The Application and Development of the Principle of Equality in Algorithmic Discrimination

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Yang Luyao

Department of Law, Macau University of Science and Technology, Macau, China 2240028791@student.must.edu.mo

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Abstract: The advent of the algorithmic era has brought significant changes and impacts to our lives. While algorithmic technologies have improved production efficiency and the speed of information dissemination, they have also raised growing concerns about algorithmic discrimination. Phenomena such as "big data discrimination" and recruitment algorithms unfairly screening candidates based on gender or race have become widespread in social life, hindering the realization of social justice and violating the fundamental values of law. To effectively prevent and remedy the harms caused by algorithmic discrimination, the establishment of a corresponding legal framework is of utmost importance. In this process, whether the concept and content of the traditional principle of equality can reasonably delineate the boundaries of algorithmic discrimination and provide effective remedies remains insufficiently discussed. An examination of the principle of equality and its applicability to algorithmic discrimination reveals that algorithmic discrimination possesses distinct characteristics compared to traditional forms of discrimination and cannot be fully addressed through conventional equality frameworks. Addressing algorithmic discrimination under the equality principle requires new forms of legal intervention. In this regard, incorporating the rights to algorithmic interpretation and algorithmic transparency into regulatory mechanisms offers a promising approach to mitigating algorithmic discrimination and upholding the principle of equality.

1. Introduction

Since British mathematician Alan Turing proposed the "Turing machine" model in his paper "On Computable Numbers and Their Application to Determination Problems" and Stephen Cook defined the core problem of computational complexity theory through "P and NP problem", algorithms have been constantly upgraded in the evolution of society. Algorithms are constantly upgraded in the evolution of society, from abstract concepts to concrete implementations. The operation of algorithms depends on a set of strict program logic based on science and technology. Today, algorithms are not only used as primary or auxiliary tools by corporations and judicial institutions to solve problems, but have also become mechanisms for distributing social and economic resources. This new approach, which leverages the neutrality and efficiency of technology, could have achieved the goal of social fairness and justice. However, in practice, there are numerous problems such as technological abuse and algorithmic black boxes, which have given

rise to a new form of discrimination - algorithmic discrimination. Equality and discrimination are mutually constitutive concepts. Algorithmic discrimination, as a new form of bias, presents unprecedented challenges to the principle of equality. However, it is worth noting that the principle of equality, as a useful tool for regulating discriminatory phenomena, not only needs to find the challenges it faces, but also should be evaluated for its applicability. At present, there remains no clear consensus on the extent to which the principle of equality can be applied to algorithmic discrimination, nor on which aspects of algorithmic bias outside its regulatory scope. This makes the process of regulating algorithmic discrimination through the principle of equality more complex and difficult. Only by identifying the points of overlap and divergence between algorithmic discrimination and traditional forms of discrimination can the principle of equality be effectively adapted and developed in practice. This paper attempts to start from the understanding of the principle of equality, based on the explanation of direct discrimination and indirect discrimination regulated by the principle of equality, to explore under what circumstances algorithmic discrimination can be regulated by the traditional principle of equality, then explaining the differences in the scope of the subjects involved and the difficulty of the legal determination of the two, and proposes new thoughts on the development of the principle of equality, with the aim of achieving effective regulation of algorithmic discrimination by the principle of equality.

2. Understanding of the Principle of Equality

2.1 Development of the principle of equality

Before entering the field of jurisprudence, equality existed more as a philosophy, religion and ethics. The discussion of the concept of equality by ancient Greek philosophers such as Socrates and Plato make equality become a critical thinking concept. Equality means equalization at first. However, with the complexity of the social structure, it is difficult to meet the demand for a single arithmetic equality, so the concept of proportional equality has emerged, which emphasizes the differentiated treatment of individuals based on their contribution to society, reflecting the pursuit of "substantive fairness". This conception pushed the evolution of equality from an abstract idea to a legal principle. After the Enlightenment, equality was incorporated into the constitutions and legal systems of various countries, and became an important cornerstone of the rule of law.

It can be said that the principle of equality has gone through a process of transformation from ethical concepts to legal norms, and its core feature lies in its strong expandability. It not only adapts to all kinds of legal scenarios, but also constantly responds to new problems in reality. In the era of algorithms, traditional discrimination has been appeared through technological means again, and the principle of equality, as an important legal basis for dealing with discrimination, is demonstrating its ability to continue to evolve and respond dynamically.

