# PREDICTIVE POLICING AND PREDICTIVE JUSTICE IN THE SPANISH LEGAL SYSTEM: CURRENT SITUATION AND *LEGE FERENDA* IDEAS BEFORE FUTURE APPLICATIONS<sup>1</sup>

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Summary: I. Predictive policing 1. Systems currently used by FCSE 2. Systems initiated and/or abandoned by FCSE II. Predictive Justice 1. A bet on the future, in the short term? 2. Systems currently used in criminal proceedings III. The fit of AI in our criminal justice IV. Possible future uses V. Conclusion VI. References

#### Abstract

Spain has limited experience – perhaps due to the absence of specific regulation – in AI for police prediction. However, there are very relevant instruments that, in a first systematization, we can classify in those systems currently used and in a generalized way by the State Security Forces and Bodies (FCSE), which are Veripol and Viogen and, secondly, those initiatives that do not enjoy such widespread use, have been initiated but subsequently abandoned or have only been pilot experiences. These are, among others, the Geographical Information Systems (G.I.S) with a strong impact in the fundamental rights. In the same way, it does not have excessive predictive justice instruments, although there are some that have an important impact on the process and execution of the sentence, which are the jurimetry systems and tools such as Ris Canvi, used in Catalonia, and in which the judges of penitentiary institutions rely when granting permits. This paper aims to critically analyze the aforementioned instruments and their impact on criminal justice as well as the fit of the future uses of artificial intelligence in our criminal justice from a perspective respectful of procedural guarantees but at the same time, not immobile, that is, bearing in mind the advantages offered by artificial intelligence in acceleration -and, at some point, greater efficiency of the criminal process.

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#### I. PREDICTIVE POLICING

In Spain there is no uniform and univocal definition of the concept of predictive police but the doctrine and forensic practice use internationally developed definitions, one of the most used being the one collected by the Organization for Security and Cooperation in Europe (OSCE) in 2017 that defines this phenomenon as "the systematic collection and evaluation of data and information, through a defined analytical process, which turns them into strategic and operational analytical products that serve as the basis for an improved, informed and documented decision-making process." <sup>3</sup>

An approximation of the national doctrine to the conceptualization of the phenomenon is offered by MIRÓ LLINARES who includes the "predictive police" within the Police Artificial Intelligence and defines it as "... application of quantitative techniques to identify targets of police interest for the purpose of reducing criminal risk by preventing future crimes or solving past crimes."<sup>4</sup>

It is, therefore, a relatively new phenomenon in our country because Spain has very limited experience – perhaps due to the absence of specific regulation – in the application of AI for police prediction. And this is because, both in artificial intelligence and in other matters, it maintains a prudent approach and it seems that it will act in line with the Member States of the European Union and currently, as is known, the European Parliament is very cautious when implementing these mass surveillance systems. <sup>5</sup>

Thus, internally, the debate does not cease to be current because in our parliament was presented by the parliamentary group Unidas Podemos a Non-Law Proposal (PNL) on the use of Artificial Intelligence (AI) in the tasks of surveillance and use of personal data of citizens by the State Security Forces and Bodies, In addition to proposing the creation of an algorithm control agency to ensure its transparency. And this is because, unfortunately, many of the "solutions" – as these AI systems are usually defined – intend to be implemented by private companies in public institutions, mainly local and / or provincial, through public contracts with a very limited competition since there are very few companies national specialising in the use of new technologies, which may offer a situation of uncertainty in terms of legal certainty

Beyond the above, there are instruments that the State Security Forces and Bodies (hereinafter, FCSE) usually use when carrying out their investigations based on the use of artificial intelligence<sup>6</sup>.

<sup>&</sup>lt;sup>3</sup> See OSCE Guide on Intelligence-Based Policing, 2017, p. 6. Available at the following link https://www.osce.org/files/f/documents/6/4/455536.pdf

<sup>&</sup>lt;sup>4</sup> MIRÓ LLINARES, F. "Inteligencia artificial y justicia penal: más allá de los resultados lesivos causados por robots", in *Revista Penal de Derecho y Criminología*, 3ª Época, nº 20, July 2018, pp. 87-130, p. 100.

<sup>&</sup>lt;sup>5</sup> See the European Parliament resolution warning of the risks to our system of guarantees and freedoms of these technologies <a href="https://www.europarl.europa.eu/news/es/press-room/20210930IPR13925/uso-policial-de-la-inteligencia-artificial-el-pe-contra-la-vigilancia-masiva">https://www.europarl.europa.eu/news/es/press-room/20210930IPR13925/uso-policial-de-la-inteligencia-artificial-el-pe-contra-la-vigilancia-masiva</a>

<sup>&</sup>lt;sup>6</sup> For a first approach to this phenomenon in our country, see GONZALEZ-ÁLVAREZ, J.L., SANTOS-HERMOSO, J. and CAMACHO-COLLADOS, M. "Policía predictiva en España. Implementación y retos futuros." In *Behaviour & Law Journal*, vol. 6., year 2020, pp. 26-41

Next, we will present the different instruments that, for a better classification, we will group into two blocks. First of all, we will highlight the systems currently and in a generalized way used by the State Security Forces and Corps (FCSE), which are Veripol and Viogen; and, secondly, those initiatives that do not enjoy such widespread use, have been initiated but subsequently abandoned or have only been pilot experiences but of which it is worth noting their impact not only on the fundamental rights of those affected but on citizen coexistence itself.

#### 1. SYSTEMS CURRENTLY USED BY FCSEs

# (a) Viogen

Perhaps in Spain the most recognized tool in the application of AI is the VioGen program, aimed at preventing gender violence. Although it was created in 2007, the Gender Violence area of the Secretary of State for Security (Ministry of the Interior), incorporated artificial intelligence in 2020 through the analytical platform of the software company SAS Iberia.<sup>7</sup>

Its operation is relatively simple: the VioGen application makes it possible to quantify the levels of risk of aggression in cases of gender violence, allowing its prediction and consequent protection, through different previously defined levels of potential victims. Specifically, VioGen starts from a first questionnaire called VPR (Police Risk Assessment) and a second, VPER (Police Risk Evolution Assessment), which is generally carried out one year after the first, when the trial has normally already been held and whatever the sentence. Five levels of risk are extracted from this assessment: unappreciated, low, medium, high and extreme. Each of them is accompanied by a protocol of action in which the complainant or victim is a participant, as well as all the administrations with competence in the matter and the court that instructs or has judged the case

Itis more complex, however, to measure or quantify the success of any instrument when it comes to evaluating its impact on a scourge such as gender-based violence. Notwithstanding the above, the authorities consider that the percentage of reliability of VioGen is relatively satisfactory: since the launch of this tool a decade ago, the recidivism of aggressions has decreased by 25% according to the latest data. And if in a generic way the recidivism in other countries of the environment reaches 35%, in Spain it is already at 15%. <sup>8</sup>The data is updated on the website of the Ministry of the Interior, which allows an analysis of the reliability and success of the tool from a statistical perspective. <sup>9</sup>

But beyond the constant evaluation by the Ministry of the Interior, VioGen is also being evaluated externally. An example is the evaluation being carried out by the non-profit organization Eticas Foundation but not at the request of the Ministry, but autonomously and with the information

<sup>&</sup>lt;sup>7</sup> See description of the application of AI to tool in the own website of SAS Iberia <a href="https://www.sas.com/es\_es/news/press-releases/locales/2020/viogen-secretaria-estado-seguridad-y-sas-unidos-lucha-contra-violencia-genero-analitica-avanzada-ia.html">https://www.sas.com/es\_es/news/press-releases/locales/2020/viogen-secretaria-estado-seguridad-y-sas-unidos-lucha-contra-violencia-genero-analitica-avanzada-ia.html</a>

<sup>&</sup>lt;sup>8</sup> Information obtained from an interview conducted by the newspaper La Vanguardia to one of the creators and Head of VioGen area Juan José López Ossorio in 2017. Available at the following link <a href="https://www.lavanguardia.com/tecnologia/20190519/462147339117/viogen-violencia-de-genero-violencia-machista-inteligencia-artificial-algoritmos.html">https://www.lavanguardia.com/tecnologia/20190519/462147339117/viogen-violencia-de-genero-violencia-machista-inteligencia-artificial-algoritmos.html</a>

<sup>&</sup>lt;sup>9</sup> The data of 2022 are available at the following link <a href="https://www.interior.gob.es/opencms/es/servicios-alcudadano/violencia-contra-la-mujer/estadisticas-sistema-viogen/">https://www.interior.gob.es/opencms/es/servicios-alcudadano/violencia-contra-la-mujer/estadisticas-sistema-viogen/</a>

published as well as with the help of external foundations. In fact, it exposes the difficulties it has to carry it out because, according to the organization "This lack of transparency and explainability implies that we cannot know if VioGén tends to estimate a risk too high or too low in certain types of cases, such as when the complainants belong to a particular social group, such as immigrants who speak Spanish (or Valencian or Galician) in a different way than those who have always spoken the language usually express themselves." <sup>10</sup>

And beyond the aforementioned problem related to transparency, it should be convenient to ask what really interests the judicial police, prosecutor's office and judiciary according to the experience accumulated during these years, since this would allow the incorporation of data that contribute to an adequate protection of the victim without any violation of constitutional and procedural guarantees<sup>11</sup>.

