

THE AMBIVALENT POWER OF TECHNOLOGY, HANS JONAS' CATEGORIC IMPERATIVE AND ITS ADEQUACY FOR THE SOCIETY IN THE DIGITAL AGE

O PODER AMBIVALENTE DA TECNOLOGIA, O IMPERATIVO CATEGÓRICO DE HANS JONAS E SUA ADEQUAÇÃO PARA A SOCIEDADE NA ERA DIGITAL

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ABSTRACT

The use of modern technique requires an ethical responsibility in the face of the ambivalence of the impacts of human action, in which the heuristic of fear presents itself as the best direction in favor of current and future society. The new must be called for a new way of thinking, privileging the diagnosis of negative results to consider the possible threats that may arise from the techno-scientific achievements. Thus, this paper aims

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to investigate the application of Hans Jonas' theory of ethical responsibility in the context of the techno-digital era. As a research problem, it asks if the principle of responsibility proposed by Hans Jonas meets the conduct requirements of contemporary digital society. As a hypothesis, it states that the contemporary digital society requires self-determined conduct for the domain of individual action, as the essence of the human being, giving rise to an adaptation of Hans Jonas' categorical imperative, which contemplates a natural obstacle to the inexorable breach of privacy in the era digital. Bibliographic research was primarily carried out in books, articles, and theses related to the theme. The research is inserted in the juridical-social aspect, adopting, as predominant reasoning, the hypothetical-deductive.

Keywords: Hans Jonas. Principle of responsibility. Technology. Categorical imperative.

RESUMO

O uso da técnica moderna exige uma responsabilidade ética diante da ambivalência dos impactos do agir humano, em que a heurística do temor se apresenta como a melhor direção em favor da sociedade atual e futura. O novo dever ser reclama uma nova forma de pensar, privilegiando o diagnóstico de resultados negativos, de modo a considerar as possíveis ameaças que poderão advir das conquistas tecno-científicas. Assim, o presente artigo tem como objetivo investigar a aplicação da teoria da responsabilidade ética de Hans Jonas no contexto da era tecno-digital. Indaga-se, como problema de pesquisa, se o princípio da responsabilidade proposto por Hans Jonas atende às exigências de conduta da sociedade digital contemporânea. Como hipótese, afirma-se que a sociedade digital contemporânea exige uma conduta autodeterminada para o domínio do agir individual, como essência do ser humano, ensejando uma adequação do imperativo categórico de Hans Jonas, que contemple um obstáculo natural à inexorável quebra da privacidade na era digital. Fora realizada, precipuamente, pesquisa bibliográfica, em livros, artigos e teses referentes ao tema. A pesquisa se insere na vertente jurídico-social, adotando, como raciocínio predominante, o hipotético-dedutivo.

Palavras-chave: Hans Jonas. Princípio da responsabilidade. Tecnologia. Imperativo categórico.

1. INTRODUCTION

A novelty of almost half a century the digital technology promised - and fulfilled - the dream of a connected world where data and personal information constitute important financial assets, capable of defining strategies and decisions, in the most varied segments of society.

Technological advances, which expose the human person to new situations, and therefore to new dangers, demand ethics of responsibility, through the resignification of human power, resulting from uncontrollable self-teaching and the speed of changes promoted by human action. At the same time, man experiences a break between theory and practice. He combines science with technique, to give practical application to theoretical knowledge, through technology, which becomes the hallmark of society.

If technical-scientific (r) evolution has promoted changes in the way of living, thinking, and relating, this means that human activity has also been transformed, and from this new action, new reflective thinking about human performance. This new thinking is intrinsically related to ethical responsibility, that is, responsibility for the moral valuation of human action in the face of ignorance of the consequences and the impact of new technologies. In this context, ethics presents itself as a moderating factor of acting for acting, of doing for doing, and the fear of consequences is revealed as a methodological resource for ethical reflection.

The technological revolution, experienced since the end of the 20th century, gave man the notion - or assumption - of controlling power over humanity, which would lead to the infinite expansion of the conditions of human life. However, if on the one hand technology has brought advancement and development, on the other hand, it has brought the need for power control and predictability of forecasts.

The novelties and technological interference in everyday life caused the illusion that all problems will be solved by the power of the technology itself. More and more man finds himself compelled to the compulsory updating of equipment, driven by knowledge and its instrumentalization, despite the unpredictability of the practical consequences of his discovery. Technology no longer obeys human reason, on the contrary, it imposes itself as the driver of humanity, in programmed obsolescence of human life.

Human's action is not limited to the behavior of singular individuals but also encompasses collective subjects that previously did not experience ethics for themselves, such as organizations, industries, research bodies, technology companies, as well as considered as complex agents that produce action throughout the planet in a significant way, and that, for this reason, they must also assume an ethical responsibility, previously reserved to human beings.

From the moment that technological development put man in theoretical and practical conditions to destroy his autonomy, freedom, and privacy, threatening individual guarantees universally recognized, man's action started to demand limits, if not by ethical conscience, certainly by normative power.

Indeed, technological development does not only affect the economic field, but also the personal sphere, in which citizens see themselves amid new social and political relations, assuming the position of objects thought of as a means for instrumentalizing the technique.

It was this evidence that aroused the reflection of thinkers for contemporary ethics, applied to technological action, that is, applied to the transformations of human action in the new technological-digital scenario, for which traditional ethics were no longer sufficient.

Thus, this article aims to investigate the application of the Hans Jonas (2006) theory of ethical responsibility in the context of the techno-digital era. It is asked, as a research problem, if the principle of responsibility proposed by Hans Jonas meets the conduct requirements of contemporary digital society. As a hypothesis, it is stated that the contemporary digital society requires self-determined conduct for the domain of individual action, as the essence of the human being, giving rise to an adaptation of Hans Jonas's categoric imperative, and which contemplates a natural obstacle to the inexorable breach of privacy in a digital age.

