Habeas Data, Habemus Algorithms: Algorithmic Intervention in Public Interest Decision-Making in Colombia

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Abstract

[Purpose] Automated decision-making and algorithmic governance are increasingly implemented in Latin America in order to improve efficiency in public institutions. However, regulatory frameworks are limited, and the uncritical adoption of technological solutions might undermine fundamental rights, especially of marginalized and vulnerable groups.

[Methodology] The article explores two cases of automated decision-making in the Colombian public sector from a social justice perspective. It also outlines current debates on the regulation of artificial intelligence and algorithmic governance at the global level.

[Findings] The article shows that the techno-optimistic discourse on the improvement of decision-making through the adoption of algorithms and artificial intelligence ignores the implications in terms of fundamental rights. This leads to the adoption of technologies without the necessary transparency and policy debates.

[Practical Implications] The outline of current debates in other regions could inform policy debates in Colombia and Latin America. They provide some guidelines on how to prevent some of the most serious pitfalls of automated decision-making in the public sector.

[Originality] While most of the debates on automated decision-making focus on the Global North, this article explores two cases from Colombia and discusses the necessary policy debates on algorithmic governance in Latin America.

Keywords: Algorithms. Discursive Technocentrism. Marginalization. Digital State. Globalization.

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INTRODUCTION

Technological development entails very profound social consequences. The adoption of automatic and computer-assisted decision-making is justified by discourses on efficiency and fairness of algorithmic governance. While technological progress in terms of Artificial Intelligence (AI) and data processing might accelerate judicial processes and improve the allocation of public resources, the implementation of technocentric solutions can have severe implications in terms of justice for vulnerable populations, especially in the Global South.

Against this background, this article aims to demonstrate how the unregulated use of algorithmic decision systems in the Colombian public sector violates the rights of *habeas data* and access to information of the most vulnerable populations. To demonstrate this, it draws on an empirical case study methodology developed through documentary research accompanied by semi-structured interviews with stakeholders from academia and civil society. A critical discourse analysis is performed on official documents issued by the Constitutional Court and the National Planning Department (DNP), namely the 2020 Accountability Report published by the Court and the DNP's CONPES document 3877 of 2016.

However, because the selection of these documents did not provide sufficient information, it was necessary to review additional documents from organizations such as the Innovation and AI Laboratory of the University of Buenos Aires (IALAB) and the specialized NGO Karisma Foundation. Thus, this critical discursive analysis, when applied to the problem of algorithmic intervention in public institutions, has clarified the social nature of technology. Based on the argument about the efficiency of technology, initiatives have been forged with the aim of optimizing the functions of public institutions in Colombia. However, the analysis highlights how the insertion of such tools reproduces issues that transcends the potential technical flaws and that essentially constitute a violation of fundamental rights.

Beyond determining the nature and functionality of the tools that are being used by Colombian institutions, this article aims to reveal the consequences of the techno-optimistic discourse on AI, which implies initiating a broader debate on the global diffusion of a techno/optimistic discourse and on the pitfalls of the adoption of technology. Thus, this analysis tries to demonstrate that the globalized triumph of the discursive pattern that promotes the adoption of technology by public authorities, raises specific issues in states of the Global South. The case of Colombia illustrates how states often blindly abandon the social protection approach to replace it by efficiency and control policies.

The remainder of the article is structured in the following way. The first section outlines some considerations that seek to question the argument of the benefits of technology to highlight new issues and thus rethink the algorithmic transformation of the Colombian public sector. The second section describes the case of the incorporation of algorithms in the Constitutional Court and the National Planning Department from its discursive dimension. The third section reviews international guidelines on automation in decision-making in order to make recommendations for Colombia. Finally, the article draws some conclusions on the need to critically assess techno-optimistic discourses that are widely adopted by states in Latin America and the Global South.

BLACK-BOXING INEQUALITY

One of the most important characteristics of algorithms is their opacity for the public (PASQUALE, 2015). The algorithmic language is the basis of these tools (WORLD WIDE WEB FOUNDATION, 2018) and they can be analyzed based on this logic. However, the internal functioning of algorithms is hardly available to external researchers. Algorithmic governance further illustrates the idea that knowledge is power. Essential decisions are being made through complex technological methods that have important consequences for the population. There is no comprehensibility about the way in which the calculations are being executed. Thus, algorithmic decision-making escapes public debates and is largely de-politicized (DE FINE LICHT e DE FINE LICHT, 2020). Pasquale (2015) stresses how these dynamics become problematic when authority unfolds algorithmically, so that decisions that used to be made by human beings have been automated. The rise of a technocracy supported by the objectivity of mathematical models requires an analysis of the ethical and legal frameworks that should govern the discourse promoting the allocation of human tasks to technological tools.

