# THE CHALLENGE OF JUSTICE SOLUBLE IN INTELLIGENCE



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#### Abstract:

The progression of artificial intelligence resulted into an amplification relating to application, which arrived to the field of justice. Thus, we notice that the man of law is replaced by the machine.

For this purpose, justice is expected to anticipate the solutions relating to exposed problems, it will then take the form of predictive justice, which makes the judgments and awards pseudonymized, and based on judicial Big data, which is not limited to judicial information, usually withdrawn from texts.

But it is also concerned by the way to make rise juridical problem, as this method shall be intelligent, as it comes from algorithmic trial.

Key words: artificial intelligence; big data; justice; algorithmic; predictive.

### **Introduction:**

Artificial Intelligence (A.I), in a broad sense, can be defined as "the science of making machines do what man would do with a certain amount of intelligence".

It is, also, identified as "the ability of a functional unit to perform functions generally associated with human intelligence such as reasoning and learning", or, more simply, "the discipline of computer processing of knowledge and reasoning.

From a technical point of view, A.I is performed by algorithms, which are themselves fed by data. A.I has progressed in recent years due to the technical and quantitative developments of these two resources (SEE, 2019).

Moreover, at the end of the 1960s, the question which arose was that of the creation of a database to collect the case-law of the trial judges.

This descriptive problem has now become prescriptive and there is concern that artificial intelligence is making law. The current events are rather intense on the subject and its tone is pessimistic (ADAM, 2018).

In law as in many other fields, artificial intelligence or "A.I" promises to assist, modify, and replace human decision-making (Richard M. Re, 2019, Vol 22).

What everyone considers to be fair is decided individually, but the process of developing the intuition of justice is completely determined by the environment in which the individual develops. Its own nature and range of external influences ultimately determine whether to take each individual position on faith, rethink it, accept it or even deny it.

Thus, the pivot points with which any concepts of justice are generated by society should be compared fall into the field of the intuition of the justice of an individual (Mamedova, 2019, vol69).

Thus, the law as an intellectual activity that benefits from a marked formalism is, in fact, a favorable ground for the application of techniques associated with artificial intelligence.

The structures of legal texts are valuable points of support for constructing an automatic analysis. References to articles of codes or laws or to case law can thus be identified without too much difficulty, which immediately places a legal text in a network of other texts (CLEMENT, 2017).

Therefore, the accessible texts will be applied and used in the field of field of justice intelligence.

### **Importance:**

This article argues that it is important to keep pace with the advancements made in the field of technology. Equally, it is important to be knowledgeable about the recent developments of creativity in order to advance the service in the field of intelligent justice.

Also, value updating, to find the same values of classical justice, which we must find in intelligent justice, because the importance of the latter is to better apply the values, in order to avoid the trivialization that can result from instant aspect related to intelligent justice.

### Aims:

This research work is mainly concerned with the popularization and amplification of the application of A.I, until the birth of an intelligent justice.

Then, the broad and instantaneous access to judicial information, concretizing the principle of bringing the citizen closer to the administration, within the framework of the digitization of the public service.

At the same time, it seeks to achieve the creation of a national market linked to intelligent justice, according to the standards imposed by international modernization, while respecting the principles of law and the primacy of equitable justice under the slogan: "codified and equitable justice".

### **Statement of the Problem:**

In order to account for the relationship between artificial intelligence and justice, we seek to address the following research question: Does the application of artificial intelligence in the field of justice have the power to change or improve the course of procedures for fair justice.

To answer this question, it is important to account for the phenomenon of "humanized" predictive justice, and then the degree of intelligence within the justicial system.

### **Methodology:**

Since intelligent justice is a new concept, we must define some basic concepts such as big data, predictive justice and regulation.

Which imposes the descriptive method. Similarly, the analytical method is also required for the principles already existing in classical justice, but their result is not yet clear for intelligent justice.

### **Subdivision:**

As long as the subject is concerned with the rules of justice, we have divided the plan according to the formal and fundamental rules as follows:

THE FIRST TOPIC :The phenomenon of "humanized" predictive justice : Fundamental application

Section one: Prediction in intelligent justice

Section two: The specificity of Big Data and its connection with intelligence

THE SECOND TOPIC: The degree of intelligence within the justice system: Formal application

Section one: Intelligent procedures for fair justice

Section two: Algorithmic regulation as the subject of a globalization movement.

### THE FIRST TOPIC:

# The phenomenon of "humanized" predictive justice: Fundamental application

what characterizes the substantive rules in intelligent justice is the principle of prediction in the resolution of disputes(First requirement) and the number of colossal information. This, it must be noted, can only be metered with a related legal protection big data(Section two).

## First Section: Prediction in intelligent justice

The concept of "prediction", often used in the domain of legal technological companies, was coined from the scientific fields, which usually make it possible to predict future results of specific phenomenon through the use of inductive analysis.

