

Judicial Justice and the European Regulation on Artificial Intelligence

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Abstract: The study has identified several difficulties in effectively implementing artificial intelligence (AI) techniques in judicial proceedings. The approval of regulations, such as Spain's Royal Decree-Law 6/2023, is insufficient for Judges and legal professionals to use these technologies effectively. Several reasons for these challenges are highlighted. Firstly, judicial proceedings and the resulting sentences must be approved by all participants, including the parties involved, Lawyers, Prosecutors, and Judges. The focus should be on the specific conflict and relevant legal texts or precedents, not on AI-generated models based on past data, which may be biased. Secondly, AI technologies are not designed to assist in the specific tasks required by Judges and other officials responsible for processing judicial proceedings. Judicial processes are governed by strict constitutional, procedural, and substantive norms that AI systems are not equipped to handle without significant human oversight. The study also references critical experiences in other countries and opinions from the General Council of the Judiciary in Spain, which point out the lack of precision in the Spanish regulation regarding the use of AI in judicial activities. This indicates that the existing legal framework has not adequately considered the complexities of integrating information and communication technologies into judicial processes. Therefore, promoting AI technologies in judicial applications requires not only regulatory approval but also comprehensive reforms to existing norms and the creation of precise complementary regulations. These measures must align with the legal system and, especially, with the AI Regulation approved by the European Parliament and Council.

Keywords: Judicial justice, environmental justice, judicial sentence, judicial process, artificial intelligence, European AI regulation.

I. INTRODUCTION

One of the fundamental principles of the rule of law is that the resolution of a specific conflict in a given country is guaranteed by the decision proposed by a Judge or Court after the development of a judicial process, complying with the rules established by the legal system. These rules, contained in the laws, provide for the following: 1) the legal text, that is, the norm to be taken into account for the solution of the specific conflict; 2) the characteristics of the procedure or process to be followed until the judicial solution or sentence is issued; and 3) the measures to be adopted to guarantee both the orderly fulfillment of the process and the execution of the sentence¹.

These rules also provide that, in the formulation and procedural resolution of the conflict, the people involved—the Lawyers of the parties, the Prosecutor (depending on the characteristics of the conflict), the Legal Counsel of the Administration of Justice, and the Judge or the members of the Court—must participate by providing arguments in the different phases of the process, generating the content of the sentence. This is the established mandate of the laws.

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¹The Spanish Constitution of 1978 establishes these rules when regulating the Judicial Power: articles 117-127.

The use of computer systems or programs in carrying out these activities is now in question² if it is proposed that, in their realization, using the tools provided by AI, they automatically perform all or part of them. This is what may happen, for example, in Spain, considering that Royal Decree-Law 6/2023, of December 19³, establishes: 1) in article 35k), the promotion of the application of AI techniques in order to support the judicial function and the process of judicial proceedings, and 2) in articles 56 to 58, a regulation that prescribes the possible realization of automated, proactive, and assisted actions in procedural activities. This case can be taken as an example of what is happening or may happen in a continental law country in the near future.

²Two good founded references in this respect are, for example: 1) Stefan Elder says critically (Elder, 2024): "The legal domain is clearly an area of a lot of contradicting arguments on the same regulation or legal issue in general. Such contradicting opinions are a particular challenge for Legal AI as none of such contradictions can easily be rules out in a binary decision model but rather all of them need to be taken into account when analysing a legal problem." 2) Another testimony with another critical reason: "We know that AI is trained with historical data that, unfortunately, may contain biases. Therefore, relying on AI for judging and sentencing can lead to discrimination. In some cases, people trust AI tools too much (the 'anchoring bias'), so we have to be careful about how we design these tools, especially when they are intended to support and not replace human reasoning". Robert Mahari. "Relying on AI for judging and sentencing can lead to discrimination due to biases". LegalToday. See at: <https://www.legaltoday.com/actualidad-juridica/entrevistas/confiar-en-la-ia-para-juzgar-y-sentenciar-puede-dar-lugar-a-discriminacion-debido-a-los-sesgos-2024-10-21/>

³Real Decreto-ley 6/2023, de 19 de diciembre, por el que se aprueban medidas urgentes para la ejecución del Plan de Recuperación, Transformación y Resiliencia en materia de servicio público de justicia, función pública, régimen local y mecenazgo. BOE núm. 303, 20.12.2023, pp. 167808 a 167994. See at: <https://www.boe.es/eli/es/rdl/2023/12/19/6/con>

The problem to be considered is whether this regulation is fair or not, and what measures must be taken so that the proposals for automation can be accepted when they comply with the prescriptions and principles proper to the democratic legal system in which they are implemented.

For these purposes, the present study does the following:

In the first section (II), the basic characteristics of what can be called judicial justice are established, highlighting the characteristics that must be met in a specific judicial process so that both the process itself and the sentence that is generated can be qualified as fair, respectively.

In the second section (III), the fundamental objectives and the limits of AI techniques that can be most useful in the development of a judicial process are shown, specifically: machine learning, natural language processing, and ChatGPT.

In the third section (IV), the existence of juridical problems and a regulation that must be considered is mentioned in order to know if it is possible to use any application of AI tools in the procedural context without violating the characterization of the process and the resulting sentence as fair or just.

Finally, in the fifth section (V), the conclusions are presented.

II. JUDICIAL JUSTICE

The Spanish legal system, like that of other Continental Law countries, recognizes and specifies the right of citizens to have Judges make decisions, including sentences, on specific cases following the phases or steps of the prescribed procedural process according to the subject matter of the conflict that originated the case. A procedure in which the participation of, generally, citizen applicants, Lawyers, Prosecutors, Legal Counsel of the Administration of Justice, and Judges is foreseen.

