

THEORY OF JUDICIAL DECISION AND THE USE OF ARTIFICIAL INTELLIGENCE



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ABSTRACT

The Theory of Judicial Decision investigates how judges make decisions and the grounds that guide them, with an emphasis on the duty to state reasons, which requires clear justifications for decisions, allowing the parties to understand the reasons behind them. This field seeks to understand the influences on the decision-making process, reflecting the tension between the strict application of norms and adaptation to circumstances, especially with the impact of technologies such as artificial intelligence (AI). The introduction of AI in the judiciary is irreversible, promising to process data and speed up decisions, but also raising concerns about the depth of analysis and limitations in understanding ethical nuances. The research aims to analyze the impacts of AI on judicial decision-making in Brazil, evaluating its advantages and disadvantages. The debate over the use of AI questions the fairness of trials, pitting the impartiality of the machine against the human experience. For this, deductive and bibliographic methods will be used, with legislative, doctrinal and jurisprudential analysis.

Keywords: Theory of Judicial Decision. Artificial intelligence. Judgment. Human Dignity.

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INTRODUCTION

Judicial Decision Theory is a field of study that investigates how judges make their decisions and what are the philosophical, logical, and practical foundations that guide these judgments. One of the central elements of this theory is the duty to state reasons, which requires that judicial decisions be clearly justified, allowing the parties involved to understand the reasons that led to that conclusion. covering the interpretation of laws, the application of precedents and legal reasoning.

The theory of legal argumentation emphasizes the need for a clear and persuasive foundation, highlighting that legal reasoning is deductive and dialectical. The discretion of judges, or freedom in cases with vague rules, generates discussions about the balance between flexibility and legal certainty.

This field is complex and seeks to understand the influences that affect the decision-making process of judges, reflecting the tension between the strict application of the rules and the need for decisions that adapt to the circumstances, especially in the face of new challenges imposed by technologies such as artificial intelligence.

In the current context, technology constantly transforms social interactions, making the boundaries between *online* and *offline* life increasingly blurred. This requires that the Law, as a regulator of social relations, quickly adapt to the new demands that arise in virtual interactions. However, the traditional justice system is often inadequate to deal with the complexity and volume of these issues.

The introduction of technology in the legal field is irreversible. In this scenario, AI emerges as a promising tool, capable of processing large volumes of data, speeding up decisions, and potentially improving fairness. Initially, AI is used to automate simple tasks, but its application in legal decision-making is expanding, especially due to the slowness of traditional systems.

Therefore, the present research aims to analyze the impacts of the use of intelligent systems in the Brazilian Judiciary, especially in decision making, in order to verify the impacts caused, as well as the advantages and disadvantages that they can offer.

It is important to note that the use of AI in judicial decisions raises concerns about the depth of analysis of decisions, as automation can amplify existing problems. In addition, this technology faces limitations in understanding moral and ethical nuances, which is especially challenging in sensitive areas such as family and criminal law.

In this way, the debate about judicial decisions rendered by AI systems raises questions about the fairness of trials, comparing the impartiality of the machine with the human experience.

Thus, to achieve the proposed desideratum, the deductive and bibliographic methods will be used, with a legislative, doctrinal and jurisprudential analysis on the subject.

THE THEORY OF JUDICIAL DECISION

The Theory of Judicial Decision studies the philosophical, logical and practical foundations that guide judges in the resolution of conflicts. Traditionally, this theory encompasses factors such as the interpretation of laws, the use of precedents, and legal reasoning. Different models, such as legal realism, which highlights social and political factors, contrast with legal formalism, which values the objective interpretation of norms.

Initially, legal formalism, one of the most traditional approaches, understands law as a logical and closed system, in which the judge must apply the law objectively, as if following a technical procedure. The role of the magistrate is predominantly interpretive: he must follow the law as it is written, without being influenced by external factors, such as personal opinions or the social context of the case. This formalist view reinforces the separation between law and morality, arguing that norms, by themselves, offer clear and defined solutions to conflicts, limiting the role of the judge to the almost mechanical application of these rules².

In opposition to formalism, there is legal realism, which criticizes the idea that the judicial decision is a simple act of applying norms. Realists claim that the decision-making process involves a series of influences external to the law, such as the subjectivity of the judge, the social context, and the specific circumstances of each case³.