Finally, with regard to its jurisprudential reception, the pronouncements by the judicial authorities are, if possible, really scarce and not very relevant. However, it should be noted the STS, Fifth Chamber, 73/2020, of October 28, in which the conviction of a Civil Guard who refused to register in the VioGen system was confirmed, violating the instruction of the Secretary of State for Security that obliges the use of the forms of this tool in the first assessment of the risk of violence (VPR). In the same way, there is another pronouncement of the National Court, specifically the Contentious-Administrative Chamber, in the Judgment of September 30, 2020 in which the Administration is condemned patrimonially after the murder of a woman by her partner and not having verified the important extreme agents that would have allowed inferring the existing risk of recidivism by the aggressor towards the victim.

As can be seen, issues regarding the "substance" of police prediction systems have not been assessed, but the two sentences exposed make clear a basic problem in the use of these systems: the lack of training (and even, in some cases, disinterest), on the part of the members of the FCSE responsible for their use. Therefore, beyond the technical improvements in the application of AI, it should persevere in the training of its users, and even, why not, in a greater familiarization with it by legal operators.

## (b) Veripol

The Veripol system, launched in 2018, is focused onpreventing false complaints, which find their fit, as is known, in art. 457 CP. In addition to being the first tool of its kind in the world, it has an accuracy of more than 90% and estimates the probability that a complaint for theft with violence and intimidation or pull is false, deterring, among other actions -never better said- to "spurious" complainants, for example, those who invent the theft of a mobile phone for the sole purpose of collecting the insurance previously contracted.

 $<sup>{}^{10} \</sup> See \ the \ information \ on \ their \ website \ \underline{https://eticasfoundation.org/es/viogen-un-algoritmo-para-predecir-el-riesgo-de-reincidencia-en-casos-de-violencia-de-genero/}$ 

<sup>&</sup>lt;sup>11</sup> In this regard, see LLORENTE SÁNCHEZ-ARJONA, M. "Big data, inteligencia artificial y violencia de género", *Diario La Ley* 25th march 2021

To do this, the tool feeds on a large amount of data (*big data*) and determines, based on the content of the information provided, the percentage of possibilities of falsity of the complaint, using natural language processing (NLP) techniques.

For its implementation, the application passed different tests of operation, nourishing itself from a bank of more than 1000 complaints for robbery with violence and intimidation and robbery with theft that were presented in Spain during the year 2015. Of these complaints, approximately 50% were true and the same false. The model, in which several officials worked for more than two years, allows us to appreciate the differences that may exist between the narration of complaints that have turned out to be true and false, based on the information provided by the complainant, morphosyntax and a wide amount of detail.

Despite the positive aspects of the tool, some authoritative voices expose important shortcomings. Thus, in the words of JAUME PALASÍ "Body language also matters in the complaint and here it does not appear. This system creates ideal types. It does not describe reality, but artificially establishes a mechanized description of reality. Reality is more dynamic than just a few words." In the same way, that some qualify the percentage of 91% of success as a success, is seen by others, such as <sup>12</sup>BAEZA YATES because, in their own words "That 9% is wrong implies that the system wrongly accuses nine out of every 100 people. And this is a very serious ethical conflict." Likewise, ethics experts miss specific regulations, as is the case in other countries (Japan, Finland, etc.) that have already faced this reality <sup>13</sup>.

But, moreover, from a purely procedural perspective it seems to violate the position of the victim, whose statement is questioned by an agent, encouraged by the application. It implies, therefore, an exchange of roles in which the victim of a crime automatically passes to the position of alleged perpetrator of another, in this case, of the aforementioned 457 CP. And, although the final decision rests with the agent, it goes without saying that in most cases he will not depart from the decision of the programme.

## 2. SYSTEMS INITIATED AND/OR ABANDONED BY FCSEs

As for the systems whose use has not been widespread in the FCSEs, it is worth highlighting mainly GIS or geographic information systems, which are usually used to prevent crime in high-risk places through a kind of "digital crime maps" and the creation of "hot *spots*" or hot spots where greater criminal activity is concentrated.

## (a) EuroCop PredCrime

In the field of citizen security, since 2011, different Public Administrations, mainly Local Entities -local police-, were raising the possibility of equipping themselves -it is unknown if they finally implemented it or if, once implemented, they had to abandon it due to its impact on fundamental

<sup>&</sup>lt;sup>12</sup> In the same sense, ALONSO SALGADO indicates that "although, obviously, the estimation of VeriPol does not compromise the decision of the Security Forces and Bodies, there is no doubt that it establishes a starting bias.." in ALONSO SALGADO, C. "Acerca dela inteligencia artificial en el ámbito penal: especial referencia a la actividad de las fuerzas y cuerpos de seguridad", Us et Scienctia, vol. 7, pp. 25-36, 2021.

<sup>&</sup>lt;sup>13</sup> See expert views in this article <a href="https://elpais.com/tecnologia/2021-03-08/veripol-el-poligrafo-inteligente-de-la-policia-puesto-en-cuestion-por-expertos-en-etica-de-los-algoritmos.html">https://elpais.com/tecnologia/2021-03-08/veripol-el-poligrafo-inteligente-de-la-policia-puesto-en-cuestion-por-expertos-en-etica-de-los-algoritmos.html</a>

rights or the lack of sufficient regulation- of the EuroCop PredCrime software. The *software*, as defined on the web, consists of "the experimental development of an Integrated System for the treatment of massive data linked to crimes and misdemeanours already committed, based on the use of mathematical models and algorithms, which allows the prevention and resolution of a crime not yet produced". <sup>14</sup>

It is a system that integrates and processes massive data linked to crimes, which bases its operation on a spatiotemporal model and geographic information of heat maps through models and mathematical algorithms for the prevention, through prediction, of crimes that, in the future, could be committed.

On the other hand, software such as that provided by Eurocop PredCrime, a private company, was contracted by municipalities for the protection of their municipalities, although there is a lack of publicity to know the scope of the contracts, as well as their specific purpose and assess whether the application of computerized surveillance techniques (as they seem to use) is contrary to both the criteria of the EU and the Spanish Agency for Data Protection itself. In fact, some of the EuroCop Pred Crime systems were "temporarily abandoned" (we intuit that due to lack of guarantees or legal basis for their use) by the City Councils that had signed it, such as Rivas Vaciamadrid (Madrid). <sup>15</sup>

The main problem that advances the use of these softwares lies in the private participation not only of public security -which usually happens in not a few enclosures- but in the management of data and sensitive information usually collected in police databases. Indeed, these tools that arise from a public-private partnership can lead to profound problems of legality, hence, at the time of writing this work, it is not possible to speak of a generalized use by the FCSE but rather the opposite, because given the aforementioned doubts there is no evidence that they are currently used <sup>16</sup>.