Article 24 of the Spanish Constitution establishes: "1. All persons have the right to obtain effective protection from the Judges and Courts in the exercise of their rights and legitimate interests, without, in any case, undue delay. - 2. Likewise, everyone has the right to a Judge, in ordinary cases, predetermined by law, to the defense and assistance of a lawyer, to be informed of the accusation formulated against them, to

a public trial without undue delays and with all guarantees, to use the appropriate means of proof for their defense, not to testify against themselves, not to confess themselves guilty and to the presumption of innocence."

To the foregoing, it must be added that Article 24, in conjunction with the principle of exclusive jurisdiction (Art. 117.3, Spanish Constitution), guarantees to citizens the right to a resolution founded in law dictated by a Judge or Tribunal. That is, the right to have their case resolved by a judge-person.

These rights are expressly recognized and delimited in the regulation that establishes the content and forms of the document with which the process is initiated: the demand, or what is the same, the content of the initial writing to which the arguments and proposals that are made in the proceeding must adhere. Continuing, we summarize the characteristics of the demand according to what is established in Continental Law in Spain and Common Law in the United States.

Assuming we are considering a civil claim as an example that can be adapted to the specific particularities of each jurisdiction, the Spanish legal system establishes the following requirements.

The main requirements for a claim are that it must always be in written form and, in addition, that it must be structured in the following three parts: Firstly, the heading, in which the identifying data of the claimant and the defendant must be included (Art. 155 of the Law of Civil Procedure (LEC)), as well as that of the lawyer and the attorney, if applicable (paragraphs 1 and 2 of Art. 399 of the LEC). Secondly, the body of the claim where the facts of the case (Art. 399.3 of the LEC) will be set out and, subsequently, the legal grounds (Art. 399.4 of the LEC).

The requirements for a civil claim in Civil law countries, as established by procedural laws (the Law of Civil Procedure in Spain, LEC), differ in some aspects from those in Common law countries. These differences are significant in terms of both the structure and the requirements of civil claims, as we will explain below.

The characteristics of the specific requirements for a civil claim in Common law countries are outlined in the definitions of the terms: claim, complaint, precedent, and stare decisis, which are found, for example, in Black's Law Dictionary (Blacks, 1968, pp. 313-4, 356-7, 1340, 1577-8).

Next, we will present a comparison, summarized in a schematic form, between the two types of requirements for a civil claim as prescribed in Civil law and Common law countries:

Civil Law

- **Legal Basis:** Claims are based on civil codes and written laws.
- **Structure:** They tend to be more formal and structured than those in common law.
- **Requirements:**
 - Clear identification of the parties: Plaintiff and defendant.
 - Clear and concise statement of the facts: Description of the situation of the case and the infringement of a right.
 - Legal grounds: Citation of the legal norms considered infringed. Jurisprudence is not recognized as a source of law; as stated in Article 1.6 of the Civil Code: "Jurisprudence shall supplement the legal system with the doctrine that, in a repeated manner, the Supreme Court establishes when interpreting and applying the law, custom, and general principles of law."
 - Specific petition: Clear indication of what is requested from the Judge (conviction, declaration, etc.).
 - Evidence: Generally presented at a later stage of the process.
- **Role of the Judge:** The Judge has an active role, directing the process and assessing the evidence presented by the parties.

Common Law

- **Legal Basis:** Claims are based on judicial precedents and legislation.
- **Attending to the Stare Decisis Doctrine:** "Doctrine that, when a court has once laid down a principle of law as applicable to a certain state of facts, it will adhere to that principle, and apply it to all future cases, where the facts are substantially the same." (Black, 1968, p. 1577).

- **Structure:** Tends to be more flexible and detailed.
- **Requirements:**
 - Clear identification of the parties: Plaintiff and defendant.
 - Detailed statement of facts: Including a chronological account of the events.
 - Cause of action: Identification of the legal basis for the claim, citing relevant judicial precedents.
 - Relief sought: Indicating the legal remedy sought (damages, specific performance, etc.).
 - Evidence: Often attached to the initial claim.
- **Role of the Judge:** The Judge plays a more passive role, allowing the parties to present their arguments and evidence.⁴

Regarding the origins and, at the same time, the specific characteristics of Common law, Russell Sandberg's book provides a detailed historical genesis of Common law. In particular, he argues that Common law reflects the existing relations between legal change and external social and political influences (Sandberg, 2023, p. 10). This applies equally to what happens in Civil law countries.

It should also be noted that, despite the differences identified regarding the content of all types of claims, the objectives pursued in judicial proceedings and the sentences, considering the legal context in which they are expressed—that is, the prescriptions established by the constitutions, laws, and jurisprudence specific to the different States in which they are in force—are sufficiently stated in the corresponding norms. An exemplary summary of the purposes of both systems, with future perspectives, is contained in the expression of them that is given when describing how the promotion of the fulfillment of the Sustainable Development Goals for 2030, which were approved by the United Nations in September 2015, should be achieved. Specifically, this is expressed when explaining what the objectives of Goal 16 are⁵, which

⁴ An example of the structure of a civil claim in the United States can be found at: <https://www.uscourts.gov/about-federal-courts/types-cases/civil-cases>.

⁵Regarding the content of SDG 16 and the corresponding targets, they can be found at: <https://www.un.org/sustainabledevelopment/peace-justice/>

has as its fundamental objective to *Promote just, peaceful and inclusive societies*.

Promoting the goals is summarized as follows:

- Promote just, peaceful and inclusive societies for sustainable development, that is, to facilitate access to justice for all and to build effective and inclusive institutions at all levels.
- Promote the rule of law in the national and international arenas and guarantee equal access to justice for all.
- Create at all levels institutions that are effective and transparent, that are inclusive, participative, and representative that respond to the needs.
- Provide access to a legal identity for all, in particular through birth registration.
- Guarantee public access to information and protect fundamental freedoms, in accordance with national laws and international agreements.
- Strengthen national institutions, including through international cooperation, to build capacity at all levels, particularly in developing countries, to prevent violence and combat terrorism and crime.
- Promote and apply non-discriminatory laws and policies in favor of sustainable development.