This analysis identifies correlations between input data (criteria set out in legislation; the facts of the case and the reasoning) and output data (formal judgment such as the compensation amount).

Correlations deemed to be relevant make it possible to create models which, when used with new input data (new facts described as a parameter, such as the duration of the contractual relationship), would produce a prediction of the decision (for example, the compensation range) (MENECEUR, 2018,n°16, p04).

Concerning Technological advances in various areas, such as communication, business and entertainment, have long been predicted to bring similar improvements to justice systems. Most of these predictions turned out to be too optimistic.

Several trials, which have been made to induce change with technology-based designs, produced very slow improvements, and in some other cases, were unsuccessful.

Historical preference for top-down, judicial and legal approaches is a factor that contributes to the slow pace of the technological change in the judicial sector.

Changes such as electronic filing or searchable judicial databases mainly use technology to automate existing justice processes, meeting the needs and tolerances of justice providers such as lawyers and judges (Thompson, 2016, Vol 12, Issue 06).

Law enforcement uses A.I in predictive policing to identify patterns in order to make statistical predictions about any potential criminal activity.

Predictive methods were used in policing even before the introduction of A.I to this field. However, A.I can link multiple datasets and perform complex and more fine-grained analytics, thus providing more accurate predictions.

For example, the combination of automatic license plate readers, ubiquitous cameras, inexpensive data storage and enhanced computing capabilities can provide police forces with significant information on many people. Using these data, police can identify patterns, including patterns of criminal behaviour.

In the same context, using advanced language processing techniques and data analysis capabilities, several researchers have built algorithms to predict the outcome of cases with high accuracy rates.

For example, researchers at the University of College London, Sheffield and Pennsylvania, developed an M.L algorithm that can predict the outcome of cases heard by the European Court of Human Rights with a 79% accuracy rate (OECD, 2019, p66).

The "PredPol" (Predictive Policing) system in the USA uses the earthquake as a model for predicting crimes such as gang violence and burglaries.

Similar to an earthquake after aftershocks, these offenses tend to increase temporarily at a specific location after initial reporting "Background Event".

A similar Dutch example is "Predicting crime System '(CAS), which was used by the Amsterdam Police. In this system, the city of Amsterdam is divided into blocks that measure 125 by 125 meters.

For each of these blocks, an information about the committed crimes, distances known suspects, the type and number of crimes, and the demographic and socio-economic structure is collected. This information is updated and analyzed for inclusion at regular two-week intervals in daily police operations. (Rik PEETERSA, 2018, Vol 23)

Once applied to law and judicial decisions, one can immediately measure what may be scientifically erroneous and ideological in the ambition to make judges' decisions accurate and objective through algorithms.

To provide a true explanation of judgment would require a much finer analysis of the data in each case and does not feature spontaneously from a mass of lexical links in which a judge's name appears.

For instance, the fact that a family court judge statistically more often determines a child's habitual residence with the mother in a particular jurisdiction does not necessarily reflect the judge's bias in favor of women, but is more likely to be explained by the existence of social, economic and cultural factors specific to the population of the jurisdiction.

Similarly, it would seem difficult to attribute a decision-making tendency to a collegiate judicial formation on the basis of the name of its president alone.

The risks of distorted explanations of court decisions are therefore extremely high on the basis of probabilistic calculations alone.

Predictive justice would thus be composed of a sort of myopic memory of justice, devoid of a fine analysis of the true causative elements of the court decisions it claims to restore.

The hope of seeing emerging from the processing by RNs information of such a nature as to produce a "norm derived from numbers" imposes on judges a "renewed effort of justification" to explain the deviation from the average that must be largely tempered in view of the technical understanding of the mechanics producing this average (GIAMBIASI, 2017).

While algorithmic instruments may be useful and complementary predictive tools, they play not crucial roles as a sole or final arbiter.

To invoke proprietorial protections and financial interests, one must prohibit defendants, courts and the community from scrutinising the validity and reliability of predictive formula used in decisive criminal procedures.

The situation thus synthesizes an element into decision-making that is even more opaque than any exercise of judicial discretion.

At least an imperfect decision by a judge may be tested on appeal, whereas an imperfect algorithm might be concealed forever (McKAY, 2019).

By enabling judges to compare their judicial practice with a statistical average and to know the jurisprudential trends of their colleagues, predictive justice will promote consistency in the judicial activity of the various courts of law and the harmonisation of case law, and thus would contribute to improving the predictability of justice and legal certainty.

But, such a system is neither safe nor without its limits:

First, the system is not free from a potential danger because one may fear the performative effect of systems of predictive justice, which not only aim to describe a jurisdictional practice but also promise to perform jurisdictional acts.

Admittedly, the judge will always be free in law to deviate from the norm. It is obvious that a judge will never be obliged, formally, to judge according to what the robot dictates to him.