For example, Re and Solow-Niederman have evaluated the algorithmic intervention in the legal area and question the benefits of a technified legal system that does not necessarily respond to legal principles, but rather to logical standards (RE e SOLOW-NIEDERMAN, 2019). In the authors' opinion, the allocation of legal tasks to instruments such as Artificial Intelligence (AI), can deeply affect the rights and values of legal actors and the general public. The authors highlight four main issues related to this technological transformation: (1) the incomprehensibility of decision procedures; since the processes and methods of some technologies create barriers of access to the reasoning process, which can reduce the spectrum of responsibility; (2) AI systems promote the collection and analysis of data, which gives way to the "datification" of legal systems and can lead to the undermining of the critical evaluation of data processing; (3) then,

disillusionment or skepticism towards human decisions is created and may even discourage the initiation of judicial careers; (4) finally, alignment is generated, this refers to the fact that jurists no longer refer to legal trials in the collective imagination, but think of technified versions of legal judgment proposed by the technology industry.

In this regard Bodó et al., state that the increasing intervention of these "algorithmic agents" in society, implies a direct reference to the concept of transparency, that is, clarity regarding the use of information (BODÓ, HELBERGER, et al., 2018). Therefore, the authors point out that it is essential to ask what are the risks and values that arise from the moment that the algorithms and human beings form society.

Algorithmic intervention can reproduce biases, exclusionary practices, lack of reflexivity and even mistrust of legal systems; For that reason, Alston argue that in order to avoid such practices, government entities should not adapt all institutional means to combat fraud and reduce costs; rather, social objectives should be the starting point for a welfare arrangement that makes use of technology to ensure a higher standard of living for the vulnerable and disadvantaged (ALSTON, 2019).

Against this background, the technological myth that obscures the materiality of latent inequality in each social conglomerate should be critically assessed. To further question the use of algorithms, Ramsay posits scientific literary criticism, according to which there must be an interpretive exercise on the language of mathematics in order to question the idea that data or facts are absolutely true (RAMSAY. 2010). Algorithmic criticism becomes an essential tool to shed light on the methods used to achieve a specific result and on their potential pitfalls in terms of equality and welfare.

On the other hand, according to Quijano, due to the global impulse of AI inclusion in different sectors, it is indispensable to analyze how the promises of effectiveness promoted by the technological discourse can be fulfilled (QUIJANO, 2019). In this sense, the configuration by the public sector of an aspirational technological scheme cannot lead to the a priori assumption that this global practice is a genuine instrument of social transformation. As developed by Fairclough & Fairclough, the arguments, the narrative and the description can configure the base of discourses that promote social change (FAIRCLOUGH, 2013). While the technical aspects of algorithms are beyond the scope of the present study, the discourses that promote their implementation and legitimate their global diffusion can be analyzed. In the case of AI and algorithmic systems, the rhetorical effectiveness of their discourse is based on an imaginary about technology. Thus, the way in which technology is rhetorically represented

communicates meanings and values associated with objectivity, speed and effectiveness (BOYD e CRAWFORD, 2012).

These arguments are particularly powerful in Latin America, where institutions are traditionally associated with partiality, slowness and lack of effectiveness (LEVITSKY, 2018). According to Archibugi and Iammarino, the incorporation and dissemination of technology aimed at solving specific human problems is known as the globalization of innovation (ARCHIBUGI e IAMMARINO, 2002). In short, technology is associated with objectivity, and different societies adapt it more easily, contrary to what happens in religious, cultural or political spheres. Thus, the diffusion of techno-optimistic discourses promoting the adoption of AI and algorithmic decision-making can be related to another dimension of inequality. The global diffusion of material and discursive aspects of technology reproduces longstanding schemes of North-South relations in which technology is viewed as "imported magic" (MEDINA et al., 2014).

For this reason, public discourse in Colombia has been influenced by globalization processes that reproduce the positive imaginary about new technologies, popularizes technological change and impregnates it with legitimacy. Technological diffusion is, in this view, part of a broader process of globalization, which is presented as an opportunity to increase the access to goods, services and technology and represent a remedy to inequality in developing countries (MILANOVIĆ, 2016). For this reason, the tendency to incorporate technological tools to defend the most marginalized groups has been widely adopted in Latin America, as one of the most unequal regions in the world (WORLD WIDE WEB FOUNDATION, 2018). For example, the growing interest in AI in countries such as Argentina and Uruguay in the period 2012-2017 focused on predicting behaviors such as school dropouts, teenage pregnancy, and identification of business opportunities (WORLD WIDE WEB FOUNDATION, 2018)

In light of the desire to introduce in local contexts global technological dynamics, it is necessary to analyze how to insert global discourses in the Colombian context without perpetuating mechanisms of domination towards the most vulnerable populations of society.