## (b) Predictive Police Patrolling (P3-DSS)

A pilot study was also developed in 2017 by the National Police Corps (CNP) in the central district of Madrid, entitled "*Predictive Police Patrolling*" (P3-DSS) that, through mathematical algorithms, allows predicting crimes, knowing their typology as well as improving the efficiency of police patrol shifts. The project was devised by the policeman and mathematician Miguel Camacho, and

https://www.eurocop.com/catedra-eurocop/proyectos-en-marcha/eurocop-pred-crime-sistemas-para-la-prediccion-y-prevencion-del-delito/

<sup>&</sup>lt;sup>15</sup> See, in the following link, its use by Rivas Vaciamadrid <a href="https://www.rivasciudad.es/noticias/organizacion-municipal/2015/12/10/un-sistema-pionero-en-prevencion-de-delitos/862600041423/">https://www.rivasciudad.es/noticias/organizacion-municipal/2015/12/10/un-sistema-pionero-en-prevencion-de-delitos/862600041423/</a> and its abandonment a few months later in this other <a href="https://rebelion.org/el-estado-policial-espanol-2-0-tecnologias-de-empresas-privadas-para-vigilar-a-los-ciudadanos/">https://rebelion.org/el-estado-policial-espanol-2-0-tecnologias-de-empresas-privadas-para-vigilar-a-los-ciudadanos/</a>

<sup>&</sup>lt;sup>16</sup> Ekaitz Cancela and Aitor Jiménez, journalists from El Salto who, after a thorough investigation, warn of the risks posed by Ekaitz Cancela and Aitor Jiménez, are very critical of the risks it poses. This tool. Thus, the following questions arise, which we reproduce literally: "What compromised and private data can a company that lends and manages the critical digital infrastructure of police agencies have access to? Don't citizens have the right to know the inside of these black boxes? Do we want a private corporation to be in a position to offer "a solution that covers the integral management of the police, both in the operational aspect (automating all its operational, administrative, judicial tasks, etc., from anywhere and at any time), and in the tactical and strategic aspect in order to achieve maximum efficiency in police work?"?..." The result of the information, very critical with these predictive policing systems adopted by local police, available at the following link <a href="https://www.elsaltodiario.com/tecnologia/estado-policial-espanol-2.0-empresas-privadas-eurocop-vigilar-ciudadanos">https://www.elsaltodiario.com/tecnologia/estado-policial-espanol-2.0-empresas-privadas-eurocop-vigilar-ciudadanos</a>

part of it can be seen in his own doctoral thesis entitled *Statistical Analysis of Spatio-Temporal Crime Patterns: Optimization of Patrolling Strategies*, defended in 2016.<sup>17</sup>

This application referred to crime prevention and improvement of efficiency in patrolling, through the development of the Geographic Information System (GIS) allows the police to manage in a reasonable time spatiotemporal data that help identify concentrations of criminal acts allowing, therefore, to implement a "predictive patrol" that provides greater efficiency in the distribution of patrols according to criminal risk. <sup>18</sup> For the use of the pilot tool used in the Central District of the city of Madrid, criminal records were collected regarding the crime of theft (105,755 incidents) between 2008 and 2012. In turn, they used the Geographic Information Systems (GIS) of the CNP that integrate criminal events on a geographical map of the city, in addition to the location of police patrols.<sup>19</sup>

However, these police prediction techniques have been questioned because they can collide with the right to equality and non-discrimination. Indeed, perhaps one of the first issues to discuss about artificial intelligence for police prediction lies in the right to equality or non-discrimination translated into the risk that it contains certain biases in the algorithms that make it up.

In fact, the Charter of Digital Rights, beyond the fact that it does not have normative force, provides in its right XXV "Rights before artificial intelligence", specifically in its section 2.a) that "The right to non-discrimination must be guaranteed regardless of its origin, cause or nature, in relation to decisions, use of data and processes based on artificial intelligence".

And this concern also occupies doctrine. Thus, NIEVA FENOLL warns about the use of *big* data in police research sothat the data that is randomly stored from people, neighborhoods, etc., despite this randomness, will have been selected according to the damages of the algorithm configurator, which implies that the results are not neutral. Also, in a conclusive way, <sup>20</sup>MIRÓ LLINARES summarizes the problem posed: "the *predictive tools we are talking about come only to do what was already done and is done today in a traditional and manual way and probably with the same biases or more, adding, in some cases, a more systematic or scientific methodology" because, -continues the author-"... What we know so far tells us that algorithms, which accurately reflect our world, seem to reflect our prejudices as well."<sup>21</sup>* 

For their part, CAMACHO-COLLADOS, GÓNZÁLEZ-ÁLVAREZ and SANTOS HERMOSO expose the existing debate alluding, on the one hand, to the fact that, although the defenders of this type of police practices argue that these tools help reduce the biases of the investigators, since they replace personal experience with a knowledge based on the systematic analysis of all known

<sup>&</sup>lt;sup>17</sup> The thesis is open at the following link <a href="https://hera.ugr.es/tesisugr/26134081.pdf">https://hera.ugr.es/tesisugr/26134081.pdf</a>

<sup>18</sup> GONZALEZ-ÁLVAREZ, J.L., SANTOS-HERMOSO, J. and CAMACHO-COLLADOS, M. op. cit. Page 30

<sup>&</sup>lt;sup>19</sup> JIMÉNEZ HERNÁNDEZ, M. "El big data como herramienta de prevención de la delincuencia ", página 28, available at this

https://rua.ua.es/dspace/bitstream/10045/115934/1/EL BIG DATA COMO HERRAMIENTA DE PREVENCION DE I imenez Hernandez Miguel Angel.pdf

<sup>&</sup>lt;sup>20</sup> NIEVA FENOLL, J. Inteligencia artificial y proceso judicial, Ed. Marcial Pons, 2018, pág. 151

<sup>&</sup>lt;sup>21</sup>MIRÓ LLINARES, F. "Inteligencia artificial y justicia penal: más allá de los resultados lesivos causados por robots", op.cit., pág. 126MIRÓ LLINARES, F. "Artificial intelligence and criminal justice: beyond the harmful results caused by robots", op.cit., p. 126

and clarified cases; its detractors understand that while these tools are based. In crimes previously solved by police units, there may be certain crimes with a higher probability of being investigated and solved, because they are committed by individuals who are considered dangerous, or because they take place in areas prone to crime. If the data entered into the model presents some kind of bias, it could cause the stigmatization of individuals or areas that present the characteristics that the algorithms identify as risk indicators. Despite the existing debate, in line with the authors cited above, they understand that the development of these practices is the logical evolution of traditional police practice.<sup>22</sup>

## II. PREDICTIVE JUSTICE

#### 1. A BET ON THE FUTURE IN THE SHORT TERM?

When making a first contextual approach to the phenomenon, it should be noted that there is no unequivocal definition of predictive justice as it is not contemplated in Spanish legislation. Therefore, forensic doctrine and practice use their literal meaning, directly translated from "predictive justice" to refer to it.

Notwithstanding the above, some relevant authors such as ARMENTA DEU qualify predictive justice as a "very broad term" and consider that "it promotes itas a tool for procedural efficiency, combining an improvement in the quality of decision-making and a reduction in judicial activity.<sup>23</sup>

Other authors associate its meaning with that of "jurimetry". Indeed, PERALTA GUTIERREZ indicates that "Jurimetry is the application of artificial intelligence and machine learning to traditional legal and jurisprudential search engines obtaining new functionalities that give rise to the development of what has also been called "Predictive Justice" <sup>24</sup>

However, although they are related terms, we understand that predictive justice is a broader phenomenon than jurimetry or, if you prefer, the second is part of the first or consists of a predictive justice tool or technique, although there may be others. We understand, in <sup>25</sup>short, that "predictive justice" is about AI used in the jurisdictional function for judicial decision-making.

As for the "state of the art" on predictive justice in Spain, there is no outright refusal towards the use of artificial intelligence systems. We are not, therefore, in the same scenario as neighbouring countries, such as France, which in article 33 of the Law for the Reform of Justice prohibits, even

<sup>&</sup>lt;sup>22</sup> The debate raised as well as its position can be seen in GONZALEZ-ÁLVAREZ, J.L., SANTOS-HERMOSO, J. and CAMACHO-COLLADOS, M. op.cit., pages 28 and 29

<sup>&</sup>lt;sup>23</sup> ARMENTA DEU, T. Derivas de la justicia, pág. 262, Marcial Pons, Madrid, 2021

 $<sup>^{24}</sup>$  PERALTA GUTIERREZ, A. "Diálogos para el futuro judicial XXIII. Jurimetría y justicia predictiva", *Diario La Ley nº9837*, 26th april 2021

<sup>&</sup>lt;sup>25</sup> As SUAREZ XAVIER argues, "jurimetry, judicial statistics, automation processes and other forms of smartification of justice can be integrated into the concept of predictive justice, but they do not configure the concept itself." in Tesis Doctoral Gobernanza, inteligencia artificial y justicia predictiva: los retos de la Administración de Justicia ante la sociedad en red", pág. 420

establishing prison sentences, the publication of statistical information on the decisions and the pattern that judges follow when issuing sentences.

On the contrary, a standard that aims to use artificial intelligence for the modernization of the Administration of Justice is currently in the Project phase: the Digital Efficiency Project. It is a "nuclear action" within the Justice 2030 program, promoted by the Government of Spain. <sup>26</sup>In fact, in January 2022, the tender for the Justice Framework Agreement for Digital Transformation was published with more than 125 million euros. <sup>27</sup>

However, the use by judges of jurimetry options or data analytical techniques, although feasible, does not seem to occur, at least in the short term. Nor does it seem that predictive justice tools "decisive" of the judicial body will be implemented, for the imposition of precautionary measures, issuance of sentences, etc. Given the real use of AI through auxiliary techniques such as those referred to implies a substantial transformation of our justice that requires reforms of greater depth than those proposed in the Digital Efficiency Project, leaving aside only the *rara avis* that RisCanvi supposes, used only in the Catalan prison system, which we will expose below.