The system is, also, without its limits and drawbacks. The promoters of predictive justice start from the postulation that the application of the law to a given case can be modeled, as if the judge, mere mouthpiece of the law, was, in the end, just a syllogism machine.

It is enough to state the major, the abstract legal rule resulting from the law, to specify the minor, the factual situation, to mechanically deduce, by comparison with other factual situations deemed equivalent by the algorithm, the solution (VIGNEAU, 2018).

While the use of technology by lawyers may not result in an immediate change in the role of judges, it will undoubtedly change the way in which certain functions are performed.

For example, the move to increasing the use of A.I in the form of predictive coding, predictive analytics, and machine learning suggest that the use of A.I by law firms is already changing the way they present material to judges and assess client risk. These changes have been controversial and debatable.

In the United States, it was noted that predictive coding was already used to determine whether recidivism is more likely in a criminal case and to assist in sentencing decisions.

Importantly, many of these current changes may impact judges by removing some assignment-related functions, but are unlikely to completely change the function or role of a judge (SOURDIN, 2018, Vol 41(04)).

We conclude that intelligent justice cannot affect all aspects, because certain sensitive areas (such as human rights cases) must be excluded from this application, because once justice ceases to be human, it will be a matter of machines that absorb legal science and thus solve the problem through precedents. Finally, the principles of quality and safety are crucial.

The important remark related to the prediction in matters of intelligent justice is that of the accompaniment of the prediction with all the stages of the trial and the judgment, because in the first place it concerns declarations in criminal matter, but it is not necessary that the prediction stops at this point, because just like the judge's job, relying on prior facts represents a relative presumption, and therefore yields an opposing evidence.

# Second Section: The specificity of Big Data linked to intelligence

Originally related to Big Data, linguistic resources were considered as works of collecting all kinds of linguistic information.

For these purposes, we define language resources as pieces of data containing linguistic information in a machine-readable form.

There are several types of linguistic resources depending on their format and type of information presented: glossaries and terminologies (specialized terms), lexical databases (linguistic knowledge for computers), dictionaries (general terms), thesauri (hierarchically controlled dictionaries), etc (Patricia MARTÍN-CHOZAS, 2019).

One of the innovations of Big data is to be able to cross a very large number of data sets from fragmented databases.

For jurisprudence, "Big data" refers not only to the expansion of the volume of data, but also to the expansion of the capacity to use it.

The issues associated with big data are sometimes exposed using the 5V formula". Big data is a data processing that involves three steps, collection, aggregation and analysis on data defined by three criteria, the 3 V's - volume, velocity and variety - to which 2 V's - truthfulness and value - have been added.

Truthfulness, which covers the precision and accuracy of the data, underscores the issue of the reliability of the data used.

The unreliability of the data being used may call into question the conclusions drawn from the data and thus diminish the value of the data.

The intrinsic value of the data can only be revealed by finding other data whose uses may be correlated, hence the need for a mass of data (SCARAMOZZINO, 2017, n°201).

There are many criteria that can be considered when evaluating the data quality of AI applications. Generally, data quality includes many different issues, such as completeness, accuracy, consistency, timeliness, repeatability, validity, availability and provenance (BURT, 2018).

It is important to emphasize the remark that Data should be:

Accessible: interested people should be able to find it easily.

Intelligible: they should be able to understand it.

Useable: it should address their concerns.

Assessable: if requested, the basis for any claims should be available (SPIEGELHALTER, 2020).

Similarly, the algorithm lies at the heart of the Big Data, the conductor who leads the analyzed data towards a goal determined by the operator of the algorithm.

The algorithm backed by the Big data, through the use of mathematical formulas, binary decisions according to a series of pre-established rules, will set to music the massive databases created by the Big data and make them intelligible via a mode of correlation and prediction.

These correlations would have remained invisible with a smaller database. Algorithms evolve towards machine learning algorithms, which correct themselves and learn from their experiences. The latter can be supervised by a person who provides both the input and output data to improve their parameters.

Supervision is used to validate and (re)calibrate the model retained by the algorithm in order to help the system orient its models in the desired direction. Learning is said to be "unsupervised" when the system is not provided with a model known a priori.

It becomes a category of artificial intelligence insofar as it is capable of modifying its code and parameters autonomously on the basis of its evaluation of its results.

The artificial intelligence, which is based on Big data, will allow the transition to intelligent sectors, which are characterized by their innovative character and their capacity to offer personalized services to connected domains (SCARAMOZZINO, 2017, n°201).

Against the background relating to Big Data, the first question we have to ask when defining an assessment model is whether the model is to be sector-specific or general.

This is an important question, since data uses are not circumscribed by a specific domain or technology. Justice, remarkably, seems to be the most important domain.

All technologies based on Big Data, as the domain of justice, use data processing for decision-making: the marked difference is in the methods but not in the scope.