THE CASE OF PROMETEA AND SISBEN IV

Algorithmic decision systems (ADS) are responsible for analyzing a large amount of data to find useful information to make a decision (EUROPEAN PARLIAMENT, 2019). Algorithms can be divided into two categories: the first describes algorithms that decide autonomously, the second is based on the premise of "human in the loop", that is to say, a functioning under the supervision of humans (RE e SOLOW-NIEDERMAN, 2019). As for the basic operation of

these decision systems, they act as a series of instructions. Inputs are provided so that the algorithm analyzes the information and responds with an output. In the case of Colombia, some ADSs have been incorporated by the public sector.

Prometea

The first example is the Prometea algorithm, implemented by the Constitutional Court for the selection of cases. The DNP adopted the SISBEN IV procedure to determine the degree of prosperity of a person who intends to acquire social benefits from the state. These systems do not provide novel services. Rather, they have been developed to optimize services previously offered by these public entities.

While the adoption of the tow algorithms was accompanied by an optimistic discourse about an increased efficiency that would benefit the general public, the implementation of the Prometea algorithm in the Constitutional Court raise concerns about a violation of the fundamental rights related to the access to information with respect to the management of this tool. The fact is that there has been a deficiency in terms of socialization with civil society, which has accentuated the abstract character of the possible consequences of its adoption. It is therefore impossible to evaluate how the use of Prometea might impact the fundamental rights set forth in the National Constitution of 1991.

This is why it is important to clarify the functioning of Prometea and the potential state of violation of rights arising from this digital transformation about which there is a clear lack of knowledge. To date, the Constitutional Court has not produced any media reports or management reports to explain clearly how this tool operates in the Court's work. It is therefore a legitimate concern for those who file an action for protection (*tutela*)[1] to understand how the selection of the case merits review by the respective Chamber in the Constitutional Court. In order to get a grasp on the issue, it is essential to analyze each phase of the implementation of Prometea in order to find out if they corresponded to the international guidelines on decision automation.

In this sense, the use of Prometea in the legal sphere is not new since there are precedents of the use of this system by different Latin American courts. The first use of this system was by the Attorney General's Office of Buenos Aires. According to the IALAB (2019) of the University of Buenos Aires, the function of Prometea was the association of the number of a file with the page of the Superior Court of Justice of the autonomous city of Buenos Aires to consult the

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[1] In terms of Article 86 of the Colombian Constitution, *tutela* is a mechanism for immediate access to the judicial system in the event of a violation of fundamental rights.

procedural status of the case. Moreover, rulings were entered into Prometea to be automatically read and to formulate questions to complete the data.

The second use of Prometea was in the Inter-American Court of Human Rights, where the work of the algorithm focused on translating documents, issuing notifications and being a search engine for precedents (IALAB, 2019). So far, Prometea has provided assistance interventions in information management, but it has never served as a guiding axis for the development of judicial activities. However, in the Constitutional Court, this system has been allowed to choose the *tutelas* that should be reviewed. For this reason, it is controversial that an algorithm that had been focused on administrative tasks is now in charge of selecting which cases should be evaluated by the Court. This leads to the question whether it is a sophisticated enough system to analyze a legal and political context and make appropriate decisions.

To answer the previous question, there is no public access to information on the functioning of the tool. This is why concerns about the lack of transparency in this regard has been expressed. From the little information available, it has been stated by the Court and the AI Laboratory of the University of Buenos Aires that Prometea is an AI system; but no details have been provided with regards to the technical characterization of the tool. However, according to FLÓREZ & VARGAS (2020), this tool simply facilitates the judge's decision making, since it analyzes and detects priority cases that qualify for review, based on a recognition of paragraphs in which rights of people in situations of vulnerability are violated and criteria proposed by the judge herself. In the authors' opinion, Prometea is not an AI system, but an automated system that processes information from the Court to produce statistics.

In addition, the memorandum of understanding for the purchase of Prometea was signed in November 2018 and testing began in February 2019 on cases claiming the right to health (CONSTITUTIONAL COURT, 2020). This made it difficult to implement the level of rigor in the risk assessment that should be applied to any algorithm in this area. Secondly, it is questionable whether, during the testing phase, it was decided to automate the review of such an important right in the legal system. In sum, regardless of the nature of Prometea, if the system has been trained to read *tutelas* sentences that are pronounced on the right to health, is it feasible that Prometea is able to process *tutelas* that deal with other rights?