For this current, the judge is not a mere interpreter of the law, but an active agent, who shapes and adapts the law by applying the rules to concrete cases. Rather than focusing exclusively on normative coherence, realism is concerned with the practical effects of judicial decisions and the social impact of law⁴.

² DWORKIN, RONALD. *Taking Rights Seriously*. São Paulo: Martins Fontes, 2002.

³ DWORKIN, RONALD. *Taking Rights Seriously*. São Paulo: Martins Fontes, 2002

⁴ HART, H.L.A. *The Concept of Law*. São Paulo: Martins Fontes, 2009.

Continuing, there is legal positivism, which prevailed in the theory of judicial decision until the twentieth century, and maintains that the law must be analyzed and applied according to the norms established by the legislator. Positivism sees law as a set of formally instituted rules, and the role of the judge is to follow them rigorously⁵.

On the other hand, post-positivism proposes a more flexible approach, recognizing that law is not only composed of rules, but also of principles. In this context, legal principles play a crucial role, as the literal application of a norm does not always result in a fair decision. Post-positivism seeks to balance the predictability of law with material justice, allowing the judge to evaluate the nuances and values present in each situation⁶.

However, an extremely important point for the entire Theory is precisely the theory of legal argumentation, which emphasizes that the judge must justify his decisions with rational and coherent arguments. According to this approach, the judicial decision cannot only be the automatic result of the application of a rule, but must be accompanied by a clear, persuasive and transparent reasoning⁷.

Thinkers such as Robert Alexy and Chaïm Perelman argue that legal reasoning is both deductive and dialectical, involving consideration of the arguments of the parties and the practical consequences of the decision⁸. In addition, the discretion of judges must be taken into account, that is, the margin of freedom they have to decide in situations where the rules are vague or insufficient⁹.

Thus, the Theory of Judicial Decision is a complex field¹⁰, which tries to understand the various influences that shape the decision-making process of judges, which, however, must have an adequate reasoning in judicial decisions, in order to promote the transparency of the judicial system, allowing the parties and society to understand the reasoning behind the decisions. This strengthens trust in judicial institutions¹¹.

Its importance is such that the duty to state reasons also serves as a control mechanism over judicial activity, allowing parties to appeal decisions that they consider

⁵ HART, H.L.A. *The Concept of Law*. São Paulo: Martins Fontes, 2009.

⁶ DWORKIN, RONALD. *Taking Rights Seriously*. São Paulo: Martins Fontes, 2002.

⁷ MARINONI, Luiz Guilherme. *Constitutional Process and Citizenship*. São Paulo: Thomson Reuters, 2021.

⁸ ALEXY, Robert. *Theory of Legal Argumentation: The Theory of Rational Discourse as a Theory of Legal Justification*. São Paulo: Landy, 2001.

⁹ BARROSO, Luís Roberto. *Interpretation and Application of the Constitution: Foundations of a Transformative Constitutional Dogmatic*. São Paulo: Saraiva, 2009.

¹⁰ See more at: ZANON JÚNIOR, Orlando Luiz. *Complex Theory of Law*. São Paulo: Tirant Lo Blanch Brasil, 2019.

¹¹ MACCORMICK, Neil. *Rhetoric and the Rule of Law: A Theory of Legal Reasoning*. Oxford: Oxford University Press, 2005.

unfair or poorly founded. The possibility of review by higher courts depends on the clarity and consistency of the justifications presented¹².

By requiring judges to explain their decisions, the duty to state reasons contributes to the promotion of fairer and more equitable decisions. Judges are encouraged to consider not only the letter of the law, but also the ethical and social principles that must be taken into account in each case¹³.

Additionally, reasoning helps to ensure the legitimacy of court decisions, as a well-reasoned decision is more likely to be accepted by the parties involved and society at large¹⁴. Respect for this duty strengthens trust in the justice system and promotes a more equitable application of the rules.

However, over time, the evolution of this theory reflects the tension between the rigorous application of the rules and the search for decisions that consider the particularities of each case. With the advancement of new technologies, such as artificial intelligence, new challenges arise, requiring a continuous review of the theory of judicial decision so that it adapts to new social and technological contexts.

AI AND JUDICIAL DECISION: POTENTIAL AND LIMITS

The world is constantly changing. Situations that once seemed distant are now part of everyday life, reflecting the accelerated dynamics of modern life, driven by the immense amount of information circulating at high speed. With globalization, new forms of social interaction develop rapidly and in unexpected ways.