For this reason, and because the rights and values to be safeguarded are the same in these different contexts - regardless of the technology used, the model proposed is not a technological assessment, but a rights-based and values-oriented model (MANTELERO, 2018, vol 34).

In relation to the previously cited model, the concept of data justice combines different approaches, disciplines and issues.

This has led to different interpretations of the interdependence between data and social justice and, also, to different strategies and responses.

Often, data justice is a response to the clear and rather limited societal perspectives of the implications of data-driven technologies, which focus on performance and security issues on the one hand, and privacy and data protection issues, on the other. (Lina DENCIK, 2019, Vol22,n°07).

Also, any algorithm is the programming of an implicit conception of reasoning. The problem lies less in the algorithms than in the underlying representations associated with them. Among them is the fear of the victory of the quantitative over the qualitative.

However, once the robot-judge fantasy has been overcome, the responsibility to use data in a relevant way, because of the singularity of the species, lies with the user.

Case law series do express trends, but they are ultimately based on the same type of motivation. The turnaround in case law reflects this aspect: any solution can evolve.

Similarly, algorithms are often presented in a normative way as dictating the solution to the dispute and not as an intelligent description of the relevant data.

However, algorithms could meet the ideal of legal certainty. While the outcome of the trial cannot be predicted, it can be rationally anticipated.

The systematization of case law responds to this need. To do this, large data sets must be probed down and explored in order to make a relevant selection of the "positive data of the law" (LECOURT, 2019).

Also Big Data is driving the trend towards behavioral optimization and a "personalized law" where legal decisions and principles are optimized best results and where the law is tailored to the individual consumers past data analysis.

Big Data, however, has serious limitations and dangers in the legal context.

Big Data brand supporters theoretically problematic assumptions about data objectivity and scientific observation.

The law is always burdened with theory. Although Big Data tries to be objective, law and data have many possible meanings and uses, and therefore requires theory and interpretation to be applied.

Moreover, the meanings and applications of law and data are indefinite and are constantly evolving in ways that cannot be grasped or predicted by Big Data. (Caryn DEVINS, 2017, Vol27)

After this, lawyers legal scholars analyzed the risks of automated decision making and anticipation in several areas.

For example, an examination of the automation used to assess creditworthiness has identified opacity of such automation, arbitrary ratings and different effects.

Computer scientists warn against the reductionist caveats of big data and "exascale" computers: "computers cannot replace the archetypal forms of philosophy and mathematics".

Research on the role of automation in exacerbating discrimination in search engines and social security systems has shown how new tools divide societies according to race category.

However, research on the impact of automated decision-making systems on fundamental freedoms in the justice sector has not received enough critical reflection (Aleš ZAVRSNIK, 2019).

Likewise, with respect to the right of privacy, jurisprudence sets clear limits to the use of automatic files and predictive profiling.

It explains that profiling and data control, which interfere indiscriminately with the privacy of a large part of the population, are disproportionate and must be related in some concrete way and factual elements.

On the other hand, case law is rare; it remains difficult to draw firm or precise conclusions.

While the ban discrimination is a useful legal safeguard and should be strengthened through the development of audit tools and algorithms to take discrimination into account. (Bart VAN DER SLOOT, 2016).

Linked to the ownership of rights, not all uses are allowed: copyrighted works cannot (legally) be reproduced or reused in certain ways without permission. However, if they are displayed to the public, they can still be processed.

Similarly, any information protected by patents is legally restricted.

In certain applications, though still freely usable in other ways. Copyright and patent restrictions apply to prevent under-supply of such content.

However, because of this argument, we may postpone the prohibited use of copyrighted or patented material; We are interested in obscene applications such as reading, digesting and processing information. (Kai SPIEKERMANN, 2019).

Following this, artificial intelligence becomes even more complex with the concept of deep learning using artificial neural networks.

Further technological development may improve it, but for now, transparency is just an illusion.

It is widely believed that A.I tools will evaporate prejudices and mental shortcuts (heuristics) inherent in humans judgment and reasoning.

This is a compelling reason why A.I technologies have been allocated too much power too quickly to deal with and solve essentially social (not technological) problems.

To do this, sociologists, including lawyers, need to work more closely with computer scientists and data scientists to build a human rights approach (ZAVRSNIK, 2020).

It is worth noting that the primary cause of interaction in the platform model is public value and the willingness to contribute to the administration of socioeconomic phenomena.

The starting point is not a specific operational need, but a sense of being an important factor in an inter-organizational network that creates public value and solutions to social problems.

Since the main goal is very different from the extraction model, the focus of relations is not based on the judicial system itself, but rather on public policy and the sponsorship of social innovation.

This means that there is an opportunity to engage in topics that have so far been rarely used in contacts with judicial authorities.

As for the courts, it also means that there is a willingness to engage with stakeholders in a relationship between equals: the Tribunal does not select

stakeholders, but provides resources and knowledge that can be gathered by any interesting topic.