This issue highlights the limits of AI. BERGSTEIN (2020) stresses this issue dubbed "catastrophic forgetting" by computer scientists. This term alludes to the situation in which the AI is trained to execute a specific task (e.g. identifying cats) but loses some of the original expertise when new tasks are added (e.g. identifying dogs). Additionally, current artificial intelligence systems do not

understand the concept of causality; that is why an AI system can associate different circumstances but it does not manage to determine which event directly generates the occurrence of further events. Therefore, even if it is assumed that Prometea is an AI system, the absence of reasoning based on causality will limit it to the superficial understanding of the background that accompanies a case that is submitted for analysis.

Furthermore, according to the EUROPEAN PARLIAMENT (2019), algorithms find their limits in aspects of deep context analysis, as they tend to be reductionist. Thus, in the process of converting texts into data, the meaning, context and critical perspective required for the analysis of a case are removed. For this reason, the algorithms are inefficient in capturing such complexity. Ultimately, the problem is exacerbated by the fact that, in practice, Prometea becomes the final instance of decision. As stated by WAGNER (2019), in most cases in which algorithms are used to help predicting or assisting in decision-making, the final decision usually follows the automated suggestion. As a result, it transfers the burden of choice to the system, so that the de facto decision is completely automated.

In addition, the majority of *tutelas* in Colombia concern unconstitutional working conditions, serious health problems, a state of defenselessness, demands for non-payment by the social security system, recognition of the right to equality, lack of response to the right to petition, protection of *habeas data*, and even protection of the minimum standard of living. According to the Constitutional Court's Accountability Report (CORTE CONSTITUCIONAL, 2020), 620 242 *tutelas* were studied during 2019, of which 367 were selected for review. Although the use of Prometea is briefly mentioned, there is no mention of its impact on the processing of these files or the parameters used in the selection process.

Despite the lack of unanimity regarding the characterization of Prometea as a genuine AI system and the concerns described above, the conclusion seems to lead to the same argument: the acceleration of the Court's internal processes translates into greater protection of rights, since a rapid response to the most urgent cases is granted. Thus, the dominant discourse about Prometea always stresses the elements of efficient management, time reduction and automation of tasks.

SISBÉN IV

Another case of automated decision-making implemented by the public sector in Colombia is the SISBÉN IV methodology (System for the Identification of Potential Beneficiaries of Social Programs), administered by the National Department of Planning (DNP). In this case, the problem lies in the

implementation of non-existent inputs and the generation of inferences. The SISBÉN is a mathematical procedure used to find the degree of prosperity of a person seeking access to social benefits granted by the State, such as the Families in Action program. Ultimately, the SISBÉN serves as a methodology and database that allows the various state entities to target social spending on those who need it most.

This algorithm is responsible for assigning each subject a score, with 0 being the most vulnerable and 100 the most prosperous subject. In order to execute such calculation, the SISBÉN surveys the subjects to acquire data on housing, health, education and income. With the recent update of the methodology, contained in CONPES document 3877 of 2016, the use of this algorithm has raised concern because the granting of the benefits now depends on a presumed income projection (CONPES, 2016). It should be emphasized that the narrative of this CONPES focuses on affirming that the approach and quality of information of SISBÉN III was insufficient, since it classified people exclusively according to the standard of living of the households and did not differentiate the degree of poverty between territories. The financial and socio-economic data used by the DNP are personal data, defined as data that makes a particular subject identifiable (RED IBEROAMERICANA DE PROTECCIÓN DE DATOS, 2017).

The discourse of the DNP revolves around the legitimate objective of combating fraud within the system. However, according to the Karisma Foundation (FUNDACIÓN KARISMA, 2019), this algorithm operates as a black box, which means that the functioning of data analysis is not public. This demonstrates a legal-political shortcoming with regard to the processing of personal data, from which the DNP is benefiting in order to restrict the spectrum of social protection of users assessed by the SISBÉN, over whom the State has a special duty of protection.

As noted by BATHAEE (2018), algorithms as black boxes make it impossible to access the predictability of the system. Thus, it is not possible to determine what effects it will cause. For the author, a black box is defined as the inability to understand the decision-making processes of an AI. The audit of such processes becomes unfeasible. As the complexity of algorithms increases, for example with the advent of neural networks, the issue of transparency becomes more serious. This black box effect is impossible to evaluate, both in the DNP procedure and in Prometea, since the level of complexity of the algorithmic process is not public. It is not possible to determine whether they are black boxes, that is, composed of processes that are totally opaque to humans; or weak black boxes, which can be analyzed through a reverse engineering procedure in order to find the variables used and to predict to a certain extent the decisions of the system.