Considering the above, it can be concluded that these expressions indicate that both the objective and the ends are precise to accept the effective realization of judicial justice in each country that accepts them as its own, understanding that the content of the denomination *judicial justice* can be considered the same as the denomination of *environmental justice*, that is, the one that encompasses with this name "the ideals of coexistence concretized in a specific legal area" (Robles, 2021, p. 858). In other words, it is the "perspective of the jurist as such, centered in the legal field in which he carries out his professional activity", whose central figure, as an embodiment of said jurist, is that of the Judge (Robles, 2021, p. 860)⁶. Here it is

convenient to add that together with *environmental justice*, one can also speak of *extra-environmental justice*, which is that which "aims to construct an ideal law in an ideal society" (p. 858); this is the perspective of the jurist philosopher, or the philosopher: "above all, the moral philosopher and the political philosopher" (p. 861).

All of which cannot make us forget that, as we have seen, considering that here we are going to consider how to carry out an *environmental* or *judicial justice*, focusing on the way of electronically processing judicial processes and the sentences that are generated in the development of these processes, which is one area that is stipulated by the regulations of a Civil law country, and another different area is the area of the regulations of a Common law country. This is formulated in the different contents and forms that the claims have, in which the processing of judicial proceedings begins and ends in one type of country and another, as we have previously expressed.

III. ARTIFICIAL INTELLIGENCE

The question we want to answer in this section is the following: Can *judicial justice* or *environmental justice* be achieved when information and communication technologies, and more specifically artificial intelligence techniques, are used as an auxiliary tool in the judicial process?

We will answer this question by referring, first, to what happens when automated management programs of the Judicial Administration are used in the processing of judicial proceedings; second, to the need to increase the efficiency of justice given the insufficiency of judicial management systems if, with their use, the achievement of *judicial* or *environmental justice* is sought; and third, to highlight some characteristics or functions of artificial intelligence systems and the limits that exist to achieve with them the satisfaction of environmental justice when used in the Judicial Administration.

1. AUTOMATED MANAGEMENT SYSTEMS IN THE FIELD OF JUSTICE

Since the adoption of the use of computer systems as auxiliary instruments for the management

⁶ Textually it says: "By the term 'environmental justice' we refer to the ideals of coexistence concretized in a specific legal sphere. By the term 'extra-environmental justice' we let philosophical imagination fly to construct an ideal law in an ideal society" (p. 858). "The perspective of the jurist as such, centered on the legal sphere in which he carries out his professional activity. If we have to choose a central figure that embodies this jurist, we would choose the judge. We can also choose the doctrinal treatise writer, since his field of interest

constitutes a specific legal sphere and, if we want more precision, a legal system that he helps to present in a systematic way. This perspective is typical of environmental justice' (p. 860)."

procedures of the Administration of Justice, a long process of construction of two types of information programs took place throughout the 20th century: those that were used with the aim of providing access to the legal information contained in banks, or databases, of legal data, thus having a documentary character, and judicial management systems, which had the mission of assisting in the processing or management of judicial proceedings with the aim of constituting and filing the judicial files. This occurred in Spain, for example, from the mid-eighties onwards (CREI, 1983, p. 7).

The current role of judicial management programs in Spain can be exemplified with the exposition of what the program Minerva⁷, dedicated to assisting judicial management in ten Autonomous Communities, the Supreme Court, and the National Audience, does. This program is not the only one that exists; in Spain, in addition to Minerva, there are eight other judicial management systems. In any case, the study of all of them, as occurs with Minerva, leads us to conclude that a judicial management system in Spain has as its main objective to optimize and expedite judicial processes. This is achieved, succinctly, through the automation of administrative tasks, the improvement of communication between the different actors of the judicial process (judges, prosecutors, lawyers), and the centralization of information.

In summary, its most important specific functions, prescribed by the corresponding regulations, are:

- The management of files, which consists in the digitalization and storage of all documentation related to a case, facilitating its access and consultation.
- The automation of procedures, that is, the simplification of repetitive tasks such as the sending of notifications or the setting of hearings, reducing time and human errors.
- The establishment of the calendar of actions, consisting of the organization of the different phases of the judicial process, ensuring that the deadlines established for the different stages of the process are met, guaranteeing communication between the different actors of the process, and guaranteeing the protection of data.

- The collection of data for generating reports and statistics that allow evaluating the efficiency of the system.
- The facilitation of access of the citizens to information about the status of their judicial processes.
- The promotion of communication between the different systems of judicial management, both at the national and international level.

Summarizing what has been expressed, it can be said that judicial management systems in Spain seek to modernize the Administration of Justice, making it more efficient, transparent, and accessible for all. All this, moreover, is carried out in accordance with what is prescribed by the laws that regulate it⁸. Furthermore, it is included in the principles with which the process responsible for the judicial process and the elaboration of the sentence, for which it can be said that they comply with the principles indicated as proper to *judicial or environmental justice*.

From a Common Law perspective, the consideration of judicial management systems in the United States can serve as an example. The first thing to note is that Common Law systems fulfill the same general functions that we have highlighted in systems of Civil Law countries. Ultimately, both types of systems are oriented, in principle, towards seeking a more efficient, transparent, and accessible Administration of Justice for all, facilitating the work of Judges, Lawyers, and officials of the Administration of Justice. All of which does not prevent us from recognizing that there are two important differences between both types of systems.

