Quaestio Iuris

vol.14, nº.04, Rio de Janeiro, 2021. pp. 1001-1038
DOI: 10.12957/rqi.2021.58084

LAW, HERMENEUTICS AND ARTIFICIAL INTELLIGENCE: BUILDING BRIDGES BETWEEN JUDICIAL DECISION, EXISTENTIAL UNDERSTANDING AND MACHINE LEARNING MECHANISMS

DIREITO, HERMENÊUTICA E INTELIGÊNCIA ARTIFICIAL: CONSTRUINDO PONTES ENTRE DECISÃO JUDICIAL, COMPREENSÃO EXISTENCIAL E MECANISMOS DE MACHINE LEARNING

Adalberto Narciso Hommerding[1]
Gabriel Henrique Hartmann[2]

ABSTRACT

This text discusses the overlap between Law, Hermeneutics and Artificial Intelligence (I.A.): the hermeneutic possibility of constructing judicial decisions based on machine learning mechanisms. The text describes hermeneutic thinking, which is a thinking that meditates, able to understand, understand and question the very existence of being, and, when describing concepts linked to AI and machine learning, it seeks to imbricate Hermeneutics and AI, trying to verify whether or not it is possible to construct hermeneutically judicial decisions based on AI mechanisms, given the difficulty of the machine to think hermeneutically. The purpose of this text, therefore, is to seek to affirm whether or not there is already a possibility of reconciling Law, Hermeneutics and AI, in the sense that the machine delivers judicial decisions that are better than those of the judge, insofar as it can contain judicial subjectivity. always present in decisions.

Keywords: Artificial Intelligence - Machine Learning - Thinking Hermeneutic - Artificial Hermeneutics.

RESUMO

Este texto discute a imbricação Direito, Hermenêutica e Inteligência Artificial (I.A.): a possibilidade hermenêutica de construção de decisões judiciais a partir de mecanismos de *machine learning*. O texto descreve o *pensar hermenêutico*, que é um pensar que medita, capaz de compreender, entender e questionar a própria existência do ser, e, ao descrever conceitos atrelados a I.A., *machine learning* e aprendizado de máquina, busca imbricar Hermenêutica e I.A., tentando verificar se é ou não possível construir hermeneuticamente decisões judiciais a partir dos mecanismos de I.A., diante da dificuldade da máquina de pensar hermeneuticamente. O intuito do presente texto, portanto, é buscar afirmar se já há ou não possibilidade de conciliar Direito, Hermenêutica e I.A., no sentido de a

[1] Mestre em Direito pela Universidade Federal de Santa Catarina e doutor em Direito pela Universidade do Vale do Rio dos Sinos e pós-doutorado em Direito pela Universidad de Alicante, Espanha. Professor da URI - Universidade Regional Integrada, de Santo Ângelo, na graduação e pós-graduação, inclusive Mestrado e Doutorado em Direito. Afiliação: Universidade Regional Integrada do Alto Uruguai e das Missões (URI) Lattes:http://lattes.cnpq.br/8316483023945932. ORCID:https://orcid.org/0000-0002-1707-1011. E-mail:anhommerding@tjrs.jus.br

[2] Mestre em Direito pelo do Programa de Pós-Graduação Stricto Sensu em Direito - Mestrado e Doutorado da Universidade Regional Integrada do Alto Uruguai e das Missões (URI), Campus Santo Ângelo/RS. Pós-graduando em Direito Previdenciário pela Escola Brasileira de Direito (EBRADI). Bacharel em Direito pelas Faculdades Integradas Machado de Assis (FEMA), Santa Rosa/RS. Afiliação: Universidade Regional Integrada do Alto Uruguai e das Missões (URI). Lattes:http://lattes.cnpq.br/9420871552170588. ORCID: https://orcid.org/0000-0003-3616-5192. E-mail: gabrielh.hartmann@hotmail.com

vol.14, nº.04, Rio de Janeiro, 2021. pp. 1001-1038
DOI: 10.12957/rqi.2021.58084

máquina proferir decisões judiciais que sejam melhores que as do juiz, na medida em que consiga conter a subjetividade judicial sempre presente nas decisões.

Palavras-chave: Inteligência Artificial – *Machine Learning* – Pensar Hermenêutico – Hermenêutica Artificial.

INTRODUCTION

The rapid development of the technique has enabled several social changes and, of course, people's behavior. Thus, technology has caused countless changes in human daily life, one of its manifestations being the creation of the *internet*, the world wide web. Despite half a decade of its invention, the mechanisms of Artificial Intelligence (AI) are still mere tools at the service of man. Is possible, however, to imagine a world in which the machine thinks like a human being? And if this is possible, what are the limits of this happening? How to regulate the exercise of thought from the machine if this occurs? In terms of Law in particular, how to regulate rights and duties without extrapolating democratic limits? After all, is it possible for the machine to hermeneutically construct court decisions capable of offering a correct decision, thus restraining subjectivity and, consequently, judicial discretion, sometimes existent in the judge's decision? Are or may AI engines be able to handle a challenge of this size?

In fact, there seems to be no answer to these questions yet. We do not discard however, a world in which that happens. Thus, this article, at first, seeks to situate what represents the hermeneutic thought, using, for that, the teachings of Ernildo Stein, one of the main Brazilian exponents of thought and Heideggerian philosophy. In a second moment, historical elements will be described about the technique, its conceptualization and its etymology, which provide human beings with daring and fanciful visions that make technical-scientific improvement tangible. From there, in a third moment, the possibility of an overlap between one and another, and the possibility or not of AI incorporating hermeneutic thinking as its possibility of constructing judicial decisions, which would mean the occurrence of an artificial hermeneutics. Evidently, there is no intention of exhausting any subject related to the theme. Far from it. What is wanted is simply to project perspectives and challenges for the use of AI in the judicial decision process.

vol.14, nº.04, Rio de Janeiro, 2021. pp. 1001-1038
DOI: 10.12957/rqi.2021.58084

1. HERMENEUTIC THINKING

Martin Heidegger, without a doubt, was one of the great philosophers of the 20th century. *Being and Time* (*Sein und Zeit*), in turn, is his main work, among many others, and possibly the best philosophical work of the 20th century. In Brazil, one of the authors who best understood Heidegger's work is Professor Ernildo Stein. According to Stein, in *Being and Time*, there are six central theses: 1) at the beginning, Heidegger places the issue of fundamental ontology, of the meaning of being; 2) to clarify this question, Heidegger, then, resorts to *Dasein*, the *being-there*, the only entity that understands being; 3) *being-there* is *being-in-the-world*; 4) *being-in-the-world* is *care, cure* (*Sorge*); 5) care is *temporal* (*zeitlich*); and 6) the temporality of care is an *ecstatic* temporality that differs from the linear, objectified time (STEIN, 2005).

Although an unfinished and controversial work, *Being and Time* is characterized by being a critique of metaphysics and a destruction of traditional ontologies, using Heidegger's critique of the concept of time as a guideline. between philosophical paradigms. It was this, explains Stein (2005), that allowed the expansion and radicalization of the reading of Heidegger's work. With the theses of *Being and Time*, Heidegger laid the foundations for overcoming the theories of consciousness and representation, theories that are always in search of an ultimate foundation for subjectivity. Note that resorting to God or nature to solve the questions of ontology and truth arises from theories of representation, forgetting the *place* of these questions: *Dasein* (*being-there*), the world (human), temporality, which constitute the object of *existential analytics*. The question of being, thus, is linked to facticity and is not posed to solve the problem of the *ultimate origin of things*.