In topic two, the reasons for reflection and the proposition of the ethics of Hans Jonas' responsibility as a new human duty, being, and acting will be addressed. In the third topic, the study will deal with the heuristic of fear - or heuristic of fear, in a translation more in line with the philosophical context -, in which the German philosopher wants ethics to be interconnected rather with fear than with the desire for the new, so that the technological development does not become a threat, or, in fact, an annihilation of human authenticity. Then, topic four will deal with the categoric imperative proposed by Hans Jonas, although at the time the author was unaware that, in the 21st century, relations would be stratified in digital media. In the end, this study dares to propose a categoric imperative for the digital age, taking Hans Jonas's categoric imperative as its theoretical framework.

Bibliographic research had been used primarily through books, articles, and theses. The research is inserted in the juridical-social aspect (GUSTIN; DIAS; NICÁCIO, 2020), adopting, as the predominant reasoning, the hypothetical-deductive.

2. THE HANS JONAS'S RESPONSIBILITY ETHICS

Hans Jonas, a German philosopher of Jewish origin, with strong intellectual performance throughout the 20th century, began his studies as a disciple of Martin Heidegger, accompanying his mentor to the University of Freiburg, where he met Rudolf Bultmann and, under his guidance, presented his thesis about gnosis in Christianity, which contains striking originality “[...] by demonstrating the direct connection of ancient Gnosticism to the existential pessimism of modern times” (OLIVEIRA, 2014, p. 20).

From then on, Jonas's concern with the placement of man in the universe and the need for self-affirmation to establish his place in the world demonstrated the ambivalence of human power over nature, in which both man and nature become an object of the technique, “[...] which starts to grow detached from the ethical reflective capacity regarding its positive and negative potentialities” (OLIVEIRA, 2014, p. 12).

It is in the search for the foundations of new ethics for the orientation of technological activity, that in 1979, Hans Jonas (2006) presents the work “The principle of responsibility: testing an ethics for technological civilization”, in which he proposes a new concept moral, replacing the old ethical imperatives, for the protection of man and nature against the risks and dangers of technique.

Without being characterized as a technophobic, the author warns about the need to reaffirm the indispensable alliance between techno-scientific progress and ethical-moral elevation, to understand and guide the modified nature of human action, proposing ethical responsibility in civilization technological, under a new categorical imperative.

In the presentation of Hans Jonas's ethical precept, Maria Clara Lucchetti Bingemer, also quoting the author, asserts that:

For there to be responsible, there must be a conscious subject. However, the technological imperative eliminates conscience, eliminates the subject, eliminates freedom in favor of determinism. The hyperspecialization of sciences cripples and displaces the very notion of being human. This divorce between scientific advances and ethical reflection led Jonas to propose new dimensions of responsibility, since “modern technology has introduced actions of such different magnitudes, with such unpredictable objectives and consequences, that the landmarks of previous ethics can no longer contain them”. (BINGEMER, 2006, p. 18)

With the Nazi ascension, Jonas was forced to leave the Germanic territory, going to reside in England, where he enlisted in the British army, in the fight against Nazism (OLIVEIRA, 2014). And it was during Second World War that Hans Jonas experienced and witnessed the greatest horrors of the use of technology. In that context of war, the intellectual began to maintain a critical eye concerning the domain of technology and its blind acceptance by man, expressing

his concern for the future of humanity and the authenticity of human life in publications such as “Phenomenology of life: foundations for a philosophical biography”; “Philosophical Essays: from the ancient creed to the technological man”; “Knowing, faith, reason, and responsibility: your essays” (OLIVEIRA, 2014); until in 1979, due to the specificity of the theme, Hans Jonas (2006) published, in German, his native language, the work “The principle of Responsibility: an essay on ethics for technological civilization”, whose conclusions served as the basis for two more future works, complementary to the study of ethical responsibility (OLIVEIRA, 2014).

Hans Jonas refers to the atomic bombs dropped on the Japanese cities of Hiroshima and Nagasaki as an example of the destructive and apocalyptic potential of technology, although it is certain that not even the predictable destructive potential was able to control the extreme powers of technological knowledge and its use, that being human insists on continuing to conquer and exercise (JONAS, 2006).

Even though technological knowledge has already demonstrated the ability to build bombs, cause radioactive and environmental disasters, monopolize the attention of men, limit the freedom and privacy of humanity, the consequences of this unlimited knowledge were and have been received as an inevitable destination of the evolution of human knowledge, with which the planet, globally, will have to submit and adopt - not to say to be enslaved - to its command.

Indeed, the utopia of the technological solution has become an incentive for the construction of a philosophical ethical system, based on being, in the sense of existing, and no longer in the “should be”, in the sense of acting, because the current human action it has repercussions on the future of humanity and, therefore, on the condition of being “human” (JONAS, 2006).

Faced with the question of whether there should be something instead of nothing, Hans Jonas (2006, p. 87) reformulates the question and places it in a fundamental way for his theory, because in his ethical view there is an unconditional obligation of human existence, and “this imposition is based on a primary duty to Being, as opposed to nothing”.

In this light, Hans Jonas (2006, p. 95) developed the concepts of good, duty, and being, bringing the conception that the center of the ethics of the future is not in the doctrine of behavioral doing, “[...] but metaphysics, as a doctrine of Being, of which the idea of man is a part”. It is not simply a matter of changing the action, but, fundamentally, who promotes the action, to legitimize the action.