## 2. SYSTEMS CURRENTLY USED IN CRIMINAL JUSTICE

## A) RisCanvi

It is a tool used in the execution phase of the sentence to predict the risk of violence when granting permits and determining the situation of the convict. We could classify it within the scope of predictive justice, because it evaluates certain items to throw the risk of a certain future action but does not apply artificial intelligence in the strict sense. On the other hand, its scope of application is limited since it only applies in the prisons of Catalonia since the competences in matters of prisons, in Spain, <sup>28</sup>were transferred to the Autonomous Communities.

The system works by applying two protocols, first, the RisCanvi *screening*, which is applied at the entrance of the prisoner to the penitentiary center and consists of ten different items and that throws a low or high risk of violence and the RisCanvi *complet*, which offers greater guarantees because it has 43 variables that yield a low risk score, medium or high. The functionalities of the tool have been extended to four: violation of sentence, violence within the prison, violent recidivism and self-directed violence (suicide, suicide attempt, self-harm ...). The results of the assessment are confirmed or modified by the prison treatment board (which rarely departs from

<sup>&</sup>lt;sup>26</sup> See, extensively, the work of BUENO DE MATA, F. "La necesidad de regular la inteligencia artificial y su impacto como tecnología disruptiva en el proceso: de desafío utópico a cuestión de urgente necesidad" en El impacto de las tecnologías disruptivas en el Derecho Procesal (BUENO DE MATA, Dir.), Thomson Reuters Aranzadi, Cizur Menor, 2021, págs.. 29 y ss.

<sup>&</sup>lt;sup>27</sup> In that Agreement, Lot 2 is intended for projects related to data engineering; innovation and artificial intelligence laboratories; Implementation of solutions based on artificial intelligence and idata engineering to identify, extract and exploit information within the judicial field for the establishment and improvement of predictive models; as well as the definition of disruptive technological solutions that help the Administration of Justice to meet its objectives <a href="https://www.mjusticia.gob.es/es/ministerio/gabinete-comunicacion/noticias-ministerio/220113-NP-Justicia-publica-la-licitacion-del-Acuerdo-Marco-de-Justicia">https://www.mjusticia.gob.es/es/ministerio/gabinete-comunicacion/noticias-ministerio/220113-NP-Justicia-publica-la-licitacion-del-Acuerdo-Marco-de-Justicia</a>

<sup>&</sup>lt;sup>28</sup> In an academic work published by its creators, at no time is the concept of "artificial intelligence" mentioned but, as the article indicates, RisCanvi uses logistic regression models. Grapevine. FÉREZ-MANGAS, D. y ANDRÉS-PUEYO, A. "Eficacia predictiva en la valoración del riesgo del quebrantamiento de permisos penitenciarios", *La Ley Penal* nº 134, september 2018, pág. 8

it) and often guide the judge's final decision on the granting of prison leave, probation, classification of the prisoner and the adoption of supervisory measures.<sup>293031</sup>

However, RisCanvi does not strictly use AI but logistic regression systems, hence, as indicated by one of the heads of the Penitentiary Systems of Catalonia, the tool has a lot of room for improvement and will soon incorporate techniques of *machine learning* or more sophisticated modalities than the current ones, <sup>32</sup>limited to feeding the algorithm through of the evaluations of the inmates added by the officials and of the prisons' own databases (days of sentence, sentences, etc.) .

As for the application of the tool, its percentage of use reaches almost 100% because onlyin 3.2% of cases the final evaluation has been modified by the evaluator. It is even criticized that even when the evaluator or technical team of the penitentiary center defends the decision to grant a prison permit, if this happens against RisCanvi because the tool appreciates a medium or high risk of recidivism, the Prosecutor appeals the decision based solely on the result of the software.<sup>33</sup>

The problems or defects that are attributed to this tool lie in the existence of false negatives which leads part of the legal profession to warn of the danger that supposes that the decision on the freedom or not of a prisoner rests on an algorithm that, inevitably, follow those who must make a final decision<sup>34</sup>. It is true that the decision is taken by the judge after having been informed or having read the report made by the technical team, which is the one who uses this tool, but it is no less true that the lawyers of the prisoners do not know both the operation and the parameters on which the application is based and that while their clients have already been convicted, They are less likely to dispute the relevance of obtaining a particular permit compared to a scientifically and theoretically objective instrument. On the other hand, that there may be some false negative and that the criminal prisoner should not bea reason to rethink a tool through which, statistically, more permits are granted than before its existence<sup>35</sup>.

B) Jurimetry and judicial data analytics systems

<sup>&</sup>lt;sup>29</sup> FÉREZ-MANGAS, D. and ANDRÉS-PUEYO, A. "Eficacia predictiva en la valoración del riesgo del bviolamiento de permiso penitenciarios", op.cit. p. 6

<sup>&</sup>lt;sup>30</sup> Specifically, 3.2% of the total. See the statistics published in the newspaper La Vanguardia, available at the following link <a href="https://www.lavanguardia.com/vida/20211206/7888727/algoritmo-sirve-denegar-permisos-presos-pese-fallos.html">https://www.lavanguardia.com/vida/20211206/7888727/algoritmo-sirve-denegar-permisos-presos-pese-fallos.html</a>

<sup>&</sup>lt;sup>31</sup> MONTESINOS GARCÍA, A. "Justicia penal predictiva" en *Justicia poliédrica en tiempos de mudanza* (BARONA VILAR, S. Dir.), Tirant lo Blanch, Valencia, 2022, pág. 440

<sup>&</sup>lt;sup>32</sup> The information on the operation of RisCanvi as well as the opinions of experts on this tool, are available in this news with the respective interviews <a href="https://www.todonoticia.cl/2021/07/11/prisiones-riscanvi-luces-y-sombras-del-algoritmo-que-ayuda-al-juez-en-cataluna-a-decidir-si-mereces-la-condicional-transformacion-digital-tecnologia/">https://www.todonoticia.cl/2021/07/11/prisiones-riscanvi-luces-y-sombras-del-algoritmo-que-ayuda-al-juez-en-cataluna-a-decidir-si-mereces-la-condicional-transformacion-digital-tecnologia/</a>

<sup>&</sup>lt;sup>33</sup> Although we cannot prove this point, this is defended by Magistrate and Professor of Criminal Daniel Varona. Their statements can be seen at the following link <a href="https://www.lavanguardia.com/vida/20211206/7888727/algoritmo-sirve-denegar-permisos-presos-pese-fallos.html">https://www.lavanguardia.com/vida/20211206/7888727/algoritmo-sirve-denegar-permisos-presos-pese-fallos.html</a>

<sup>&</sup>lt;sup>34</sup> EIn the words of Marisa Díaz, a prison law lawyer: "The law is clear about the conditions for requesting permits or accessing the third degree, and says nothing about Riscanvi. Using it to deny is a serious violation of rights." See his words in the report published in La Vanguardia <a href="https://www.lavanguardia.com/vida/20211206/7888727/algoritmo-sirve-denegar-permisos-presos-pese-fallos.html">https://www.lavanguardia.com/vida/20211206/7888727/algoritmo-sirve-denegar-permisos-presos-pese-fallos.html</a>

<sup>&</sup>lt;sup>35</sup> Envelope the weight and importance of false negatives and positives see, extensively, the excellent work of MARTINEZ GARAY, L. "Errores conceptuales en la estimación del riesgo de reincidencia" en *Revista Española de Investigación Criminológica (REIC)*, art 3, nº 14, 2016.

Very recently, specifically in December 2021, the CGPJ made available to Judges and Magistrates – also members of the Judicial Office, such as LAJs – the KENDOJ (*Knowledge Extractor* for CENDOJ) application that applies AI and *machine learning* techniques to carry out two actions: on the one hand, the automatic pseudonymization of a document for compliance with GDPR standards and, on the other, to facilitate access to the most relevant information of each document prior to its reading as well as a more accurate search for legislation and jurisprudence for the development of its functions.<sup>36</sup>

But beyond this instrument with such a limited scope, the truth is that other legal operators such as Lawyers, already have tools or LegalTech systems based on predictive justice for the exercise of their function. It is specialized software created by powerful companies in the legal sector that, broadly speaking, allow the user to predict the chances of success of their actions before a certain Court, all based on *big judicial data* obtained from CENDOJ, after signing commercial exploitation agreements with the CGPJ.

