Application and Constraint of Illegal Evidence Exclusion in AI Service

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Abstract: *With the progress of scientific and technological means, emerging technologies such as AI algorithm and big data mining technology continue to provide strong support for the development of procuratorial work. In the field of illegal evidence exclusion, in addition to seeing the enabling prospect provided by AI, it is also necessary to fully realize a series of technical constraint principles that AI enables the exclusion of illegal evidence. At the same time, a series of prerequisite problems existing in basic theory also need to be fully sorted out and studied before the application and promotion of the exclusion of illegal evidence enabled by AI. Finally, it is necessary to form a refined working mechanism for the exclusion of illegal evidence, including the hierarchical mechanism of normal exclusion and abnormal exclusion, the specific work flow of "machine preliminary screening, business qualitative, case management analysis, and notification of the prosecution Commission" and the hierarchical management mechanism.*

1. INTRODUCTION

The exclusion of illegal evidence has always been a difficult problem in the field of criminal evidence science, and it is also one of the key tasks of criminal prosecution work. In the first pilot work of the national regular analysis and notification report on the exclusion of illegal evidence launched in 2021, procuratorial organs around the country have accumulated rich experience and cases in the field of the exclusion of illegal evidence. Through the investigation of these experiences and cases, we can find that: on the one hand, the examination work of grassroots procuratorial organs in the process of excluding illegal evidence is too heavy and trivial; On the other hand, the rapid development of emerging technologies such as artificial intelligence and big data also provides a new starting point and opportunity for grassroots procuratorial organs to efficiently eliminate illegal evidence. In this regard, in order to facilitate the introduction of emerging technologies to accurately serve the exclusion of illegal evidence, it is necessary to subdivide and establish a fine classification mechanism for the exclusion of illegal evidence according to the degree of technology replacing manpower and the difference of risk points, and give precise policies.

2. AI ENABLES THE LEGAL BASIS FOR THE EXCLUSION OF ILLEGAL EVIDENCE

Basic research is the premise of applied research. The application of all technology must be based on its solid theoretical foundation as a prerequisite. In addition to the above principles of technical constraint, technology enabling the exclusion of illegal evidence also needs to meet certain theoretical preconditions.

2.1 A Clear Definition of "Illegal Evidence"

The prerequisite for excluding "illegal evidence" is a clear definition of the concept of "illegal evidence". At present, there is no clear legal concept for the definition of "illegal evidence", the main legal basis for judging and interpreting "illegal evidence" is the "Provisions on Several Issues of Strictly Excluding Illegal Evidence in Handling Criminal Cases". This document defines "illegal evidence" through a series of criminal case handling rules, that is, it adopts a vague definition, only enumerates a series of cases that need to be excluded and identified, and does not clearly point out what is "illegal evidence" and what is not. This has brought congenital obstacles to enabling the exclusion of illegal evidence by technology. Whether it is big data mining technology or artificial intelligence technology, the premise for the exclusion of illegal evidence is a clear definition of illegal evidence and a highly abstract summary of its characteristics. Only after the completion of this work, it is possible to translate the exclusion criteria of illegal evidence into technical language, and then complete the determination of the exclusion of illegal evidence by designing decision logic for the corresponding technical application.

On the definition of "illegal evidence", the biggest dispute is whether the defective evidence belongs to the exclusion of "illegal evidence". Although the theoretical circle generally believes that the boundary between illegal evidence and flawed evidence lies in the different degree of human rights infringement, and then believes that illegal evidence is the evidence obtained through serious human rights infringement. However, this standard cannot clearly provide exclusion criteria for the application of technology. Moreover, in addition to the rule on the exclusion of verbal evidence, the Chinese law does not make specific provisions on the type and scope of illegal evidence collection infringement on human rights, and the criminal procedure law and judicial interpretation only make clear rules on the exclusion of evidence collection infringement on citizens' life and right to health and personal freedom. However, it does not specify whether and how to exclude the obtained evidence when other basic rights stipulated by the Constitution, such as the right of personality, the right to privacy, and the inviolability of residence, are infringed by the act of obtaining evidence. In this context, some important evidence that affects the trial of a case, or the investigators' non-malicious illegal investigation behavior, or the evidence that can supplement its legitimacy, can be used as an exception to the rule of exclusion of illegal evidence into the court. These exceptions can only be dealt with through the experience of the case personnel, if only rely on technology to exclude, this treatment does not have sufficient academic conditions at present.

2.2 Classification of "Illegal Evidence"

From the point of view of the form of evidence, the exclusion rules of illegal evidence in our country can be divided into the exclusion rules of verbal evidence and the exclusion rules of physical evidence. The exclusionary rule of verbal evidence is a limited non-arbitrary confession rule.[1] Only in the case of serious violation of human rights, violence or threat to the defendant, causing unbearable physical or mental pain to the defendant, and statements made against his will are illegal evidence to be absolutely excluded. The exclusion of physical evidence is a kind of exclusion of flawed evidence, and the law allows the correction of physical evidence obtained by illegal evidence collection. Only when it cannot be corrected and seriously affects judicial justice, the physical evidence will be considered as illegal evidence to be excluded. The exclusionary rule of physical evidence focuses on the legality of evidence collection and the impact of the evidence on judicial justice, not only the protection of human rights. These two different exclusionment rules of illegal evidence determine that the objective differences between the two exclusionment rules of illegal evidence must be respected in the process of enabling the exclusionment of illegal evidence by science and technology. Therefore, the technology application scenarios and underlying logic of the exclusion of illegal evidence should also be adjusted according to the differences between the two exclusions of illegal evidence.

