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DECISION-MAKING PATTERNS AND ARTIFICIAL INTELLIGENCE

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Abstract: The Brazilian Civil Procedure Code brought, among other innovations, the creation, by law, of a “doctrine of judicial precedents”. The legislative intention of forming a framework of judicial precedents, in practice, was unregulated with the creation and vertical imposition of hierarchical theses by the Superior Courts. Within the time limit of our time, new technologies are incorporated into procedural law and the routine of the Courts, without a necessary “filtering” and independently between Courts. Having found a huge collection of pending solutions in the Superior Courts, Artificial Intelligence and machine learning emerge as alternatives for solving demands, optimizing deadlines and qualifying decisions. However, the indiscriminate use of new technologies, without consolidating ethical discussions on the subject, can generate distortions when making decisions, fully or partially supported by artificial intelligence.

Keywords: Artificial intelligence. Machine Learning. precedents. Fundamental rights.

INTRODUCTION

The legislative intention present in the Civil Procedure Code, among other innovations, would be to create a system of judicial precedents, promoting the integrity of the law, under a logical-argumentative perspective of interpretation.¹, allowing, among other factors, greater transparency and predictability in the making of judicial decisions, which become obligatorily

justified and, according to some, a guarantee to the containment of the will.²

This article proposes to analyze the possibility of stifling future decisions in a scenario where the establishment of theses by the Superior Courts and the improper use of new technologies³ can replicate existing errors or discrimination, considering the possibility, in theory, of perpetuating defensive jurisprudence, for example.

New technologies have been incorporated into everyone’s routine, and their increase in procedural law is beneficial as an instrument for reducing the judicial collection and qualifying judicial precedents.

Given that “the same rights that people have offline must also be protected online⁴”, the pernicious use of new technologies can generate a looping where all the first decisions formed by algorithms can be repeated, reproducing any existing biases in the formation of these algorithms, due to the approximation of cases, where the logical formation of precedents is pursued.

Another problem that we intend to analyze, in a tight synthesis, is the hierarchical formation of theses⁵, replacing the traditional judicial precedents of the reading of comparative law, theses formed “from the bottom up”, not being the result of the conformation and gradual construction of certainties, reproduced in the Dworkian figure of the “chain novel” where each author complements the work of his predecessor, qualifying it.

When precedents and algorithms that reproduce this jurisprudence are juxtaposed,

1. Cf. MITIDIERO, Daniel. **Precedentes:** da persuasão à vinculação. 2. ed. São Paulo: Revista dos Tribunais, 2018.

2. Cf. VIANA, Antônio Aurélio de Souza; NUNES, Dierle. **Precedentes:** a mutação do ônus argumentativo. Rio de Janeiro: Forense, 2018. 443p.p. 96.

3. Throughout the article there was no concern to clarify the formal concepts of some new technologies. Thus, the terms artificial intelligence, machine learning, automated decisions, deep learning, judgment by machines, software, algorithms, among other terms are adopted in their colloquial sense, and within the tightness of the present, they normally refer to the basis of decisions made without human participation.

4. Cf. *Human Rights Council 32a. Session Agenda item 3 A/HRC/32/L.20*, Oral revisions of 30. Jun., 27 jun. 2016. O original da Resolução HRC/32/L.20.

5. STRECK, Id. *Ibidem*. p. 351 e 352.

with emphasis on the defensive jurisprudence of the Courts, the analysis of the ethical contours of these algorithms deserves greater attention, since the simple instrumental analysis (reduction of the collection of processes) is not enough as an ideal of distribution of justice.

THE PROJECT - PRECEDENTS AS THESESES

Noting an absurd number of cases filed daily, added to the collection of cases in progress and without solution, the collapse of the judicial system that was time-consuming⁶, inefficient and fragmented remained evident, demanding new solutions to the demand arising from the frenetic and constant social transformation that took place. from the promulgation of the Federal Constitution⁷, mainly.

To solve this “problem”, over the last few decades, attempts have been made in the most diverse and creative ways to present solutions that have proved, individually considered, to be unsatisfactory.

Since the successive legislative changes⁸, that extinguished resources and created new ones, that altered the execution process⁹

or proposed the creation by law of binding precedents¹⁰ or incidents of judgment of repetitive appeals¹¹, the reasons that impelled these changes to the norm have always been motivated by the reduction of trial deadlines and the reduction of access to higher courts.

In the Judiciary, what is called defensive jurisprudence¹², was the tool used by the Courts, over the years, to evade the judgment of merit.

As if this resistance to the judgment was not enough, the Superior Courts edited Statements of Precedents to obviate, ab initio, access to the higher court, in a preliminary judgment of admissibility of appeal.

In the explanatory memorandum¹³, the CPC (Law 13.105/2015) demonstrates the fragility of judicial provision¹⁴, that would be provided in an insecure, fragmented way¹⁵, divergent and incompatible with the law in force.

Opting to add integrity, coherence, isonomy and stability to judicial decisions, in a complementary way to the civil law system, Law 13.105/2015 intended to provide security to the legal system, creating incentives for the uniformization of judgments, approaching the treat-like cases doctrine.¹⁶

6. Cf. PEIXOTO, Fabiano Hartmann e BONAT, Debora; **Racionalidade no direito: Inteligência artificial e precedentes**. 1 ed. Curitiba: Alteridade. 2020. 144p. p. 71.