Today, friendships and relationships are formed through screens, with approximation and distancing coexisting as consequences of the same factor: technology. It has profoundly reshaped human life and shaped the behavior of future generations, creating a scenario in which the boundaries between *online* and *offline* life become increasingly blurred. As virtual relationships intensify, new situations and conflicts arise, requiring specific regulations for these interactions.

¹² FARIAS, Cristiano Chaves de; ROSENVALD, Nelson. *Theory of Judicial Decision: Foundations, Limits and Possibilities*. Salvador: JusPodivm, 2017.

¹³ BONAVIDES, Paulo. *Constitutional Theory of Participatory Democracy (For a Constitutional Right of Struggle and Resistance. For a new hermeneutics. For a repoliticization of legitimacy)*. São Paulo: Malheiros Editores, 2001.

¹⁴ FARIAS, Cristiano Chaves de; ROSENVALD, Nelson. *Theory of Judicial Decision: Foundations, Limits and Possibilities*. Salvador: JusPodivm, 2017.

New social relations even emerge from other *online systems* and their regulations, such as the very notion of the General Data Protection Law¹⁵, Civil Rights Framework for the Internet, as well as the so-called *neurorights*, according to the new reform of the Brazilian civil code.

In this context, Law, as a regulator of social relations, is constantly challenged to respond, in a timely manner, to the questions that emerge from these new forms of interaction, especially when we face legal situations caused by the corrosion of sovereignty in the face of the systematic globalization of contemporary society¹⁶. The traditional judicial system, however, often proves to be inadequate to deal with the complexity and volume of these new demands, and is often seen as slow, complex and, in some cases, partial¹⁷.

Given this reality, the introduction of technology in the legal field is irreversible. The development of technological tools, capable of processing information and transferring knowledge to machines, has become essential to innovate and meet the legal demands arising from these new relationships¹⁸.

In the Brazilian legal system, technology began to be applied first in procedural acts. But, with the enactment of the Code of Civil Procedure (Law No. 13,105/2015), in 2015, the electronic process was regulated, and currently, practically all judicial proceedings take place in digital media. From the initial petition to the final decision, the process is managed by electronic systems, allowing lawyers and parties involved to access and view the records from any computer¹⁹.

In addition, automated systems have streamlined the counting of deadlines and the execution of subpoenas, promoting greater speed, efficiency and more fluid communication between procedural subjects.

About the electronic process, Fernanda Suriani asserts:

¹⁵ See more at: CARDOSO, Caroline de Melo; RÉGIS, Jonathan Cardoso. Comparative law: LGPD and Marco Civil da Internet. Revista de Direito, Vol. 16, n. 1, 2024.

¹⁶ DEMARCHI, Clovis. Crisis of the State and democracy in the context of Globalization. Revista Jurídica, Vol 16, n. 2, Available at: <https://doi.org/10.17151/jurid.2019.16.2.3>. Accessed on: October 14, 2024.

¹⁷ SURIANI, Fernanda Mattar Furtado. Process, technology and access to justice. São Paulo: Juspodivm, 2022. p. 181.

¹⁸ FACELLI, Katti *et. al.* Artificial intelligence: a machine learning approach. 2. ed. Rio de Janeiro: LTC, 2021. p. 11.

¹⁹ LAGE, Fernanda de Carvalho. Manual of Artificial Intelligence in Brazilian Law. 2. ed. São Paulo: Juspodivm, 2022. p. 185.

As a rule, these systems are more focused on electronic procedural management and only digitize the existing procedural rules. However, [...] the use of artificial intelligence models in courts with transformative potential is already beginning²⁰.

Therefore, the great technological advance took place with the ability to transfer human cognitive functions to computers, giving rise to Artificial Intelligence (AI). Created to simulate these functions, AI has gained prominence in the legal field, due to its ability to process large volumes of data and information quickly and effectively²¹.

In a country whose legal system is characterized by a high number of lawsuits, many of which are mass or repetitive demands, with factual or legal similarities²², AI has come to be seen not only as a tool for progress, but as a possible "savior" of the problems faced by Brazil, since it makes it possible for cases to be classified and grouped in a standardized way.