Without wishing to delve into all the legal applications or legal data analytics, in order to expose their operation, Jurimetría, from the Wolters Kluwer group, surely one of the pioneering applications (year 2017) in the application of predictive justice to Law, serves as an example. It is a tool that systematizes and extracts exhaustively the intelligence that resides in a set of more than 10 million judicial resolutions and in all the judicial statistics from all the instances and jurisdictional orders of Spain, to which half a million new resolutions are incorporated each year. Jurimetría consists of six interconnected modules, each with a different and complementary purpose and scope: 1) Jurimetry of the case: evaluates the critical parameters for the success of the case, knowing the trajectory of the Judge and the opposing lawyers, with access to the most relevant jurisprudence; 2) Jurimetry of the Judge or Magistrate: allows analyzing the trajectory, lines of argument and positions of the judge in question; 3) Jurimetry of the lawyer: global analysis of the counterparty in the process, from all perspectives; 4) Jurimetry of the company: allows an analysis of the litigation in which one of the large companies has been a party; 5) Jurimetry of the Court: allows to know the activity of the courts and tribunals of Spain, in aspects such as the average duration of the processes, congestion or the probability of recurs; and 6) Jurimetry of the Public Body: allows to examine the judicial processes in which a public body or entity has been a party, from any perspective. 37

As we have advanced, the use of these judicial data analytics systems – which are mainly used by lawyers – is not prohibited, as in France, but is simply understood to be allowed as it is not regulated. The large publishers acquire through commercial agreements with the CGPJ all the data (judgments, orders, ...) of those who feed these products. And although it has been used regularly since 2017, it has been this year 2022 the moment in which the CGPJ has complained or, rather, has become aware, of the implications that these systems may have, indicating,

<sup>&</sup>lt;sup>36</sup> A news about the aforementioned tool can be seen in the following link <a href="https://confilegal.com/20211218-la-carrera-judicial-contara-desde-el-lunes-con-una-aplicacion-basada-en-la-inteligencia-artificial-y-machine-learning/">https://confilegal.com/20211218-la-carrera-judicial-contara-desde-el-lunes-con-una-aplicacion-basada-en-la-inteligencia-artificial-y-machine-learning/</a>

<sup>&</sup>lt;sup>37</sup> Information extracted from your own website <a href="https://jurimetria.laleynext.es/content/Inicio.aspx#">https://jurimetria.laleynext.es/content/Inicio.aspx#</a>

There are also other applications interesting as they are Tirant Analytics <a href="https://analytics.tirant.com/analytics/estaticas/guiausuario/guia\_analytics\_web.pdf">https://analytics\_web.pdf</a>, vLex Analytics <a href="https://lefebvre.es/noticia/nace-neo-la-primera-plataforma-la-gestion-del-conocimiento-juridico-del-mercado-europeo/">https://lefebvre.es/noticia/nace-neo-la-primera-plataforma-la-gestion-del-conocimiento-juridico-del-mercado-europeo/</a>

literally, that "the determination of the criteria for the use of jurimetry and artificial intelligence by companies and individuals from databases is missing, including those configured by this constitutional body; which shall have the necessary participation in the determination of such criteria of use". <sup>38</sup>

It is, in our opinion, paradigmatic that at this point - that is, when the products have been used for years - the CGPJ, which ultimately has commercial exploitation agreements with these publishers, shows its concern in this regard.

But such concern is by no means trivial because it has also been shared by procedural doctrine, although it reflects different positions. ARMENTA DEU warns of the risks posed by predictive justice, risks that he describes as "systemic" because it will imply that the litigant stops going -or go less, according to his words- to the courts since the pronouncements will already be known and predictive justice will get them to be increasingly homogeneous. On the other hand, NIEVA FENOLL points out after describing some predictive justice tools used in other countries that, in legal argumentation, "<sup>39</sup>artificial intelligence will make the work of persuasion less arduous, as it can be collected much more easily the available information and the arguments for and against the different options and, As already said, it will not be conditioned by emotions or feelings, but will integrate only objective data." MARTIN DIZ also considers the establishment of AI and its application to procedural law a priority but prioritizing guarantees over efficiency "40even more so when due to its undeniable degree of technological progress, and so it could serve in future decades as an element of assistance to lawyers and predictability". BARONA VILAR reflects on jurimetry and considers that "it 41 must be valued for what it is, namely, a computational care system. It is not a substitute model of the human mind" and, in a <sup>42</sup>similar sense, BORGES BLÁZQUEZ understands that its use by the judicial authority is feasible, as used by lawyers, although it exposes the misgivings that it could generate in the Judicial Power, given the precautions that the General Council of the Judiciary has had in related matters.

In our opinion, there is some distrust that large companies in the legal sector will mark the step to the Administration of Justice. There is no doubt that using these *Legal Tech* tools for the elaboration of the procedural strategy will place the party that possesses them in an advantageous position compared to the one that lacks them. <sup>44</sup> And contrary to what one might think, it applies not only in the civil jurisdictional order, but also in the criminal one, where it may happen that

<sup>38</sup> See the summary of the CGPJ Report to the Draft Law on Digital Efficiency <a href="https://www.poderjudicial.es/cgpj/es/Poder-Judicial/En-Portada/El-Pleno-del-CGPJ-aprueba-por-unanimidad-el-informe-al-anteproyecto-de-ley-de-Eficiencia-Digital-del-Servicio-Publico-de-Justicia</a>

<sup>&</sup>lt;sup>39</sup> ARMENTA DEU, T. op.cit. p.263

<sup>40</sup> NIEVA FENOLL, op.cit. p. 30

<sup>&</sup>lt;sup>41</sup> MARTIN DIZ, F. "Justicia predictiva: inteligencia artificial y algoritmos aplicados al proceso judicial en materia probatoria" en El impacto de las tecnologías disruptivas en Derecho procesal, op.cit., pág. 138

<sup>&</sup>lt;sup>42</sup> BARONA VILAR, S. Algoritmización del Derecho y de la Justicia. De la Inteligencia Artificial a la Smart Justice, Tirant lo Blanch, 2021, pág. 371

<sup>&</sup>lt;sup>43</sup> BORGES BLÁZQUEZ, R. *Inteligencia artificial y proceso penal*, Ed. Thomson Reuters Aranzadi, Cizur Menor, 2021, pág. 164

<sup>&</sup>lt;sup>44</sup> In the same sense is pronounced REIFARTH MUÑOZ who explains that "It is possible that artificial intelligence produces imbalances in the construction of an effective line of defense. The preparation of a case with legaltech systems is much simpler, since it allows to process data, comparisons and probabilities of success or failure of a certain matter with extraordinary speed. In general terms, the use of these instruments is beneficial but can lead to dysfunctions when only one of the parties has access to it.s", in REIFARTH MUÑOZ, W. "El uso de la inteligencia artificial en el proceso judicial y los derechos fundamentales", op. cit., pág. 210

the investigated person who lacks resources and avails himself of legal aid faces not only the Public Prosecutor's Office - which perhaps in a private capacity can use this tool - but also the private accuser equipped with these technologies.

And in a context in which jurisprudence is increasingly relevant in the judicial system, we run the risk of moving towards a common classification, classification and commercialization of judicial big data by the big technology companies, violating the principle of equality of arms and relegating those who lack resources to basic – and not premium – access to jurisprudence<sup>45</sup>.