The question of the *meaning of being*, as explained by Ernildo Stein (2005), follows *being-in-the-world*, not so much as a question to be resolved, but as a form (why not *a priori*?, asks Stein), which is a *condition of possibility of the understanding* that the being-there has of itself, of the tools it handles and of the simply intramundane entities. Existentials as ways of being-there are co-originating with the understanding that *Dasein* has of itself in its *having-to-be*: understanding of the being is always a task. Before *Dasein* theorizes or exposes the world in discourse, it already has an understanding of itself, of the tools it deals with. This structure that Heidegger calls *as hermeneutic*, which is more original than the *as apophantic* of saying, commits *Dasein* to the world, in a relationship prior to theory and praxis. The being-in-the-world thus ends up constituting the key to *Lebenswelt*, the world of life, which presents itself as a structure behind which there is no way to advance. Here, says Stein, the paradigmatic

vol.14, nº.04, Rio de Janeiro, 2021. pp. 1001-1038
DOI: 10.12957/rqi.2021.58084

question arises in which the relationship with the world is replaced through consciousness and representation that always come late. This is the mark of *Being and Time*. For Stein, if the question of the lived world has become central in philosophy and the human sciences, it was because of this paradigmatic revolution that, on the one hand, delimited the task of philosophy and, on the other, it suppressed the question of the ultimate foundation, introducing the idea of *good circularity*. This novelty of the paradigm of being-in-the-world, therefore, will be one of the keys to understanding the influence of Heidegger's work on other philosophers.

The revolution brought about by *Being and Time* does not start, however, with *Being and Time*. There are, as is often said, three moments in Martin Heidegger's thought. According to Stein, although there are no three Heideggers, one could speak of a Heidegger I, a Heidegger II and a Heidegger III as something created by the search for an understanding of the stages of the philosopher's monumental work and his immanent project. Heidegger I is the Heidegger that precedes Being and Time. In the words of Stein (2002, p. 23),

> a denominação Heidegger I já aponta para um problema de caráter não apenas histórico do pensamento, mas para uma questão essencial para o pensamento: De que modo dar conta do projeto de uma analítica existencial como condição para pensar o sentido do ser, tema da ontologia fundamental e, ao mesmo tempo, ter que pressupor já o sentido do ser para construir a analítica existencial? Heidegger dirá, por essa razão, que o caminho de *Ser e tempo* foi necessário, mas a sua incompletude aponta para a urgência de ter que ir além dele[3].

Martin Heidegger designates the movement of going beyond of the project of *Being and Time* as *Kehre*, *turning point*. Even after 1927, the year of the publication of *Being and Time*, the works of Heidegger, explains Stein, are still works in which Heidegger I is obsessed with finding a suitable formulation for the third section of the first part, *Time and Being*. The works produced by Martin Heidegger in the period of Heidegger I not only point to a historical problem of thought, but to essential questions of thought: "de que modo dar conta do projeto de uma analítica existencial como condição para pensar o sentido do ser, tema da ontologia fundamental e, ao mesmo tempo, ter que pressupor já o sentido do ser para construir a analítica existencial?[4]" (STEIN, 2002, p. 23). For Heidegger, then, the path of *Being and Time* was necessary; however, this gap exposes the need to go beyond it.

[3] the name Heidegger I already points to a problem not only of a historical nature of thought, but also to an essential question for thought: How to account for the project of an existential analytic as a condition for thinking about the meaning of being, a theme of fundamental ontology and, at the same time, having to presuppose the meaning of being in order to build existential analytics? Heidegger will say, for this reason, that the path of Being and time was necessary, but its incompleteness points to the urgency of having to go beyond it. (Free translation)

[4] how to account for the project of an existential analytic as a condition for thinking about the meaning of being, theme of the fundamental ontology and, at the same time, having to already presuppose the meaning of being in order to build existential analytics? (Free translation)

vol.14, nº.04, Rio de Janeiro, 2021. pp. 1001-1038
DOI: 10.12957/rqi.2021.58084

From 1929 onwards, Martin Heidegger progressively abandoned being in Western metaphysics. Although the overcoming of metaphysics in this period is evident, the philosopher, rooted in his project in metaphysics itself, eventually introduces his entry into metaphysics. In addition to a distancing from *Being and Time*, the philosopher abandons references from Heidegger I, such as the phenomenological method and the issue of hermeneutics of facticity. Thus, there is a decrease in the effort in theoretical and categorical construction. From these facts, Heidegger II took shape in the 1930s.

Although in this period the philosopher analyzed the classics of German idealism (Kant, Schelling and Hegel), his inclination towards thinkers and poets who demonstrated the malaise of metaphysics was noticeable. He is affiliated, then, with Nietzsche, Hölderlin, Rilke and Tralk, who became the object of broad and in-depth analysis of his interpretations. When analyzing the oblivion of being in metaphysics, Martin Heidegger excels in pre-Socratic thinkers. Heidegger I is dedicated to Plato and Aristotle, while Heidegger II analyzes the dawn of the birth of the question of being, mainly Heraclitus and Parmenides. According to Ernildo Stein (2002), Heidegger II chooses certain themes or specific philosophical questions, as ways of overcoming metaphysics. When talking about poetry, art, technique, world image, the West, the role of science and other themes, the philosopher seeks, then, to overcome metaphysics and the oblivion of being. Heidegger II shows his presence, especially after World War II, and takes specific themes for his writings and lectures (language, technique, art, poetry, thought, building, living and thinking). A significant amount of his works published at the end of 1940 could be considered a diagnosis of the second half of the 20th century.

Heidegger III, on the other hand, a contemporary philosopher, sought to expose the scenarios that decided the fate of the West and the world at the time. During this period, the philosopher resumed his thinking and presented answers to the problems posed by humanity in the 20th century. It is at this stage that the interpreter of specific issues emerges, linked to science, culture and the human condition. For Stein (2002), Heidegger III, mediated by the effects of the effort to diagnose phenomena of the technical era, ends up being a guide that leads us to the philosopher of the forgetting of the being, Heidegger II, and to the philosopher of existential analytics, Heidegger I. A third moment in the development of Heidegger's philosophy arises, therefore, after the existential analysis and reflection on the history of metaphysics. However, this is not a chronologically distinct third period because, according to Gianni Vattimo (2002), it develops parallel to Heidegger II, even when Heidegger III's themes are predominant, mainly in works post-World War II World. Heidegger III may constitute an

vol.14,nº.04,RiodeJaneiro,2021. pp. 1001-1038
DOI: 10.12957/rqi.2021.58084

entrance to the philosopher's works, but this will only become possible if the development of philosophical thought, prior to the 1950s, constitutes a preparatory path. What is certain, as already mentioned, is that there are no three Heideggers. This differentiation, exposed by Professor Ernildo Stein, represents a search for understanding the stages of his fundamental work and his inseparable project that led to the emergence of Heidegger I, II and III.

The matter of thinking, which interests us, is the subject of Heidegger II. At the moment, however, when the philosopher attributed the fact that science still does not think, there is a clear manifestation attributed to Heidegger III. Understanding Heidegger's approach to thinking led to dimensions analyzed by the philosopher, especially after 1940. Undoubtedly, throughout Heidegger's work, the way of referring to thinking results from the application of Heidegger's philosophy to thinking itself, in different ways (STEIN, 2002). Therefore, three ways of thinking are identified in the philosopher's works[5]:

Thinking I: the first thinking is an activity attributed to human beings in their specific condition. In recent centuries, and especially in the 20th century, thinking I was converted to the physical and sensitive dimension of a biological being endowed with a psyche. Thinking I was the object of psychology, possibly of anthropology, and has become a central theme in biological sciences, such as neurobiology. This thinking is referred to *animality*. It becomes characteristic of the living being that, as an organism, has reached a certain form of evolution. thinking I is a fundamental quality of the human being. Heidegger, however, does not see the essence of the rational animal in thinking I. For Heidegger – in what follows Nietzsche -, man is an *animal that has not yet been found*, which cannot be cataloged through this property of thinking. This first way of thinking, explains Stein, involves, then, the biological and the psychic, and, more than that, the whole way of existing in a concreteness in which the beyond-itself refers to a new way of sensitivity, to a new way of being physically in the world (STEIN, 2002).

Thinking II: In Western metaphysics, thinking II was reduced to logic. To think was to be capable of reasoning and argumentation. It was through this second way of thinking that the paradoxes of the first thought were apparently resolved. As explained by Ernildo Stein (2002, p. 33-34),

[5] [1]For Stein, we have, therefore, before us, the challenge of understanding the philosopher's work, in order to understand what he wants to expose in the analysis of the three ways of thinking. Although thinking III can be attributed as the fundamental mark of Heidegger's thought, the other two ways of thinking receive, in this first way, a certain inflection in which they did not appear in the way they are exposed, without the presuppositions of the philosopher's thinking. That's why the work *What Is Called Thinking?* occupies a unique place and an absolutely unique starting point for us to talk about the three ways of thinking. STEIN, Ernildo. *Pensar é Pensar a Diferença: filosofia e conhecimento empírico.* Ijuí: Ed. Unijuí, 2002, p. 31

vol.14, nº.04, Rio de Janeiro, 2021. pp. 1001-1038
DOI: 10.12957/rqi.2021.58084

> Introduzir conceitos, como espírito, intelecto, alma, consciência, eram esforços para criar lugares para onde levar a sensibilidade ou de onde pensá-la em sua condição de possibilidade. O modo mais tradicional de examinar essa segunda forma de pensar era dizer que o ser humano é dotado de racionalidade[6].