To the human “duty to be”, Jonas connects the responsibility of being, that is, to the duties of being, which must be recognized as a priority for the discernment of the values to be considered, for the conjecture of the future human existence. On the theory of values, Hans Jonas explains that:

[...] only from objectivity could an objective must-be deduced, and with it a commitment to the preservation of Being, a responsibility related to Being. Our ethical-metaphysical question about man's must-be, in a world that must be, becomes a logical question about the status of values as such. In the currently precarious and confusing situation of the theory of value, with its ultimately nihilistic skepticism, this is not a promising undertaking. But it has to be undertaken, at least due to the clarity of a responsibility related to Being. (JONAS, 2006, p. 103)

Hans Jonas does not deal with the responsibility of being or should be based on past acts as if it were punishment or guilt for wrongdoing, linked to the cause or motive to act. The

Jonasian ethical proposition starts from a consequentialist view, based on the commitment to do or fail to do something in the face of the ambivalent effects of the present act, that is, the consequences of the act. It is the responsibility for something that should be avoided in the future since it is ethics directed towards the future.

From the notion of responsibility for the result, and the dimensions of technological actions “[...] in a cumulative and probably very little reversible way (OLIVEIRA, 2014, p. 119), Hans Jonas realized the need to build ethics focused on the application of the technique, due to the ambivalence of its effects (beneficial and harmful), as well as the automaticity of its application, insofar as the execution of the technique is no longer due to the need for use, but by the mere autonomous power to use.

The new global dimensions of space and time expand the effects of technology, referring to new ethical thinking, which also occurs due to the rupture of anthropocentrism, because the impact of the technique is no longer restricted to man, but, rather, to all beings’ humans and non-humans, born and unborn, that sustain human survival (JONAS, 2006).

In this regard, the philosopher rests the principle of ethical responsibility for technological civilization on the apocalyptic potential of technology, which values ontological ethics in metaphysical terms in the face of crucial questions that “indicate to what extent we can take chances with technical bets and what risks must be considered inadmissible” (SUSIN, 2017, p. 30).

The responsibility ethics proposed by Hans Jonas (2006) thus starts from the threat of modern technology, characterized by a self-propulsion, almost pathological, in search of infinite overcoming, in which the production ends up prevailing over the action, and the *homo faber*, in an appropriation of the concept of Hannah Arendt⁴, superior to *homo sapiens*.

This is because the technique ended up exceeding the objectives outlined in times past when its creation and use was measured by human necessity “[...] and not as a path to an end chosen by humanity” (JONAS, 2006, p. 43).

Nowadays technology has become the central enterprise of man, based on the need for continuous progress, in the function of the development in the search for total domination over things and man himself. It is a question of overcoming *homo sapiens* by *homo faber*, eager for incessant inventive employment, even if a man had not needed or claimed for this technological overcoming.

Thus, “Technology assumes an ethical significance because of the central place that it now subjectively occupies at the ends of human life” (JONAS, 2006, p. 43). Producing takes the place of acting. Therefore, the moral of acting lose space for the moral of producing, demanding new imperatives and social intervention in the form of public policy, such as the scope of the effects of technology in time and space.

Because technology causes modification of human behavior, Hans Jonas justified the need for ethical reflection in the face of new action, without which man would continue in a Promethean delusion, as a partner of God, creating and submitting all nature to his conveniences, regardless of the consequences that this creation can bring, leading humanity “[...] to the greatest challenge ever posed to human beings by their action” (JONAS, 2006, p. 21).

4 Man as a manufacturer of durable artifacts building a world by mastering a technique, for “[...] who every instrument is a means of achieving a prescribed end” (ARENDETT, 2010, p. 185).

In other words, once the power of technology has been demonstrated in its form of performance, and considering that every action requires a moral examination, the significant and unprecedented changes brought about in this form of performance also demand the same moral examination.

While the technique was conceived to satisfy vital needs, submit to nature, the modern technique presents itself for the mastery and exploration of nature. In this step, it is necessary to analyze the extent to which the technique, as idealized and employed today, modifies the human action once experienced because man has never been detached from the technique. That is to say, the ethical analysis of human action "aims at the human difference between modern technique and that of previous times" (JONAS, 2006, p. 29).

The interference of technology in human action results in the displacement of the anthropocentric ethical vision, previously focused on the human relationship or of each man with himself, for the relationship of man with the world, through *techné*, based on the duty to be, whether in virtue the expansion of the consequences of human activities in space and time, whether by the fact that many places himself as an object of technique for an end.

Due to the technological determinism that eliminates conscience, the subject, and freedom in favor of the imperative of technique, Jonas's ethical responsibility inserts the latter into the horizon of ethical reflection, presenting itself as a barrier to the science that imposes itself and is legitimized for the mere need to overcome. It is the qualitative novelty of human actions that leads to the need to reframe the concept of ethics, as it has never been considered in the perspective of traditional ethics (JONAS, 2006, p. 29).

The ambivalence of technological power, enhanced for evil or good, is that it imposes an ethical conscience in the use of technology. If all technologies had exclusive beneficial use, there would be no need to evaluate them ethically. It is precisely in the risk of technology, presented as a solution to all problems, without measuring the risks and threats arising from its use, that a new ethical responsibility is claimed.

By relegating man to the secondary level, technology takes the leading role in the evolution of humanity, as a science that leads to unpredictable knowledge, which is no longer designed to respond exclusively to the need of man, but presents itself as a direction in the search for the progress for the sake of progress, obedient to the blind idea of previous technical overcoming.

In the absence of neutrality, technology places itself in the central position of acting, in which ethics needs to evaluate not only the intention to do but also the consequences in technological doing, from which the risk may be born, being, curiously, the greatest risk of technology in the success (for the evil perpetrated) than in the failure (OLIVEIRA, 2014).

In the analysis of the duality between the good use and the bad use of the technique, Jonas works ethics according to the scope of acting in time and space. That is, while in the past techniques the technological action had an immediate reach, limited to the borders and detached from long-term planning, the current technique, in the digital age, shows itself to be immediate, global, and reflected in future generations.

So are the algorithms that, designed for the recognition of human needs, enable the processing of huge amounts of information in a centralized way, just like computational algorithms, which through autonomous learning (*machine learning*) assume the authority to decide, define, profile and plan, while man abdicates his power to make the right choices.