7. Cf. WAMBIER, Luiz Rodrigues. **Inteligência artificial e sistemas multiportas: uma nova perspectiva do acesso à justiça**. Revista dos Tribunais, São Paulo v. 1000, ano 108, p. 301-307, fev. 2019. p. 302.

8. After the Federal Constitution of 1988, until the entry into force of the current law 13,105 of March 15, 2015, the CPC underwent 53 amendments. see. <<https://legislacao.presidencia.gov.br/atos/?tipo=LEI&numero=5869&ano=1973&ato=297UTTU5EenRVT15b>>. Accessed on April 26, 2021.

9. We highlighted Law 11,232 of December 22, 2005 and Law 11,382 of December 6, 2006.

10. Leinº 11.417, de 19 de dezembro de 2006.

11. Law number 11,672, of May 8, 2008

12. Read: CRUZ E TUCCI, José Rogério. **Um basta à perversidade da jurisprudência defensiva**. Revista Consultor Jurídico-Conjur. São Paulo, 2014. Available at: <www.conjur.com.br/2014-jun-24/basta-perversidade-jurisprudencia-defensiva>. Accessed on: March 30, 2022.

13. CPC and related standards. – 7th ed. – Brasília: Federal Senate, Coordination of Technical Editions, 2015.313 p. Available at: <<https://www.senado.gov.br/senado/novocpc/pdf/Anteprojeto.pdf>>. Accessed on April 26, 2022.

14. **id. ibidem**. p. 27

15. **id. ibidem**.p. 27

16. Read: PUGLIESE, William S. Theory of precedents and legislative interpretation. 107 f. Master's Thesis – Law School of the Federal University of Paraná, Curitiba, 2011. p. 13

As we have seen, in order to give agility¹⁷ avoiding the collapse of access to the Higher Courts, it was intended, through legislation¹⁸, standardize jurisprudential understandings, reducing deadlines and optimizing resources.

The CPC thus materialized the beginning of a precedential system¹⁹. If we agree that the CPC changes the format in which judicial decisions will be rendered from now on²⁰. A new problem arises when we realize that we are unprepared for this new tradition of judgments.

Copying the common law judgment procedure models, what is extracted is that we are incapable of immediately applying this tradition, as is happening in practice, after 7 (seven) years of the CPC's validity²¹.

We do not study the cases as in common law adherents, restricting ourselves to discussing the theory of the system of precedents, without, in fact, having its understanding in practice. Magistrates, prosecutors, lawyers, students prepare themselves for the exercise of interpreting the law, not for the preparation of theses that aim to form or approximate precedents. In our law schools²², there are no apparent signs of reform in its curriculum

17. Explanatory memorandum: **Code of civil procedure and related rules**. P. 25. Id. *ibid.* p.27.

18. According to the Explanatory Memorandum. ID *ibid.* p. 29.

19. For VIANA & NUNES, there is no judicial precedent in Brazil, at least in the way considered in English and American law. See: VIANA & NUNES, precedents. p. 224.

20. Read: BARBOZA, Estefânia Maria de Queiroz. Critical reflections from the approximation of common law and civil law systems Stare decisis, integrity and legal certainty. Thesis (Doctorate in Law) 264 f Pontifical Catholic University of Paraná: Curitiba. p. 167, Ver: TARUFFO, Michele. *El vértice ambíguo. Ensayos sobre la Casación civil*. Lima: Palestra Editores, 2005. p. 13-15.

21. Read: STRECK. Dictionary of Hermeneutics. P. 354-355. Also: STRECK, Lenio Luiz. Judicial precedents and hermeneutics: the meaning of binding in the CPC/2015. Salvador: Juspodium, 2018.

22. Read also: FREITAS, Hyndara. Brasil tem mais de 1.500 cursos de Direito, mas só 232 têm desempenho satisfatório. Available at: <<https://www.jota.info/carreira/brasil-tem-mais-de-1-500-cursos-de-direito-mas-so-232-tem-desempenho-satisfatorio-14042020>>. Accessed on April 26, 2022.

23. Read: COLE, Charles D. *Stare decisis na cultura jurídica dos Estados Unidos*. O sistema de precedente vinculante do common law. *Revista dos Tribunais*, v. 87, n. 752, jun./1998, p. 11

24. About the importance of the Integrated System of Case Reports (Law Reports) in a system of judicial precedents, read: BARBOZA, Estefânia Maria de Queiroz. *Tese de Doutorado*. p. 166

25. In this sense, the Preface to the work of VIANA and NUNES written by Humberto Theodoro in VIANA and NUNES. precedents. P. XII, of the Preface.