For Stein (2002), joining rationality with animality was, however, just a mere expedient, not a solution. As this dimension of rationality, contained in logic, was the one that fit in the places found also for sensibility (soul, spirit, mind, consciousness), the solution for the two ways of thinking was basically always reduced to the sphere in which rationality predominated, with the condition of the human being as a world maker remaining unresolved, as a way of being determined from the totality of the human condition.

The empire of logic, the second way of thinking, thinking II, thus marked the entire history of Western metaphysics. Philosophy and science were concerned with this thinking. All forms of thinking, therefore, took place in the domains of philosophy as metaphysics and in the domains of science as logical discourse (STEIN, 2002).

Thinking III: the third way of thinking, thinking III cannot be placed alongside the other two ways of thinking as if it were more of a thinking linked to an object. For Heidegger, thinking III is the worthiest of being thought. Hence Heidegger's assertion that *the strangest thing about our strange time is that we still don't think*. Thinking III involves the other two ways of thinking and constitutes its condition of possibility. According to Stein, Heidegger introduces with his philosophy the conditions of possibility, the frame in which the human being is situated, while thinking about the first two ways of thinking (STEIN, 2002).

The third form will serve as a substitutive element for the definition of man as a rational animal, leading the effort to determine the essence of the human being towards a way of existing in which, since always, he is already beyond himself. Thus, a transcendence linked to existence is introduced. Such transcendence, however, is linked to the world-forming condition. For Heidegger, *stone is worldless, the animal is poor in world, and the human being is world forming*. The world is a world with transcendence and also as a way in which the unity between the three ways of thinking takes place. In Heidegger, beyond logic, which is the second way of thinking, there is a thinking that is a way of *being-in-the-world*. Thinking, therefore, is not a simple activity of presenting serial arguments or logical forms in any scientific field. Thinking is a way of being. Ernildo Stein (2002, p. 36-37) quotes the following passage here:

[6] Introducing concepts, such as spirit, intellect, soul, consciousness, were efforts to create places to take sensibility to or from where to think about it in its condition of possibility. The most traditional way of examining this second way of thinking was to say that the human being is endowed with rationality. (Free translation)

vol.14, nº.04, Rio de Janeiro, 2021. pp. 1001-1038
DOI: 10.12957/rqi.2021.58084

> Nós estamos, por exemplo, diante de uma árvore em flor e a árvore está diante de nós, ela se apresenta a nós. A árvore e nós nos apresentamos um ao outro, enquanto a árvore está aí e nós estamos aqui. Na relação recíproca – postos um diante do outro – a árvore e nós somos[7].

In thinking III, the relationship with speaking changes. Speaking takes on another depth. In Heidegger's words, only a being who speaks, that is, who thinks, can have a hand and, in the use of that hand, perform works of the hand. For metaphysics, the human being *speaks because s/he thinks*. For Heidegger, the human being *thinks because s/he speaks*. Heidegger links thinking III to the use of the hand. For him, the hand cannot be determined as an organ of capture as in animals. The hand is infinitely distinguished from all the organs of capture, and only a being who speaks, who thinks, can have a hand. Therefore, Heidegger links the third way of thinking to a practical way of being-in-the-world, to a familiarity in the relationship with entities (STEIN, 2002).

For Stein (2002), we have before us the task of exploring the unthinkable that lies behind the three ways of thinking. The thinking object of psychology or neurobiology must receive an unobjectified dimension of an event that shows what science has not been able to show. The thinking object of logic takes place in a context to which every statement capable of truth or falsehood refers to and which is the original place which is, by extension, the condition of possibility of the statement. The thinking that Heidegger presents to talk about the way he talks about the thinking of psychology and the thinking of logic cannot be explained in its condition of possibility, as it has an existential character and constitutes the happening itself, in which transcendentality has already been overcome. towards a history that is, at the same time, the clearing of manifestation of being and of the reciprocal relationship between man and being.

As you can see, Heidegger links the third phase to a way of thinking in a practical world. For the philosopher, thinking is linked only to being. This is due to the fact that thinking is not linked to the objects of the ontic world, but rather to thinking that we want to reveal, that in the ontic world thinking logically would not make it possible. Ernildo Stein (2002, p. 59-60), when explaining thinking in Heidegger, considers that thinking can be converted into *Bedenklichste*, in a more serious or strange concept (putting the being in fear or summoning to responsibility), because thinking is concerned with unveiling, that is, thinking "aponta para um perigo, o perigo de não pensarmos mais, ou o perigo de pensarmos sem

[7] We are, for example, in front of a flowering tree and the tree is in front of us, it presents itself to us. The tree and we introduce ourselves to each other, while the tree is there and we are here. In the reciprocal relationship - placed facing each other – the tree and we are. (Free translation)

vol.14, nº.04, Rio de Janeiro, 2021. pp. 1001-1038
DOI: 10.12957/rqi.2021.58084

sabermos o que pensamos[8]". Thinking III provides the ontologically ontic condition of *dasein*, since in it being has a place of understanding of being. Only in the third phase does Heidegger point out that only the being is capable of thinking and questioning about its own existence. The way of thinking always takes place in the complete relationship between the being and the essence of man. Thus, Heidegger (2005) argues that thinking for men is simple, but it becomes difficult when, in certain situations, they want to carry out their own actions. Thinking only happens with learning, because thinking is always linked to the way of thinking. In order to think, it is not enough for the being to be concerned only with correct thinking, but the path that leads the being to imperatively think.

For Martin Heidegger (2000, p. 13), the thought that calculates is, however, different from the thought that meditates. While the first one does not stop, even coming to meditate, the thought that meditates requires great effort, in addition to needing more care than any other activity. Man, the only being that meditates, chooses to flee from the thought that meditates, and for that reason he approaches a thought that calculates. Accordingly, thinking that calculates is not thought that meditates (*ein besinnliches Denken*), it is not thought that reflects (*nachdenken*) on the meaning that reigns in everything that exists.

Insofar as meditating means awakening the sense to the useless, everything that is not immediately useful and that is not linked to the growth of needs and consumption is considered useless, that is, meditation, by not projecting necessary, figure itself as useless. The technique responsible for meeting human needs is projected in proximity to a calculating thought. Technique, however, is co-determinant of knowing. In short, *techne* is not a concept of *doing*, but a concept of *knowing*. Therefore, modern sciences, through technique, incisively modified and modify the world, that is, our own being in the world (HEIDEGGER, 1995).

That is why Heidegger, in the last writings he produced, sought to study the technique. In one of his writings, dated 1953, Martin Heidegger wrote on the *technique matter*. The German thinker, unlike authors concerned with the conceptualization of technique, focuses on the *essence* of technique. For him, *technique is not the same thing as the essence of technique* (HEIDEGGER, 2007, p. 375). In the words of Álvaro Vieira Pinto (2005, p. 151),

[8] points to a danger, the danger of not thinking anymore, or the danger of thinking without knowing what we think. (Free translation)

vol.14, nº.04, Rio de Janeiro, 2021. pp. 1001-1038
DOI: 10.12957/rqi.2021.58084

> Heidegger, movido pela hostilidade à técnica real, afasta a significação corrente da palavra e entra a especular sobre o segundo sentido, o erudito, o etimológico, daquele termo. A essência da técnica desliga-se assim do fazer, acepção sem dúvida plebeia, material e indigna de um metafísico, e passa a ter significado de trazer à luz, isto é revelar, desvendar, conforme a composição original da palavra grega *alétheia*[9].

In Heidegger, technique is not merely a means. It's a way of disclosing, unveiling. Heidegger (2007, p. 380) states that "abrir-se-á para nós um âmbito totalmente diferente para a essência da técnica[10]". This is the scope of revealing, that is, the truth. The technique, for the German philosopher, becomes essential only when the unconceiling, unveiling or disclosing happens.