# III. THE FIT OF AI IN OUR CRIMINAL JUSTICE

Once exposed some tools of police and predictive justice that timidly use artificial intelligence, it is possible to consider if a more intense AI and with a more widespread use in the different phases of the process has or can have a fit in our criminal justice. For this, it becomes essential, among other basic premises, to start from the following.

a) Respect for Article 117.3 EC and the principle of jurisdictional exclusivity: the debate is not so much in limiting access to the human judge in some cases but in that behind justice, that is, decision-making, there must be a human judge. And this is not on a whim, but because in art. 117.3 of the Spanish Constitution recognizes the principle of jurisdictional exclusivity by which "The exercise of jurisdictional power in all types of proceedings, judging and enforcing the judgment, corresponds exclusively to the Courts and Tribunals determined by law, according to the rules of competence and procedure established by them". Art. 117.3 EC, indicates BORGES BLAZQUEZ that we can draw two conclusions: "first, our constitution excludes other subjects or systems from the ability to judge. The second, the article says who should exercise the function: judges and courts. But it does not specify how or through which tools. Therefore, the use of AI systems in a complementary way, acting as support for the decision that the judge must make and never replacing their reasoning would fit into our system".46 In the same vein, MONTESINOS GARCÍA concludes that "We welcome everything that contributes to objectifying certain decisions that judges must adopt. But we have to start from the premise that we are facing care systems, that is, collaboration tools. The judge's decision cannot rest exclusively on an algorithm. The result provided by the predictive system, in the case of being considered by the judge, can only do so as one more element, which must in any case be corroborated by other elements of the trial. So we conclude this work by stating emphatically that the predictive function, if integrated into criminal justice, should only be support or advice in judicial decision-making, but it can

<sup>&</sup>lt;sup>45</sup> Saving the distances, the referred problem reminds us of what happened in the United States where a young activist, Aaron Schwartz, tried to "liberate" the jurisprudence of the federal courts of the United States, to which prior access was payment, downloading PACER's case-law for hosting it on the open basis (*open aCCESS*) of RECAP. Unfortunately, this young man ended up committing suicide. for, among other problems, he faced decades in prison for the discharges made. More information in the following link: <a href="https://arstechnica.com/tech-policy/2013/01/internet-pioneer-and-information-activist-takes-his-own-life/">https://arstechnica.com/tech-policy/2013/01/internet-pioneer-and-information-activist-takes-his-own-life/</a>

<sup>46</sup> BORGES BLÁZQUEZ, R., op. .cit. p. 197

*never reach decision-making force or be binding on judges*.<sup>47</sup> Therefore, artificial intelligence applied to criminal justice must be assistive, never a substitute forthe judicial function <sup>48</sup>.

- b) AI **must be public and accessible**: indeed, one of the main risks that we face as a society is that the AI used in criminal justice is configured, controlled and executed by a few, moreover, of the private sector, and that could obey the interests of certain lobbies. Therefore, on the one hand, AI should be regulated and, on the other, it should be public and accessible to any citizen<sup>49</sup>. It is also essential for the exercise of the rights of the defence to know the algorithm in order to be able to challenge the result of the diligence and/or evidence carried out or obtained by artificial intelligence.
- c) Evaluation and review by independent persons or entities: artificial intelligence is constantly evolving, so it becomes essential that its application to criminal justice is periodically evaluated. Therefore, the tools that use this technology should be reviewed, mainly by a group of independent experts, if possible appointed by a public entity, without prejudice to the fact that private groups or entities can also be constituted better if they are non-profit which are allowed to audit the AI to report on deficiencies and necessary improvements for both effective and respectful operation of the rights and guarantees of the criminal process.
- d) Towards a relevant role of the Public Prosecutor's **Office as guarantor of the proper functioning of AI** in the process: it should be remembered that the Public Prosecutor's Office is, in accordance with its principles of action, an impartial party in the process that must be both for the conviction of the guilty party and for the acquittal of the innocent. Moreover, the Spanish Constitution, in Article 124, gives it a leading role in the defense of citizens' rights. Hence, it must be erected as the reviewer or guardian of the correct use of Artificial Intelligence in the judicial process, monitoring its correct functioning and denouncing the infractions and violations of rights that may cause a negligent use of this technology<sup>50</sup>.
- e) Training and information for judges and legal operators: the widespread application of artificial intelligence in the process without even knowing the basis and operation of this technology can imply undesirable consequences. With this, it is not intended, much less, the acquisition of an expert level, from a computer-scientific perspective, of the knowledge and management of this technology. A lawyer is not a computer scientist hopefully the legal plans will advance in that direction but he must, at least, understand how artificial intelligence operates. There are already very interesting programs on *Legal Tech* in which you can acquire

<sup>&</sup>lt;sup>47</sup> MONTESINOS GARCÍA, A. op.cit. p. 449

<sup>&</sup>lt;sup>48</sup> Judge MARCHENA GÓMEZ ruled forcefully on this, who stresses that "I cannot identify, however, with this line of reasoning and I must express my categorical rejection of these predictive algorithms if they are interpreted as something more than a purely auxiliary instrument, never binding - or even conditioning - at the service of the judge, in whom must be resided, always and in any case, the capacity to affect the personal freedom of any citizen. To replace the judicial decision with a mechanized decision that worships an alleged mathematical precision, would irreparably violate the guarantees of the investigated, especially his right of defense.." in MARCHENA GÓMEZ, M. "Artificial Intelligence and Criminal Jurisdiction", Author's Admission Speech at the RAD, p. 38 and 39, 2022

<sup>&</sup>lt;sup>49</sup> In this sense, ARMENTA DEU, T. op.cit., p. 319

<sup>&</sup>lt;sup>50</sup> In the words of NIEVA FENOLL "Its mission may be much more objective and even-handed, which is as it should be since she will no longer have the commitment to prove an accusation in which she will not be implicated, but it will be able to monitor from the outside how the progress of that accusation and the judicial action runs. That greater externality It will undoubtedly result in the most perfect fulfillment of its work." in Artificial intelligence and judicial process, op. cit. Pág 150

basic and even somewhat advanced information on the application of AI to criminal justice and, although many of the recipients are practicing lawyers, the Judicial School also has an Official University Master's Degree for the Exercise of the Jurisdictional Function, taught by the UNED, in which judges who enter the judicial career receive training in RTIFICIAL Intelligence, *Blockchain* as well as other disruptive technologies<sup>51</sup>.

e) Greater pedagogy and information towards society: if, as shown by the reference indices, it is still a pending issue to bring the Administration of Justice closer to citizens, with greater reason they should be clearly explained the role that Artificial Intelligence will have in criminal justice<sup>52</sup>. It is not, at all, a trivial issue, because we start from a technology whose widespread ignorance causes a logical distrust in a citizenship that, in the end, is the recipient of the decisions that, through its use, are going to be adopted in criminal justice. There are already interesting studies, highlighting that of MORALES MORENO, which show how the acceptance of this technology and its application to criminal justice is low: today citizensdistrust judicial decisions that rely on algorithmic predictions<sup>53</sup>. Therefore, beyond being involved in a generalized digital transformation of society, we must, in particular, be very scrupulous, clear and pedagogical when explaining both the benefits and, ultimately, the operation, of the application of this technology in the administration of justice.

## IV. POSSIBLE FUTURE USES

Starting at the end, the application of AI in criminal justice should serve to assist or assist the judge in making decisions.

While such technology has the potential to in many cases be more reliable than human intelligence, the use of algorithms for the imposition of custodial sentences, in the style of the hackneyed example of "COMPAS" in the US, would not be constitutional<sup>54</sup> because, except for conformity, no one can be sentenced to a custodial sentence. without having been subjected to an oral trial with all the guarantees before the immediacy of an impartial and independent tribunal<sup>55</sup>.

In the same way, we must also be cautious in the application of AI for the limitation of freedom in precautionary place, mainly when imposing provisional detention. As NEIRA PENA suggests, the reinforced imputation trial that must occur before the imposition of this measure, should not be contaminated by the biases that the tool could suffer, but it should not be forgotten that the decisional process must be developed individually and in response to the specific circumstances of the case , which implies that ultimately, with greater or lesser influence of the machine, the

The curriculum also includes specific seminars on the aforementioned subjects. <a href="http://portal.uned.es/portal/page?">http://portal.uned.es/portal/page?</a> pageid=93,70656198& dad=portal& schema=PORTAL&idTitulacion=262301

<sup>&</sup>lt;sup>52</sup> See index of the European Union EU Justice of the year 2021 <a href="https://ec.europa.eu/info/sites/default/files/eu\_justice\_scoreboard\_2021.pdf">https://ec.europa.eu/info/sites/default/files/eu\_justice\_scoreboard\_2021.pdf</a>

<sup>&</sup>lt;sup>53</sup> Vid, for all, MORALES MORENO, A. "Algoritmos en el estrado, ¿realmente los aceptamos? Percepciones del uso de la inteligencia artificial en la toma de decisiones jurídico-penales" Revista *Ius et Scientia* vol.7, nº2, 2021

 <sup>&</sup>lt;sup>54</sup> See, inter alia, description offered by BORGES BLAZQUEZ about this software in BORGES BLAZQUEZ,, op.cit. p. 63
<sup>55</sup> GIMENO SENDRA, V. *La simplificación de la justicia penal.y civil*, Editorial BOE, 2020, pág. 28

decision falls on the judge <sup>56</sup>. But, without denying the aforementioned conclusion, it is true, on the other hand, that trying to objectify and "algorithmize" certain parameters for the assessment of the risk of flight, at a time like the current one in which unfortunately such a restrictive precautionary measure is abused - the most serious - can operate in favor of the accused. As has been demonstrated with the already analyzed RisCanvi, that since its implementation more permissions are granted than before, establish a scoring system - eg 3 points per root, 5 if you justify that you have work ... - It can be of great help to the judge <sup>57</sup>who, without prejudice to due individualized attention and the specific circumstances of the case, will be able to make a decision that rests on a somewhat more objective basis than what is currently happening.