26. Read: FARIA, Gustavo Castro. *Jurisprudencialização do direito: reflexões no contexto da processualidade democrática*. Belo Horizonte:Arraes Editores, 2012. p.114

27. Read: STRECK. *Dicionário de Hermenêutica*. p. 352-353.

that include the analysis of cases reported by the doctrine²³ and study the formation and application of precedents, contrary to what is taught in the academy of countries in the common law tradition, and object of judicial practice.²⁴

Since there are no studies, since graduation, practical teaching on the subject, reality reveals that notions of ratio decidendi, obtaining dictum and distinction are little treated in the Courts.²⁵

Thus, summaries²⁶, Statements, Guidelines of our Superior Courts are made in disrespect to the procedures taken with the secular tradition of the common law countries, as already seen.²⁷

Let's see the example of binding precedents³⁴ created with Constitutional Amendment 45/2004riadas com a Emenda Constitucional 45/2004³⁵. Without dwelling on the subject, the fact is that binding precedents must only be edited after repeated decisions, as stated in the Federal Constitution (article 103-A). It was not, for example, the case of the Binding Precedent n. 11³⁶ which originated in the: HC-91952 STF.³⁷

This vertical binding effect is present in the

Judiciary in other fields. Despite not having standardized this inflexible character of its jurisprudence, it has been fruitful in judicial pro-activity with successive creations of Precedents, Statements and Jurisprudential Guidelines²⁸, usually related to a lack of legislation, creating procedural and material norms, formulating theses that often replace the legislative process.

Distorting the theory of precedents, the current procedure of the Judiciary reveals an intention to edit precedents and precedents (themes) abruptly, without facing and maturing the prevailing legal theses²⁹, with the purpose of adapting, and even limiting, what is provided for by law, demonstrating, at first, the neglect with the elaboration of an integral, stable, uniform and coherent precedent, which is the result of the maturation of the positioning jurisprudence taken over the years and not taken by chance to limit possible legislative progress, for example.

The idea of the need for a “continued legal dialogue” appears in the sense adopted by LORENZETTO³⁰, where any judicial decision must bear in mind the need to justify a dialogue already initiated by “others”, whose argument (current decision) will contribute to the continuity of the discussion.

Even as a practice, there are not a few decisions handed down that can be considered defensive jurisprudence.³¹ of the courts. This flawed interpretive system is organized to prevent the effective analysis of the facts of the process (as examples, Precedent 126-TST and 7-STJ, 284-STF),³² producing different legal effects. Even based on the same factual support and the application of the same legal norm, there are divergent decisions, and the Courts, due to speed, efficiency and reduction of demands, fail to provide their constitutional duty to judge the case. concrete.

However, for the formation of precedents, as a rule, a factual comparison is necessary.³³ which resembles the precedent to the case of the records. Obviating the processing of appeals to the Higher Courts because it is impossible to re-examine the facts is a paradox, which undeniably prevents the formation of precedents, in traditional ways.

As we have seen, in order to give agility³⁴ and avoid the collapse of access to the Higher Courts, it was intended to³⁵, organize and standardize jurisprudential understandings, reducing deadlines and optimizing resources.

However, the combination of vertical theses and automated decisions raise concerns for legal practitioners, as we will see.

28. About the fundamental notions and differentiation between precedents, statement and jurisprudence, read: VIANA & NUNES. **Precedentes**. p. 203-224.

29. Read: MENDES, Bruno C.A. **Precedentes judiciais vinculantes: a eficácia obrigatória dos motivos determinantes da decisão na cultura jurídica brasileira**. - Rio de Janeiro, 2013. f. Dissertação Mestrado Direito Universidade Estácio de Sá, 2013. p. 169

30. LORENZETTO, Bruno Meneses e KOZICKI, Katya. **Constituindo A Constituição: entre paradoxos, razões e resultados**. Article: Revista Direito GV, São Paulo, v. 11, n. 2, jul./dez. 2015. 623-648 p. 642;

31. See the insurgency of the OAB and entities against the practice, in the article by VITAL, Daniel. OAB-DF asks the STJ for objective criteria for the admissibility of appeals, Revista Consultor Jurídico-Conjur of July 2, 2020. Available at: <<https://www.conjur.com.br/2020-jul-02/oab-df-stj-criteria-objectives-admissibility>> Accessed on April 24, 2021.

32. It is interesting to analyze the research carried out by the IDP, on the “dyke” of resource containment and the precedents used to prevent access to the higher courts. See CARNEIRO, Rafael Araripe. STJ in numbers: administrative impropriety. Jota. June 6, 2020. <https://wpcdn.idp.edu.br/idpsiteportal/2020/06/STJ-em-números_-improbidade-administrativa-JOTA-Info-1.pdf> Accessed on April 21, 2021.

33. Read: TUCCI, José Rogério Cruz e. **Precedente judicial como fonte de direito**. São Paulo: Revista dos Tribunais, 2004. p. 12.

34. **Código de processo civil e normas correlatas**. p. 25. Read also: **Id. ibidem**. p.27.

35. **Id. ibidem**. p. 29.

THE TOOLS - ARTIFICIAL INTELLIGENCE AND JUDICIAL PRECEDENTS³⁶

Artificial Intelligence emerges as an alternative to correcting biases³⁷ (behaviors, prejudices and errors) in decision making. Certainly the elimination of prejudices and biases of the judges³⁸ contribute to the impartiality required by law, where Pedro's behavior (drunk or sober) would not affect the judgment, algorithmically preconceived.

Even though the benefits brought by this new digital age are evident³⁹, opting for preconceived judgments does not completely rule out the problem. Discriminatory decisions in automated decision-making processes can also occur, and even more perniciously. Algorithms are developed through the appropriation of a certain number of historical data. Containing these

data biases, biases or errors, machine learning tends to replicate this anomaly, in an even more negative percentage than biased human behavior can cause.