Heidegger considers technique as a manifestation of the truth of being. *Dasein* is in the world as understanding. Thus, " para o estar-aí, ser-no-mundo equivale a originariamente intimidade com uma totalidade de significados[11]" (STRECK, 1999, p. 171). Things come endowed with meanings and can thus manifest themselves within the totality of meanings established by *dasein*. Thus, in Heidegger, understanding is a *being of a can-be*. For the German thinker, technique constitutes a destination, where unveiling and veiling takes place.

In the instrumental and anthropological view of technique, Heidegger (2007) characterizes technique as a means to certain ends. Therefore, a correct view does not have the need for unveiling. In contrast, the vision of the true focuses on the search for essence. Only with unveiling and unconceiling is it possible to reach the true. To approach the essence of the technique, it is necessary to overcome the correct and reach the true.

Therefore, according to Felipe Boburg (2009), for Heidegger, truly thinking about technique is essential to free oneself from the desire to dominate, control and put technique at the service of man, because when human beings elevate technique, the more the domain that the technique holds is reaffirmed. The technique, for Heidegger, is a destiny, something that was inherited, and, due to that, it cannot be erased without erasing the human being. For this fact, it is necessary to recognize that the technique is intrinsic to the human being and that it did not appear due to human appearance and, in the same way, it will never submit to its will.

For Hans-Georg Gadamer, Heidegger, by transcending metaphysics, resurrects the theme of being and acquires a fundamentally new position. With Heidegger, hermeneutics

[9] Heidegger, moved by hostility to real technique, moves away from the current meaning of the word and begins to speculate on the second sense, the scholarly, the etymological, of that term. The essence of technique is thus disconnected from doing, which is undoubtedly a plebeian meaning, material and unworthy of a metaphysician, and takes on the meaning of bringing to light, that is, revealing, unraveling, according to the original composition of the Greek word *alétheia*. (Free translation)

[10] a totally different scope for the essence of technique will open up for us. (Free translation)

[11] for being-there, being-in-the-world is originally equivalent to intimacy with a totality of meanings. (Free translation)

vol.14, nº.04, Rio de Janeiro, 2021. pp. 1001-1038
DOI: 10.12957/rqi.2021.58084

becomes philosophical, with the comprehension understood as an ontological structure of *dasein*, based on being itself, and not the property of being. The concept of being is the most universal – for dispensing a definition – and the emptiest. Thus, for Heidegger, the matter on the meaning of being is only possible when an *understanding of being* is given. (STRECK, 1999, p. 170).

It should also be clarified - and here the reference is to Gadamer (1997) - that in German, comprehension (*Verstehen*) also designates practical know-how (*er verstehtnichtzu lesen*, *he does not understand reading*, which means as much as: *he gets lost in reading*, that is, cannot read). Comprehension, therefore, is the way of being pre-sence, insofar as it is can-be and *possibility*; therefore, to comprehend is to understand oneself. Therefore, existing, inevitably, is linked to time and individual conditioning. So, it is only possible to understand given the condition of time and place.

Thus, the text is a linguistic statement and whoever seeks to understand it performs a project. At the moment when the initial understanding of the text appears, the interpreter pre-lines the total meaning. This only manifests itself because the reader and interpreter read the text facing expectations and perspectives of certain senses. As Gadamer (1997) explains, whoever reads and interprets is subject to misunderstandings. In hermeneutics, the tool is not decisive, as the language existing in the statement goes much further. Hermeneutics is the one with the ability to interpret the word without exhausting it, with respect to the etymological nature and all its understandings (VATTIMO, 2002). The utterance, therefore, does not carry the meaning in itself, which would be *decoupled* by the interpreter. In interpretation, something is always left out, the unsaid, the *inaccessible* (STRECK, 2011, p. 285).

Heidegger was not an enemy of technology, nor did he see technology as a demonic element. For him, the age of technique would be a dangerous and hopeful time. Hence a certain fear on the part of the philosopher, who thought of the need for technique to be understood in its essence. For Heidegger, technique is an entity, whose being, the essence of technique, must be investigated. Thinking, discussed here, is the thinking of Martin Heidegger, which certainly has meaning in human beings, arising from non-logical thinking, "pensar que abre um espaço para onde remete todo o enunciado e de onde esse recebe sua condição de possibilidade[12]" (STEIN, 2002, p. 51-52). Man has the ability and possibility to think; however, this possibility of thinking does not guarantee that man will do so. For Martin Heidegger it is strange and even arrogant, in times as problematic as the ones that are in

[12] thinking that opens a space to which all the statement refers and from where it receives its condition of possibility. (Free translation)

vol.14,nº.04,RiodeJaneiro,2021. pp. 1001-1038
DOI: 10.12957/rqi.2021.58084

progress, that the human being does not think (HEIDEGGER, 2005). In view of Heidegger's thinking, the human being is the only privileged entity capable of harboring a being capable of comprehending, understanding, thinking logically and, above all, capable of questioning his own existence. With the propulsion of the A.I., through the improvement of machine learning algorithms or machine learning algorithms, the human being is probably no longer the only privileged entity. In view of this hypothesis, the possibility of constructing an artificial hermeneutics emerges.

2. FROM TECHNIQUE TO MACHINE LEARNING: A BRIEF HISTORICAL JOURNEY OF POSSIBILITIES AND PERSPECTIVES

The history of AI essentially involves technical evolution. Technical evolutionism permeated previously unimaginable concepts and research. To understand the technological phenomenon, an initial description of the different technical concepts that caused the emergence of innovative technological concepts is essential. With the emergence of AI and machine learning, methods based on the search and optimization of results have been used in the Judiciary in order to reduce the subjectivity of judicial decisions.

The technique changed the man. Precisely for this reason, two statements justify the assertion: "um diz: técnica é um meio para fins. O outro diz: técnica é um fazer do homem.[13]" (HEIDEGGER, 2007, p. 376). Both are correlated, as they establish ends and for that they employ means that constitute a human doing.

According to Greek mythology, Prometheus and Epithemeus were the creators of the human race. Epithemeus (*epi-temis*, the one who *thinks after*) was appointed by Zeus to distribute the instinctual qualities to everyone. Upon reaching the human being, he had nothing else, as he had been generous in previous deliveries. Zeus, out of human compassion, appointed Prometheus (*pro-metis*, the one who *thinks before*), to bestow his own virtues on human beings: *pre-cognition* and *pre-vision*. With the ability to calculate, predict and some aspects of technical operability granted by Prometheus, Zeus, fearing that men with the technique might become more powerful than the gods, inflicts a punishment on Prometheus. Zeus ties Prometheus to a rock together with an eagle that devours his liver, an organ that constantly regenerates. In this way Zeus guaranteed eternal punishment for Prometheus (GALIMBERTI, 2015).

[13] one says: technique is a means to ends. The other says: technique is a man's doing. (Free translation)

vol.14, nº.04, Rio de Janeiro, 2021. pp. 1001-1038
DOI: 10.12957/rqi.2021.58084

For the Greeks the word technique is an adjective. The Latinized form of the word, which is rarely used, *techna* has the sense of cunning or wit, certainly influenced by *technicus*, which comes close to the Greek and designates a master of some craft. Thus, " por motivos de caráter semântico acabou impondo-se o adjetivo técnico(a), revestido da categoria gramatical de substantivo, assim tendo se conservado nas línguas modernas[14]" (PINTO, 2005, p. 175). In contrast, Martin Heidegger combines the technique with the character of *poiesis* or production. So much so that in the technical age, in principle, everything can be produced without space for what does not fit into calculating thinking. In the words of Álvaro Vieira Pinto (2005, p. 175)

> O termo «técnica» deriva do grego technikon. Isto designa o que pertence à techne. Este termo tem, desde o começo da língua grega, a mesma significação que episteme quer dizer: velar sobre uma coisa, compreendê-Ia. *Technè* quer dizer: conhecer-se em qualquer coisa, mais precisamente no facto de produzir qualquer coisa. Mas para apreender verdadeiramente a t*echnè* pensada à maneira grega bem como para compreender convenientemente a técnica posterior ou moderna, isso depende de que pensemos o termo grego no seu sentido grego, e de que evitemos projectar sobre este termo representações posteriores ou actuais. *Technè*: conhecer-se no acto de produzir[15].