In addition, as denounced by the Karisma Foundation, in order to carry out the analysis of benefit distribution, the DNP entered into agreements with private companies. Experian Colombia S.A. is mandated to find inconsistencies through a transfer of financial data of SISBÉN users. Innpulsa Colombia has access to the database in order to identify alerts of manipulation. According to the DNP, the alliances with these companies aim to achieve an interoperability between databases to improve the quality of the SISBÉN information and thus make better decisions (DEPARTAMENTO NACIONAL DE PLANEACIÓN, 2020).

The private handling of big data collected by public entities (DEPARTAMENTO NACIONAL DE PLANEACIÓN, 2020) has not been carried out in accordance with the essence of the right to *habeas data*, which grants control to the individual of what happens to her personal data, regardless of whether the data is public, private or semi-private (Article 15 of the Colombian Constitution). This demonstrates a lack of consideration by the agency of the right of the holders of the information to decide about the data being provided to third parties for data analysis.

From the above, it can be inferred that the DNP can reduce the number of beneficiaries of social programs by profiling income, providing the algorithm with an input that does not exist, since the future ability to produce an income is uncertain. According to KIRKPATRICK (2017), algorithms tend to have a source problem with respect to the database they use. The original data might present biases and algorithms will rely on the source and replicate the biases. In this particular case, the use of Big Data does not make the source of data visible. Data include information collected by official surveys along with inferences generated by Experian and Innpulsa. According to Wachter (2019), the era of Big Data must be accompanied by a right to reasonable inferences, since private data can be captured in a generalized way and used to make unverifiable profiles. Eventually, says Watcher, if this data is transferred to private entities, this can lead to biased and discriminatory decisions based on people's private attributes.

The above scenario raises several concerns. On the one hand, the current policy of the Court and the DNP seems to indicate that algorithms are the most precise and appropriate tool for achieving the social goals of the state. This may be due to, as QUIJANO (2019) states, the preponderance and globalization of the dominant discourse on the capacity of algorithms to optimize almost any sector.

As the use of algorithmic decision-making systems increases, the possibility of violations of fundamental rights are multiplicated. The adverse symbolic effects of the technocentric discourse are precisely that the mere deployment of technology implies effectiveness. As a result, control policies are not responding to minimum standards of evaluation, transparency and citizen oversight. Both SISBÉN IV and Prometea treat cases of disadvantaged people

who need financial and judicial support from the state. Against this background, it is worth questioning whether these practices are legitimate within the Colombian legal system and how they relate to a global movement toward the regulation of algorithmic governance.

CONSIDERATIONS FOR THE COLOMBIAN CONTEXT

As illustrated by the two cases outlined above, the incorporation of algorithmic decision systems is problematic with regard to national regulations as well as from the point of view of justice. The automation of decision-making in the public sector in Colombia not only disregards constitutional precepts, but also ignores international guidelines on the use of algorithms by public authorities.

The Limitations of the Colombian Legal Framework

Law 270 of 1996 sets the general principles of the administering of justice. However, it does not provide a direct reference to the way in which the Court could make use of technology to improve the execution of its functions. With respect to the algorithm used by the DNP, the framework associated with personal data in the area of credit contained in Law 1266 of 2008 should apply. This law regulates the treatment that public and private data must receive, as well as the responsibility regime of the holder of the information and its operator. In the section on circulation of information (article 5f), the delivery of personal data to databases is allowed if it has the same purpose as that of the initial operator (in this case, the DNP). Even after the enactment of Law 1581 of 2012 and Decree 1377 of 2013, it is unclear how holders can protect their right to *habeas data* with respect to the processing of data by third parties when third-party algorithms are used.

Although the processing and circulation of data and the administration of justice must respect the rights enshrined in the law, the regulation has not been adjusted to the new technological environment in which authorities are immersed. The regulation of these technological tools has not been guided by the criteria of justice and access to information. Therefore, it can be observed that the concern for the efficiency of the public sector has promoted the adoption of techno-optimistic discourses on the effectiveness of the analysis of enormous amounts of data. In this view, digitalization would necessarily result in the immediate improvement of the public service and its impact on society. However, the lack of national regulation evidences the fact that public service should not be reduced to technification, but should also guarantee scenarios in which citizens, and especially the most vulnerable populations, can exercise and demand the protection of their rights.

The consequences of these tools being implemented in the Colombian context without regulation would sacrifice the principle of legality according to which the authorities are only allowed to do what is expressly provided for by law. Indeed, ALSTON (2019) warns that if there is no legal basis to regulate the matter, society may perceive the design of these systems in a negative way. Thus, acknowledging the limited Colombian regulatory framework, the following section will focus on some international guidelines and judicial precedents to determine how algorithmic decision-making can be adopted with an improved legitimacy.