The first difference is centered on the fact that Civil Law judicial management systems, as is the case in Spain, do not deal with providing access to the legal documentation stored in databases. Those interested in this access must do so using other systems: those dedicated to the recovery of legal documentation. On the other hand, in Common Law judicial management systems, as in the United States, they integrate, as part of them, the systems for the recovery and storage of legal documentation.

The second difference between both types of systems is centered on the content of the legal

⁷<https://www.administraciondejusticia.gob.es/-/soluciones-minerva?inheritRedirect=true&redirect=>

⁸A recent list of its contents is in: Delgado, 2024

documentation to which they have access. The distinction lies in the fact that Common Law systems provide access to information that is contained in the judicial files of the federal and state courts, which does not occur in Civil Law countries. In these countries, as occurs in Spain, you can only access, through the use of legal documentation recovery systems, the content of the legislation or administrative, governmental regulations, and the judicial sentences issued previously. That is to say: it is not possible to access the content of judicial files. Additionally, it should be noted that sentences are anonymized. This cannot happen because, due to data protection legislation, it is not possible to know the names of the natural persons whose conflict has generated the process and the sentence.

This is different from what happens in the United States judicial management systems with respect to the protection of personal data, since although there are precautions to preserve access to certain parts of some cases in relation to the transcendence of personal content, there do not exist guarantees as general as those offered in Europe by the regulation on protection of personal data. Thus, occurs in the ambit of the justice system of the United States, with the programs that, among others, Tyler Technologies⁹ provides, for example, or, in the ambit of the federal justice, with the PACER program (Public Access to Court Electronic Records)¹⁰, which is a federal system, established since 1988 by the Judicial Conference of the United States and that provides public access to the federal court records. The Judicial Conference of the United States is a governmental agency created by Congress in 1922. It has the principal objective of establishing the national policies of the administration of the federal courts in the United States. (Myers, 1971, p. 597)

After what we have expressed previously (section II), it is not strange that judicial management systems have these differences in the two types of countries considered. This already explains the differences existing in terms of the elements of the content and form of civil claims that we showed (Black, 1968, p. 1577).

Obviously, these differences require giving a different purpose and objective to the computer

programs that assist in the management of judicial processes in one or another type of country, satisfying the particularities mentioned. Which does not prevent recognizing that, for example, in Common Law countries the respective demands of judicial or environmental justice are also met through the use of judicial management systems as occurs in Civil Law countries. At the same time, it must be recognized that they would be, in turn, activities proper to extra-environmental justice, that is, they would have a philosophical character, those of jurist philosophers who propose the implementation in their respective field of action of the demands of environmental justice typical of legal systems different from those in which they carry out their usual work.

We cannot forget that legal concepts are always related to some legal informational environment. We are talking about systems and systems thinking. Crossing system boundaries easily leads to an incorrect legal view. Legal principles in force and their limits are not recognized (Saarenpää, 2024, p. 39).

2. THE INSUFFICIENCY OF JUSTICE MANAGEMENT SYSTEMS

We have just expressed that both the use of Continental justice management systems and those of Common law countries, in principle, comply with the demands of *environmental justice*. However, in reality, it is necessary to nuance this affirmation because reality shows us that there are limitations in both systems. This is so because for some years now, it has been estimated that justice management systems used in both types of countries are not sufficiently efficient for the development of judicial activities. We speak of the insufficiency of justice management systems because their fundamental purpose, which we explained, was to seek a more efficient Administration of justice for all, has been in crisis for years.

This is the case in Spain, as can be seen by simply reading the annual statistics on the activity of Courts and Tribunals prepared by the General Council of the Judiciary. In them, it is observed, specifically, the continuous annual increase: in the number of cases filed in the judicial bodies, in the litigation rate of the population, and in the number of judicial cases pending in the judicial bodies at the end of the year (Memoria, 2024, pp. 465-469), which is clear evidence that their activity is insufficient and cannot be considered fair.

This is a common problem that occurs in other countries, as demonstrated by the constitution and

⁹<https://www.tylertech.com/solutions/courts-public-safety/courts-justice>

¹⁰<https://pacer.uscourts.gov/>

implementation by the Council of Europe in the year 2000 of the organism CEPEJ, which stands for the "European Commission for the Efficiency of Justice"¹¹. This was an initiative of the meeting of European justice ministers held in London in 2000. With CEPEJ, the Committee of Ministers of the Council of Europe wanted to establish "an innovative body to improve the quality and efficiency of European judicial systems and strengthen the confidence of users in such systems." It should be noted that members of the Council of Europe are countries with a Continental legal system, for the most part, but others have a Common law system. This latter is the case in the United Kingdom, Ireland, Cyprus, and Malta. The United States and Canada, countries with a Common law system, are observer members.

On the other hand, aware of the problem of the insufficiency of justice management systems, at the same time that the existence of this problem was recognized by the Ministers of Justice of the Council of Europe, in 1998, a little before the constitution of CEPEJ, IA and Law studies for the deficiency and efficiency in the judicial field of the automated management judicial systems were exposed, given the auxiliary use to their functions that could be fulfilled in all programs developed with IA techniques, as long as the integrity of the decision-making function of Judges was respected and even enhanced with such use (Sartor and Branting, 1998, p. 110).

This confidence in the use of AI techniques as part of the solution to the lack of judicial efficiency is so assumed in recent years that the CEPEJ itself, the Ministries of Justice of the countries members of the Council of Europe, also considered, in 2018, that the use of AI in the Administration of Justice, taking the due precautions, could be a relevant factor for the increase of the degree of efficiency of the judicial activity. This is exposed in its European Ethical Charter on the use of Artificial Intelligence in judicial systems and their environment, when referring in the introduction that justifies the establishment of the general principles that integrate this Ethical Charter¹².