2.2 Content of the principle of equality

2.2.1 Formal Equality---Responding to Direct Discrimination

The concept of formal equality constitutes the basic framework of the principle of equality. Due to various factors, people cannot be identical individuals. Social and natural contingencies can confer differential characteristics on individuals. Therefore, the law has to give the same treatment to individuals with different characteristics, i.e., "the same treatment in the same situation", where the same situation emphasizes that the subject has the same essential characteristics in a particular situation, which excludes factors that are not relevant to the specific normative purpose. As Aristotle said: "A good flute should be given to a first-class flutist, and even if another person's superiority in origin is more than his superiority in playing, the best flute should still go to him, unless wealth and birth contribute to the improvement of the flute".

Formal equality plays an important role in the anti-discrimination legislation, firstly, it can effectively counteract the provisions that are clearly discriminatory, which are characterized by subjective and intentional, blatant and undisguised discrimination, which can also be called direct discrimination. And precisely because such discrimination is easily identifiable, the application of formal equality is extremely widespread. Secondly, formal equality conveys almost the same meaning as "equality before the law" stipulated by the law, i.e. "equality in the application of the law", i.e. the rules of the law shall be applied equally to the same kind of behavior of the same kind of social subjects. Unless there are sufficient reasons to grant privileges and immunities in legislation, no individual or organization should be treated differently or be exempted. [1] Equality enshrined in modern law is mostly about formal equality, and the majesty of the law makes the concept of formal equality easier for the public to accept and abide by.

2.2.2 Substantive Equality---Responding to Indirect Discrimination

Some human differences are bound to exist, if the law does not pay attention to and adjust rather unreasonable, but in the later practice, people gradually found that simply maintain the consistency of the rules, emphasizing equal opportunity, will not lead to real results in fairness, if the equality is only formal, then those who should be treated fairly will be slow to wait for the real equality. Therefore, it seems to become more important to see the differences than the same rules, and this is precisely what substantive equality addresses.

The prohibition of indirect discrimination also derives from the true meaning of substantive equality, which focuses on equality of results, so that even if a policy is neutral and not biased in any way, it will be challenged by substantive equality if it adversely affects individual groups of people in terms of results, unless there is a justification of a reasonable necessity for the provision and the aim sought to be achieved. Thus, the rules against which indirect discrimination operates are usually those that are acceptable to the majority of the population or those that are naturally entrenched in the development of society, which are not readily recognizable and may require a long period of time before inequality becomes apparent. Compared with direct discrimination, legislation on indirect discrimination is more difficult and complex.

3. Analysis of the application of the principle of equality to algorithmic discrimination

The Oxford Dictionary defines an algorithm as "A collection of rules or steps used to solve problems or complete specific tasks". From a conceptual point of view, algorithms seem to be very different from the traditional objects of discrimination such as gender and race. However, the outcome of an algorithm is entirely dependent on the input instructions and procedures, which is similar to human language; algorithms are nothing more than paper or verbal expressions turned into binary code. In this case, if the code itself is discriminate, it will be no different from the explicit, overt manifestations of direct discrimination. Algorithmic discrimination arising from discriminatory coding is obvious and easy to recognize. Therefore, for such discrimination, one can directly apply the legal provisions that protect formal equal to protect one's own interests. However, although the legal provisions on direct discrimination are very rich in content, they are not frequently applied at present. Direct discrimination is slowly disappearing, and discrimination in modern society is more often manifested by neutral and covert indirect discrimination, not to mention algorithmic discrimination. But many legal systems do not explicitly prohibit indirect discrimination. In the view of some scholars, this is one of the important defects of the antidiscrimination mechanism. [2] However, for the concept and meaning of indirect discrimination has been a recognized existence in modern society, and for algorithmic discrimination, due to its many similarity characteristics with indirect discrimination, scholars also almost unanimously agree that indirect discrimination should be applied to regulate algorithmic discrimination. [3]