The Regulation of Algorithmic Decision-Making Processes in the World

This section briefly describes an overview of best practices with regard to the incorporation of technological tools in public sector decision-making. To begin with, the examples of regulation cited here indicate that the lack of management of algorithms goes far beyond the impossibility of creating an effective containment strategy; it implies the absence of information on the subject and, consequently, violates a significant number of rights held by citizens. In order to prevent this digital transformation of state power from becoming a mechanism of domination towards marginalized social sectors, a legal and public policy restructuring is needed, as will be shown below, to achieve the protection of the particular interests of the individuals affected by these new tools.

The first project of normative framework is the Toronto Declaration drafted by the NGOs Amnesty International and Access Now (AMNESTY INTERNATIONAL e ACCESS NOW, 2018), which places a special duty of care and respect for human rights on states when using machine learning systems, so that discriminatory practices are avoided in the public sector.

Another landmark regulation on the tension between digital technology and the processing of personal data is the General Data Protection Regulation of the European Union (GDPR), which entered into force on May 25th, 2018 (EUROPEAN PARLIAMENT, 2018). The GDPR is a binding regulation that applies to legal entities and individuals for the processing of data within the European Union. More precisely, as stated by the GDPR, the aim is to ensure the protection of personal data due to the rapid progress of technology and thus to protect the principles of legality, fairness and transparency.

Hence, one of the mechanisms designed in the GDRP is to require the consent of the data owner and the specification of a legal or contractual purpose when processing data. By recognizing the intervention of technology, this regulation extends the scope of legal protection of data subjects, and therefore establishes that it is necessary to grant rights that effectively respond to this new

legal and social infrastructure. These rights include access to information (arts. 12-15), the right to data portability (art. 20) and the right to object to automated decision-making (arts. 21 and 22). These rights thus make it possible to enforce accountability and establish obligations on those who control and analyze personal information. For example, an impact assessment in terms of data protection is indispensable in the light of Article 35, and even more so in cases where automated data assessment leads to profiling and decision-making with legal effects.

The monitoring mechanisms contemplated by the above-mentioned regulations safeguard the rights of those who may be affected by this technological development. Recital 71, however, goes further by insisting on the necessity of human intervention and on the obtention of a right to an explanation to appeal decisions. Although this recital is a mere parameter for the interpretation of the GDPR and this right to an explanation is not required in the literal wording of the text, it could be developed through jurisprudence (WACHTER, MITTELSTADT & FLORIDI (2017).

For the two Colombian cases described in the previous section, the main problem is that no instances, rights or protection mechanisms have been designed to deal with the technological impact within the institutions. Therefore, those affected by Prometea or SISBEN IV do not have effective measures and mechanisms to appeal to the authorities.

In this regard, the European Data Protection Board has proposed some interpretative guides regarding the GDPR. Three guidelines are particularly interesting in order to evaluate the impact of automated decision-making systems on fundamental rights.

First, the Guide on individual automated decision making and profiling highlights the importance of proportionality of measures that may be necessary for the public interest or for the functioning of a public authority (EUROPEAN COMMISSION, 2018). While the technocentric discourse sets the debate on automated decision-making on technological terms, the idea of proportionality resituates the adoption of technological solutions within the broader context of social protection and social justice.

Second, the Guide on Transparency (EUROPEAN COMMISSION, 2018a) gives a limited dimension to the notion of justice, as it translates this concept to the realm of the execution of "a reasonable process" of data analysis. However, justice cannot be thought of as a reasonable expectation regarding the process. The concept of "fair process" encompasses a series of guarantees that are more in line with the protection of rights.

Finally, the Guide on impact assessment with respect to data analysis (EUROPEAN COMMISSION, 2017) clarifies that the GDPR establishes that

impact assessment is mandatory in cases where there is a high probability of reaching an outcome that violates rights and freedoms. The case of SISBÉN IV seems to fit this definition as it deals with a massive amount of data of different kinds and participates to decision-making that potentially affect basic rights. On a similar note, REISMAN ET AL. (2018) explain the importance of always having a risk assessment system in place. In other words, the impact assessment tool must be able to evaluate both the algorithm and the contexts, that is, to understand how judges, public servants and other decision makers influence its inputs and interpret its outputs.