Faced with this digital dictatorship, Yuval Noah Harari (2018) presents 21 lessons for the 21st century, in a work that draws attention to the fact that when authority moves from humans to algorithms, the world is no longer a field of action for autonomous individuals in the search for the best. Instead, the universe becomes a stream of data, in which living organisms are taken as a combinatorial analysis of algorithmizable DNA to meet the needs of others.

It is in the fusion of biotechnology and information technology that humanity is faced with the maximum risks that humankind has ever faced, in order to impose an ethical responsibility in acting (should be) as never imagined by traditional anthropocentric ethics and, perhaps, nor by Hans Jonas, were it not for the German philosopher's concern to foresee the effects of a negative prognosis on humanity.

For Hans Jonas (2006), ethics in technological civilization cannot do without the exercise of futurology based on the present damages and hypothetical risks arising from current actions, to generate an ethical diagnosis of what should be expected, of what should be encouraged, what should be avoided compared to what should be expected, since the risk would generate the potential to change attitudes and behaviors for the future.

When presenting the essay on ethics for technological civilization, Hans Jonas (2006, p. 21) argues that man only has a notion of what is at stake when he knows what is at stake, only with the preview of the disfigurement of man is that you will arrive at the concept of the man you want to preserve. The ethical compass for technological development is the prediction of danger, referred to by the author as the "heuristic of fear" (JONAS, 2006, p. 21).

The heuristic of fear, or heuristic of fear, in a translation more in line with the philosophical perception presented by Hans Jonas (OLIVEIRA, 2014), constitutes one of the central points in the constitution of the principle of ethical responsibility, since the ability to predict prognosis negatives imposes a responsible action, changing the present action in order to prevent the undesirable from occurring, "[...] with the premise of preserving future generations and all forms of life" (SUSIN, 2017, p. 36).

In Hans Jonas's ethical conception, the fear of acting would work as a prevention to the harmful actions of what could happen when using a certain technology, which would end up directly influencing immediate human behavior. According to the creator of the principle of ethical responsibility in the technological age:

We need the threat to the human image - and well-defined types of threats - in order, with the dread generated, to affirm an authentic human image. As long as the danger is unknown, it will not be known what is there to protect and why we should do it: for this reason, contrary to all logic and method, knowledge originates from what we must protect ourselves against. This appears first and, through the upheaval of feelings, which knowledge is anticipated, teaches us to see the value whose opposite affects us so much. [...] What we don't want, we know much earlier than what we want. Therefore, to investigate what we value, the philosophy of morals has to consult our fear before our desire. (JONAS, 2006, p. 70-71).

In addition to traditional ethics, which are based on principles already known, the ethics of responsibility is based, therefore, on the discovery of unknown principles, but whose assumption becomes necessary and urgent to remove risks on future interests, based on a bet on the present tense.

For Jonasian thought, this is the new role of moral knowledge, in which “knowledge becomes a priority duty, beyond everything that was previously required” (JONAS, 2006, p. 41). Knowledge of a future dimension of human action will be required in front of technical/theoretical knowledge, although it is difficult for theoretical knowledge to anticipate the magnitude of the effects of its application, which confers greater risk when acting, and, therefore, the greater ethical meaning of acting in the present.

For Hans Jonas (2006, p. 41):

Recognizing ignorance, then, becomes the other side of the obligation to know, and with that, it becomes a part of ethics that must instruct self-control, more and more necessary, over our excessive power. No previous ethics has been forced to consider the global condition of human life and the distant future, including the existence of the species. The fact that today they are at stake requires, in a word, a new conception of rights and duties, for which no ancient ethics and metaphysics can even offer the principles, much less a finished doctrine. (JONAS, 2006, p. 41)

Bringing to the current context, if the human being had projected the risks of technology that led to the digital dictatorship, experienced in the 21st century, it would have been perceived, and perhaps prevented, that the entire universe became a flow of data, in which man would find himself merged with technology and hacked by it in its essence, being exposed to a flood of manipulations guided by the agreed decoding of the human operating system.

3. THE HEURISTICS OF FEARS IN THE DIGITAL AGE

The central point of Hans Jonas' ethical responsibility is represented by the heuristic of fear, in which the human being will only have the scope of his actions if his unwanted result is projected. It is through the exercise of futurology, faced with a negative prognosis of actions, that the future would open up in new possibilities, while humanity would keep the reins on its desires, evils could be minimized (JONAS, 2006).

The current technological power does not include more optimistic actions based on the utopia that the immediate solution, due to knowledge at hand, is disconnected from the future, and that the consequences of today's acts will be the responsibility of only those who will experience it. It is important to give preference to the fear of the bad, in which the future cannot be expected by the accumulated successes of the technology, or by the fact that a new technique comes from the mere adaptation of the previous technique, refusing, therefore, any voluntary restraint or immediate ethical questioning.

In this sense, rather than fear, fear is characteristic of ethics, which is why Hans Jonas's heuristic proposition does not bring a feeling of weakness or helplessness, but, rather, “a reflective premise on the dangers that become real, insofar as the possibilities for its realization becomes evident” (OLIVEIRA, 2014, p. 134).

Under this perception, Jelson Oliveira (2014) identifies that the best translation of the concept of *heuristik der furcht* is heuristic of fear, differently from what Marjiane Lisboa and Luiz Barros Montes proposed in the translation into Portuguese of the work “The Principle of

Responsibility: the essay of an ethics for technological civilization” (JONAS, 2006). This is because fear would translate into an altered state of consciousness, in which the individual would be paralyzed by the fact and ethics would have no space. Fear, on the other hand, is not something pathological that leads to flight in face of the same fact. On the contrary, it leads the individual to face “the situation, in an attempt to guide the action well, which means, in this case, to prevent the imaginatively projected from being concretely effective (OLIVEIRA, 2014, p. 134).

