new social contours can bring various gains to relationships, the economy, and human development. But they can also serve as a mechanism to accentuate social inequalities.

Nevertheless, we can highlight that this new society brings for us new material conditions for human existence, which can help preserve fundamental rights and human dignity. We must analyze how new challenges presented by the data-driven society impact safeguards for human dignity.

Thus, as a result of this research, we can observe the need to constantly establish new foundations on which socio-legal developments can be built upon, in the interests of safeguarding human dignity in the observed context. Without exhausting the debate, we attempted to analyze this central theme in this article. Any new foundations should always remain inside the scope of democratic rules applied by the legal system.

In this sense, the future of Law will give us access to the right to a future.

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