The boundary of cooperation is not defined. The main emphasis is on the proper allocation of public resources and building a network capable of analyzing and implementing effective policies. The focus on inter-organizational network is essential in the platform model (Giulio MICHETTI, 2019).

It could prompt us to refocus the lawyer on his or her essential task: to pose the legal problem and argue about it. Databases and annotated codes have relieved the lawyer's memory.

However, it must be stressed that the availability of statistical data on court decisions is undeniably valuable.

A first use of this type of data is the authority argument. To be able to put forward figures in a well-founded manner.

A second interesting use is the search for contextual elements that may explain why the decision was rendered in one way or another.

In the same way that data on the stock management of a department store provides information on consumer habits, or that, in a more modern way, Internet searches can reveal trends and information in an indirect manner.

With this in mind, we really need to talk about forensic big data, because it is a useful purpose of massive data processing through which we can bring out the weak signals.

A final observation is that, given the state of the instruments, it is recommended that, whatever the method of analysis is chosen, it should be combined with one or more other analyses, using a different method.

In the field of predictive justice, the multi-criteria method is also a prudent option (DONDERO, 2017).

When A.I works on legal information, it must be possible for it to be processed by machines. This implies certain attention to the quality of the information, as poor quality data affects the quality of the A.I results themselves. Statistical correlations and relationships are not sufficient to motivate a judgment.

If A.I is to analyse and understand legal information, it must be well structured and legally meaningful.

A.I could be more useful if legal information (such as judgments) were enriched by greater legibility and structuring of texts, identification codes and Meta data.

In cases where legal meaning is added in the form of structured terms and meaningful relationships, the contribution of A.I can potentially increase.

On the other hand, the general opinion is that A.I in the service of justice should be able to give explanations on how to achieve a certain result.

This may be an explanation of the process followed in making the decision, but also the reason for the content of the final decision itself.

Today, even if in general A.I is in theory capable of providing such explanations, in practice, humans are able to explain certain aspects of the decision-making process much more easily than machines (REILING, 2019).

At the end of this part, and in order to protect information, it is necessary to first apply pseudonymization also to trace the contours of big data. Thus, the outlines are concerned with the exploitation of data.

For a better exploitation, it will be necessary of all to inform public about the three colors of the data, the authorized white data, the gray data which requires an exploitation contract and the black data which can in no case be exploited.

At this point, a liability may be generated in the event of a breach of the data.

Intelligent justice is not only a way of resolving online disputes, but also a way to replace the overwhelming legal norms with new norms from science.

Finally, passion for algorithms must not lead to contempt for the rule of law. The risk is to replace legal norms with technology and algorithm norms.

### THE SECOND TOPIC:

# The extent of intelligence within the justice system: Formal application

When we study the application of AI on justice we are required to understand the course of procedures, which are linked to a new means(First requirement), and also the same legal position for regulation, which must also be intelligent (Second requirement).

## First Section: Intelligent procedures for fair justice

The role of the judge is complex. It may include activism, complex interactions with people, dispute resolution, case management, public and special educational activities, social commentary, and adjudication functions, which may be conducted with other judges or, less frequently, in some Jurisdictions with lay (jurors).

The extent to which the judges are involved in each activity varies by jurisdiction and judges. Some judges may be more "sensitive" than others, and others may be more emotional and compassionate or oriented towards therapeutic

justice - interventions focused on procedural fairness that emphasize "voice" and respect.

Given this variability, it is difficult to determine how the development of artificial intelligence ("A.I") could change the role of the judiciary. (SOURDIN, 2018, Vol 41(04))

To this renewal of standards is added - secondly - to the reduction of orality in favor of the screen. Thus, for educational or evidential purposes, digital images and sounds (audio) are used in the courtroom.

In the future, it is conceivable that the "hearing" aspect will take place by video conferencing sessions or Skype talks. Disruption here affects the personal, passionate, random dimension of any trial. The constituent tension of the judicial debate fades away.

It is no longer a look in front of you, but a screen without the presence individuals and voice without origin. Connection replaces the relationship.

This discontinuity between seeing, hearing and feeling, gesture and speech, text and context impoverishes the experience of justice. This is how videoconferencing is imposed, despite several oppositions.

This places a screen between judges and refugees without measuring their extreme difficulty in expressing themselves.

There is a legitimate fear that this inhibiting distance will break the copresence that is constitutive of these hearings. This tension between managerial objectives and the jurisdictional approach may undermine the dignity of the trial.

Another effect of the disruption affects the judgment and the jurisprudence.

The decision could be anticipated as seen in certain American practices where the sentence is set according to the score of responses to the risk of recidivism.

The sentence is no longer linked to the facts and the perpetrator but adjusted to the foreseeability of a mathematically attested recidivism. Here, correlation replaces evidence (SALAS, 2019).