It is not a question of condemning technology to a necessary and relentless bad prognosis, especially if one considers the ambivalence of human actions. The utopia of technology is founded on past success, thus identified in the actions that corresponded to the expectations of humanity. Despite the popular intention to reconfigure and improve human living conditions, technology still has selfish or partisan biases, which end up camouflaged by the enthusiasm and ingenuity with which the successes of the technique have been welcomed by man.

At the time, Hans Jonas focused on the evil effects brought about by human action on nature, in which man believed he was above nature and not as another element of the natural environment, fixed on the belief of total control while ignoring the adversities that your action could present you.

However, in the case of ethics that has to do with acting, the logical consequence is that any direct or indirect human action, modifying nature, does not dispense with ethical analysis, since even the indirect action will end up impacting the human natural environment, especially if considered Lavoisier’s maxim (2012, p. 77) that “in nature, nothing is created or nothing is lost, everything is transformed”.

In this context, what to expect from digital technology and its immediate and future impacts? What are the consequences that the virtualization of communication has brought to humanity?

Died in 1993, at the age of 93, Hans Jonas experienced a little of what today would be technological disruption⁵, thus understood as an innovation that brings about the rupture of known standards. In the analysis of the consequences of human acts, Jonas already indicated that the excessive use of technology, often without the pressing need, gave the man the feeling of power, which would be identified by the Israeli professor Yuval Noah Harari (2018) as a digital dictatorship.

When recognizing in technology the motto chosen by the human being for the evolution of civilization, the contemporary Israeli philosopher analyzes the same lines proposed by Hans Jonas, to verify that the changes already experienced and those that may result from the virtualization of social, commercial, loving and even parental, have not yet received the necessary ethical treatment. According to Harari:

Considering the immense destructive power of our civilization, we cannot afford to have more failed models, world wars, and bloody revolutions. This time, failed models can result in nuclear wars, monstrosities generated by genetic engineering, and a complete collapse of the biosphere. So we have to do better than we did when facing the Industrial Revolution. (HARARI, 2018, p. 58)

The fear of the Israeli scholar is not based exclusively on the collapse of the biosphere, but also, and above all, on the seductive intervention of artificial intelligence in the contemporary

5 Cf. Disruption, [2021]: “Act or effect of breaking (up); rupture, fracture, rupture”. Term contemporaneously associated with sudden changes, driven by technological means.

society presented, at first, on an optional basis, to then assume authority for the free will of human individuals (HARARI, 2018).

Since the 1960s, the application of artificial intelligence has populated the plot of science fiction films.⁶ It was imagined how the human being would gain outer space. How the individual would be able to contact anyone anywhere, that a document could be in two places at the same time, without losing its value or how a spelling mistake could be reissued without the need to rewrite the entire text. It was thought about the ease of access to information and dreamed of the possibility of gathering in one place all the data that are relevant to a subject.

Since the 1960s, mankind already had the technique of algorithmic communication and had the possibility that algorithms would solve primary and complex issues, without, however, projects that the future technological revolution could establish a dictatorship of *big data*⁷ algorithms while undermining the idea of freedom and privacy.

If today personal data has become a wealth accessible to companies, organizations, public agents, and even other citizens, contributing to the manipulation, surveillance, and articulated targeting of the individual, it is because 20 years ago algorithms were developed for the processing of unprecedented data, making what was previously accessible only to the holder access to all.

Less than a decade ago, this apocalyptic scenario inspired television series.⁸ Today, human beings ignore the possibility that, with the evolution of digital technology and biotechnology, data collection will no longer depend on the individual's consent. That from the granting of data to virtual social interaction networks to digital commerce organizations, to public and private companies, anyone will be able to collect, record, and transfer all personal and biometric data of the citizen, whoever is interested, because concentrated on mobile devices or data cloud (*cloud computing*).

This situation imposed the regulation of the circulation of personal data in Brazil through Law No. 13,709, of August 14, 2018 (BRAZIL, [2020]), guided by the considerations that supported the edition of the European Data Protection Law, among them :

(6) Rapid technological developments and globalization have created new challenges for the protection of personal data. The collection and sharing of personal data have increased significantly. New technologies allow private companies and public entities to use personal data on an unprecedented scale in the exercise of their activities. Natural persons increasingly make their personal information available in a public and global way. New technologies have transformed the economy and social life and should contribute to facilitating the free movement of personal data in the Union and its transfer to third countries and international organizations while ensuring a high level of protection of personal data. (EUROPEAN UNION, [2016]).

6 Cf. Jornada..., 1970; Blade..., 1982; Matrix,1999; A Rede, 1996.

7 Cf. Big ..., 2021: "Big data are high-volume, high-speed and/or high-variety information assets that require innovative and cost-effective ways of processing information that allows for improved vision, decision making, and process automation. . " (BIG ..., 2021, our translation). Original text: "Big data is high-volume, high-velocity and/or high-variety information assets that demand cost-effective, innovative forms of information processing that enable enhanced insight, decision making, and process automation."

8 Cf. Black Mirror, television series in which it presents fiction with themes that examine contemporary society, the unforeseen consequences of new technologies (BLACK..., 2011).

If information is power, why does man willingly have that power in favor of strangers? Why do people, as holders of their personal data, make their lives widely available, subjecting themselves to informational surveillance?

The answer lies in the present, in which information is grouped in large volumes, by public or private organizations, focused on their interests, while the population remains blindly enslaved by the utopia that exposure will make the individual a complete, connected, and human being. matched, or that digital technology will only represent a time saver. Despite the utopian prediction, reality did not live up to projected expectations. Either the man did not promote the prognostic analysis of his actions, or, if he exercised it, he ignored the negative prognosis of the consequences of his acts for a future, now lived, imposing governmental normative measures, aimed at regulating what much of the humanity doesn't even understand.