The history of technique often remains detached from its main foundation: the man who engenders it. Accordingly, it is wrong to restrict the manifestation of technique in machines, in exteriority and in the Western aspect of temporal succession. It fails to highlight " a verdadeira base que explica a sucessividade das criações tecnológicas, a historicidade inerente à existência do ser humano no mundo, obrigado a produzir-se a si mesmo[16]" (PINTO, 2005, p. 206).

For Jacques Ellul, the evolution of technique caused in human beings a feeling of elimination of everything that is not technical. All this is due to a long historical process. Initially, the diversity of influences focused essentially on aesthetics, not only for reasons related to reason, but as a vital element. With the advent of the nineteenth century, with technical training concerned exclusively with rational issues, important habits and trends of

[14] for reasons of a semantic nature, the technical adjective was imposed, covered by the grammatical category of noun, thus having been preserved in modern languages. (Free translation)
[15] The term "technique" derives from the Greek technikon. This designates what belongs to techne. Since the beginning of the Greek language, this term has the same meaning as episteme means: to watch over a thing, to understand it. *Technè* means: knowing oneself in something, more precisely in the fact of producing something. But to truly grasp *technè* thought in the Greek way as well as to properly understand modern or later technique, this depends on our thinking of the Greek term in its Greek sense, and on avoiding projecting later or present representations onto this term. *Technè*: knowing yourself in the act of producing. (Free translation)
[16] the real basis that explains the successiveness of technological creations, the historicity inherent to the existence of the human being in the world, obliged to produce himself (Free translation)

vol.14, nº.04, Rio de Janeiro, 2021. pp. 1001-1038
DOI: 10.12957/rqi.2021.58084

the time were injured[17]. Consequently, in a short period of time, it was realized that there could be no more aesthetic concern in the practical activity, and, with that, "um estilo se constitui, fundado nessa idéia de que a linha adaptada ao uso é a mais bela[18]" (ELLUL, 1968, p. 76).

For respectful researchers, the period between the 16th and 18th century was characterized by the absence of active reasoning, linked to rationalization action and concern with efficiency. This thought was intertwined with humanism and universalism, which exempted technical development. That's why the Industrial Revolution cannot be characterized as a period of technical outbreak, as the term technique is not restricted to the designation of machine.

Therefore, technical expansionism had its prelude in the Nazi period, which introduced a technical mentality, that is, the fact that people are not judged by the content of their actions, but whether they are good or bad in the activities they perform. The human being was designated as a matter of efficiency (GALIMBERTI, 2015). This technical outbreak of this given historical period combines five factors, listed in such a way:

> 1.º uma muito longa maturação ou incubação técnica, sem contragolpes decisivos, antes da eclosão; 2.º o crescimento demográfico; 3.º a situação do meio econômico; 4.º plasticidade quase perfeita da sociedade, maleável e aberta à propagação da técnica; 5.º uma clara intenção técnica que une tôdas as fôrças na perseguição do objetivo técnico[19]. (ELLUL, 1968, p. 61-62).

The thought of each age, period or generation is reflected in its technique. Thus, the 17th and early 18th centuries are characterized by the age of clocks; the 18th and 19th centuries as the age of steam engines; and current times as the era of communication and control. Or, again, the bygone era was characterized by electrical power generation, transmission and distribution engineering, while the present period is effectively characterized by communications engineering, which is able to support currents of all sizes and is able to move machines with great performance (WIENER, 2017).

[17] According to Jacques Ellul, "an attempt was made to reintroduce, surreptitiously, the essential aesthetic and moral factors, in practice. Hence the absolutely amazing creation of certain aspects of the 1880s style: the utensil with industrial decorations: the sewing machine with cast iron flowers, and the first tractors with engraved ox heads... Bad taste helping, expense soon revealed useless." (Free translation) ELLUL, Jacques. A Técnica e o Desafio do Século. Rio de Janeiro: Paz e Terra, 1968, p. 76.

[18] a style is constituted, based on this idea that the line adapted to use is the most beautiful. (Free translation)

[19] 1st a very long technical maturation or incubation, without decisive counter-attacks, before hatching; 2nd demographic growth; 3rd the situation of the economic environment; 4th almost perfect plasticity of society, malleable and open to the propagation of the technique; 5th a clear technical intention that unites all forces in pursuit of the technical objective. (Free translation)

vol.14, nº.04, Rio de Janeiro, 2021. pp. 1001-1038
DOI: 10.12957/rqi.2021.58084

Technique, of course, is not about what human beings do to meet their needs. Technique is not about a biological being, since the animal is an even-technical being. Technique goes beyond. It is an act that circumstantially modifies or reforms some natural aspect, in order to achieve a form or circumstance opposite to the initial one. Or rather, in order to meet their needs, human beings change, modify or reform some aspect, until then, natural. The set of these procedures is called technique. Thus, for José Ortega y Gasset (1963, p. 18) "a técnica é o contrário de adaptação do sujeito ao meio, posto que é a adaptação do meio ao sujeito[20]."

It is noteworthy that this is a shallow concept given the breadth of the technique. Once the human being marveled at what he found done. Now, in the age of technology and technological civilization, he is ecstatic with his own inventions, that is, he marvels at what he does. Technique, a product of human perception, materialized by instruments and machines, holds a science, called technology, capable of exploring its complex, full of epistemological content.

The technique has always been at the foundation of the productive social process. For this reason, the technique cannot be thought of without man. Man, as a technical animal, constitutes a being capable of elaborating projects, thinking and rethinking his actions, as the human being has in technology the natural behavior of the humanized being. Technology is as old as humanity. Despite being older than science, technology without the aid of science is capable of creating complex structures and instruments.

Technical improvement, leveraged by a series of factors, made it possible for human beings to achieve previously unimaginable biases. The technique, although still contained by economic power, has technology as its main hatching artifice, more specifically AI. AI has its emergence linked to the functioning of human minds. So much so that, in 1943, Warren McCulloch and Walter Pitts developed the first work on AI, based on the functioning of brain neurons, formal logical analysis by Russell and Whitehead, and theoretical analysis of computation by Allan Turing. The official birth of the AI is dated back in 1956, at Dartmouth College, and shared the efforts of John McCarthy, Marvin Minsky, Claude Shannon, and Nathaniel Rochester. With continual advances and setbacks, AI becomes a science in 1987. An AI System must have the ability to perform three activities: "(1) armazenar conhecimento,

[20] technique is the opposite of adaptation of the subject to the environment, since it is the adaptation of the environment to the subject. (Free translation)

vol.14, nº.04, Rio de Janeiro, 2021. pp. 1001-1038
DOI: 10.12957/rqi.2021.58084

(2) aplicar o conhecimento armazenado para resolver problemas e (3) adquirir novo conhecimento através da experiência[21]." (HAYKIN, 2001, p. 59).

The exponential advance of AI took place with access to the internet, an instantaneous communication tool, which predates the history of computers. The eagerness for instantaneous communication mechanisms that could provide fast communication over great distances was the human desire in the 18th century. The telegraph was the first means that provided instantaneous communication over great distances, especially with the installation in 1858 of the first transatlantic cable. It was only in the course of the Cold War, in 1950, that US President Dwight D. Eisenhower created the ARPA (Advanced Research Projects Agency). With the debates started in 1966 about the implementation of the ARPANET, in 1969 the first computer network came into operation.

The massive development of the internet is due to the explosion of the World Wide Web in the mid-1990s. The development of the Web happens, then, in periods. Web 1.0, the most primitive form of webs, was characterized by the passivity of users and without the possibility of interaction. Its main characteristics were staticity, centralization, exclusive use for reading and non-interactivity. Web 2.0 was able to offer an ease of interaction, with research, publication and consultation of content. It was structured on dynamism, interaction, and the possibility of reading and writing, with the development and favoring of collaborative work. Web 3.0, or Semantic Web, in turn, added knowledge in the geospatial context, with content and information adapted to the user's taste and preferences, based on the inclusion of semantic metadata. Finally, Web 4.0, or Predictive Web or Collaborative Web or Internet of Things, started a new cycle, centered on offering an intelligent, predictive behavior, so that the human being could, with a simple movement, cause a set of actions derived from it, in addition to offering a more complete and personalized interaction to the user. With the possibility of computers processing quadrillions of mathematical operations per second, the possibility emerged for machines to think, and, then, a Web 5.0 is already being considered, with the fusion of knowledge of human brains, both in capacity and speed and knowledge sharing, which technology could provide. The uniqueness will be reached, then.