In criminal matters, the judge needs to evaluate the appropriate sentence consider the specific crimes committed by specific criminals while maintaining balance purpose and subjective factors, including sentencing purposes, including punishment, deterrence, community protection, rehabilitation, accountability, Condemn and acknowledge the harm done to victims and communities.

This is a complex proportioning exercise that combines all competition and the multiple goals of sentencing. This process is generally called "instinct" or "intuition" synthesis.

Instinctive synthesis is described as a global value judgment, Processes that are not necessarily logical and may produce "results" Which rational ideas will be different'.

For that, open justice can be challenged when the accused, the courts and the public is denied control of the algorithmic tools that are used for the determination of the legal status and freedom of the defendant.

Such tools must be "testable and questionable". Equality of arms is a key principle of procedural fairness which means that the defendant should not be at a disadvantage compared to that is, there should be equal opportunities (McKAY, 2019).

On the other hand, in civil matters, the use of artificial intelligence is wider. Lawyers use artificial intelligence to draw up contracts, mining documents under the discovery and due diligence procedure (Marr, 2018 [88]).

The use of artificial intelligence could extend to other similar areas of criminal justice, such as settlements and investigations.

Since the design of the algorithms and their use can affect the result, the rules the AI implications should be carefully considered (OECD, 2019, p66).

At this stage, it can be concluded that legal research must not be limited to the collection of somehow related cases or articles.

Expertise in legal research lies in the drawn connections and links between individual pieces of information.

The way the information is combined and the structure itself tend to influence further research.

In other words, finding information and turning it into legal knowledge is a mutual process. Therefore, for the most part delegating legal research results in the waiver of at least some decision-making powers.

However, it is not particularly new. Always renounced decision-making powers in legal research; what has changed - and is now it changes again - this is the entity to which the judges entrust the examination: "keepers of information". (BUOCZ, 2018),

There are three distinct facets to a thorough exploration of the role of AI in consequential decision-making.

The first involves cataloging the objectives and values that procedure and process are trying to advance in a particular context.

Without a thorough understanding of what it is that laws, norms, and other safeguards are trying to achieve, we cannot assess whether the existing systems are adequate, let alone design new systems.

The second facet involves determining which of these objectives and values can and should be imported into the context of machines. A third facet involves the design and vetting of consequential decision-making systems in practice. There is a widespread consensus that such systems should be fair, accountable, and transparent (CALO, 2017).

Among the various dimensions of innovation, it seems to be the most technological promising.

In Brazil, the focus on this issue has increased significantly, given the massive figure investment by the Brazilian courts in the purchase of new technologies, especially after establishment of the National Council of Justice (Conselho Nacional de Justiça - CNJ) in 2005, the discussion has been dominated by the impact of new technology adoption in justice organizations, especially the introduction of electronic judicial process, creation of online systems, use of computers by judges and staff, and the development of the Internet portals.

Currently, the focus is more on the effects of technology on work professionals and courts (Wallace, 2017), e.g. the use of artificial intelligence in court decisions and the use of online dispute resolution (ODR) mechanisms (Tomas AQUINO GUIMARAESA, 2018, Vol 53).

Higher transparency is a common refrain when discussing the ethics of algorithms with respect to dimensions such as the algorithmic way a decision is made on what assumptions and how can be improved to take into account feedback from people involved adoption.

On a larger scale, the use of open source software in ML application context has already been recommended by over decades with an indirect call to tools perform more interpretable and reproducible programs, e.g. as Jupyter Notebooks, available from 2015.

But, publishing scripts expose their developers to the public professional developers who may find shortcomings in code development (Samuele LO PIANO, 2020).

In Russia, engineers have tried to model the intellectual system "Robot Lawyer": the main goal is to help lawyers and citizens in providing the necessary information regarding legal processes; "Robot Lawyer "includes an expert system that uses a set of rules to provide reference and some information neural network models to answer more complex questions (Camilla OVI LUIGI SALVIA, 2019).

Ever since the judges began to exercise greater and more detailed control above the judgments, they looked for research and technology tools to facilitate their task.

Therefore, communities were looking for similar tools to ensure that judges are following the will of the community as demanded.

It is natural that as our ability to process data grows, and our ability to deeply analyze it and present it in a useful way enhanced, we are an extension of technology to chambers.

However, the note ends with a remark. This too far-reaching technology may relinquish the role of condemnation to machines, making the sentencing process nothing but a mechanical invention (Michael DONOHUE, 2019, Vol32).

Ultimately, excessive focus on the internal management of justice organizations to understand and explain performance is a simplified strategy that ends up generating a distorted image of how and why something happens.

The time has come to turn your attention to the effects of other communities systems can take on justice.

For example, it would be desirable to have new research works on how the judiciary results should triangulate data from the judiciary with health data, education, security, demography, economics and work.

Connection of different databases enables the creation of explanatory and predictive research models compliant with complexity of social reality. (Tomas AQUINO GUIMARAESA, 2018, Vol 53).