Although algorithmic discrimination is a new type of discrimination, algorithms are ultimately

designed by human beings, and to a certain extent can be said to be the mapping of human thinking. From the point of view of cognitive psychology, human beings are "cognitive miser". In order to save thinking cost and cognitive resources in the society of complicated information, people always adopt the way of categorization to simplify their cognitive process. Through this classification, on the one hand, human beings are able to know the world more quickly and easily in order to improve the efficiency of production and life, but on the other hand, human beings' categorized understanding of the world formed on the basis of the classification creates stereotypes of a certain type of affairs or groups, which is the root of discrimination and prejudice. [4] In order to make the trained algorithms more relevant to the needs of the society, algorithm designers tend to use the existing data models in reality to train the algorithms. But the problem is that real data is already full of implicit discrimination, only that it is always habitually accepted and ignored by society. While most of us would honestly and reasonably portray ourselves as unbiased, however, we are often surprised to find that the way we behave betrays this egalitarianism. As a result, we are likely to find that even if we deny sexism, it takes us longer to categorize women as surgeons. [5] Moreover, algorithms that learning on their own will "reinforce existing patterns". Ultimately, algorithms become a tool for implicit discrimination, making substantive equality more difficult to achieve. Algorithmic discrimination and indirect discrimination in the root of the problem of consistency, as well as both have the neutrality, covert characteristics of the two have some overlap in the scope of the impact of the two, therefore, if you can effectively regulate indirect discrimination, then the improper use of algorithmic discrimination will also be reduced by half.

4. The difference between algorithmic discrimination and traditional discrimination

Algorithms have similarities with direct and indirect discrimination in some manifestations and characteristics, so in some specific cases, algorithmic discrimination can be identified and prohibited in the same way as traditional discrimination. However, algorithmic discrimination is not exactly equivalent to indirect discrimination. The complexity and automated nature of algorithmic decision-making present a whole new set of challenges in terms of identification and accountability. It is difficult to cover all manifestations of algorithmic discrimination by relying only on the traditional regulatory framework of indirect discrimination. We need to clearly recognize the differences between algorithmic discrimination and traditional discrimination, so that we can adjust and expand the regulation of traditional discrimination and solve the problem of algorithmic discrimination in a more targeted way.

4.1 Different scope of subjects involved

Most traditional forms of direct and indirect discrimination have primarily targeted groups or minorities. This is because such discrimination typically manifests through policies or collective human behavior. Although individualized discrimination did exist in the past, it was generally limited to differential treatment based on a person's specific identity or behavior, and it was difficult for such instances to constitute a systemic or structural issue. However, the advent of the algorithmic era has made "personalized discrimination" possible. With the development of technology, data has become one of the most valuable resources of the 21st century. People connect with the outside world through the Internet and exchange information with various terminal body to access the services and resources they seek. We have become so immersed in this convenient and fast-paced lifestyle that we often fail to realize we are being gradually drawn into a complex matrix of algorithms. Algorithms collect vast amounts of personal information left behind during online activity. Through processes such as data cleaning, feature extraction, and data storage, algorithms are able to construct a "digital portrait" of individuals, analyze their behavioral patterns, and provide personalized services and content recommendations based on these user profiles. These personalized mechanisms have become commonplace not only in daily life but also in fields such as

judicial decision-making. [6]

The rise of personalized algorithmic discrimination has opened new avenues for the manifestation of traditional discriminatory practices. Prior to the advent of algorithmic systems, individuals were typically exposed to the same advertisements, messages, and promotional services. In the face of mass information, individuals were, to a large extent, equal. However, the emergence of algorithms has fundamentally altered the rules of the game. It analyzes people's information and behaviors, thereby enabling "personalized customization" for each individual. Therefore, we can observe such a phenomenon: although using the same application software, the content presented to each person is different. This results in extreme differentiation and inequality in information among individuals, which is not present in traditional discrimination. The algorithm discriminates against you, and you have no idea why. It might be your blood type, the account you left on the network, that caught the algorithm's attention, not because you are female or have any identity traits, but simply because you are you. The initiation of the algorithm requires a rigorous coding process, but during its actual operation, it can also be completely illogical. The worst-case scenario is that not only do you not know why the algorithm discriminates against you, but you might even be completely unaware that you have been discriminated against. Personalized algorithm discrimination refers to the formation of each individual's personalized application. It's very difficult for you to find situations around you that are exactly like yours in terms of prejudice. This is the "personal discrimination" problem brought about by algorithms.