In the same way, and leaving aside what is related to the limitation of freedom, all motions for resolutions that imply an objectification or can be carried out objectifying parameters will be able to apply Artificial Intelligence. This was already warned by GIMENO SENDRA who understood, with good sense, that AI could help or assist the judicial body formulated proposals for resolutions on different topics<sup>58</sup>. Although some of them can be accepted, among which we would highlight, civil precautionary measures, bail of the popular accuser and confiscationor; Other proposals we would discard because of their limited practical application - e.g. motion for a resolution on pardon - or even because of their high complexity and because they may compromise fundamental rights such as freedom - e.g. the execution of a European arrest warrant and surrender.

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<sup>&</sup>lt;sup>56</sup> NEIRA PENA, A. "Inteligencia artificial y tutela cautelar. Especial referencia a la prisión provisional" en *Revista Brasileira de Direito Processual Penal*, vol.7, nº 3, págs.. 1897-1933, 2021, pág. 1927

<sup>&</sup>lt;sup>57</sup> Very graphic about it is shown VELASCO NUÑEZ, the application of AI for leakage risk assessment "...She is the mother of the lamb of the provisional prison. Know if the person is going to escape in the period remaining for the trial or not. It is the 'Scoring' system. With the following variables: 3 points if you are rooted, 5 if you have a job... The more points, the less risk of leakage", words collected in an interview published in Confilegal on February 21, 2022 and available at the following link <a href="https://confilegal.com/20220221-jueces-robot-y-comunicaciones-en-blockchain-una-realidad-cada-vez-mas-cercana-en-espana/">https://confilegal.com/20220221-jueces-robot-y-comunicaciones-en-blockchain-una-realidad-cada-vez-mas-cercana-en-espana/</a>

<sup>58</sup> The list to which GIMENO SENDRA referred, without wishing to be exhaustive, is as follows: Calculation of the effective enforcement of sentences (arts. 988.III LECrim and 76 C.P.); Procedural budgets, such as jurisdiction (arts.9 and 23 LOPJ) and cross-border conflicts; objective jurisdiction and enforcement (Article 303 of the LECrim); jurisdiction over connection of offences (arts. 17.1.II and 300), territorial jurisdiction (arts. 19 et seq.); prescription (arts. 131 et seq. C.P., 666.3ª LECrim); pardon of the injured party (arts. 130.1.5° C.P., 106.II LECrim), pardon (arts. 130.1.4° C.P., 666.4ª LECrim and L. of June 18, 1870) and the supplicatory (arts. 666.5ª, arts. 11-14 of the Rules of Procedure of the Congress of Deputies and art. 22 of the Rules of Procedure of the Senate), res judicata (art. 666.2ª).; Civil precautionary measures (arts. 764, 589 et seq.), bail of the popular accuser (art. 280) and confiscation (arts. 127-127 octies C.P.); Provisional decisions prohibiting residence (art. 544 bis LECrim in relation to arts. 57 and 48 C.P.) and protection orders (art. 544 ter), temporary deprivation of driving licences during the investigation (art. 529 encore LECrim), the suspension of the official provided for in administrative legislation, the provisional suspension from the function or public office of the accused in pretrial detention and suspected of belonging to a terrorist or rebel organization (art. 384 encore LECrim), the temporary closure of a company and temporary suspension of the activities of a company (art. 529.3 C.P.) and the seizure of publications and the prohibition of disseminating criminal news (arts. 816 and 823 bis) LECrim, 189.8, 270.3 and 510.6 C.P.); The file of the attestation for lack of known author (art. 284.2 LECrim).; The dismissal for reasons of opportunity in the face of triflecrimes (art. 963.1.1ª LECrim).; The cases of criminal mediation and/or negotiated conformity sentence for reasons of opportunity that, culminated in the intermediate phase, have a written processing (arts. 784.3 and 787.1); The process for acceptance of Decree (arts. 803 bis.a-803 bis.j); Other resolutions: DNA tests for the determination of the accused that are already carried out by algorithms (arts. 5 L.O. 10/2007 and 3.a of RD 1977/2008) or averting the risk of criminal repetition (art. 129 bis CP), the declaration of default and contumacia (arts. 512-514 and 786 LECrim); the time limits for the investigation (art. 324); the execution of a European arrest warrant (Articles 47 et seq.) and a European warrant (Articles 16 et seq. L. 23/2014), the binding request for no need to adjudicate (Articles 642-645 and 782); Appealable decisions (arts. 216 et seq., 766, 790, 803, 846 bis a), 846 ter, 847 and 976); the deposit of the private accuser (art. 875) and the deadlines for lodging appeals (arts. 212, 766.3, 803.1.1a, 856 and 976.1), etc. n GIMENO SENDRA, Simplificación de la justicia penal y civil, op.cit., págs. 28 y 29

We must therefore move away from ambitious approaches and move towards a more cautious approach to the application of AI in criminal justice. Thus, everything inherent to the processing of the procedure or even to the civil object -which is accumulated to the criminal ex arts. 100 and 108 LECrim- could be a first stage in which to apply AI to, subsequently, and before a possible positive evaluation of its use, extend it to other resolutions of the criminal justice and , Ultimately, assistance in the evaluation of evidence and in the reasoning of the judicial body.

Indeed, the evaluation of the evidence, whether documentary, personal or expert, as well as the motivation of the sentence, may in the future be carried out with the help of artificial intelligence, but there will be certain parameters that will inevitably require human presence<sup>59</sup>. They should be, in our opinion, and due to their constitutional relevance, the last spaces in which to apply AI, once it has already been successfully applied in other acts or procedural resolutions with a minor or less intense effect on the rights of the investigated.

But, we insist, in the face of a criminal justice system that is still in full digital transformation, we cannot claim a widespread use and, what is worse uncontrolled – that is, literally, lacking control – of artificial intelligence. Only with solid wickers - set out in the previous section - can an effective application of AI be developed, but at the same time respectful of fundamental rights in criminal proceedings.

## **V - CONCLUSION**

The police and predictive justice tools currently used in criminal justice do not allow us to infer an intense and widespread application of this technology in our country. It is therefore necessary to use it prudently and in line with what has happened in the countries and the European Union itself, whose Regulation on Artificial Intelligence is still to come<sup>60</sup>.

And beyond the fact that the Governmentis enthusiastic about digital transformation and allocates a large amount of funds in its Justice 2030 plan, the truth is that there is a lack of specificity about the purpose in the application of artificial intelligence in justice, beyond a generic approach of intelligent justice oriented data<sup>61</sup>. If it is not clear what is intended, that is, if the objectives are not clearly defined at this key point of digital transformation, we run the risk that, on the one hand, innovation and entrepreneurship will be hindered and, on the other, we may encounter tensions with private initiatives or solutions that may fail in their attempt to be used by public authorities. Given the lack of existing regulation and the impact on both data protection regulations and fundamental rights<sup>62</sup>.

<sup>&</sup>lt;sup>59</sup> In this regard, NIEVA FENOLL, J. op.cit. Page.87

<sup>&</sup>lt;sup>60</sup> The necessary harmonisation in the context of the Union European, see, by all, DE HOYOS SANCHO, M. "El uso jurisdiccional de los sistemas de inteligencia artificial y la necesidad de su armonización en el contexto de la Unión Europea" *Revista General de Derecho Procesal* nº55, 2021. Sobre el pronóstico en la aprobación del Reglamento, acierto la autora al considerar que es muy poco probable que entre en vigor antes de 2023, pág. 23.

<sup>&</sup>lt;sup>61</sup> The work plan on digital efficiency can be seen at the following link <a href="https://www.justicia2030.es/eficiencia-digital">https://www.justicia2030.es/eficiencia-digital</a>

<sup>&</sup>lt;sup>62</sup> See What happened with facial recognition systems for crime prevention in a well-known supermarket chain who were harshly questioned in the Order 72/2021 of the Provincial Court of Barcelona, Section 9, Rec 840/2021. In the legal basis, the judge warns that "Not everything goes in terms of fundamental rights. These technologies can be really intrusive and require a calm ethical and legal debate, since can have very adverse effects on fundamental values and human integrity". And this is because, and this concludes the legal basis.- With facial recognition you are not protecting public interests, but private interests of

In the same way, the Judiciary seems to have become aware of the importance and impact that Artificial Intelligence can have on the administration of justice. Although jurimetry systems have been applied for about five years in our country, it has not been to date, in the report to the Draft -today Project- of the Digital Efficiency Law, the moment in which they have warned of the relevance and risk of applying Artificial Intelligence in criminal justice, being necessary a complete and guaranteeing regulation and becoming an actor that must play a determining role<sup>63</sup>. Beyond the fact that this decisive role corresponds, in our opinion, to the legislative branch, a working group called "Technology, Artificial Intelligence and Administration of Justice" was created, formed by prestigious judges and computer engineers who are developing a list of artificial intelligence tools for application in the Administration of Justice. Notwithstanding the above, and considering positive the involvement of the CGPJ in the study of AI, unfortunately, as often happens with reforms of such depth, a future reform that advances towards a wider use of this technology will surely not be exempt from resistance and reluctance on the part of the judiciary.