As for the Algerian context, we find the law 15-03(February 10, 2015), relative to the modernization of justice, which deals with the procedures related to a justice based on electronic way.

This law aims to modernize the functioning of justice through the establishment of a centralized IT system, communication of legal documents and electronic procedural acts, the use of videoconferencing in the procedures judicial (art01).

The technical processes used in the communication, by electronic means of acts and documents must guarantee: the reliability of the identification of the parties to the electronic communication, the integrity of the documents communicated, the security and confidentiality of exchanges, the conservation of the data made it possible to determine with certainty the date of sending and that of receipt by the recipient.

The document transmitted electronically mirrors the validity and effectiveness of an original document and, therefore, it is established in compliance with the procedural requirements (art10).

In application of this law, a first national trial took place at the Koléa court (Algeria) on October 7, 2015.

In any case, the application of artificial intelligence related to the judicial field requires the adoption of new procedures, which must not violate the interests of litigants, especially in terms of confidentiality and fair trials.

# Second Section: Algorithmic regulation as the subject of a globalization movement

As already explained A.I is based on algorithms. These algorithms can be written by humans, or with sufficient A.I capability, the computer system can create its own algorithms to achieve the goals set by the main algorithms.

Since the computer will always follow the goals set by the algorithm, we must be careful to predict the ways in which the computer can achieve this. (Iria GIUFFRIDA, 2018, Vol 68).

The attention we pay to A.I today is not new. A quick glance over the last twenty, forty, a hundred years, similar hopes are met and concerns about the artificial intelligence systems and robots they inhabit.

In this context the term "regulation" has its attractions. Like policy, regulation is a flexible term that can accommodate many modalities and structures.

Perhaps too flexible: it is not entirely clear what is being governed and by whom. Regardless, regulation carries its own intellectual baggage — baggage that, like "ethics," is complicated by industry's dominance of AI development and application (CALO, 2017, Vol 51).

We use the term « algorithmic regulation » to refer to the underlying phenomenon of interest which conceptually unites the divers, concerns and perspectives represented in this collection.

Although the term « algorithmic regulation » was popularized by Silicon Valley entrepreneur Tim O'Reilly in 2013, the idea that computational algorithms might be understood as a form of social ordering was proposed some time earlier in 2009 in the context of an ethnographic analysis seeking to understand how Indian workers providing I.T services to a North American were coordinated (Karen YEUNG, 2019).

It is sometimes thought that regulation and innovation are opposed to each other. This is not correct. Instead, when regulation is well designed, it can create a stable framework for innovation and promoting

Societal trust in new technologies and encouraging entrepreneurs to build their companies in a jurisdiction. Flanders has already recognised the connection between regulation, trust and prosperity in its three part A.I Development plan (TURNER, 2018).

It must be noted that ethics for artificial intelligence cannot be expected to be simpler than that ethics for people.

On the contrary, it is to be expected be at least a more complex and involved topic one basic ingredient is sure to be another. Most likely, people will not be so compassionate which supposedly underlies them ethical behavior between themselves, artificial agents.

The more that all artificial actors easily and "naturally" develop empathy for people and for everyone different, although in the optimistic view proclaimed here the growing rationality inevitably at certain stages of race (self) awareness, honesty and caution. Things are even more complicated (KNUD, 2019).

Intelligent machines increasingly outperform human experts the question of when (and why) people should be "up to date" decision-making.

One common answer centers on results: reliance on intuition and experience, people are able to identify the interpretation errors - sometimes catastrophic errors - that elude machines.

Although it is likely that today this argument will become weak as technology advances (Kiel BRENNAN-MARQUEZ, 2019, Vol 109).

The same question reoccurs as to the artificial intelligence that will transform the work of the judge.

In the classic approach that has prevailed for a long time until nowadays, each judge developed his or her own methods for identifying the strands of legal reasoning needed to resolve a case.

He could rely on tools, such as analytical tables, selections of case law or articles. These tools were diversified and, above all, clearly emanated from authors who were themselves jurists.

The shift to direct exploration of comprehensive databases of case law has already considerably reduced the share of these mediators.

However, even if search engines are far from neutral in the selection of the data they operate, one could still retain a certain illusion of mastery of this exploratory phase.

It will be much more complex in the future with tools whose intelligence directly affects the processing of information: intelligence in this case consists of making choices in the literature review in order to filter out the most relevant elements. However, there is no universally accepted method to do this work.

It will therefore be essential that the modes of reasoning inscribed in the algorithms be perfectly explicit and mastered by the judge.

Moreover, alternative methods should be proposed and one should not find himself/herself in a monopoly situation with only one usable technology. The stakes are high and it is high time for legal professionals to become much more involved in these issues (CLEMENT, 2017).

Let us imagine a judge thinking about how he is going to decide a dispute over compensation for a breach of honor.