This gap between utopian expectation and reality can be attributed to the ambivalence of acts, which imposes on technological civilization the ethical responsibility to know the facts and weigh the consequences of human intention or action for the present and the future, drawing on the formula *in dubio pro malo*, which, in addition to giving expression to the ethical duty, presents itself as a shield to the imagined danger, allowing the scientific-technological retreat, when a bad prognosis is perceived (JONAS, 2006).

Only ethical action through fear can cool the power of technology, in the face of enthusiasm and innocence "with which the successes of technique have been accepted and practiced in all areas of human society, under the banner of the utopia of progress" (OLIVEIRA, 2014, p. 136).

Because it is heuristic, the fear of consequences takes into account theoretical and factual knowledge. The first, related to ethical, subjective issues, fundamental to human life; the second, related to objective empiricism, from which it is possible to make predictions. Both objective and subjective analysis, that is to say, factual or theoretical, are mutually supportive in the search for prognosis, "since the knowledge of ethical principles, in a way, depends on empirical knowledge, which ends up being based on reality, the resulting possibilities and forecasts" (SUSIN, 2017, p. 41).

The ethics of the future, designed by the German philosopher, is in fear for what has not yet been experienced and has no affinities in past experiences. For Jonas (2006, p. 72), one should prefer the imagined *malum* to the experienced *malum*, produced intentionally, in the duty to project a future *malum* in an appropriate way to evoke the corresponding fear of rational action in favor of humanity and not as a shield from the individual threat.

Although Hans Jonas had not known artificial intelligence in an irrevocable and unavoidable reality, it is known that his ideas were not contrary to technological discoveries. The philosophical hypothesis is that to know this technical-scientific reality, the human being needs to leave the cave and discover the proposition of the world for himself (the facts), to empirically, under the fear of evil, falsify what is claimed to be good for him. Only by knowing the reality, subjectively and objectively, with its immediate and future pros and cons, can the human being take risks ethically and consciously for an authentic life.

All historical facts are better understood when analyzed for their consequences. However, the consequences of the *technologization* of society may remove from man the power to see things as they actually happened, and perpetuate the error for the next generations, which

imposes immediate and reflective management, under a new categorical imperative, in the face of the fear of that human intelligence is artificialized or irremediably annihilated.

4. THE CATEGORICAL IMPERATIVE OF HANS JONAS

Man, with a product of nature, has always been an entity that is indisputably connected to the world. From man comes any idea of duty regarding human conduct, until acting has become the object of duty - "that is, the duty to protect the basic premise of all duty, that is, precisely the presence of mere candidates for a moral universe in the future physical world"(JONAS, 2006, p. 45).

For Hans Jonas (2006, p. 47-48), moral duty means conserving the physical world and the human essence on Earth, which is important in protecting your vulnerability in the face of the threat of technological evolution, based on the following categorical imperative: "Act in such a way that the effects of your action are compatible with the permanence of an authentic human life on Earth"; or expressed negatively: 'Act so that the effects of your action are not destructive to the future possibility of such a life' "(JONAS, 2006, p. 47-48).

The ethical imperative proposed by Hans Jonas seeks to adapt to the challenges presented by the role of technique in contemporary times, in which the new human action should be the central object of concern, in the search for responsible progress.

Before the moral command proposed by Hans Jonas, Immanuel Kant (2009) had proposed the following imperative: Act in such a way that you can also want your maxim to become law. For Jonas, Kant's imperative presupposed a coincidence in the general human conception, in which the expression "you can also" stems from the rationality in the acceptance of the idea by all actors in society, as a logic of "power" or "not power" which expresses "[...] self-compatibility or incompatibility, and not moral approval or disapproval." (JONAS, 2006, p. 47).

Indeed, while Kant's categorical imperative was focused on the individual, and his criterion was subjective and momentary, the categorical imperative proposed by the 20th-century philosopher "[...] calls for another coherence: not that of the act with oneself, but those of its final effects for the continuity of human activity in the future. " (JONAS, 2006, p. 49).

In this light, Hans Jonas criticizes the idea of the 18th-century Prussian philosopher, generalizing human ethics, as if the maxim of an individual was realized in the general exercise of the community, making it unquestionable to the vision of others. In other words, Kant bet on man's goodwill in making the right choice, assuming that the individual choice will always be correct and considered. Jonas's imperative seeks the moral law, to reach the individual's feelings, in considering the consequences of the acts for the future and his responsibility concerning humanity.

In other words: Immanuel Kant's categorical imperative did not take into account the individual's choice, according to his perception of what is right for him, that is, the individual's free will in what affects him. On the contrary, it hypothetically takes action, as a generalized individual thought, in which objective responsibility is transformed into subjective responsibility, due to individual self-determination.

For Hans Jonas, Kant “[...] exhorted each of us to ponder what would happen if the maxim of his current action were transformed into a principle of general legislation” (JONAS, 2006, p. 48). In his critical analysis, the German philosopher refuted the Kantian imperative when he did not identify in his proposal the probability that the private individual choice, which was not “[...] general, or which could in any way contribute to such generalization ”(JONAS, 2006, p. 48).

Despite the difference in categorical propositions of Jonas and Kant, the one presented for the collective praxis, and the one for the individual, immediate, and interpersonal plan, Gabriel Insaurrealde recognizes common points among the philosophers, since both need to count on “a correspondence and agreement with a law external to the action ”(JUNGES, 2010). Asked about the identity between the two thinkers, Insaurrealde asserts that:

For Jonas, the most important thing is to make a law that reaches the feelings, and that has to do with the consequences of what is done. For Kant, if we have a good intention, it is enough. Not for Jonas. He argues that you can have good intentions, such as when you throw an herbicide on the ground. On the other hand, the consequences of its action are not known. Therein lies the problem. If you do not realize the consequences of your action, it can become immoral. Jonas updates the Kantian imperative for a technological society. On the other hand, Jonas is sometimes too Kantian. This is because he seeks a universal law, albeit focused on the consequences of the action. This introduces the question of the future and responsibility for modernity, being an important contribution of Jonas. (JUNGUES, 2010).