Thus, it is necessary to subscribe to a prudent approach, fleeing from extremes, without neglecting the advances and opportunities presented by this technology, but, at the same time, ensuring respect for fundamental rights and procedural guarantees<sup>64</sup>. A *totum revolutum* cannot be proposed, but the application of artificial intelligence to criminal justice must be carried out gradually and calmly, establishing scientific reviews before implementation and after it<sup>65</sup>.

Therefore, its implementation should not only be carried out by lawyers, on the one hand, and by computer scientists, on the other, but, given that the tools must be evaluated and scientifically reviewed, criminologists should play an important role.

And finally a final thought: if we move towards a more intense application of AI in criminal justice, it will be necessary to overcome the frustration generated by the fact that the reality or the result achieved does not correspond to the probability of it happening. Indeed, it should be remembered that we speak of predictive justice and predicting is synonymous with predicting or guessing, but not infallibility. Therefore, claiming the beauty of the improbable, we should naturalize the strange and rare event of an outcome other than that predicted by AI. That it has

the legal person and "Adequate guarantees would be violated in order to protect the rights and freedoms of the interested parties, not only of those who have been punished and whose prohibition of access is incumbent on them, but of the rest of the people who access the aforementioned supermarket"

<sup>63</sup> See the report to the Preliminary Draft, Paragraph 168 <a href="https://www.poderjudicial.es/cgpj/es/Poder-Judicial/Consejo-General-del-Poder-Judicial/Actividad-del-CGP]/Informes/Informe-al-anteproyecto-de-Ley-de-Eficiencia-Digital-del-Servicio-Publico-de-Justicia--por-la-que-se-transpone-al-ordenamiento-juridico-espanol-la-Directiva--UE-2019-1151-del-Parlamento-Europeo-y-del-Consejo--de-20-de-junio-de-2019--por-la-que-se-modifica-la-Directiva--UE-2017-1132-en-lo-que-respecta-a-la-utilizacion-de-herramientas-y-procesos-digitales-en-el-ambito-del-Derecho-de-sociedades . Then This prudent approach is confirmed when they state that "Waiting for the outcome of the Union legislative procedure on the proposal for a Regulation on artificial intelligence is a recommended option, before addressing the regulation of so-called assisted actions in our legal system."

<sup>&</sup>lt;sup>64</sup> In full line with the approach of SIMÓN CASTELLANO, which maintains an "ambivalent" position situated "*in the center of the extremes and that it tries to take advantage of The advantages of technical progress while warning of the ends and edges that it deploys, setting certain red lines*" SIMÓN CASTELLANO, P. Precautionary justice and artificial intelligence, Ed. Bosch, 2021, p. 98

<sup>65</sup> In this sense, see, for all, MIRÓ LLINARES, whose positioning can be seen in detail in MIRÓ LLINARES, F. "Predictive policing: utopia or dystopia? On attitudes towards the use of Big Data algorithms for law enforcement", *IDP Magazine*, nº 30, March 2020, pp.1-8L

not been right does not mean that it has been wrong - or even that it is misconfigured - but that there has been a different result than predicted that should not lead us, inexorably, to a hasty conclusion about the malfunction of this technology. It is not risky to say that AI will be a reality sooner rather than later, and although in an assistive way, it will have an increasing presence in criminal justice. Let us not turn our backs on a technology which, however unknown, is fascinating and let us prepare today for the justice of tomorrow.

#### VI. REFERENCES

- ALONSO SALGADO, C. "Acerca dela inteligencia artificial en el ámbito penal: especial referencia a la actividad de las fuerzas y cuerpos de seguridad", Us et Scienctia, vol. 7
- ARMENTA DEU, T. Derivas de la justicia, pág. 262, Marcial Pons, Madrid, 2021
- BARONA VILAR, S. Algoritmización del Derecho y de la Justicia. De la Inteligencia Artificial a la Smart Justice, Tirant lo Blanch, 2021
- BORGES BLÁZQUEZ, R. *Inteligencia artificial y proceso penal*, Ed. Thomson Reuters Aranzadi, Cizur Menor, 2021
- BUENO DE MATA, F. "La necesidad de regular la inteligencia artificial y su impacto como tecnología disruptiva en el proceso: de desafío utópico a cuestión de urgente necesidad" en El impacto de las tecnologías disruptivas en el Derecho Procesal (BUENO DE MATA, Dir.), Thomson Reuters Aranzadi, Cizur Menor, 2021
- DE HOYOS SANCHO, M. "El uso jurisdiccional de los sistemas de inteligencia artificial y la necesidad de su armonización en el contexto de la Unión Europea" *Revista General de Derecho Procesal* nº55, 2021
- FÉREZ-MANGAS, D. y ANDRÉS-PUEYO, A. "Eficacia predictiva en la valoración del riesgo del quebrantamiento de permisos penitenciarios", La Ley Penal nº 134, septiembre 2018
- GIMENO SENDRA, V. La simplificación de la justicia penal. y civil, Editorial BOE, 2020
- GONZALEZ-ÁLVAREZ, J.L., SANTOS-HERMOSO, J. y CAMACHO-COLLADOS, M. "Policía predictiva en España. Aplicación y retos futuros." En *Behaviour & Law Journal*, vol. 6., año 2020
- LLORENTE SÁNCHEZ-ARJONA, M. "Big data, inteligencia artificial y violencia de género", *Diario La Ley* 25 de marzo de 2021
- MARCHENA GÓMEZ, M. "Inteligencia artificial y jurisdicción penal", Discurso de ingreso del autor en la RAD, 2022
- MARTIN DIZ, F. "Justicia predictiva: inteligencia artificial y algoritmos aplicados al proceso judicial en materia probatoria" en El impacto de las tecnologías disruptivas en el Derecho Procesal (BUENO DE MATA, Dir.), Thomson Reuters Aranzadi, Cizur Menor, 2021
- MARTINEZ GARAY, L. "Errores conceptuales en la estimación del riesgo de reincidencia" en *Revista Española de Investigación Criminológica (REIC)*, artículo 3, número 14, 2016.
- MIRÓ LLINARES, F. "Inteligencia artificial y justicia penal: más allá de los resultados lesivos causados por robots", en Revista Penal de Derecho y Criminología, 3ª Época, nº 20, julio 2018

- MIRÓ LLINARES, F. "Predictive policing: utopia or dystopia? On attitudes towards the use of Big Data algorithms for law enforcement", Revista IDP, nº 30, marzo 2020
- MONTESINOS GARCÍA, A. "Justicia penal predictiva" en *Justicia poliédrica en tiempos de mudanza* (BARONA VILAR, S. Dir.), Tirant lo Blanch, Valencia, 2022
- MORALES MORENO, A. "Algoritmos en el estrado, ¿realmente los aceptamos? Percepciones del uso de la inteligencia artificial en la toma de decisiones jurídicopenales" Revista *Ius et Scientia* vol.7, nº2, 2021
- NEIRA PENA, A. "Inteligencia artificial y tutela cautelar. Especial referencia a la prisión provisional" en *Revista Brasileira de Direito Processual Penal*, vol.7, nº 3, págs.. 1897-1933, 2021
- NIEVA FENOLL, J. Inteligencia artificial y proceso judicial, Ed. Marcial Pons, 2018
- PERALTA GUTIERREZ, A. "Diálogos para el futuro judicial XXIII. Jurimetría y justicia predictiva", *Diario La Ley nº*9837, 26 de abril de 2021
- REIFARTH MUÑOZ, W. "El uso de la inteligencia artificial en el proceso judicial y los derechos fundamentales", en El impacto de las tecnologías disruptivas en el Derecho Procesal (BUENO DE MATA, Dir.), Thomson Reuters Aranzadi, Cizur Menor, 2021
- SIMÓN CASTELLANO, P. Justicia cautelar e inteligencia artificial, Ed. Bosch, 2021