Secondly, algorithmic discrimination will break the general principle of law, the law is a tool to regulate the overall order of society, and its main role is reflected in the universal applicability, which applies to all people in the same situation, in order to generally regulate the actors within a certain range. As mentioned above, the law protects the equal status of social subjects through various provisions, and the general characteristics of the law are embodied behind these provisions, although indirect discrimination also constitutes a "special rule" for direct discrimination, but it is a special rule abstracted from the general rule, the former reflects the stability of the law, and the latter reflects the flexibility of the law, both of which together promote the law's flexibility. Flexibility of the law, both together to promote the integrity of the legal system and current, but the algorithm of discrimination is abstracted from the special rules of the special rules, so that the algorithm of personalized discrimination will force the law from the rules of the special rules of the personalized rules, and then how to balance its relationship with the general rules of the law, it will be a proposition worthy of thought.

4.2 Different difficulties in legal determination

Because direct discrimination has the characteristics of clearer external manifestation, easy-to-obtain evidence, a clear causal relationship, and simple and uniform legal standards, the difficulty of legal determination of direct discrimination is lower. The explicit nature of direct discrimination enables courts and judicial authorities to make swift determinations based on legal provisions. As for indirect discrimination, although it is more concealed compared to direct discrimination, policies or behaviors that are indirectly discriminatory tend to be gradually recognized over time. Moreover, as many countries are committed to legislating against indirect discrimination, a wide range of its forms and manifestations have already been identified and categorized. Therefore, the legal recognition of indirect discrimination is not particularly difficult. However, the legal recognition of algorithmic discrimination remains challenging, as an effective framework for its identification has yet to be established.

First of all, it is difficult to identify the criteria for discrimination. As mentioned above, the essence of indirect discrimination connotes differential treatment for different situations, and the algorithm itself also exhibits such characteristics. Therefore, many scholars argue that a significant portion of algorithmic discrimination—particularly algorithmic price discrimination—can be

subject to appropriately relaxed requirements. It is believed that economically rational "differential treatment" possesses a certain degree of legitimacy and that the occurrence of such discrimination should be tolerated. [7] This perspective analogizes algorithmic discrimination to reasonable price discrimination in economics. Price discrimination is essentially part of a market strategy aimed at maximizing corporate profits and achieving optimal allocation of market share. It is a reasonable match between the enterprise's offerings and consumers' willingness to pay and demand, and thus, reasonable price discrimination does not violate legal provisions. It is true that legal price discrimination can, to a certain extent, support the realization of substantive equality. However, it is still inappropriate to justify algorithmic discrimination solely based on such economic reasoning. First, reasonable price discrimination is generally acceptable because it is based on factors such as purchase quantity, market conditions, and consumer identity to determine different pricing standards. These differences reflect market supply and demand and do not involve consumers' private information. In contrast, algorithmic discrimination relies on users' personal data for pricing—such as consumption records and social behavior—often without the consumer's explicit authorization or awareness that such information is being used. Second, legitimate price discrimination is open and transparent, allowing consumers to understand the basis for differential pricing; whereas algorithmic discrimination is opaque, and consumers are typically unaware of whether they are paying a fair price for the same goods or services. From this perspective, if a portion of algorithmic discrimination is to be legalized and transformed into a tool for promoting substantive equality, its specific criteria and boundaries remain difficult to define.

Second, it is difficult to determine the facts of discrimination. Traditional forms of discrimination ultimately result from human behavior, and the means by which they are implemented are visible to the public—the only uncertainty lies in when they are discovered. Algorithms, by contrast, function differently from human agents. Their inherent complexity, opacity, and non-linear characteristics render them the exclusive domain of a small group of technical experts. The general public has no access to the internal logic of their operation, which is the root of algorithmic opacity. In academic discourse, such opaque systems are often referred to as the "algorithmic black box," a concept used to capture the difficulty of understanding and explaining algorithmic decisions. The opacity of algorithms can be attributed to two fundamental causes. On the one hand, as algorithmic systems become increasingly complex, they also become more inscrutable—even to their own developers. Modern algorithms, particularly those based on machine learning, are often designed for autonomous learning, involving real-time updates and continuous ingestion of training data. Many systems are already capable of running thousands of lines of "dark code" autonomously, with their functions remaining unknown. In the future, it may become increasingly difficult for even technical experts to explain why an algorithm behaves in a certain way, let alone for the general public. On the other hand, data hegemony is another major contributor to the opacity of algorithmic discrimination. As Frank Pasquale notes in The Black Box Society, there is a direct correlation between algorithmic opacity and the monopolization of data. Data often described as the "new oil"—possesses substantial commercial value. By mastering a vast amount of user data information, enterprises can precisely analyze user needs. At the same time, having more data means being able to train more efficient algorithms, thereby gaining an advantage in the market competition. Through the algorithm black box, enterprises can control the way data is used and the results, making it impossible for users to understand the underlying operation principles. In the long run, this will not only cause damage to user rights and social fairness, but also lead to the distortion of market competition.