In the course of a Fourth Industrial Revolution, characterized by Klaus Schwab (2016) for its speed, breadth, depth and systemic impact[22], the A.I. is momentarily in a weak or

[21] (1) store knowledge, (2) apply stored knowledge to solve problems, and (3) acquire new knowledge through experience. (Free translation)

[22] For Klaus Schwab, “Speed: Unlike previous industrial revolutions, this one evolves at an exponential, non-linear pace. This is the result of the multifaceted and deeply interconnected world we live in; moreover, new technologies beget newer and increasingly skilled ones. Breadth and depth: It is based on the digital revolution and combines various technologies, leading to unprecedented paradigm shifts in the economy, business, society, and individuals.

vol.14, nº.04, Rio de Janeiro, 2021. pp. 1001-1038
DOI: 10.12957/rqi.2021.58084

feeble stage, capable only of performing specific tasks. In some cases, it performs specific activities better than human beings, but that does not mean that computers use insight and understanding in carrying out the tasks. The studies about A.I. aim at a strong or general A.I., capable of creating intelligent systems with broad competencies. The discussion that permeates the scenario of general A.I. is based on the fact that machines will acquire consciousness, or even the possibility of actually feeling emotions; a thinking that stops being calculating and reaches a thinking that meditates, overcomes binary logic and reaches an abstract idea.

This becomes closer as machine learning improves. A machine learning algorithm uses a set of training data and looks for hypothesis(s) within possible alternatives. Each algorithm uses a pre-programmed form to describe the hypothesis. The most frequent and used, which momentarily work in support of judicial activities, are the predictive methods based on optimization under the model of artificial neural networks (ANNs) or based on search under the decision tree model.

The search-based predictive model is based on evaluating hypotheses within a space of possible solutions. The decision tree uses strategies to make a more complex problem simpler. The solution of subproblems, combined in a tree format, produces a solution to the various compound problems. Decision trees are characterized by their flexibility, robustness, attribute selection, interpretability, and efficiency. In contrast, the predictive, optimization-based model seeks the hypothesis that describes in a way that optimizes some function. The most popular optimization technique is that of ANNs. The ANN-based algorithm performs its tasks with an error correction rule, in which quadratic optimization of the error occurs. ANNs are computational systems based on a set of defined rules that, interconnected and with simple processing, simulate the architecture of biological synapses. ANNs execute their tasks satisfactorily when programmed to use large amounts of data.

Criticism related to ANNs is based on how the network arrives at its decisions. The difficulty in understanding concepts represented by ANNs is based on the fact that the large amount of parameters is manipulated by complicated mathematical formulas. In order to reconcile ANNs and decision tree concepts, researchers are dedicated to the study of techniques that can translate the knowledge acquired by the network into a format understandable by the user. Recently, scholars have turned their efforts to a sub-area called

The revolution is not only changing "what" and "how" we do things, but also "who" we are. Systemic impact: it involves the transformation of entire systems across and within countries, in companies, industries, and across society". (Free translation) SCHWAB, Klaus. A Quarta Revolução Industrial. Tradução Daniel Moreira Miranda. São Paulo: Edipro, 2016, p. 16-17.

vol.14, nº.04, Rio de Janeiro, 2021. pp. 1001-1038
DOI: 10.12957/rqi.2021.58084

deep learning, based on numerous layers of training. Tasks, however, that cannot be summarized without linking one vector to another, or that would take a person to a certain time of reflection, are still beyond the reach of deep learning, at least for the time being (HARTMANN PEIXOTO; SILVA, 2019, for. 100).

Optimization-based machine learning under the ANN model and search-based machine learning under the decision tree model have learning paradigms: supervised learning, unsupervised learning, and reinforcement learning. In supervised learning, the agent observes examples of input and output and elaborates a mapping of these. The accuracy of an algorithm with supervised learning will depend on the effectiveness of the algorithm chosen, as well as the quality and quantity of data. In unsupervised learning, the agent, without any explicit feedback, learns input patterns. With feasible financial cost, it has paradigms similar to human thought. In reinforcement learning, on the other hand, the agent learns through a series of reinforcements (rewards and punishments) and has the task of defining the algorithms responsible for the task.

The evolution of AI, mainly in the field of machine learning, provided an approximation of the possibility of a computer executing a thought that meditates. The massive amount of data and computational researches brought an old dream of the human being, progressively closer. Although this possibility may become a reality, a machine capable of performing the task of a magistrate in the judicial decision-making process will only become possible when the machine goes beyond binary logic and incorporates hermeneutic thinking.

3. THE POSSIBILITY OF CONSTRUCTION OF ARTIFICIAL HERMENEUTICS

The Fourth Industrial Revolution brought previously unimaginable realities and possibilities. The word *revolution* indicates radical change. In the history of human beings, the revolutions that break out trigger a profound change in social structures. The first change, in this sense, occurred with the agricultural revolution that combined animal and human strength for the benefit of production, transport and communication. The agricultural revolution unleashed a series of industrial revolutions: the first took place from 1760 to 1840, caused by the construction of railways, the steam engine and the beginning of mechanical production; the second industrial revolution started in the 19th century, entered the 20th century and made mass production possible with the advent of electricity; the third industrial revolution started in 1960 and is often called the digital or computer revolution. With the introduction of digital

vol.14, nº.04, Rio de Janeiro, 2021. pp. 1001-1038
DOI: 10.12957/rqi.2021.58084

technologies, there was a break with the third industrial revolution. These disruptions were driven by AI and the interaction between physical, digital and biological domains.

In the Fourth Industrial Revolution, innovations spread rapidly. In this sense, the construction of an artificial hermeneutics is considered, a fact that will only be possible when the machines reach the *hermeneutic thinking* (which is the thinking of a privileged entity, capable of sheltering a being capable of understanding, comprehending, thinking logically and, mainly, capable of questioning about its own existence, overcoming the calculating thinking and reaching a thinking that meditates), developed by Martin Heidegger. The technological tools currently used by the Judiciary can, therefore, and still be considered mere instruments to assist in procedural decisions.

Although the Brazilian Judiciary Branch has one of the largest databases in the world, as it has a large part of its judicial processes digitized, as a way of adapting to the 40 existing electronic process platforms, this makes this database capable of being used by some tool of AI. Currently, there are 72 projects of A.I. tools, used in different procedural stages and that somehow operate with A.I. They are in different stages of implementation, included in the Federal Supreme Court (STF), the Superior Court of Justice (STJ), the Superior Labor Court (TST), in addition to the State Courts, Regional Federal Courts and Regional Labor Courts, as well as in the National Council of Justice[23]. It is noteworthy that all these projects, momentarily, are not able to make a decision. The AI tools used by the Brazilian Judiciary Power only support the judicial process in the most diverse procedural stages. Regarding the current mechanisms used by the Judiciary, which serve as support systems and help in the preparation of judicial decisions, Spanish jurist Nuria Belloso Martín (2015, p. 132), in fact, warns:

> Entendemos que se puede reducir la incertidumbre del lenguaje, pero no eliminarla completamente. Por todo ello, actualmente, no podemos considerar la IA y los SEJ más que como sistemas de apoyo y ayuda a la decisión pero no como sustitutivos de la capacidad de valorar y ponderar por parte del órgano judicial[24].

In order to provide for a normative on ethics, transparency and governance in the production and use of AI in the Brazilian Judiciary, the National Council of Justice (CNJ) prepared Resolution n. 332, of August 21, 2020. Among other aspects, the use of AI models

[23] The study coordinated by FGV's Center for Innovation, Administration and Research of the Judiciary (Ciapj), found 27 AI projects that help verify whether a case falls under article 332 of the Code of Civil Procedure (preliminary dismissal of claims that are contrary to precedents and theses of the STF and STJ). Another 12 projects suggest draft decisions and judgments. Another 9 tools are dedicated to verifying the admissibility of appeals.