As a solution to demand problems⁴⁰ and aiming to confer organicity⁴¹, was enacted in 2015, the CPC – Civil Procedure Code⁴², which, among other tools, sought to create, by law, a system of precedents that support decision-making, avoiding the dispersion of jurisprudence, and promoting the isonomy of judgments⁴³.

Data from the National Council of Justice (CNJ)⁴⁴ in their report Justice in Numbers 2020, highlight the transparency of the Judiciary since its presentation⁴⁵, revealing an “inventory” of about 77.1 million cases in progress in the year of 2019⁴⁶, and there was a historical reduction of this collection⁴⁷, demonstrating the increase in the productivity

36. Read: MITIDIERO, Daniel. **Cortes Superiores e Cortes Supremas** – do controle a interpretação da jurisprudência ao precedente. 3ª. ed. São Paulo: 2017.

37. Read: FERRAJOLI, Luigi. **Direito e Razão: Teoria do Garantismo Penal**. São Paulo: Editora Revista dos Tribunais, 2002. p. 46.

38. CHEN demonstrates that judicial analysis is full of extra-legal factors that influence judges' decisions in the most varied nuances. Behavioral anomalies in judicial decision-making offer an intuitive understanding of the relevance that the use of machine learning can help in limiting deviant behavior. (...) For example, the widening of the vote difference in the quarter before an election between Democratic and Republican judges (p. 6), the reduction of sentence considering the Defendant's birthday, or his presence at the trial (p. 6). 12), the alteration of the granting or not of asylum by the Louisiana judges according to the result of the football team of their choice, and the presence or absence of an attorney at the hearing (p. 14/15). For further conclusions, see: CHEN, Daniel, *Judicial Analytics and the Great Transformation of American Law*. *Journal of Artificial Intelligence and the Law*, Forthcoming, (October 14, 2018). Available at: <<https://ssrn.com/abstract=3306071>>. Access: March 08, 2022.

39. Read: POBLET, Marta & KOLIEB, Jonathan. (2018). **Responding to Human Rights Abuses in the Digital Era: New Tools, Old Challenges**. *Stanford Journal of International Law*. 54. 259-283. p. 261.

40. On the decrease in access to the Higher Courts: “The tendency to reduce the number of appeals that must be considered by the Courts of second degree and higher is an inexorable result of more uniform and stable jurisprudence.” in Code of civil procedure and related norms. p.29

41. About the objectives of the CPC: Id. *ibid*.p. 26

42. The concern with the reduction of the procedural archive and the impact of judicial decisions were some of the reasons that led to the adoption of a system of judicial precedents. in PEIXOTO & BONAT. *Rationality in law*. p. 71.

43. PEIXOTO & BONAT analyze that “the expansion of the list of fundamental rights, the independence of magistrates, greater freedom of interpretation, the adoption of vaguer and more fluid concepts” transformed the Judiciary and were important vectors in the adoption of a system of precedents. in PEIXOTO & BONAT *Rationality in law*, p. 73.

44. Justice in Numbers 2020: base year 2019/National Council of Justice - Brasília: CNJ, 2020. Available at: <<https://www.cnj.jus.br/pesquisas-judiciarias/justica-em-numeros/>>. Accessed on: 26 Apr.2021.

45. Presentation by Minister Dias Toffoli, President of the CNJ, p. 5.

46. 55.8% of these 77 million cases are in the execution phase. ID *ibid*. P. 150.

47. Segundo o Sumário Executivo **Justiça em Números 2020**: ano-base 2019/Conselho Nacional de Justiça 35,4 milhões de casos foram baixados.

of magistrates⁴⁸ and servers in this period, estimating a congestion rate of 68,5%⁴⁹, emphasizing the high degree of litigation to the detriment of the efforts of the CNJ carried out since 2006 to encourage a “culture of conciliation”

In the context of this article, the Justice in Numbers 2020 report highlights the launch of Datajud – National Database of the Judiciary⁵⁰, highlighting the “Acceleration in the virtualization of Justice” that confirms the virtualization of Brazilian Justice, noting that: “Nine out of ten lawsuits were initiated on a computer, a cell phone or a tablet - ten years before, the proportion was one every ten”, with a volume of 23 million new electronic processes, presented in 2019, remaining only 27% of the processes in paper support.⁵¹

Virtualization has become the objective of our Courts, where, under the apparent cloak of productivity and efficiency, celerity has been praised.

Interestingly, the Courts recognize that they exercise jurisdiction fully or partially supported by new technologies, from the admissibility judgment, carried out as in “a production line”⁵², and, as in the case of the STJ, by artificial intelligence systems such as Athos (which proposes to carry out a screening of similar cases, as well as identify cases that may be subject to allocation for judgment under the rite of repetitive appeals) and the software Sócrates 2.0 (which uses

machine learning to compartmentalize the controversies presented in the special appeal, comparing the Court’s decisions with the judgment of the court of origin, separating the jurisprudence related to the topic under discussion, including a suggestion of a draft).

The simple observation is that process and artificial intelligence have become inseparable, which is essential for the functioning of the Courts today.