Until now, the proposals had been of a theoretical nature, those of the specialists in law and artificial

intelligence, and of ethical content, once it did not enter into explaining the technical reasons of the acceptance, in the CEPEJ Ethical Charter.

Therefore, returning to the more concrete question that we asked at the beginning of this section, it is worth reflecting on the following: what technical reasons can fundamentally support the use of AI applications in the Administration of Justice, at the same time that the establishment of preventive measures in this regard, are a suitable means to increase its efficiency?

To answer the question, it is convenient to briefly refer to some of the basic characteristics of the virtualities that, nowadays, AI tools are shown to possess. We will address this in the following part.

3. ARTIFICIAL INTELLIGENCE TOOLS: FUNCTIONS

In any use of computer science, we talk about algorithms, which are sets of instructions necessary to solve a problem or complete a task. Donald Knuth defines an algorithm as a finite set of rules that gives a sequence of operations to solve a specific type of problem (Knuth, 1997, p. 4). Algorithms are used in fields such as science, engineering, computing, business, and medicine, and also in justice management systems, where they guide a computer to perform specific tasks related to case management.

Without a doubt, algorithms play a key role in optimizing judicial processes and decision-making. They have been present in information systems that support the Administration of Justice since the mid-1980s, although their use, as we have noted in II, 2, has not always increased efficiency. However, the novelty of AI techniques does not lie in the use of algorithms; they also use them, but rather in their capabilities, which we will explain below.

AI introduces advanced functions such as Machine Learning and Natural Language Processing, Computer Vision, and Robotics (Russel and Norvig, 2021, pp. XI-XVII). In the legal field, the possible use of Natural Language Processing and Machine Learning stands out. Recently, the application of the two last functions called ChatGPT has been highlighted.

Natural Language Processing allows computers to understand, interpret, and generate human language (Russel and Norvig, 2021, p. 851). It requires the use of computational linguistics, machine learning, and deep learning techniques to analyze and manipulate

¹¹<https://www.coe.int/en/web/cepej>

¹²Introduction to the European ethical Charter on the use of Artificial Intelligence in judicial systems and their environment. Adopted at the 31st plenary meeting of the CEPEJ (Strasbourg, 3-4 December 2018). <https://www.coe.int/en/web/cepej/cepej-european-ethical-charter-on-the-use-of-artificial-intelligence-ai-in-judicial-systems-and-their-environment>

large amounts of text (Gomez, 2023, p. 55). We can already say that its use, therefore, has little application in the resolution of judicial processes since in these only the specific texts involved in each judicial process come into play. A different thing is its possible application in the generation of form models that are used in judicial management.

Machine Learning allows machines to learn and improve from experience, without the need to be explicitly programmed for each task. It identifies patterns in large data sets (Russel and Norvig, 2021, p. 651). For the above reasons, this tool is also not relevant in judicial processes; in these, only the specific data of the case are relevant. As with Natural Language Processing, a different thing is its possible application in the generation of form models that are used in judicial management.

ChatGPT is an AI-powered generative model developed by OpenAI¹³, designed for conversation. It engages with users, generating responses in natural language and simulating human-like interaction. This is based on Natural Language Processing and Machine Learning, using a large amount of text data accessible on the internet. It has the same difficulties as Natural Language Processing and Machine Learning regarding the use of large amounts of data and models built from that data for its application in the process: only the data and arguments provided in relation to the specific case by the participants in its processing are relevant.

As a conclusion of what has been explained so far, algorithms and AI can play a crucial role in various fields as they introduce capabilities that optimize processes and decisions, although not so much in judicial proceedings. It is fundamental to have a realistic vision of their capabilities and limitations for each case in which it is intended to be used.

Regarding ChatGPT, this application is an example of how AI can interact and simulate human conversations, demonstrating the potential of these technologies in information management and decision-making. This implies, according to its creators, that its technological capacity to understand the context and intention behind users' questions or queries makes it a tool that can develop conversations (chats) with "robots" or information systems¹⁴.

The above also has limitations, as this idea does not prevent us from clarifying that, as specified in the program's terms of use when explaining the content of what it provides, more specifically the accuracy of its response or 'output,' one must be cautious with the responses it emits because, as indicated to the user: "Accuracy. Artificial intelligence and machine learning are rapidly evolving fields of study. We are constantly working to improve our Services to make them more accurate, reliable, safe, and beneficial. Given the probabilistic nature of machine learning, use of our Services may in some situations result in Output that does not accurately reflect real people, places, or facts."¹⁵

Therefore, despite everything, there is no doubt that the functioning of this tool can be considered for its application in the legal field, as it happens in other areas. However, this will always occur when it is used in a closed environment: with limited legal information and using specific and known sources, that is, models built over time. The typical example in this regard in this field is the use of ChatGPT in a law firm that feeds the program with the activities carried out and the legal texts used therein, throughout its history, on specific cases, and the decisions made regarding those cases by Judges or Courts. This is not the case for the processing of a case about a particular, specific conflict, where it depends on the different arguments and legal texts alleged by the parties, their Lawyers, the Legal Counsel of the Administration of Justice, the interested parties, the witnesses, the experts, and even the Judge or Court. This means that models do not fit here: the citizen has the right to have a specific decision about the particularity of their case in compliance with the current law. This shows that the use of ChatGPT in the Administration of Justice cannot be carried out (Novelli *et al.*, 2024).

In summary, these considerations about ChatGPT, Natural Language Processing, and Machine Learning give us a clue about the precautions that should be taken when using these techniques in judicial processes and their consequences: the sentence¹⁶. This is because in relation to these activities, the problems to be solved do not meet the characteristics of what constitutes the objective of AI techniques: to analyze and manipulate large amounts of text and

¹³<https://openai.com/>

¹⁴<https://openai.com/chatgpt/>

¹⁵<https://openai.com/policies/terms-of-use>

¹⁶Precautions are presented with respect to the UK experiences and possibilities of the use of AI techniques in the Criminal Justice System by Charanjit Singh (Singh, 2024).

identify patterns in large datasets. In both the Continental and Common Law legal systems, Judges and the rest of the participants in the processes must resolve, through oral and written arguments, specific cases.