The plaintiff's lawyer believes that the damage should be compensated to a considerable extent, while the defendant's lawyer argues that the compensation

should only be symbolic, at best, because the defendant's lawyer has access to a database of court decisions on honor killings.

The judge's views and decisions are more likely to be influenced by the statistical elements that he reads.

This influence will lead to a standardization of judicial thinking. This may be desirable, but the question deserves to be asked, rather than seeing uniformity as the result of the widespread use of computer tools.

Judges should not be tempted to stop judging, but must automatically move towards the most common solution, reassuring themselves that there is less error when there are several people thinking the same thing (DONDERO, 2017).

Thus, the regulation of algorithms is imposed, which indisputably testifies to a phenomenon of globalization of the norm.

The globalization referred to her does not refer to a global administrative law, that is to say, the emergence of administrative law standards specific to certain international organizations.

Also, it is not understood as internationalization of administrative law, that is to say the application by several States of administrative norms contained in a treaty.

Globalization is understood here as the generalization of common legal rules in the legal system of several states.

It is identified as a "phenomenon that is tending to become progressively more widespread on a global scale, becoming common to many countries, or many people".

As such, the regulation of A.I seems to be the subject of a globalization movement. Such a movement seems to be natural in a context of globalization, since the stakes and difficulties related to the technology are identical in all regions of the world.

The globalization of A.I regulation is therefore manifested from two points of view. At the global level, positive law and legal discourse agree on the scope of the regulation to be implemented.

The result is a globalization of the field of A.I regulation. Moreover, the globalized discourses converge towards an original model of regulation, in which reference is made to common regulatory instruments. Thus, a globalization of A.I regulation instruments appears (SEE, 2019).

The most important aspect of resolving machine disputes is not the solution itself, but the way the problem is submitted to the machine. Therefore, the solution related to the problem must not be adopted without standards.

Solving the problem must be necessarily based on objective standards. Even if there are no standards, the machine must forward the dispute to a competent judge to avoid any mechanical application before Discover yourself.

It should be remembered that large amounts of data can create confusion and saturation, which can lead to regulatory issues.

The regulation linked to A.I in matters of justice imposes the following two remarks: first it is the judge who programs the machine in order to regulate. Then the role of the judge is not reduced; he's just discreet. We are there in front of a classic task taken up by intelligence.

Then, the quality of the data and the number of people exposed complicate the work of control and regulation. For this the internationalization of control operations is essential, in order to clearly identify any probable overrun.

### **Conclusion:**

Predictive justice being an application imposed by artificial intelligence will give rise to a worrying justice. This imposes the current assimilation of certain principles of justice, such as: fair justice, judicial security, guarantees for the litigants,...

Based on the aforementioned findings, we recommend the following **remarks** and suggestions :

- Do not rush the transition to intelligent justice because the application of new procedures is not admitted or not accepted by all litigants, and sometimes is even rejected by lawyers and judges.
- In all the potential cases, the prediction must also be based on the statements of the public audience. According to law number 212 of the code of criminal procedures, this is also the position of the Algerian legislator.
- The beginning and use of intelligent justice is based on the new technologies, which must be taken into account by the national authorities.
- The right to gain access to the information related to intelligent justice must not exclude the security aspect of this information, especially when it is related to private life.
- The application of intelligent justice foregrounds two aspects: the theoretical aspect which asserts the intervention of intelligence in all areas of justice. Because we are based on the means, which is the same in all judicial disciplines.

Also, the practical aspect does not allow intelligence to intervene in all areas, thus, the intelligence is excluded when the judge tends to intervene.

This leads us to state more **recommendations**:

- The transition to intelligent justice must be carried out according to a national will. While following the stages, starting with information, which imposes the next stage of awareness, comes after the security materialized by codification and certification in order to go to the final application.

It's clear that this is the last stage, but which will never be fully successful if this last stage is not accompanied by improvement in order to reach a certain stage of good quality and maintain this position.

- The maintenance of article 212 of the code of criminal procedures is highly recommended, because it is impossible in the case of this article to replace the judge by the machine, given that it's a question of conviction in relation to the evidence that is brought and discussed. In this regard, we cannot imagine the conviction of the machine, so it is only a question of the conviction of the judge.
- Encourage the activity of "legal techs" which are start-up in the legal field, and activate in the competitive market, based on innovation, characterized in a digital platform.

We conclude that global change and digital transformation will make it easier to exploit legal data.

- The use and exploitation of data resulting from court decisions fall under the protection of personal data provided for by the Algerian law 18-17 (June 10, 2018), based on the principles of anonymization and pseudonymization.
- -The intention of A.I cannot be accepted in all the issues related to justice. The criterion for intervention is the discretion of the judge.

Citing as an example the means of proof in civil matters, when the text allows the judge to qualify the evidence, intelligence cannot take place, for lack of conviction. However, when the judge's qualification is ruled out, intelligence can intervene.

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