[24] We understand that you can reduce the uncertainty of the language, but not eliminate it completely. For all that, currently, we cannot consider the AI and the SEJ more than as systems of support and assistance to the decision, but not as substitutes for the capacity to evaluate and ponder on the part of the judicial body. (Free translation)

vol.14, nº.04, Rio de Janeiro, 2021. pp. 1001-1038
DOI: 10.12957/rqi.2021.58084

must guarantee legal certainty, equal treatment, non-discrimination, plurality and the undoubted respect for fundamental rights established by the Constitution. In addition to establishing measures for the proper use of these tools, the Resolution seeks to ensure the autonomy of internal users, in order to enable the review of decisions and the data used in their preparation. In short, the CNJ delimited the use of AI in the Brazilian Judiciary Power to supervised learning models.

Another legislative initiative that aims to limit the use of AI mechanisms in decision-making systems is Bill no. 5,051/2019, on the initiative of Senator Styvenson Valentim. In addition to disciplining the use of AI in Brazil, the Bill limits AI to aid in human decision-making and delimits civil liability for damages arising from its supervisor. The condition of decision-making assistant is, therefore, momentarily the only possibility. The development of AI research already points to algorithms capable of presenting decisions that minimize human subjectivities, which, apparently, appears as a scenario for improvement in jurisdictional provision.

Undoubtedly, the concern with algorithmic transparency, equal treatment and the undoubted respect for constitutionally established fundamental rights must be the main milestones for the development of AI mechanisms that support the judicial decision-making process. These concerns arise in face of numerous controversial cases of the use of technological tools in the Judiciary, as is the case with *Compas* in the United States[25] and *SyRI* in the Netherlands[26].

Concerned with algorithmic transparency, the 1st Conference on Administrative Law approved 40 statements, including statement number 12, which states: " a decisão administrativa robótica deve ser suficientemente motivada, sendo a sua opacidade motivo de invalidação[27]." (NATIONAL JUSTICE COUNCIL, 2020). Despite this concern, Brazilian Administrative Law, for example, views robotic decision as a reality, given the current scenarios of AI mechanisms development. With the propulsion of machine learning, more specifically deep learning, the perspectives, therefore, lead us to believe in the possibility of building thinking machines. The Brazilian Judiciary is concerned about the limitation of such

[25] Algorithm that performs an evaluation based on the points system, in order to make the court decision less subjective. The Wisconsin Supreme Court recently warned that Compas could have a serious flaw, awarding higher scores to ethnic minority offenders.
[26] A court in the Netherlands declared it illegal and prohibited the use of an algorithm designed to combat various types of fraud. SyRI, in addition to being discriminatory and prejudiced, violates provisions of the European Convention on Human Rights. Furthermore, another controversy concerns the lack of transparency regarding the model used by the algorithm.
[27] the robotic administrative decision must be sufficiently motivated, and its opacity is a reason for invalidation. (Free translation)

vol.14, nº.04, Rio de Janeiro, 2021. pp. 1001-1038
DOI: 10.12957/rqi.2021.58084

tools, as seen in the elaboration of Resolution 332/2020. The 1st Conference on Administrative Law, although not promoting innovation in administrative law, brought, however, the importance of discussing the insertion of technology in public administration.

These legislative scenarios expose the concerns of AI. A decision made by AI incorporated hermeneutic thinking is still distant, but the evolution and progressive technological development tend to enable the proximity of the substitution of the judicial decision making function, currently limited to magistrates. This will only become a reality with a general AI.

Machine learning should be based on thinking (programming algorithms), perception (sensors) and acting. An operational simplification can be seen here, whether of human intelligence or of the AI. The operation carried out by the AI, however, momentarily, is very shallow and is concerned only with performing a task. To achieve the AI that this text proposes, further development of the first operation is necessary: thinking.

For a *poiésis* of an artificial hermeneutics, the search for solutions, gradually optimized, should aim to unveil the truth in order to seek, let us say, the essence of the truth. Undoubtedly, for that, the technical and technological evolution should provide machines with a thought that meditates, that allows an opening and a way to think. Therefore, the logical-mathematical conceptions, rooted in a mechanistic and technicist thinking, should be surpassed in favor of judicial decisions hermeneutically constructed by machines.

To achieve the feasibility of an AI concerned with hermeneutic thinking, it is necessary that AI is (even more) a multidisciplinary area. Thus, the possibility of an artificial hermeneutics composed of AI mechanisms, endowed with theories of law and hermeneutic complexity, is outlined. While it's possible to imagine this in the not-too-distant future,

> o elemento de inovação para o Direito, que é o desenvolvimento e aplicação da IA, é essencial, mas não se coloca acima da criatividade humana. Essa orientação coloca a IA como mecanismo de eficiência e produtividade, ampliando sistematizações e reduzindo o erro ou retrabalho de tarefas repetitivas que consomem um potencial de tempo e energia humana. Aqui destaca-se o cuidado (ou equívoco) que se deve ter ao eleger a IA como substituto da inteligência humana, especialmente em áreas de aplicação repletas de complexidade[28]. (HARTMANN PEIXOTO; SILVA, 2019, 138).

[28] the innovative element for the law, which is the development and application of AI, is essential, but it does not place itself above human creativity. This orientation places AI as a mechanism for efficiency and productivity, expanding systematization and reducing the error or rework of repetitive tasks that consume a potential of human time and energy. Here, the care (or misunderstanding) that must be taken when choosing AI as a substitute for human intelligence is highlighted, especially in application areas full of complexity. (Free translation)

vol.14, nº.04, Rio de Janeiro, 2021. pp. 1001-1038
DOI: 10.12957/rqi.2021.58084

The difficulty in implementing an artificial hermeneutics lies mainly in language, as the idea of a singular legal language is false. Therefore, the understanding of the plurality existing in the legal universe increases the complexity for the application of AI mechanisms (HARTMANN PEIXOTO; SILVA, 2019). Moreover, the difficulty seems to lie in the fact that language seems to be just an attribute of man, as far as it is known. It is the home of being that, therefore, inhabits it, to stay here with Heidegger's lesson. How, then, to imagine, in relation to the machine, a language from another perspective, from the perspective of hermeneutics, that is, of understanding?

Currently, there are several opinions on the use of AI mechanisms in the Judiciary, but numerous researchers on the subject continue to believe that technological tools are restricted to auxiliary mechanisms only. In this sense, AI would be restricted to activities performed by human beings; however, such tools would never replace the human brain.

Therefore, the development of a machine capable of taking judicial decisions involves the development of an algorithm equipped with technologies capable of incorporating hermeneutic thinking, in which language becomes a condition of possibility. It is only in this scenario, that is, of a system that acts and thinks like a human being, that success will be achieved in terms of human A.I. performance. For an artificial hermeneutics we need an algorithm that acts rationally, endowed with intelligence capable of thinking, understanding and elaborating decisions always with a hermeneutic bias, which we do not have yet. For now, therefore, we still agree with Andreia Momolli (2020), for whom the AI can use automation tools without the need for human review, when analyzing documents in the records, analysis of writings and expose the facts in the legal and jurisprudential context. According to Momolli (2020, p. 151), however, " não há viabilidade para a utilização de inteligência artificial para proferir decisão no processo jurisdicional da sociedade em rede em substituição ao julgador humano[29]". As said, we still agree with Andreia, but we do not know what the future holds.

FINAL CONSIDERATIONS

Martin Heidegger, in all the stages of his monumental work and his immanent project (Heidegger I, Heidegger II and Heidegger III), sought to describe thinking. But it was only after 1940 that the German philosopher went into the subject in depth. Ernildo Stein identifies

[29] there is no feasibility of using artificial intelligence to render a decision in the jurisdictional process of the network society, replacing the human judge. (Free translation)

vol.14, nº.04, Rio de Janeiro, 2021. pp. 1001-1038
DOI: 10.12957/rqi.2021.58084

in Heidegger's works three ways of thinking: thinking I, thinking referred to animality; an activity attributed to human beings in their specific condition; thinking II, reduced to logic in Western metaphysics; a thinking endowed with reasoning and argumentation capacity; and, thinking III, which is beyond logic: a thinking that is a way of being-in-the-world. It is a substitute element for defining man as a rational animal.