Initially, AI has been used to automate tasks that were previously performed manually by servers, without involving complex decision-making processes. However, the use of this technology in legal decision-making is becoming a global trend, due to the slowness and inefficiencies of traditional judicial systems²³.

With the daily production of a vast amount of legal data, especially due to the large volume of new lawsuits, AI is seen as the only system capable of managing and eventually resolving these lawsuits efficiently. However, it is important to note that AI decision-making follows a similar logic to the precedent system, where a decision is rendered based on factual and legal similarities, without an in-depth analysis of the grounds of appeal²⁴.

In this scenario, while this automation can speed up the trial of repetitive cases, there is a risk that it will only amplify existing problems rather than achieve the desired goal of standardizing, making more impartial, and speeding up judicial decisions²⁵.

²⁰ SURIANI, Fernanda Mattar Furtado. Process, technology and access to justice. São Paulo: Juspodivm, 2022. p. 314.

²¹ RUSELL, Stuart J.; NORVIG, Peter. Artificial intelligence. Translated by Regina Célia Simille. Rio de Janeiro: Elsevier, 2013.

²² BRAZIL. National Council of Justice. Justice in numbers: 2023. Brasília, 2023. Available at: <https://www.cnj.jus.br/wp-content/uploads/2023/08/justica-em-numeros-2023.pdf>. Accessed on: 03 out. 2024.

²³ RISSLAND, Edwina L. Artificial Intelligence and Law: Stepping Stones to a Model of Legal Reasoning. The Yale Law Journal, 1990. Disponível em: <https://www.jstor.org/stable/796679>. Acesso em: 06 out. 2024.

²⁴ NUNES, Dierle; RODRIGUES, Larissa. The contradictory and its implementation by design: *design thinking, legal design and visual law* as approaches to effective implementation of influence. In: NUNES, Dierle; LUCON, Paulo Henrique dos Santos; WOLKART, Erik Navarro (coord.). Artificial Intelligence and procedural law: the impacts of technological life on procedural law. Salvador: Juspodivm, 2020. p. 229.

²⁵ MOTA, Luiza Rosso. Criminal judicial decision and Artificial Intelligence. Rio de Janeiro: Lumen Juris, 2023. p. 80.

On the other hand, the expectation is that, with the use of advanced techniques for the machine to "learn" patterns and provide *insights*, AI can be used to solve more complex demands, rendering more reasoned, accurate decisions that are aligned with the needs of modern legal practice²⁶.

In addition, considering that it is the judge's duty to judge based on the available evidence, which, through legal discourse and the exercise of power, often leads to decisions that violate individual rights and guarantees, because they are based on personal beliefs and concepts of the judges or by personal claims that override legal logic, AI emerges again as a promising tool to promote more coherent, rational, impartial, and, consequently, fairer decisions²⁷.

Its use is seen as a means of ensuring, or at least simulating, impartiality, in addition to increasing jurisdictional speed and efficiency. However, there are questions about the ability of computers to develop an adequate legal argument, since it involves more than simple analytical reasoning²⁸. Legal argumentation is based on a complex interplay of cases, rules, statutes, principles, and customs, which need to be considered both together and in isolation to achieve a just outcome²⁹.

Moreover, just any reasoning is not sufficient for a decision to be taken; it must be adequate and legitimate, allowing the parties to comply with or contest it. Society must be able to exercise control over jurisdictional activity and understand the Law, making social conducts more predictable and calculable within the legal order³⁰.

Therefore, for AI to be able to carry out any jurisdictional activity with a minimum level of legal complexity, it must be programmed to deal with a wide range of combinations and possibilities.

Decision-making by AI systems in court cases is usually done through algorithms and *machine learning* models, trained with large volumes of data and legal information. However, the trend of this technology is to seek simpler and more convenient solutions,

²⁶ SURIANI, Fernanda Mattar Furtado. Process, technology and access to justice. São Paulo: Juspodivm, 2022. p. 120.

²⁷ MOTA, Luiza Rosso. Criminal judicial decision and Artificial Intelligence. Rio de Janeiro: Lumen Juris, 2023. p. 80-85.

²⁸ FERRAJOLI, Luigi. Democracy and guarantees. Madrid: Editorial Trotta, 2008.