The new order protests for the coherence of the acts with their final effects for the continuity of human activity in the future. Jonasian ethical responsibility does not consider real consequences as a value, but rather the assessment of the subjectivity of acting given the possible consequences, which affect, male finally, the human and non-human essence. In the words of Hans Jonas:

The actions subordinated to the new imperative, that is, the actions of the collective whole, assume the character of universality in the real measure of its effectiveness. They “totalize” themselves in the progression of their impulse, forcibly ending in the universal configuration of the state of affairs. This adds to the moral calculation the time horizon that is missing from the logical and instantaneous operation of the Kantian imperative: if the latter extends over an ever-present order of abstract compatibility, our imperative extends towards a foreseeable concrete future, which constitutes the finished dimension of our responsibility. (JONAS, 2006, p. 48-49)

Knowledge is in human hands, as the only being endowed with intelligence and the ability to predict its actions, whether by a subjective or objective prognosis, but, in any case, intrusive in the human way of life, and therefore, subject to valuation.

After the Antigone choir sang the human deeds of breaking the seas, taming the horses, and capturing the fish (SÓFOCLES, 2005), man tamed the rivers, reduced the distances, and broke the force between the atomic nuclei, adapting them to the most powerful means of destruction until today architected. At Jonas’s command, the knowledge or ignorance of the devastating power of the Hiroshima and Nagasaki bombs would not need to be conditioned by empiricism, so that the idealization of this action (using the energy of the atomic nucleus in the bomb) would be classified as unethical. The possibility of destruction was enough.

In the model of Hans Jonas, the ethics relevant to the technological society does not dispense with the commitment of man to trace the prognosis of his actions, to rationalize the importance, the need, and the convenience of the development and use of the technique, under penalty of humanity to be condemned to the end, by the depletion of natural resources that sustain human life and the technique itself.

4.1 POR UM IMPERATIVO CATEGÓRICO ADEQUADO À ERA DIGITAL

Only 25 years after the death of Hans Jonas, the consequences of human action were evident in climate change and, therefore, for the physical survival of mankind. In addition to this evidence, Yuval Noah Harari denounced the changes that disruptive technologies will bring to human nature since people have different opinions regarding the use of bioengineering and artificial intelligence, and the ignorance with which they welcome the proposition technology. For the author of "21 Lessons for the 21st Century", "if mankind fails to conceive and manage globally accepted ethical guidelines, the season will be open for Dr. Frankenstein" (HARARI, 2018, p. 157).

From the much that has already been said about the dangers of artificial intelligence, the accumulated successes certainly surpass the setbacks, but there can be the unconditional, unquestionable and unreasonable acceptance of technology in confrontation with human rationality, especially when what at stake are fundamental rights proper to the dignity of the human person, which, in one way or another, must be consistent with an authentic human life on Earth.

The thriving reality, to some extent imagined, or at least feared by Hans Jonas, encourages the formulation of a categoric imperative suited to the digital age: *It acts in such a way as if its individuality represents the maxim of its human essence.*

The categoric proposition of this study is not based on human egoism, in the sense of disassociation of the individual with the world, but, in the sense of preserving his place in the world (as a human being), because the human essence is in individuality. As long as man remains faithful to his free, autonomous, and rational essence, his capacity for reaction and protection will be preserved for the exercise of his uniqueness, both for present and future lives. According to Hannah Arendt:

[...] destroying individuality is destroying spontaneity, man's ability to start something new with his resources, something that cannot be explained based on reaction to the environment and facts. Once the individuality is dead, nothing remains but horrible puppets with the faces of men, all with the same behavior as Pavlov's dog, all reacting with perfect predictability even when they march towards death. This is the real triumph of the system: The triumph of the SS requires that the tortured victim allow himself to be taken to the gallows without protests, that he resign and surrender to the point of failing to assert his identity. (ARENDR, 1989, p. 506)

If Arendt's reflection was based on the strength of Nazism, the reflection of this study is based on the deceptive appearance of artificial intelligence, which, under the banner of evolutionary conquest, puts the individual's freedom and privacy at risk, which constitutes the essence of human life.

Attentive to Hans Jonas' criticism of Kant's categorical imperative, the proposition of a categorical imperative suited to the digital age has its possessive pronoun, because the individuality of one may not be the individuality of the other. Therefore, it is up to each human being to act according to their individuality, so that everyone reaches their individuality, as being the human essence, capable of rationalizing and defending themselves from actions that threaten their essence.

In other words: if the imperative for the digital age sought individuality in the human essence, it would be assumed that individuality would be linked to a general human essence, and not to the individual, as a singular, autonomous, and free being, able to manage their self-determination.

5. CONCLUSION

Hans Jonas's philosophical itinerary focuses on the attempt to create an individual conscience to review the mistakes and successes of humanity, to promote a prognosis of the evils of actions, which can impact human survival on the planet.

Based on the hypothesis of the consequences of human actions on nature, founded on the advancement of technology, it is necessary to reflect on the consequences of the misuse of technology, which is also considered, now, the digital technology and the artificial intelligence that sustains it, for the protection of a dignified human life.

The new world order transformed what was once limited, into unlimited. State's intervention was necessary to protect interference with human life, while the State still reserves the right to restrict this protection, in defense of compliance with the law, the exercise of its own activities, and public security. Express predictions of the limits of private life are presented, regulated by devices that guarantee their protection, and others, that guarantee the disclosure of intimacy, for the common good.

In this new context, the fundamental right to data protection is an essential component for the exercise of the right to privacy, as a condition for a dignified human life. The electronic space requires the observance of responsible ethics, based on individual conscience, for the benefit of the collective.