The historical path of AI begins with technical development, passing through the main theoretical landmarks of AI until today. In this text, we try to highlight some of the means for the realization of a strong or general AI, intrinsically endowed with a hermeneutic thinking. To achieve a machine capable of building hermeneutically court decisions and to offer correct decisions, thus restraining the subjectivity in court decisions, much more is needed.

It is possible to imagine, with technological evolution, the possibility of an algorithm that, unlike the ones currently used, is capable of making judicial decisions, using A.I. methods, based especially on machine learning, with predictive optimization methods, based, in turn, on the ANN model, deep learning.

AI mechanisms may be able to hermeneutically construct court decisions only when we reach a strong or general AI, or even when the human being reaches Web 5.0. Perhaps from this point onwards, we can say that the algorithm developed for the construction of court decisions reached thinking III. A.I., then, will be the possibility of constructing judicial decisions with a hermeneutic thinking, elaborated by a machine that, in turn, will already bring in itself this third thinking.

The use of the brain as a parameter for the development of machine learning models based on Machine Learning and Deep Learning techniques makes human beings gradually place their trust in algorithms. Technological limitations, however, make the possibility of building an artificial hermeneutics still distant. Although the Brazilian Judiciary Power, for example, has mechanized or digitized a large part of the collection of its judicial processes, the improvement in terms of constructing judgment algorithms is still limited.

With the projection of an artificial hermeneutics, the judicial decisions currently built by a human decision maker, intrinsically endowed with a thinking that calculates, a correct thinking, a de-humanizing thinking and a logical thinking, may be replaced by a thinking that meditates, a thinking that seeks the being and that seeks to unveil the truth. Therefore, thinking, today attributed exclusively to the human being, would enable the opening for a new being that meditates: Artificial Intelligence. However, *where the danger is, salvation also grows*, that is, with the possibility of a thinking being attributed to machines, this construction should be permeated by ethics, transparency and accountability.

vol.14, nº.04, Rio de Janeiro, 2021. pp. 1001-1038
DOI: 10.12957/rqi.2021.58084

Law is not an exact science, along the lines of mathematics. To arrive at judicial decisions hermeneutically constructed by an algorithm, therefore, it will be necessary to go beyond the current binary, specific and calculating logic, and reach a thought that meditates, equal to or superior to the thought of being. In short, the hermeneutic construction of court decisions by AI will only be possible with general or strong AI, intrinsically endowed of thinking III, described by Ernildo Stein, which is still not possible to glimpse, although imaginable.

The possibility, as the text proposes, of an artificial hermeneutics, therefore, may not be so futuristic. With machine learning mechanisms, and with the evolution of deep learning, this possibility tends, progressively, to become a reality. Only with the achievement of general or strong A.I. (intrinsically endowed with hermeneutic thinking) will it be possible to construct judicial decisions that, respecting coherence, integrity, principles of law, etc., provide the right answers to the law, the most correct answers possible.

Thus, it is possible to conclude that the human being does not think what should be thought, which enables the opening for the construction of judicial decisions by an algorithm, thus eliminating subjectivities and propitiating the Law to perform integrity and coherence in the search for the unveiling of the truth. Artificial hermeneutics may not be far off, since the technical improvement makes it progressively closer to realization, enabling the Judiciary, who knows, to deliver a quality jurisdictional provision to the court.

REFERENCES

BELLOSO MARTÍN, Nuria. Algunas reflexiones sobre la informática jurídica decisional. In: BAEZ, Narciso Leandro Xavier et al. *O Impacto das Novas Tecnologias nos Direitos Fundamentais*. Joaçaba: Ed. Unoesc, 2015.

BOBURG, Felipe. Heidegger y el problema de la técnica. In: GUERRA TEJADA, Ricardo; VILALTA, Adriana Yáñez. *Martín Heidegger. Caminos.* Cuernavaca, UNAM, Centro Regional de Investigaciones Multidisciplinarias; Facultad de Filosofia y Letras; Centro de Investigación y Docencia em Humanidades del Estado de Morelos, 2009

CONSELHO NACIONAL DE JUSTIÇA. *Enunciados aprovados na Plenária da I Jornada de Direito Administrativo*. Agosto, 2020. Disponível em: <http://www.stj.jus.br/sites/portalp/Paginas/Comunicacao/Noticias/10082020-I-Jornada-de-Direito-Administrativo-divulga-os-40-enunciados-aprovados.aspx>. Acesso em: 08 set. 2020.

ELLUL, Jacques. *A Técnica e o Desafio do Século*. Rio de Janeiro: Paz e Terra, 1968

GADAMER, Hans-Georg. *Verdade e Método: Traços fundamentais de uma hermenêutica filosófica.* Trad. Flávio Paulo Meurer. Petrópolis, RJ: Vozes, 1997

vol.14, nº.04, Rio de Janeiro, 2021. pp. 1001-1038
DOI: 10.12957/rqi.2021.58084

GALIMBERTI, Umberto. O Ser Humano na Era da Técnica. In: *Cadernos IHU ideias***,** Universidade do Vale do Rio dos Sinos, Instituto Humanitas Unisinos. Ano 13, n. 218, 2015. São Leopoldo: Universidade do Vale do Rio dos Sinos, 2003. Disponível em: <http://www.ihu.unisinos.br/images/stories/cadernos/ideias/218cadernosihuideias.pdf>. Acesso em: 31 maio 2020.

HARTMANN PEIXOTO, Fabiano; SILVA, Roberta Zumblick Martins da. *Inteligência Artificial e Direito*. 1. Ed. Curitiba: Alteridade Editora, 2019

HAYKIN, Simon. *Redes Neurais. Princípios e práticas.* Tradução Paulo Martins Engel. 2. ed.. Porto Alegre: Bookman, 2001

HEIDEGGER, Martin. *¿Qué significa pensar?* Tradução Raúl Gabás. Madrid: Trotta 2005.

HEIDEGGER, Martin. A Questão da Técnica. In: *Scientiae Studia*, São Paulo, v. 5, n. 3, jul.-set., p. 375-398, 2007. Disponível em: <http://www.scielo.br/scielo.php?script=sci_ arttext&pid=S1678-31662007000300006>. Acesso em: 29 jan. 2020.

HEIDEGGER, Martin. *Língua de Tradição e Língua Técnica*. Trad. Mário Botas. Lisboa: Passagens, 1995.

HEIDEGGER, Martin. *Serenidade.* Trad. Maria Madalena Andrade e Olga Santos. Lisboa: Instituto Piaget, 2000.

MOMOLLI, Andréia. *Hermenêutica Jurídica e Inteligência Artificial no Processo Jurisdicional da Sociedade em Rede*. 2020. 158 f. Dissertação (Mestrado em Direitos Emergentes na Sociedade Global - Universidade Federal de Santa Maria (UFSM), Santa Maria, 2020.

ORTEGA Y GASSET, José. *Meditação da Técnica.* Rio de Janeiro: Livro Ibero-Americano, 1963.

PINTO, Álvaro Vieira. *O Conceito de Tecnologia.* Vol. 1. Rio de Janeiro: Contraponto, 2005, p. 151.

SCHWAB, Klaus. *A Quarta Revolução Industrial.* Tradução Daniel Moreira Miranda. São Paulo: Edipro, 2016.

STEIN, Ernildo. *Pensar é Pensar a Diferença: filosofia e conhecimento empírico*. Ijuí: Ed. Unijuí, 2002.

STEIN, Ernildo. *Seis estudos sobre "Ser e tempo".* 3. ed. Petrópolis, RJ: Vozes, 2005.

STRECK, Lênio Luiz. *Hermenêutica Jurídica e(m) Crise: exploração hermenêutica da construção do Direito*. Porto Alegre: Livraria do Advogado, 1999.

STRECK, Lênio Luiz. *Verdade e Consenso: constituição, hermenêutica e teorias discursivas*. 4. ed.. São Paulo: Saraiva: 2011.

VATTIMO, Gianni. *Introduccion a Heidegger*. Barcelona: Editorial Gedisa, 2002.

WIENER, Norbert. *Cibernética: ou controle e comunicação no animal e na máquina.* Tradução Gita K. Guinsburg. 1. ed.. São Paulo: Perspectiva, 2017.

Trabalho recebido em 01 de março de 2021
Aceito em 23 de agosto de 2021