Thus, a fundamental aspect of due process is public notification of how citizens' rights may be affected by government agencies when automated systems play a major role in decisions. Therefore, a legitimizing component of an algorithmic impact assessment would require each agency to publicly disclose the automated decision systems used, including their purpose, scope, and potential impacts on communities and individuals. For example, the GOVERNMENT OF NEW ZEALAND (2018) has prescribed that these algorithms, procedures or formulas must be evaluated if they are used by government agencies, and that in such instances it must be deemed relevant to know the risks that may exist for the social conglomerate. This risk assessment and measurement must be carried out through the application of 6 principles: public benefit, transparency, the limited nature of data analysis, the good use of data, constant human supervision and finally the recognition of the people being analyzed.

Another interesting framework on data protection standards is proposed by the Ibero-American Data Protection Network (RED IBEROAMERICANA DE PROTECCIÓN DE DATOS, 2017). For example, article 29 states that the data owner shall have the right not to be subject to automated decisions that produce legal effects, without any type of direct or indirect human intervention. The application of the mentioned guideline is controversial in the legal system. Because of the lack of information regarding the cases discussed here, the competent authority may end up affirming that the decision is the product of a high level of human intervention, but this may never be verified truthfully. The Network suggests that open channels of communication and the possibility to exclude some data from the algorithmic analysis are options that offer more guarantees and that have not been considered in Colombia.

The Case of SyRI

According to the then UN Special Rapporteur on Extreme Poverty and Human Rights, Philp Alston (ALSTON, 2019), a right to social protection needs to be implemented in the face of the interference that AI and algorithms are having on decision-making. In his view, if it is not possible to adjust the use of algorithms

to fundamental rights, institutions should refrain from using this type of tools. As noted by ZERILLI ET. AL (2019), human decisions are not unbiased either. They are affected by different axiological frameworks and personal motivations, so judges, having the power to use judicial discretion, may decide against the principles of justice. However, a judge's motives must always be in writing and must be subject to legality and even to precedent. This is why the authors stipulate that there should be a high standard of transparency for cases in which automated decision-making systems are not designed in a way that make the reasons for their decision explicit. It is therefore unacceptable to use AI if it is not possible to generate a satisfactory explanation for the decision.

This situation is illustrated by a case that has some similarities with the Colombian SISBÉN IV. In the Netherlands, an automated System of Risk Indication (SyRI) was implemented in 2003. In accordance with the amicus curae redacted by Alston (2019), its main objective was the detection of fraud in the social security and tax system. The SyRI operated through the analysis of large amounts of data in order to predict and detect illegality. The problem began when, from 2006 to 2010, 63,000 individuals were evaluated to identify which people claimed to live alone in order to acquire a higher subsidy, when in fact they were living with more people; the result was a detection of only 0.07%, equivalent to 42 individuals.

Moreover, the "high risk" cases had erroneously received such qualification by the system. The same was true of the "Kadastercheck" project, where an assessment of 119,000 people resulted in the detection of 117 cases of fraud. In addition, with the Middengebied neighborhood project, where state databases were used to make predictive inferences about potential fraud, only 16 benefits ended and 9 were altered.

The SyRI procedure had been scrutinizing databases of people living in the most vulnerable neighborhoods in the country without any transparency regarding the risk model of the algorithm and data analysis. The United Nations Special Rapporteur observes that the use of this system defines whether a person's access to state benefits is reduced or suspended, which undermines his or her right to social security. He recalls that social security and state assistance have been established as rights inherent to human welfare when people are harmed by events beyond their control: illness, disability or unemployment. Because of the defenselessness of people in these conditions, the realization of a welfares requires a defense against the bureaucratic arbitrariness of the system. Therefore, Alston emphasizes that experimentation with data analysis through digital tools is a partisan political tendency that has been directed towards the oppression of the most disadvantaged.

As a result, in a judgment of 5 February 2020, the Hague District Court ruled that SyRI was in breach of the European Convention on Human Rights (ECHR), in particular of Article 8(2), according to which respect for private life cannot be subject to state interference. The Court found that the use of SyRI was illegal as its interference was not provided for by law and its operation was not foreseeable or accessible.

Systems such as SyRI are subject to internal and non-transparent procedures, thus violating the legitimate confidence that citizens have in the actions of the state. In addition, access to data such as name, gender, place of birth, place of work and access to social benefits are personal data. This scrutiny of people's privacy through the intrusive process carried out by SyRI is similar to that carried out by SISBÉN IV, since the DNP and the Dutch Government justify this intrusion for the detection of fraud. These parallel developments denote the worldwide presence of discriminatory and victimizing ideologies towards populations in conditions of poverty. The same is true of the incorporation of Prometea, which reads and selects cases of people who tend to be at the margins of society.