The previous statements are now better supported since we have a legal definition of what AI can do in the legal field. This definition is more specific than those previously presented regarding AI systems or programs. It is the one established by the 2024 European Regulation on Artificial Intelligence, which (Regulation, 2024, art. 3, 1) states: "AI system means a machine-based system that is designed to operate with varying levels of autonomy and that may exhibit adaptiveness after deployment, and that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments."

Expressions that reveal the virtuality of AI systems are always based on the functioning of a machine and its corresponding algorithm, and that, despite its name, it functions by reproducing, reiterating, data that has occurred. They do not count with concrete aspects of human intelligence; therefore, they do not carry out all the tasks proper to this intelligence, which we know are not centered only on calculation and speed, but also on comprehension and reflection, attending to values, meanings, criteria, perspectives, or vital points of view acquired and constructed through the process of participation or autopoiesis proper to the knowledge and action of living beings (Maturana and Varela, 1984, p. 28).

With this, it is confirmed that it is impossible to resolve in the legal field with the mechanisms proper to these programs, mechanically, cases or concrete conflicts in which it is necessary to attend to the norms, rules, and procedures promulgated, in force, and accepted in a democratic society, once in the resolution about the same, intervene with their concrete perspectives of comprehension and reflection, through arguments, necessarily jurists (Judges, Prosecutors, Legal Counsel of the Administration of Justice, Lawyers), officials, and even the beliefs, points of view, considerations, and acceptance of the citizens who are part of the conflicts and are involved in their solution (Sanchez, 2019, p. 133).

The same European Regulation takes precautions with respect to the use of AI in the Administrations of

Justice. It stipulates that the AI systems used by judicial Administrations are classified as high-risk. Therefore, their approval must be granted by the competent community and state institutions, as established by the Regulation. This is indicated in Article 6 - Classification rules for high-risk AI systems.

The Regulation establishes that High-risk AI systems are the AI systems of "Administration of Justice and democratic processes". The Regulation says concretely: "AI systems intended to be used by a judicial authority or on their behalf to assist a judicial authority in researching and interpreting facts and the law and in applying the law to a concrete set of facts, or to be used in a similar way in alternative dispute resolution."

Therefore, it can be raised what answer we can give to the question with which this section III began: can judicial justice, or environmental justice, be achieved when AI techniques are used as an auxiliary instrument of the judicial process? From what has been indicated so far, we can already say that the answer is negative, unless the specific AI techniques that are intended to be used in a judicial process meet the requirements established in the European Union Regulation for the approval of high-risk AI systems of the Administration of Justice¹⁷.

In other words, we can positively answer the question by saying that AI systems will be usable in the Administration of Justice and will increase its efficiency, thus satisfying the requirements of environmental justice. This is contingent on these systems being designed and used according to the authorizations required for high-risk systems. It is important to consider that such systems carry this risk because, as we have shown in this section, the functions proper to AI techniques are inadequate for their use in the obligatory implementation of judicial processes related to specific cases and legal texts.

Now we can ask ourselves: are there already concrete risks in the use of AI to assist in the preparation of judicial processes and sentences? In the next section, we will present two real examples: one that occurred in the United States and another in Spain. We will also specify the proposals of the European Union Regulation to avoid them.

¹⁷The approach is seriously supported, for example, in the paper: "Words or code first? Is the legacy document or a code statement the better starting point for complexity-reducing legal automation?"(Goodenough and Carlson, 2024).

IV. PROBLEMS AND REGULATIONS

The reserved use of AI in the Administration of Justice becomes more explicit if we take into account what we consider in this section, in which we refer to the following:

- Firstly (1), we gather a testimony from the use of AI programs in the United States within the judicial field by a Judge who shows certain concerns that its use has raised in judicial practice in the United States.
- Secondly (2), we present the most notable characteristics and problems of a normative initiative approved in Spain related to proposals for changes in justice management systems that could be implemented through AI programs.
- Thirdly (3), we highlight the procedures that must be followed if AI systems used in the Administration of Justice are to be considered satisfactory for complying with the requirements of environmental justice, according to what is prescribed in this regard by the European Regulation on Artificial Intelligence.

1. PROBLEMS WITH THE USE OF AI BY US COURTS

Catherine Forrest, a former federal judge in New York, criticizes the use of AI in US justice. In her book "When Machines Can Be Judge, Jury, and Executioner" (2021), she argues that current AI tools are based on utilitarian conceptions of justice and are inconsistent with the principles of liberty and individual justice of the Constitution and the Declaration of Independence of the United States.

Forrest argues (Forrest, 2021, p.1) that this is because, by virtue of their design, these AI tools introduce social biases, such as those of race or gender, into the criminal justice system and other legal areas. This dependence on biased data can negatively affect the development of judicial processes. She also points out, as another problem, that these tools are designed by private companies without transparency in their functioning.

Therefore, she proposes redesigning AI tools (Forrest, 2021, p. XVI) to prioritize justice and equity, similar to the proposals made in the public debate in the United States regarding the content of design standards for autonomous weapons (Forrest, 2021, p.

131). She suggests that, as in the latter case, the redesign of AI programs used in the Administration of Justice should focus on principles of justice and equity rather than utility and efficiency.