The fear of the results of a digitalized social and political relations must be seen as a methodological resource for reflecting the ethical responsibility on human action, and thus represent an obstacle to the domain of technique over the world, as a manifestation of authoritarian power, to which the human being must bow, under pain of being punished or removed from the political-social system.

Acting in such a way that the effects of human action are not destructive to future lives is essential not only for reshaping future human and extra-human living conditions but also for the current way of life and thinking, so that man you must ask yourself about the risks and threats of technical action before doing, considering the ambivalence of its effects, the automaticity of its application, the new global dimensions in time and space, surpassing traditional (anthropocentric) ethics, which no longer respond by modified human action.

The virtualization of social relations, the uncontrolled manipulation of the data of individuals, collected and collected as input for a capitalist surveillance society, and the substitution of the privacy spectrum for security, for the control in the treatment of data, justify the ethical reflection and its responsibility for the Hans Jonas' view, due to the high impact of its consequences on human life.

Since the dignity of the human person is the guiding value of the Brazilian constitutional order, it is a deontological value (in addition to axiological), that is, morally necessary, which serves to guide the current practice, in the balance between public and private, certain and wrong, just and unfair, in order to avoid the unwanted consequences of the future.

REFERENCES

- A REDE. Direção: Irwin Winkler. [S. l.]: Columbia Pictures, 1996.
- ARENDT, Hannah. **A condição humana**. Trad. Roberto Raposo. Rio de Janeiro: Forense, 2010.
- ARENDT, Hannah. **Origens do totalitarismo**. Trad. Roberto Raposo; São Paulo: Companhia das Letras, 1989.
- BIG data [verbetes]. In: GARTNER. **Gartner glossary**. [S. l.]: Gartner, 2021. Disponível em: <https://www.gartner.com/en/information-technology/glossary/big-data>. Acesso em: 4 fev. 2021.
- BINGEMER, Maria Clara Lucchetti. Apresentação. In: JONAS, Hans. **O princípio da responsabilidade**: ensaio de uma ética para civilização tecnológica. Trad. Marijane Lisboa e Luiz Barros Montes. Rio de Janeiro: Contraponto: Editora PUC-Rio, 2006. p. 17-22.
- BLACK mirror. Direção: Produtor: Barney Reisz. [S. l.]: Zeopotron, 2011.
- BLADE Runner: o caçador de androides. Direção: Ridley Scott. [S. l.]: Warner Bros., 1982.
- BRASIL. **Lei nº 13.709, de 14 de agosto de 2018**. Lei Geral de Proteção de Dados Pessoais (LGPD). Brasília, DF: Presidência da República, [2020]. Disponível em: http://www.planalto.gov.br/ccivil_03/_ato2015-2018/2018/lei/L13709.htm. Acesso em: 4 fev. 2021.
- DISRUPÇÃO [verbetes]. In: INSTITUTO ANTÔNIO HOUAISS. **Grande dicionário Houaiss**. [S. l.: s. n.], [2021]. Disponível em: <https://houaiss.uol.com.br/>. Acesso em: 4. fev. 2021.
- GUSTIN, Miracy Barbosa de Sousa; DIAS, Maria Tereza Fonseca; NICÁCIO, Camila Silva. **(Re)pensando a pesquisa jurídica**: teoria e prática. 5. ed. rev., ampl. e atual. São Paulo: Almedina, 2020.
- HARARI, Yuval Noah. **21 lições para o século XXI**. São Paulo: Companhia das Letras, 2018.
- JONAS, Hans. **O princípio da responsabilidade**: ensaio de uma ética para civilização tecnológica. Trad. Marijane Lisboa e Luiz Barros Montes. Rio de Janeiro: Contraponto: Editora PUC-Rio, 2006.
- JORNADA nas estrelas. Direção: Robert Wise. [S. l.]: Paramount Pictures, 1970.
- JUNGES, Márcia. Hans Jonas e a atualização do imperativo categórico [Entrevistado: Gabriel Insaurralde]. **Revista do Instituto Umanitas Unisinos**, São Leopoldo, ed. 328, 10 maio 2010. Disponível em: <http://www.ihuonline.unisinos.br/artigo/3195-gabriel-insaurralde>. Acesso em: 4 fev. 2021.
- KANT, Immanuel. **Fundamentação da metafísica dos costumes**. Tradução, introdução e notas por Guido de Almeida. São Paulo: Discurso Editorial, 2009.
- LAVOISIER, Antoine Laurent. **Tratado elementar de Química**. Trad. Emídio C. Queiroz Lopes. Lisboa: Sociedade Portuguesa de Química, 2012. t. 1.
- MATRIX. Direção: Joel Silver. [S. l.]: Warner Bros., 1999.

OLIVEIRA, Jelson. **Compreendendo Hans Jonas**. Rio de Janeiro: Vozes, 2014.

SÓFOCLES. **Antígona**. Trad. J. B. Mello e Souza. [S. l.]: Ebook Brasil, 2005.

SUSIN, Fernanda Prux. **Heurística do temor: técnica e responsabilidade em Hans Jonas**. 2017. Dissertação (Mestrado em Filosofia) – Programa de Pós-Graduação em Filosofia, Universidade de Caxias do Sul, Caxias do Sul, 2017. Disponível em: <https://repositorio.ucs.br/handle/11338/3318>. Acesso em: 4 fev. 2021.

UNIÃO EUROPEIA. **Regulamento (UE) 2016/679, do Parlamento Europeu e do Conselho, de 27 de abril de 2016, relativo à proteção das pessoas singulares no que diz respeito ao tratamento de dados pessoais e à livre circulação desses dados e que revoga a Diretiva 95/46/CE (Regulamento Geral sobre a Proteção de Dados)**. [S. l.]: EUR-Lex, [2016]. Disponível em: <https://eur-lex.europa.eu/legal-content/PT/TXT/?uri=celex%3A32016R0679>. Acesso em: 4. fev. 2021.

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