A new dilemma arises, when we verify that the formation of precedents was replaced by the establishment of prevalent theses (themes) p, as already seen. And, according to the news reports, in order to speed up judicial decision-making, and reduce the historical collection of processes, the observation is that there has been a delegation of decision-making functions (totally or partially) to the machines⁵³, it is not credible, despite the euphemism (supported decisions), that decisions are just decisions supported by artificial intelligence, given the high number of processes and decisions taken.

If, in fact, there was total transparency, these automated minutes indicated in the institutional matters of the Superior Courts, if they are not necessarily judgments, within the accountability celebrated by the CNJ, it must also mention, what would be the percentage of rejection or approval of these pre-conceived minutes, obeying the transparency in the formation of the data,

48. Noteworthy is the information that Minister Alexandre de Moraes (STF) in his four years of work would have reduced the number of cases pending judgment from 6,597 to 635 in relation to the original collection, with 20,268 new cases being distributed to the minister during this period. See <<https://www.conjur.com.br/2021-abr-09/anos-stf-Ministro-alexandre-reduz-acervo-90>>. Accessed on: 26 Apr. 2022.

49. Read: o Sumário Executivo da Justiça em Números 2020 **op. cit.** p. 6.

50. **Id. Ibidem** p. 6

51. Cf. Sumário Executivo da Justiça em Números 2020, p. 10.

52. In the institutional matter “Nucleus of the STJ presidency contributed to the reduction of the procedural archive of the court” Available at: <<https://www.stj.jus.br/sites/portalp/Paginas/Comunicacao/Noticias/11032021-Nucleo-da-presidencia-do-STJ-contribuiu-para-a-reducao-do-acervo-processual-da-Corte.aspx>>. Acesso em 26 abr. 2022.

53. About the theme: FERRARI, Isabela; BECKER, Daniel; WOLKART, Eric Navarro. *Arbitrium ex machina*: panorama, riscos e a necessidade de regulação das decisões informadas por algoritmos. Revista dos Tribunais online, v. 995, p. 1-16, set. 2018. Available at: <<http://governance40.com/wp-content/uploads/2018/11/ARBITRIUM-EX-MACHINA-PANORAMA-RISCOS-E-A-NECESSIDADE.pdf>>. Accessed on April 24, 2022.

and the possibility of correction of biases.

And this is not to say that the innovation brought about by new technologies is bad⁵⁴. On the contrary, the high number of processes makes it impossible to make decisions, in due time and in the right way, based on the purely human factor.

Machine decision making is sometimes preferable to human decision making.⁵⁵ The function we have is to question the legitimacy of these practices and how they affect us.

In addition to the Judiciary, the transition from a society based on wealth to a society based on information has, in fact, created a new structure of power.⁵⁶ Data is monetized, used as political currency, as the social influence. Happiness is what you post on social media.

These condensed facts demonstrate the need for permanent assessments of the impact of new technologies on human rights⁵⁷, at each stage of the development and implementation of artificial intelligence systems, including and especially when making judicial decisions.

Digital technologies provide means to defend fundamental rights, and can perversely suppress, limit and violate human

rights and the Judiciary is not free from these questions.⁵⁸

Thus, in the final part of this article, the juxtaposition of a “precedents” system, along the lines outlined above, and the use of intelligent judgment systems are questioned.

THE PRODUCTION LINE ⁵⁹ - REPLICATING DECISIONS

In the topics that preceded the present, we briefly approached the existence of a precedential system (item II), noting the increase of new technologies in support of judicial decisions (item II.1).

According to SOURDIN⁶⁰ technology is reshaping the justice system on at least three fronts. First, at a basic level, technology is used as a tool for providing information, support and advice to people involved in the justice system (supportive technology). Second, technology can replace functions and activities that were previously performed by humans (replacement technologies). On a third front, technology changes the way judges work effectively, providing different forms of justice from traditional ones (disruptive technology)⁶¹, where, situations such as predictive analytics can reshape the

54. Read: MAGRANI, Eduardo. **Entre dados e robôs: ética e privacidade na era da hiperconectividade**. Rio de Janeiro: Ed. Arquipélago, 2019. p. 255.

55. Read: MORAIS DA ROSA, Alexandre. **Artificial intelligence and law: teaching a robot to judge**. *Magazine: Consultor Jurídico-Conjur.* of September 4, 2020. Available at: <<https://www.conjur.com.br/2020-set-04/limite-penal-inteligencia-artificial-direito-ensinando- robo-julgar>>. Accessed on April 30, 2022.

56. Read BOSTROM, **Superinteligência**, p. 23.

57. Read the required due diligence procedure recalled in item 39 of the 74th. Session of the UN General Assembly, Report A/74/821 of 29 May 2020. Available at: <<https://www.un.org/en/content/digital-cooperation-roadmap/>>. Accessed on July 17, 2021.

58. Read: BRAGANÇA, Fernanda; BRAGANÇA, Laurinda Fátima da F. P. G. **Revolução 4.0 no Poder Judiciário: levantamento do uso de inteligência artificial nos Tribunais brasileiros**. *Revista da Seção Judiciária do Rio de Janeiro*, Rio de Janeiro, v. 23, n. 46, jul./out. 2019. p. 69. Available at: <<https://doi.org/10.30749/2177-8337.v23n46p65-76>> Accessed: April 26, 2022.