Therefore, the solution to the problems lies beyond the better or worse application of legal texts. As can be seen, the proposed solution is to redesign AI programs in a way that respects the objective of achieving justice more than utility or increased efficiency. In this sense, Forrest's position coincides with the proposal of the European Union regarding the consideration of high risk in AI systems developed in the legal field, and the prescription that their design must be carried out according to the appropriate authorizations and procedures established in the AI Regulation as we will explain later (in IV.3). This would be applying the principle of *environmental justice* as a reference for its construction.

2. SPANISH REGULATION AND SEVERAL PROBLEMS

The Royal Decree-Law 6/2023, of December 19, aims to improve the functioning of the management systems of the Administration of Justice in Spain. It is part of the Recovery, Transformation and Resilience Plan and addresses the provision of the public justice service with the aid of digital means, in order to ensure its quality and accessibility throughout the country¹⁸.

The Preamble of the Royal Decree emphasizes the need to meet these objectives through the improvement foreseen in:

1. The routing of electronic files and the transmission of documents between judicial bodies.
2. The interoperability of data between different judicial and prosecutorial bodies.
3. Access to services and procedures of the Administration of Justice for citizens.
4. The identification and digital signature of those involved in non-face-to-face services.

¹⁸Real Decreto-ley 6/2023, de 19 de diciembre, por el que se aprueban medidas urgentes para la ejecución del Plan de Recuperación, Transformación y Resiliencia en materia de servicio público de justicia, función pública, régimen local y mecenazgo. BOE núm. 303, 20.12.2023, pp. 167808 a 167994. See at: <https://www.boe.es/eli/es/rd/2023/12/19/6/con>

It should be remembered that these were the objectives of the traditional systems of assistance to the management of the Administration of Justice implemented since the mid-1980s, and that they have achieved insufficient results in recent years.

AI in the Administration of Justice

To improve it, the Royal Decree proposes the use of AI in the Administration of Justice. This is stated in article 35, which details, generically, the "General principle of data orientation" and its promotion through the use of metadata and interoperable data models in the Administration of Justice. This article, for the aforementioned purposes, in its subsection k), states: "The application of artificial intelligence techniques for the aforementioned purposes or others that support the jurisdictional function, the processing, where appropriate, of judicial proceedings, and the definition and execution of public policies related to the Administration of Justice."

It is important to highlight here that the Royal Decree, in this article 35, subsection k), enables the application of AI techniques to support "the jurisdictional function" and "the processing, where appropriate, of judicial proceedings." Or, what is the same, it enables the use of programs based on Machine Learning and Natural Language Understanding in these matters. Which, expressed generically, carries risks as we have expressed in section III.3.

Another Article, 56, Regulates Automated and Proactive Actions

According to this article, automated actions are those procedural actions produced by an information system without human intervention. They are limited to simple procedures that do not require legal interpretation, such as numbering files and generating copies and certificates. These actions are in line with those that have been carried out in the Administration of Justice in the past, which began to be implemented in Spain since the 1980s. All of the above indicates that these actions do not seem to pose problems even when used in support of AI techniques.

Proactive actions, described in Article 56.3, are self-initiated by information systems without human intervention, using information from administrative files to generate notices or have direct effects on other administrative procedures, as the norm states. Although the provision seems to refer only to

administrative files and procedures, it becomes clear, once the article is included in Book I, Title III of the norm, that it also deals with 'the electronic processing of judicial proceedings.' The text implies, in any case, the automated use of potentially biased information systems, as occurs in the United States, which requires taking preventive measures to avoid its use in the judicial field.

Bias in the Judicial Field

Regarding the importance of bias in the judicial field, the following literature can be indicated.

The arguments presented by Robert Buckland in the common law context are of interest (Buckland, 2023, pp. 6-14). Also, the statement about the problems posed by biases made in the article titled "Use of the COMPAS algorithm in the criminal process and the risks to human rights" by Maria Roa (Roa, 2022, pp. 303-304). In relation to the Spanish criminal process, the dangers of bias and AI are exposed by Raquel Borges in her work "The machine's bias in decision-making in the criminal process" (Borges, 2020). Regarding the relevance and scope of bias, in general, in judicial decisions in Spain, the book "The incidence of cognitive biases in judgment," coordinated by Ignacio Sancho (Sancho, 2024), deals with it.

Article 56 Establishes Rules to Justify Automated or Proactive Actions and to resolve Problems with Defective Systems:

- Identification and traceability of automated and proactive actions.
- Possibility of performing the same actions manually.
- Ability to disable, revert, or cancel already performed automated actions.
- Safeguards that address the inherent risks of using automated data, although the explicit use of AI programs is not mentioned.

The General Council of the Judiciary (CGPJ), in a report issued prior to the regulation in 2022 (Informe, 2022) and 2024 (Informe, 2024), the latter following the approval of the European Regulation on AI, has critically pointed out that, regarding proactive actions, the Royal Decree-Law does not mention the Judicial Neutral Point, which contains judicial information systems essential for communication between judicial

and administrative institutions. It also emphasizes that the control of AI tools in judicial activities, including attention to data protection regulations, should be carried out by the CGPJ and not by the State Technical Committee for Electronic Judicial Administration (CTEAJE), a public administration, in accordance with current legislation and not the Royal Decree-Law, which precisely assigns it to the CTEAJE.

As we can see, the use of AI techniques in the automation of judicial activities poses challenges in relation to the constitutional separation of powers. For these techniques to be effective and legal, existing fundamental regulations must be complied with and new procedural laws must be developed to adapt to emerging practices.

Assisted Actions and AI

Article 57 regulates assisted actions, which are closer to the automation of judicial functions performed by Judges, Prosecutors, and Court Clerks. It defines an assisted action as one in which the information system generates a draft of a complex document based on data that can serve as a basis or support for a judicial or procedural decision. This implies the partial automation of the process of creating judicial decisions based on statistical data from previous decisions.