²⁹ SUNSTEIN, Cass R. Of Artificial Intelligence and Legal Reasoning. University of Chicago Law School Roundtable, vol. 29, 2001. Disponível em: https://chicagounbound.uchicago.edu/cgi/viewcontent.cgi?article=12376&context=journal_articles. Acesso em: 06 out. 2024.

³⁰ STRECK, Lênio. What is this – do I decide according to my conscience? 6. ed. São Paulo: Livraria do Advogado, 2017.

prioritizing convenience over complexity. The main concern is that this search for simplicity is not confused with partiality, generating discriminatory biases and possible violations of the rights of the parties involved in the process, due to the algorithms used³¹.

In addition, AI also faces considerable limitations in its ability to understand moral, ethical, and contextual nuances, which often influence judicial decisions. The subjectivity inherent in many decisions, especially in areas such as family or criminal law, poses a major challenge to the application of AI, which may not capture the full complexity of these cases³².

In view of this, it is undeniable that the advances in AI bring numerous benefits to the daily lives of legal operators and litigating parties, such as the reduction of operating costs, the storage and management of large volumes of data, the conduct of research and the analysis of documents, in addition to facilitating the identification of mass demands and repetitive processes.

In addition, AI can be trained to search for and analyze a wide range of previous court decisions, identifying relevant precedents to be considered in new cases, as well as detecting patterns in decisions, helping to ensure consistency. And, based on this, it can even suggest sentences based on statistical analyses of previous decisions, promoting uniformity.

However, it is necessary to consider that AI also has limitations, especially if we consider that not all cases are the same, and its application must take into account the specific nuances and contexts that can influence the decision. As already mentioned, machines do not have human legal reasoning and may have difficulties interpreting details and particularities of cases, which can lead to wrong decisions.

As Luiza Mota points out, "no matter how much information and data algorithms provide infinitely, the complexity of the world and relationships is much greater and unrecognizable by machines".³³ The effectiveness of AI also depends on the quality and comprehensiveness of training data. If the data is incomplete or biased, this can

³¹ SURIANI, Fernanda Mattar Furtado. Process, technology and access to justice. São Paulo: Juspodivm, 2022.

³² SURIANI, Fernanda Mattar Furtado. Process, technology and access to justice. São Paulo: Juspodivm, 2022.

³³ MOTA, Luiza Rosso. Criminal judicial decision and Artificial Intelligence. Rio de Janeiro: Lumen Juris, 2023. p. 106.

compromise the uniformity of decisions. In addition, this data must be regularly updated, as both legislation and case law are constantly evolving³⁴.

Another important aspect is transparency. The algorithms that make up the intelligent system must be explainable and understandable, so that stakeholders can understand how decisions were made³⁵. Human oversight is key to the proper use of AI. When well employed, this technology can become a powerful tool to promote justice and equity in the judicial system, helping to standardize decisions³⁶.

However, AI cannot fully replace human analysis and the judgement of magistrates. The final decision should continue to be made by human judges, who consider both the data analyzed by the AI and the specific context of each case and its nuances, which the technology may not capture.

AUTOMATED JUDICIAL DECISION AND THE RIGHT TO A FAIR TRIAL

In the face of the debate about the advantages and disadvantages of judicial decisions rendered by artificial intelligence systems, the reflection arises as to who hurts a fairer trial: man or machine? In addition, it questions the liberality of the citizen to choose by whom he prefers to be judged. This is a complex issue, which involves questioning the autonomy and impartiality of machines in comparison to human beings.

Currently, human judges have a set of knowledge, experiences, and interpretive skills that machines cannot yet replicate. As discussed earlier, legal operators exercise legal reasoning, which involves the interpretation of legal rules in order to influence decision-making³⁷.

This legal reasoning uses legal principles and rules to analyze specific cases, identify the relevant facts, interpret the applicable rules, and reach a conclusion on how to resolve the conflict or apply the law³⁸. The process involves steps such as the collection

³⁴ NUNES, Dierle; MARQUES, Ana Luiza Pinto Coelho. Artificial intelligence and procedural law: algorithmic biases and the risks of attributing decision-making functions to machines. São Paulo: Revista dos Tribunais, 2018.

³⁵ NUNES, Dierle; MARQUES, Ana Luiza Pinto Coelho. Artificial intelligence and procedural law: algorithmic biases and the risks of attributing decision-making functions to machines. São Paulo: Revista dos Tribunais, 2018.