Finally, it is difficult to recognize the basis for adjudication of discrimination. After years of development, traditional discrimination not only has a rich legal system at home and abroad, but also a large number of judicial cases that can be drawn on, but algorithmic discrimination is facing a different dilemma from the past. At present, the rule system of algorithmic discrimination follows the traditional tort liability system, and most of the cases are still trying to attribute responsibility

through the principle of fault liability, then according to the constituent elements of tort liability, if we want to identify the occurrence of algorithmic discrimination will have the following four conditions, first, to see whether there is illegality in the design, operation, and results of the algorithm; second, the victim needs to be specifically harmed because of the algorithmic discrimination; third, it needs to be prove that the behavior of algorithmic discrimination has directly led to the fact of damage; fourth, it needs to be proved that there is negligence and intentionality on the part of the perpetrator in the algorithm's design or operation. The whole process of determination requires multiple investigations into the technology and the subjects involved, and the time and judicial costs are higher compared to ordinary infringement cases. In judicial practice, especially for the fourth element, want to prove the subjective intentionality of the algorithm is never easy. The subject of the algorithm can either refuse to disclose the internal operation procedures of the algorithm for the ground of protecting commercial secrets, or defend on the ground that subjective intentionality does not exist due to the automation of algorithmic decision-making, which undoubtedly increases the burden of proof on the right holder. [8] In addition to this, judicial officers' lack of relevant experience with algorithmic technology leads to the possibility that they may encounter technical understanding barriers when facing algorithmic discrimination cases, thus further hindering the fairness of judicial adjudication. [9]

5. The development path of the principle of equality in algorithmic discrimination

5.1 Constructing the right of algorithmic interpretation and improving the legal regulation of algorithms

As mentioned above, the advent of the algorithmic era has shifted the rule of specificity toward a rule of individualization, gradually encroaching on individual rights. If this trend is not addressed in a timely manner, individuals may become increasingly marginalized. The information of ordinary people has become an endless source of "food" for the algorithms. From this perspective, algorithms violate the basic moral values of human society. The algorithm arbitrarily implements "personal customization", neglecting the protection and respect for individual autonomy and human dignity. This will inevitably affect the realization of the principle of equality. As some scholars have noted, "If the unfairness of the algorithm eliminates individuals' opportunities to access key information resources, then individuals will be adversely affected. More precisely, this adverse effect is a 'fault'. Because it violates the basic rights of individuals to be treated equally and respected. Based on this, the academic community has generally called for the establishment of algorithmic interpretation rights based on a moral philosophy perspective. [10] When individual rights are infringed by algorithmic decisions, individuals should be entitled to demand reasonable explanations from those responsible for the algorithms and be empowered to challenge their outcomes. Algorithmic interpretation, as a mechanism for explaining the rationale behind algorithmic decisions, may become a critical tool for individuals to resist algorithmic discrimination in the digital age. When individuals are harmed by powerful and opaque algorithmic systems, the right to algorithmic interpretation enables them to require developers and operators to provide transparent and reasonable justifications for the algorithm's outputs. This not only protects individual rights but also signifies the algorithm's recognition of, and respect for, personal dignity.

As one of the earliest regions to incorporate the responsibility of algorithmic interpretation into its legal framework, the European Union has explicitly recognized the right to algorithmic interpretation in its legal provisions. For a long time, the EU has emphasized the establishment of an internal free market as a core constitutional principle, with the central aims of promoting fair competition, protecting fundamental rights, and eliminating cross-border barriers. Within this context, the widespread use of algorithms has had a significant discriminatory impact on market participants, consumers, and workers, directly conflicting with the foundational principle of the EU internal market—particularly the free movement of persons. This is also an important reason why

the EU has become a leading organization in addressing algorithmic discrimination. In 2018, General Data Protection Regulation (GDPR) formally take effect. GDPR grants individuals the right not to be subject to decisions based solely on automated processing, and explicitly provides that individuals have the right to be informed about the logic, significance, and potential consequences of such algorithmic decisions.