To avoid problems, Article 57 includes the following provisions:

- A draft generated by the system does not constitute a judicial resolution without validation by the competent authority.
- The system must ensure that drafts are generated at the user's request and can be freely modified.
- The validation of the final text and the electronic signature must be carried out by judges, prosecutors, or legal officers, in compliance with procedural laws.

These precautions ensure that the statistical data provided by AI systems do not replace the mandatory reference to the law in the resolution of cases. In any case, this situation implies risks that will require the corresponding application to comply with the requirements established by the European Regulation for judicial systems.

The action of the systems that assist in assisted actions differs from those performed by systems for the recovery of legal documentation, which only provide documentation to improve the interpretation of norms, without creating drafts of decisions. Assisted actions go beyond that by preparing specific drafts of judicial decisions, within the framework established by the precautions to avoid complete automation, ensuring that the final decisions are validated and based on the law by judges and magistrates.

In summary, Royal Decree-Law 6/2023 promotes the modernization of the Administration of Justice in Spain through digitalization and the use of AI techniques, establishing rules for the automation of judicial processes and proposing improvements for the efficiency and accessibility of the judicial system. However, judicial proposals must be heard, as judges are responsible for exercising exclusive jurisdiction. Given the possible risks in most applications, the indications established by the European Regulation on Artificial Intelligence must also be followed.

3. THE EUROPEAN AI REGULATION AND THE ADMINISTRATION OF JUSTICE

The European AI Regulation (Regulation, 2024), approved on June 13, 2024, has been in force since August 2, 2024, and will apply fully from August 2, 2026. It establishes a common regulatory framework to govern the use of artificial intelligence in all activities within the European Union. Its main objectives are to guarantee the safety and rights of citizens, promote human-centric AI, and foster innovation and the free movement of goods and services based on AI.

Objectives of the Regulation

1. **Safety and Human Rights:** Ensure that AI systems are safe, respect the rights of citizens, and avoid harmful effects.
2. **Innovation:** Stimulate investment in AI, guaranteeing the free movement of goods and services and avoiding unnecessary restrictions by Member States.

Regulation of AI in Legal Activities

The Regulation classifies AI systems intended for legal activities as high-risk, which implies:

- They must undergo a conformity assessment before being placed on the market.

- They include systems used by judicial authorities to investigate and interpret the law, ensure compliance with the law, and in alternative dispute resolution.

Data Protection

Data protection is critical, and the principles of data minimization and privacy by design and default must be respected. Measures may include anonymization, encryption, and technologies that allow the use of data without unnecessary transmission.

Requirements for High-Risk AI Providers

Articles 8 to 17 of the Regulation detail the requirements that providers must meet, including:

- Risk Management: Implement procedures to identify, assess, and mitigate risks.
- Data Governance: Ensure the quality and traceability of data used by AI systems.
- Transparency: Provide clear and understandable information about the functioning of AI systems.
- Human Oversight: Ensure that important decisions can be reviewed and supervised by humans.

From all of the above, we can conclude that the Regulation expresses the need for a redesign of AI tools to prioritize justice and equity over utility and efficiency. In other words, the European Union's proposal aligns with the perspective of guaranteeing a high level of protection in the development and application of AI systems in the legal field.

With this said, we reiterate what we expressed at the beginning and at the end of the previous section (III): the use of AI systems in the judicial process will not be possible simply by providing systems or programs as generally established in the Spanish regulation shown as an example. This is because these systems are considered high-risk, and therefore, the companies, designers, and implementers of these systems must meet the requirements provided in the Regulation and receive the corresponding authorizations from the entities declared competent in this regard in each country in the future.

Therefore, we can conclude that if AI systems implemented to assist in the execution of judicial processes and sentences receive these authorizations, they will comply with *environmental* or *judicial justice*.

V. CONCLUSIONS

The study has identified several difficulties that hinder the effective implementation of AI techniques in the processing and resolution of judicial proceedings by the Administration of Justice. The approval of a regulation, such as Royal Decree-Law 6/2023 of December 19 in Spain, which contemplates the use of these techniques by Judges, Prosecutors, and legal professionals of the Administration of Justice, is insufficient. The following paragraphs present some reasons for these difficulties.

Firstly, the particularity of judicial proceedings and the resulting sentences is highlighted. These proceedings and sentences must be approved by all participants: the parties involved in the process, Lawyers, legal professionals of the Administration of Justice, Prosecutors (if applicable), and Judges. The objects of discussion and reference must be the specific conflict that originates the process and the text of the laws (Civil Law) or the precedents (Common Law) alleged, never models of past or biased solutions that an AI system could generate.

Continuing on, some facts are described that explain the difficulties highlighted, emphasizing that AI technologies are not designed to assist in the specific tasks of Judges and other officials responsible for the processing of specific judicial proceedings. The rules of conduct are prescribed and delimited by the Constitution, procedural norms, and substantive norms.

Finally, it is emphasized that it is not surprising that there have been critical experiences regarding the use of AI systems in judicial processes in other countries, as well as critical opinions from the General Council of the Judiciary in Spain that point out the lack of precision in the Spanish regulation (Royal Decree-Law 6/2023) regarding the use of AI in judicial activities. This occurs because, in both cases, the provisions of the legal system regarding the use of information and communication technologies as an auxiliary instrument in the processing of judicial proceedings have not been taken into account.

In view of the above, it is proposed not only to promote the use of AI technologies in the judicial application of law but also to carry out adequate reforms to existing norms and promote the promulgation of precise complementary norms, always taking into account what is prescribed by the legal

system (Constitution and laws) and the AI Regulation approved by the European Parliament and Council.

In this way, it will be possible to make *judicial justice* or *environmental justice* a reality, using AI techniques in the resolution of judicial processes and sentences.

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