³⁶ TOMMASI, Sara. Algorithms and new forms of discrimination: a look at European Law. Revista de Direito Brasileira, Vol. 27, n. 10, Florianópolis, 2020.

³⁷ RISSLAND, Edwina L. Artificial Intelligence and Law: Stepping Stones to a Model of Legal Reasoning. The Yale Law Journal, 1990. Disponível em: <https://www.jstor.org/stable/796679>. Acesso em: 06 out. 2024.

³⁸ MORAIS, José Luiz Bolzan de; NASCIMENTO, Valéria Ribas de Moraes. Constitutionalism and Citizenship: for a democratic constitutional jurisdiction. Porto Alegre: Livraria do Advogado, 2010.

and analysis of evidence, the use of jurisprudence, argumentation based on legal principles, and the consideration of ethical and social values. In addition, the school of legal thought adopted by each professional — whether formalistic, pragmatic, sociological, critical, among other approaches — directly influences their reasoning³⁹.

However, the most important factor is perhaps that, in addition to the logic necessary to reach the solution of a case, the presence of sensitivity, ethics and common sense is essential to ensure the fairness and effectiveness of the jurisdictional provision, as this decision-making process is influenced by social, political and cultural changes, which are more difficult to be captured by machines⁴⁰.

In this context, machines, even programmed with vast combinations of data, can hardly consider all these variables with the same depth and breadth as a human being⁴¹. While AI systems and algorithms can process large volumes of information, identify patterns, and make quick and objective decisions, free from subjective interference, this reliance on the objectivity of machines also raises concerns related to transparency, algorithmic bias, privacy, and ethics, which can undermine trust in the automated judicial system⁴².

It is a fact that, as much as people seek speed in the resolution of their demands, they need the benevolence of the Judiciary – human understanding and reason are essential. The desire to be understood by the judicial system is closely linked to the principles of access to justice and human dignity⁴³.

Thus, this search for recognition is essential to ensure that decisions consider the individuality of each case, the nuances and complexities involved, as well as the needs and interests of the parties. In addition, this approach reinforces the sense of justice and

³⁹ BEBIANO, Fernando Nogueira. Application of artificial intelligence in conflicts submitted to Restorative Justice: (im)possibility. Electronic Journal of Law and Politics, Stricto Sensu Graduate Program in Legal Science at UNIVALI, Itajaí, v. 17, n. 1, 1st quarter of 2022. Available at: <https://periodicos.univali.br/index.php/rdp/article/view/18661/10720>. Accessed on: 07 out. 2024.

⁴⁰ BEBIANO, Fernando Nogueira. Application of artificial intelligence in conflicts submitted to Restorative Justice: (im)possibility. Electronic Journal of Law and Politics, Stricto Sensu Graduate Program in Legal Science at UNIVALI, Itajaí, v. 17, n. 1, 1st quarter of 2022. Available at: <https://periodicos.univali.br/index.php/rdp/article/view/18661/10720>. Accessed on: 07 out. 2024.

⁴¹ SUNSTEIN, Cass R. Of Artificial Intelligence and Legal Reasoning. University of Chicago Law School Roundtable, vol. 29, 2001. Disponível em: https://chicagounbound.uchicago.edu/cgi/viewcontent.cgi?article=12376&context=journal_articles. Acesso em: 06 out. 2024.

⁴² SURIANI, Fernanda Mattar Furtado. Process, technology and access to justice. São Paulo: Juspodivm, 2022. p. 182-183.

⁴³ FERRAJOLI, Luigi. For a theory of Fundamental Rights and Goods. Porto Alegre: Livraria do Advogado, 2011.

legitimacy for the parties involved, promoting trust in the Judiciary and ensuring the effectiveness of decisions⁴⁴.

Every individual has a fundamental need to be treated humanely. Thus, when the person is treated in this way, he feels recognized as an individual worthy of respect and consideration, with his own needs, feelings and rights. In this way, trust in a judicial system is not only based on efficiency, but also on respect for the humanity of those who seek justice⁴⁵.

Therefore, if the purpose of judicial decisions is understood as the guarantee of justice and the resolution of conflicts in an equitable manner and in accordance with the law, humanized treatment becomes indispensable⁴⁶.