Debating the Use of Automated Decision-Making in Latin America

Automated decision-making initiatives have been implemented in Colombia and elsewhere primarily because of the global diffusion of a techno-optimistic discourse on technology. Technological solutionism (MOROZOV, 2014) is supposed to overcome the material and symbolic ineffectiveness of the institutions. However, the desirability of algorithmic action is questioned when these types of tools are used in judicial instances or to classify people, generating inferences on which decisions can be made. These discourses do not consider the particular needs of citizens, nor does it address the negative consequences that arise among the affected populations. The two Colombian cases described earlier and the outline of the global debates about the regulation of algorithmic governance evidences the need for a political debate in Latin America to critically evaluate the potential benefits and the pitfalls of these technologies.

If public benefit is measured in terms of expediting processes, for example the number of sentences that reach the Court or the time needed to analyze SISBÉN data, society is conceived as an object of experimentation. Idyllic archetypes about technology are symbolically constructed and reproduced without questioning the social costs that they can generate. In the Colombian case automated decision-making processes are legitimated by efficiency and presented with exclusively positive connotations. Similar discourses are reproduced in other countries, especially in the Global South where technological progress has usually been associated with development and modernity (HARDING, 2011).

The lack of clarity regarding the cases described here raises valid questions about which the respective authorities have not provided any explanations. While other countries and regions have developed recommendations, the policy debate has hardly been imported along with the material elements of technology. Under the scope of the mentioned international regulations, this type of technology or AI should be available to the citizens and included in the institutional framework in a regulated, gradual and carefully evaluated manner, in order to avoid the fallacy offered by technocentric solutionism.

New guarantees and instances of transparency, explanation and information must be created. In addition, it is clear that risk assessment is of vital importance when technological tools mediate between the state and the citizens Through jurisprudence, existing rights could be translated to the new digital context. Moreover, the development of new rights should be discussed, such as the right to social protection against the opacity of the state's technical processes or the right to object to automated decisions. These debates are of vital importance in a context of rapid digital transformation in Colombia and in Latin America.

CONCLUSIONS

The adoption of algorithmic decision-making systems in the Colombian public sector illustrates the diffusion of a technocentric discourse that present AI and other digital technologies as a solution to political problems. The implementation of this type of technologies without updating the legal framework and without fostering the necessary political debate undermines fundamental rights of populations.

The cases of Prometea and SISBÉN IV demonstrate how marginalized groups are disproportionally affected by this trend. While *tutelas* allowed marginalized individuals to claim their right to access to health services in a dysfunctional system, the implementation of Prometea to make the processing of *tutelas* more efficient discards a large number of them. Without the necessary transparency on the decision-making process, the right to access to health services might be undermined and the public does not have access to the criteria. In the same vein, the SISBÉN IV was designed to improve efficiency and to fight against fraud in the allocation of social benefits. However, the perspective of social justice was not taken into account. As a result, SISBÉN IV might exclude households from the social benefits programs on dubious grounds. The lack of reliability of the data processed by the algorithms and the intervention of third-party companies further questions the fairness of the process.

A review of existing regulations and debates in other parts of the world could inform political and legal debates in Colombia and Latin America. In light of the generalization of algorithmic decision-making systems, a critical

assessment of their potentials and pitfalls centered on the idea of social justice is necessary. This article outlines a number of elements that should be on the agenda such as the transparency of algorithmic decision-making systems, a systematic assessment of their implementation, the proportionality of technological tools with social needs, and the possibility to appeal algorithmic decisions. Public debate can draw upon discussions and regulations already existing in other regions.

For example, the European Union developed a comprehensive legal framework. New Zealand has debated the issue of algorithmic decision at the governmental level. Moreover, NGOs and experts have designed more ambitious framework with a human rights and social justice perspective such as the Toronto Declaration. Finally, debates in Latin America must address the particular position of their countries in the global diffusion of technologies and discourses. Solutions designed in the Global North do not necessarily address the particular needs of Latin American societies, and especially of the more marginalized and vulnerable communities.

Against this background, this article contributes to broaden the perspective of the critique of algorithmic decision and artificial intelligence by looking at their implementation beyond the most analyzed countries in the Global North. Moreover, it adopted an interdisciplinary approach by looking both at the evolution of the legal framework but also at the policy debates.

The implementation of algorithmic decision-making system in Latin America is a recent phenomenon. However, it will probably become a mainstream solution to institutional and administrative problems in the coming years. The debates on legality, ethics, and social desirability regarding algorithms and artificial intelligence are necessary in order to continue to promote social justice in the digital age. An academic understanding of the consequences of technological change on fundamental rights is crucial to inform policy debates and further research is required in order to identify existing algorithmic decision-making systems and to critically assess their operation beyond technocentric discourses.

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