5.2 Focusing on technical transparency and regulating Algorithmic responsibility

Transparency is the foundation of equality. It ensures that all individuals have equal access to resources and opportunities by making rules and information publicly available. In the context of algorithmic discrimination, the primary challenge in legal determination—whether it concerns the identification of applicable standards, the establishment of relevant facts, or the justification of legal reasoning—centers on a lack of algorithmic transparency. If the operational processes of algorithms could be disclosed to the greatest extent possible, the legal difficulty in identifying and adjudicating algorithmic discrimination would be significantly reduced. However, the understanding of algorithmic transparency cannot be delineated according to traditional standards. The traditional definition of transparency requires us to focus on the openness of the process and the clarity of responsibility, but in order to realize algorithmic transparency, our focus should be shifted to its algorithmic logic and dynamics. First of all, the logical transparency of algorithms should be placed in the social and cultural understanding, and more attention should be paid to the social and value factors behind the disclosure of information. At the same time, it is emphasized that algorithmic transparency practice should fully consider the complex technical conditions, organizational structure and specific application scenarios involved in algorithmic decision-making, and many other influencing factors, and the model allows us to focus more on the social aspects embedded in algorithmic transparency practice that have been obscured and ignored by the traditional model, and to regard algorithmic transparency practice as a social practice activity unfolding among multiple subjects. [11] With the understanding of algorithmic transparency, we can then make adjustments to the technical, social, and legal aspects to form a tripartite synergy to deal with algorithmic discrimination.

Regulators should first ensure transparency in algorithm design and development. Optimal transparency is the level of transparency that matches the level of transparency desired and achieved by each individual or group. [12] In the algorithm development stage, we should advocate the concept of transparency design, clarify the core purpose and application scope of algorithm design, and ensure that the various data sources used by the algorithms are legal and of controllable quality. The transparency mechanism should be reasonably designed for different objects and scenarios. Second, at the social level, it is necessary to promote industry self-regulation, and technology giants such as Google and Meta have already taken the initiative to formulate relevant transparency policies. For example, Google AI released the "Model Card" (Modern Card) system, recording in detail the function of each model, the source of training data, potential deviations, etc. It is also regarded as an important step towards algorithm transparency by Google. At the same time, the role of public supervision is maximized to assess the social impact of algorithms through user feedback or public opinion. Third, in terms of legal governance, a specialized algorithm governance body can be set up and focus on monitoring algorithms in key areas, or a third party can be commissioned to conduct an independent assessment of fairness and stability before the algorithm is officially launched.

6. Conclusions

The emergence of algorithms has profoundly transformed our way of life and subtly influenced our everyday decision-making. But the mysterious algorithms have not become the "scales" that safeguard justice and equality. Instead, they have triggered a new phase in the long-standing

struggle against discrimination, between human beings and inscrutable strings of code. Equality and discrimination are closely related, and the principle of equality has evolved over thousands of years and with the development of society, becoming an important cornerstone of the contemporary legal system to regulate discriminatory phenomenon, and the universality of the principle of equality and its rich legal foundation also make it become the right choice to deal with algorithmic discrimination. Through the principle of equality, the direct discrimination in algorithmic discrimination can be effectively dealt with, and the similarity between the characteristics of algorithmic discrimination and indirect discrimination also reflects the high applicability of the principle of equality to the regulation of algorithmic problems. However, when we assess the new technology of algorithms, algorithmic discrimination poses a new jeopardy to the principle of equality compared to traditional discrimination in the past. This is mainly reflected in the two aspects of algorithmic discrimination and traditional discrimination in the scope of subjects involved and the difficulty of legal determination. Therefore, in the face of the new social development situation, the regulation of algorithmic discrimination by the principle of equality requires new approaches. On the one hand, in order to empower individuals to address algorithmic discrimination, introducing the concept of "algorithmic explanation rights" can be regarded as a feasible approach. On the other hand, transparency serves as the foundation of equality, and the core difficulty in regulating algorithmic discrimination lies in the lack of algorithmic transparency. A nuanced understanding of algorithmic transparency can foster tripartite cooperation among technology, society, and law, making it possible to strike a balance between preserving equality and managing algorithmic risks. The rise of algorithmic discrimination continues to provoke reflection and debate. The growing sense that "something is wrong with the algorithms" reflects an urgent global need for more responsible algorithmic governance. Algorithms are not a discriminatory vessels. They should be forged with the concepts of justice and equality, through the integrated development of the humanities and technological innovation, we may ultimately achieve a harmonious coexistence between algorithms and human society.

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