In view of this, Luiza Rosso Mota states:

In this scenario, decision-making by algorithms can be considered inhumane. Resistance to this approach also stems from distrust of a decision rendered by a machine. The very opportunity to be heard by someone can be placed as a human value, as can being judged by a person rather than a machine. In this game, uncertainty ends up maintaining traditional methods, even if the results are inferior⁴⁷.

In addition, the judge is a figure associated with authority, which reinforces the idea that his decisions will be effectively complied with⁴⁸, in addition to being able to be held accountable for the decisions he makes—which, in the case of a machine, presents great challenges. It is important to note that, in a democratic judicial system, which respects the principles of the Democratic Rule of Law, a person is not normally allowed to choose which judge or court he will be judged by. The distribution of cases and the appointment of judges are made according to legal criteria, to ensure the impartiality and independence of the process. However, in specific situations, such as in arbitrations or private mediations, the parties may have more freedom to choose who will resolve the conflict⁴⁹.

⁴⁴ SANTOS, Boaventura de Souza. *By the hands of Alice: the social and the political in post-modernity*. 7. ed. Porto: Edições Afrontamento, 1999.

⁴⁵ BEBIANO, Fernando Nogueira. Application of artificial intelligence in conflicts submitted to Restorative Justice: (im)possibility. *Electronic Journal of Law and Politics, Stricto Sensu Graduate Program in Legal Science at UNIVALI, Itajaí*, v. 17, n. 1, 1st quarter of 2022. Available at: <https://periodicos.univali.br/index.php/rdp/article/view/18661/10720>. Accessed on: 07 out. 2024.

⁴⁶ KAHNEMAN, Daniel; SYBONI, Olivier; SUNSTEIN, Cass R. *Noise: a failure in human judgment*. Trad. Cássio de Arantes Leite. Rio de Janeiro: Objetiva, 2021. p. 328.

⁴⁷ MOTA, Luiza Rosso. *Criminal judicial decision and Artificial Intelligence*. Rio de Janeiro: Lumen Juris, 2023. p. 160.

⁴⁸ TARUFFO, Michele. *The simple truth. The judge and the construction of the facts*. Roma-Bari: Laterza, 2009.

⁴⁹ MOTA, Luiza Rosso. *Criminal judicial decision and Artificial Intelligence*. Rio de Janeiro: Lumen Juris, 2023.

In this sense, it is essential to initially define the limits of the use of AI in judicial decisions, so that, in the future, criteria can be established, allowing people to choose between being judged by a machine, if it is qualified, or by a human judge⁵⁰. However, while this technology can improve efficiency, the need for human oversight remains essential to ensure that decisions respect fundamental legal principles.

However, nothing prevents dirty AI from being used as a support for magistrates. Thus, as a tool to support judicial decision-making, the intelligent system represents a significant innovation in the field of Law and, above all, Justice. With the use of learning techniques, AI can process and analyze an immense amount of data, identifying complex patterns in various legal areas.

In this context, when programmed to handle legal data, especially precedents and case law, AI can detect patterns in previous decisions, helping judges understand how similar cases have been resolved. This contributes to avoiding the violation of the duty of procedural good faith and promotes greater consistency in judicial decisions.

AI systems also offer tools that facilitate legal research, allowing for quick and accurate queries to complex issues. These systems can analyze legal texts, court decisions, and doctrines, providing relevant information almost instantaneously. In addition, they can be used as support during hearings, assisting the judge in immediate access to data relevant to the decision.

Another form of decision-making support is AI's ability to detect patterns and fraud, as well as simulate scenarios. This technology can identify anomalous patterns, especially in financial crimes, where it is necessary to analyze large volumes of data to detect illicit activities. Not to mention that, by performing statistical analysis and comparing previous resolutions, AI systems can simulate different scenarios based on historical data, helping judges consider multiple perspectives before making a final decision, resulting in greater accuracy and fairness⁵¹.

Continuously, AI systems also assist in the preparation of draft decisions, using the analysis of precedents and relevant data⁵². These drafts, however, need to be reviewed and adapted by human judges to ensure the consistency and quality of the final text. AI can

⁵⁰ MOTA, Luiza Rosso. Criminal judicial decision and Artificial Intelligence. Rio de Janeiro: Lumen Juris, 2023.