59. The expression appears in the institutional article “**Núcleo of the presidency of the STJ contributed to the reduction of the procedural archive of the court**” previously mentioned.

60. Read: SOURDIN, Tania Michelle. “*Justice and technological innovation.*” *Journal of Judicial Administration*, Vol. 25, 2, (1 de dezembro de 2015). pp. 96 - 105. Available on the website: <<https://ssrn.com/abstract=2713559>>. Accessed on March 06, 2022.

61. According to SOURDIN’s methodology, *supportive technology, replacement technologies e disruptive technology*. Ver SOURDIN, Tania Michelle. *Judge v. Robot: Artificial Intelligence and Judicial Decision-Making*. *UNSW Law Journal*, v. 41, n. 4, 2018, p. 1114 –1133. p. 1117. Available on the website: <<https://goo.gl/hxbXri>>. Accessed on March 06, 2022.

role of the judge.⁶²

Fundação Getúlio Vargas, through the Center for Innovation, Administration and Legal Research (CIAPJ/FGV) carried out studies on the use of artificial intelligence in the justice system, within the sustainable development projects of the UN Agenda for 2030 in Brazil. This survey on the use of artificial intelligence in Brazilian courts concluded that more than 50% already adopt some type of artificial intelligence system, which will lead to the possibility of crossing these data to verify the impact of AI on the speed, efficiency and productivity of courts.

Thus, both assistive technologies and replacement and disruptive technologies are no longer an exercise in fiction, but a reality present in our Judiciary.

The concern is with the possible amalgamation between new technologies and binding precedents, within the logic of reducing the procedural collection, without other care.

The intention, mainly of the Superior Courts, to strengthen a Tupiniquim precedential regime, would initially be to shape the legal system⁶³, avoiding the argumentative disjunction of judicial decisions. However, it cannot be overlooked that the intention to create a precedential regime would also have the objective of reducing the number of cases that would be processed before the Superior Courts.

62. Id. **ibidem**. Read: MORAIS DA ROSA, Alexandre e BOEING, Daniel Henrique Arruda. **Ensinando um robô a julgar**: pragmática, discricionariedade, heurísticas e vieses no uso de aprendizado de máquina no judiciário. Florianópolis: Emais Academia, 2020.

63. Read: VIANA & NUNES. **Precedentes**. p. 225.

64. PEIXOTO & BONAT. **Racionalidade no direito**. p. 110.

65. Reas: STRECK, Lenio Luiz. **O que é isto**: decido conforme minha consciência? 4.ed. Porto Alegre: Livraria do Advogado, 2013. p. 105. Também: STRECK, Lenio Luiz. **Notícia de última hora: CNJ autoriza a cura de juiz solipsista!** Revista Consultor Jurídico-Conjur de 21 de setembro de 2017. Available on the website: <<https://www.conjur.com.br/2017-set-21/senso-incomum-noticia-ultima-hora-cnj-autoriza-cura-juiz-solipsista>> Accessed on April 29, 2022.

66. Cf. NUNES, Dierle; MARQUES, Ana Luiza Pinto Coelho. **Inteligência artificial e direito processual**: vieses algorítmicos e os riscos de atribuição de função decisória às máquinas, Revista de Processo, n. 285, nov. 2018. pp. 421-447.

67. Read: Courts invest in robots to reduce stock volume. Valor Econômico, March 18. 2019. Available at: <<https://valor.globo.com/noticia/2019/03/18/tribunais-investem-em-robos-para-reduzir-volume-de-aco.es.ghtml>>. Accessed on March 05, 2022.

68. France has banned the jurimetry of judgment data from the Judiciary, using artificial intelligence given the real possibility of

Still, the realization of these imposition, in a vertical way, makes it necessary to reflect on the legitimacy of this practice, which, under an alleged cloak of legality, can provoke the trivialization of fundamental rights in favor of the alleged efficiency and productivity conferred by the artificial intelligence.

For FISH & BONAT:

The system of precedents was designed in Brazil to fulfill very specific functions: to improve the performance of the Judiciary with the reduction of the collection and to promote argumentative convergence. But its introduction was imposed by means of specific legislation, which assigned a binding character to the decisions of the Supreme Courts.⁶⁴

The benefits of using new technologies, regarding the ability to reduce deadlines and routines, where human interference is less and less present, do not challenge major concerns.

However, when in favor of this efficiency and celerity these tools are used to make, or support the judicial decision, concern permeates any and all reflection.

The entire construction of a legal rationality that overcomes solipsism⁶⁵ cannot lead to a technological decisionism⁶⁶

The analysis of the policy chosen by the Judiciary that, in favor of agility⁶⁷, risk the possibility of ex ante decision making⁶⁸,

interfering with the entire legal system must also be questioned.

In the same sense, the possibility of taking standardized decisions, even if they do not correspond to merit, as can be seen from the media articles cited in the body of this article, in which, for example, the STJ's e-juris system is cited, expose a of the bottlenecks of the judicial process, in this case, access to the Special Appeal, whose analysis must necessarily pass through the computerized system, which requires a series of formal requirements increasingly closer to reading a code required by machines, instead of human reading.

The verification of judgments carried out totally or partially by machines (under the euphemism of supported judgment), still raises the question of the possibility of replicating the same result, either with the plastering⁶⁹ jurisprudence, or with the replication of possible biases arising from the perpetuation of computerized judgment bases.