⁵¹ PINTO, Henrique Alves. The use of artificial intelligence in the decision-making process. Brasília: Journal of Legislative Information, 2020. p. 47.

⁵² SÁNCHEZ-ARJONA, Mercedes Loorente. Artificial Intelligence, risk assessment and the right to due process. Navarra: Thompson Reuters Aranzadi, 2022, p. 392.

thus provide a legal and statistical basis, but the analysis of emotional and complex particularities, as seen, must still be done by human judges, who will put the finishing touch on the device⁵³.

Thus, artificial intelligence should be seen as a support tool, and not as a complete substitute for human judgment. And, if we consider that the legal system and society are constantly changing, human beings are better able to deal with the ambiguities and nuances of human behavior, adapting their interpretations and decisions based on new precedents, social transformations, and technological advances⁵⁴.

It is important to remember that people value humane treatment, wanting to be heard and, when well founded, to have their reasons recognized⁵⁵. This factor strengthens trust in the judicial system, which is essential for its effectiveness. The exclusivity of decisions made by AI can generate reservations in the public, while human intervention helps to ensure that these decisions are ethical and responsible.

Therefore, it is crucial that the introduction of AI into the judicial decision-making process takes place with caution. Efficiency and technological innovation must coexist with the principles of justice, transparency, protection of fundamental rights and the public interest.

FINAL CONSIDERATIONS

Judicial Decision Theory is a field that investigates the philosophical, logical, and practical foundations that guide judges in resolving conflicts, including the interpretation of laws, the application of precedents, and legal reasoning. As seen, the duty to state reasons is a central aspect, requiring that decisions be clearly justified, allowing the parties to understand the reasons behind the conclusions. Among the approaches, legal formalism treats law as a logical and closed system, while legal realism argues that judges are active agents who shape law according to the social context.

The evolution from legal positivism, which prioritizes the rigorous application of norms, to post-positivism, which accepts a more flexible approach, reflects the need to

⁵³ PINTO, Henrique Alves. The use of artificial intelligence in the decision-making process. Brasília: Journal of Legislative Information, 2020. p. 47.

⁵⁴ SÁNCHEZ-ARJONA, Mercedes Loorente. Artificial Intelligence, risk assessment and the right to due process. Navarra: Thompson Reuters Aranzadi, 2022, p. 392.

⁵⁵ BEBIANO, Fernando Nogueira. Application of artificial intelligence in conflicts submitted to Restorative Justice: (im)possibility. Electronic Journal of Law and Politics, Stricto Sensu Graduate Program in Legal Science at UNIVALI, Itajaí, v. 17, n. 1, 1st quarter of 2022. Available at: <https://periodicos.univali.br/index.php/rdp/article/view/18661/10720>. Accessed on: 07 out. 2024.

consider nuances for fair decisions. In addition, the theory of legal argumentation emphasizes the importance of clear and persuasive reasoning, recognizing the discretion of judges in situations with vague rules and the need to balance flexibility with legal certainty.

In the contemporary scenario, technology transforms social interactions and requires Law to quickly adapt to the new demands of virtual interactions. In this context, the introduction of technologies, especially artificial intelligence (AI), is irreversible. AI has the potential to process large volumes of data, speed up decisions, and improve fairness, but it also raises concerns about the depth of analysis and limitations in understanding moral and ethical nuances.

Although the use of this technology offers advantages, such as cost reduction and the identification of patterns in decisions, its application must take into account the specific context of each case. Human oversight is crucial, as final decisions must be made by judges who consider both the data analyzed by the AI and the particularities of each situation. Thus, AI should be seen as a complementary tool to human analysis, rather than a substitute.

The debate around judicial decisions rendered by AI systems highlights the importance of fairness in trials, comparing the impartiality of the machine with human experience and understanding. The citizen's choice between being judged by a machine or a human is still an open question, requiring clear limits to the use of AI. The introduction of this technology into the judicial system must be carried out with caution, balancing innovation and respect for fundamental rights, so that justice remains a priority.

Therefore, the integration of AI in the judicial process represents both an opportunity and a challenge. On the one hand, it can improve efficiency and consistency in the use of precedents and the analysis of large volumes of data. On the other hand, it raises questions about the ethical appropriateness and fairness of AI-based decisions. In the future, the theory of judicial decision will need to evolve to incorporate the role of technology, without losing sight of the fundamental values of law.

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