ROQUE & SANTOS propose three basic premises so that judicial decisions can be taken, in part, by artificial intelligence:

[..]as requirements for the use of artificial intelligence in judicial decision-making: (i) every judicial decision made with the aid of artificial intelligence must contain this information in its body; (ii) decisions made exclusively by robots must be somehow subject to human review, with the

Constitution guaranteeing the subjective public right of access to judges; and (iii) whenever Motions for Clarification are filed, invoking the occurrence of obscurity, contradiction, omission or material error against a decision rendered with the aid of artificial intelligence attested to, these must be considered by the judge of the case, without the use of formulation mechanisms automated judicial decisions, under penalty of nullity.⁷⁰

The European Union was already concerned with automated decision-making, creating special rules that, when dealing with data protection, weaving parameters on the possibility of decisions formed by machines.⁷¹

In its Article 22, the GDPR⁷² deals with automated individual decisions, including the definition of personal profiles, where: “1. The data subject has the right not to be subject to any decision taken solely on the basis of automated processing, including the definition of profiles, which produces effects in his legal sphere or which significantly affects him in a similar way.”⁷³

Also in Recital 71, and in article 22, § 2, a) and c) of the RGPD, the “explicit consent” of the data subject, and when entering into or executing a contract, authorizes exclusively automated decision-making. The GDPR provides for the data subject, in addition to the “adequate guarantees”, the “right to information”, as well as “the right to obtain human intervention” and the “right to

being able to predict the outcome of judgments. In this sense: RODAS, Sérgio. **França proíbe divulgação de estatísticas sobre decisões judiciais**. Revista Consultor Jurídico-Conjur de 05 de junho de 2019. Available on the website: <<https://www.conjur.com.br/2019-jun-05/franca-proibe-divulgacao-estatisticas-decisoes-judiciais>>. Accessed on April 24, 2022.

69. Read: VIANA, Antônio Aurélio de Souza. **Juiz-robô e a decisão algorítmica: a inteligência artificial na aplicação dos precedentes in Inteligência artificial e processo**. Isabella Fonseca Alves (organizadora) 1. ed., 3. reimp. Belo Horizonte, São Paulo: D'Plácido, p. 27

70. Read: ROQUE, André Vasconcelos; SANTOS, Lucas Braz Rodrigues dos. **Inteligência artificial na tomada de decisões judiciais: três premissas básicas**. Revista Eletrônica de Direito Processual – REDP – Rio de Janeiro. Ano 15. Volume 22. Número 1. Janeiro até Abril de 2021. p. 74.

71. RGPD. art. 22, § 1, 3; 13, § 2 f.; 14, § 2, alínea g; 15, § 1 Hs. 2, alínea h.

72. RGPD é o Regulamento **Geral sobre a Proteção de Dados (GDPR, em inglês)**. Publicado pelo Parlamento Europeu em maio de 2016 sua vigência iniciou em maio de 2018.

73. RGPD. art. 22, § 1, 3;

explanation⁷⁴” about the decision made.

Once the decision pattern making parameters are known, by artificial intelligence, the algorithmic opacity⁷⁵ would be reduced, ensuring transparency, contradictory and enabling the intended accountability of the entire process.

The second premise of the need for the human factor in decision-making would be, in Roque and Santos’ view, in accordance with the principle of the natural judge, being that”, the Judiciary cannot do without the necessary humanization” Establishing the premise that “...it would be unconstitutional for decision-making exclusively by robots, without their decisions being in any way subject to human review, and the Constitution guarantees the subjective public right of access to judges.”⁷⁶

The mandatory presence of the human factor in decision-making, even if partially, at the time this article is written, is still the rule. Over the years and with the adequacy of the procedures and development of machine learning, added to the profusion of data, its structuring and qualification, this discussion will probably be held in the sense that the efficiency of artificial intelligence can supplant human understanding in decision making.⁷⁷, enabling autonomous solutions, without the mandatory presence of humans, despite probable resistance to this understanding and

inevitable discussions about legitimacy and legality.

As a third requirement, Roque and Santos develop the thesis that, even after a decision where the combination of algorithmic transparency and human review occurs, there is the possibility that, in cases of omission, obscurity, contradiction or material error in a decision rendered with the aid of artificial intelligence, the decision can be appealed, whose clarification and integration of the judgment must occur exclusively by the human, without the participation of artificial intelligence.

What is extracted is that the effective contribution of the concomitant use of artificial intelligence and the adoption of an efficient system of precedents, if well used, contribute to the facilitation of judicial activity and the promotion of greater access to justice.⁷⁸ However, the nightmare can come from the realization that algorithms can fail, presenting the possibility of biases and opacities.⁷⁹, as well as when they do not allow an explicit explanation of their causality.

The way the media stories reported in this article are presented⁸⁰, those in charge praise the institutional achievements, and the decision-making, as indicated, takes place as in a production line, revealing the use of artificial intelligence in an autonomous and abundant way, in order to comply with the

74. O RGPD. art. 13, § 2 f. establishes that the person affected by the automated decision can “useful information regarding the underlying logic, as well as the importance and expected consequences of such processing for the data subject”. This regulation is consistent with the understanding of ROQUE & SANTOS where: “every judicial decision taken with the aid of artificial intelligence must contain this information in its body” in ROQUE & SANTOS. Artificial intelligence in judicial decision-making. p. 70.

75. *Id. ibidem.* p. 70

76. *Id. ibidem.* p. 71.

77. Read: MORAIS DA ROSA e Alexandre BOEING, Daniel Henrique *Ensinando um robô a julgar: Pragmática, discricionariedade, heurísticas e vieses no uso de aprendizado de máquina no Judiciário*. 1. ed. Florianópolis: Emais Academia, 2020.

78. Read: PEIXOTO & BONAT. *Racionalidade no Direito*. p. 126.

79. Read: FERRARI; BECKER; WOLKART. *Arbitrium ex machina*. p.3.

80. As another example, in institutional matters, the Minas Gerais Court of Justice (TJMG) boasts the judgment of 280 cases, in one click. TJMG uses artificial intelligence in virtual trial. Available in: <<https://www.tjmg.jus.br/portal-tjmg/noticias/tjmg-utiliza-inteligencia-artificial-em-julgamento-virtual.htm#.YIs5-bVKjIU>>. Accessed on April 26, 2022.

established deadlines and goals, without much concern for the substantive issue, and without analyzing the legitimacy and legality of the procedure, it seems.

Continuing with the analysis of institutional matters, in order to ascend to the Higher Courts, in the way that institutional disclosure takes place, it is necessary to fill in a form, with a pre-established layout, under penalty of not being aware of its appeal by the -juris, in the case of the STJ, for example.

The possibility of replicating biases necessarily raises questions about ethics, legality, morality, legitimacy and legality of the use of artificial intelligence in judicial decision-making.

In either case, the concern with establishing ethical principles and strong safeguards in the use of artificial intelligence, where better governance is allowed⁸¹ possible, with wide transparency and explainability of decision-making procedures, are mandatory for the development and use of Artificial Intelligence in the Judiciary.

Thus, the process conducted by machines or artificial intelligence system must conform to the Constitution and obey its fundamental principles, with the principles of transparency, responsibility being inescapable.⁸², supervision and repair that must be updated, considering the advent of new technologies and even conceptual ductility over time.

CONCLUSION

The centrality of human rights⁸³ if it is recognized in the offline world it must be even more considered in the online world.

The intertwining between the adoption of a system of precedents, based on an imposition of theses, allegedly binding, with the objective of which the reduction of the accumulation of processes, with artificial intelligence, and the taking of automated decisions, total, or partially, it becomes worrying.

Procedural guarantees (contradictory, full defense, justification, argumentation, isonomy) take on a new meaning from the new institutes incorporated into the Law, namely the adoption of a system of “precedents” and the necessary technological innovation that permeates every order. There is even talk of a “due technological process”, of a “technological turn in procedural law”⁸⁴

Justice based exclusively on data, subject to replicating previous decisions, can bring about a dehumanizing policy, not being immune to prejudices, errors and discrimination caused by algorithms. The issue is that the intentional misuse of the technological tool exposes with more colors the fragility of the very Rule of Law, showing its democratic deficit in decision-making.

If, on the one hand, it promotes the efficiency of the system with time and value savings⁸⁵; the possibility of difficulties in full access to the Judiciary, the reproduction of algorithmic prejudices and the rigidity of decisions ruin the entire procedural system.

81. On governance, ethics and transparency in the use of Artificial Intelligence in the Judiciary, see Resolution number: 332, of August 21, 2020 of the National Council of Justice (CNJ).

82. Reas: European Commission. *Ethics Guidelines for Trustworthy AI*. Bruxelas, 2019. p.19. Available on the website: https://ai.bsa.org/wp-content/uploads/2019/09/AIHLEG_EthicsGuidelinesforTrustworthyAI-ENpdf.pdf. Accessed on: April 21, 2022.

83. Ver: SANTOS, Fabio Marques Ferreira. **O uso da inteligência artificial como um “meio” de melhoria e eficiência dos direitos e das garantias fundamentais no Estado constitucional**. Revista de Direito Constitucional e Internacional. v. 105. Jan-Fev/2018. p. 29-53.

84. In this sense: NUNES & PAOLINELLI. **Novos designs tecnológicos**. p. 17.

85. Ver: OLIVEIRA, Alexandre Machado de: **A pandemia do coronavírus e a revolução digital no Poder Judiciário**. Revista **Consultor Jurídico**, 13 de abril de 2020, Available on the website: <<https://www.conjur.com.br/2020-abr-13/opinio-pandemia-revolucao-digital-poder-judiciario>>. Acesso em: 24 abr. 2021.

Technology is not good, is not bad⁸⁶, nor neutral.⁸⁷ The solution that confers security, integrity and stability in decision-making involves the ethical evaluation not only of new technologies, but also the Judiciary policy that cannot rule out the preponderance of human rights by the discourse of greater productivity.

86. Cf. CASTELLIS, Manuel. *The rise of the network society*. Blackwell: Oxford, 1996. p. 96.

87. Ver: O'NEIL, Cathy. *Weapons of Math Destruction: How Big Data increases inequality and threatens democracy*. New York: Broadway Books, 2017. 275 p. p. 21 e ss

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