For the exclusion of illegal verbal evidence, the main application of science and technology lies in the objective investigation of the connection between the forensics personnel and the forensics person, and the focus is to establish a technical logical reasoning chain, through the identification and screening of the communication media such as voice, image and text that are connected between the two. To investigate whether there is no legally permitted contact behavior between the forensics personnel and the person being forensed, and then complete the exclusion of illegal speech evidence. For the exclusion of illegal physical evidence, the main application of science and technology lies in the normative perspective of forensics, through big data investigation, surveillance video screening, mathematical logic confirmation, technical identification and a series of technical means to ensure that forensics personnel in the investigation process to obtain, custody of the evidence source is true and reliable, so as to ensure the identity of evidence and the integrity of the evidence chain. In other words, the former lies in supervising the standardization of the forensics process through technical means, while the latter lies in supervising the authenticity of the forensics results through technical means, so the technical logic is completely different. This requires in the evidence theory must be for the verbal evidence and physical evidence two different types of evidence to establish the "standard" and "real" verification standards to investigate whether the evidence is illegal and the corresponding technical judgment logic.

2.3 The Scale Constraint of AI's Involvement in the Exclusion of Illegal Evidence

According to the current practice of the exclusion of illegal evidence, in addition to the specific evidence pointed to, the application for the exclusion of illegal evidence needs to be specified as far as possible in terms of time, place, method and other parameters, that is, it should be made as clear as possible. This requires that the research and judgment information required for the exclusion of illegal evidence itself is not only illegal evidence collection, but includes a lot of additional information and related information. If we want to exclude illegal evidence through scientific and technological means, then the acquisition, processing and analysis of these additional information are also important analysis objects. Then, in order to exclude one or more illegal evidence, it is necessary to

consider whether there is a necessary scale for the acquisition, processing and analysis of additional information. The more and more hidden additional information is required, the more serious the degree of information collection will be for the relevant people. From the perspective of citizens' personal information collection, such information collection behavior must comply with the restriction requirements of the "principle of proportionality" on public power, otherwise it will easily lead to improper infringement of citizens' personal information. Therefore, AI intervention in the exclusion of illegal evidence needs to consider certain scale constraints, and this scale constraint is based on the in-depth research on the protection of citizens' information rights.

3. AI ENABLES TECHNICAL CONSTRAINTS ON THE EXCLUSION OF ILLEGAL EVIDENCE

As a concentrated embodiment of "instrumental rationality", any application scenario of AI should not deviate from specific technical constraint principles. These specific technical constraints are both ethical and moral, as well as political. In conclusion, whether a technology can properly serve the process of human understanding and transforming the world, the first prerequisite is whether human society can fully control the application of technology by establishing and adhering to clear technical constraint rules. With the progress of science and technology, while empowering and serving a series of procuratorial work including the exclusion of illegal evidence, we must also be clearly aware of the limitations and risks of the application of science and technology, and then establish the technical constraint principle of AI enabling the exclusion of illegal evidence to guide and regulate the application of science and technology in the exclusion of illegal evidence.

3.1 Improving the Efficiency of Litigation and Saving Judicial Resources are the Two Major Technical Testing Standards

The promotion of each reform is bound to obey its established value objectives, and to a clear value objectives as the direction of reform, in the case of "fish and bear's paw" can not be both value conflicts, is bound to be around the core reform objectives to make a choice. The fundamental measure of improving judicial credibility inherently includes the requirements of "fairness" and "convenience". The former requires the judicial justice as the result oriented, the latter requires the judicial resources as little as possible to complete as many judicial tasks. Taking the reform of illegal evidence exclusion analysis reporting system as an example, whether the application of science and technology in it plays a good role should be based on improving the efficiency of litigation and saving judicial resources as the basic test standard. The "Procuratorial Big Data Action Guide (2017-2020)" issued by the Supreme People's Procuratorate in 2017 also clearly pointed out: "The construction of procuratorial big data should serve the judicial handling of cases, crack the outstanding problems in the current procuratorial work, and promote the role of procuratorial supervision; Service management decision-making, provide objective and accurate decision-making support..." Therefore, if a technology can neither significantly improve the efficiency of litigation nor significantly save judicial resources, then its application in judicial practice is lacking of practical significance. This applies not only to the application of science and technology in the elimination of illegal evidence, but also to all practical scenarios that try to solve legal problems with science and technology.

3.2 Science and Technology can Only Replace the Fact Judgment Rather than the Value Judgment of the Case Personnel

Replacing human resources with science and technology is a basic logic of the application of technology. This means that in the application of science and technology, we must first distinguish what is replaceable and what is irreplaceable in a scene. As an ancient discipline, law is mainly based on value judgment. What to affirm and what to deny are determined by the value trade-off at the philosophical level. Since machines and technology have no emotional and ethical concepts, science and technology can not completely replace human beings to complete the work of value judgment. Specifically in judicial practice, due to a large number of value judgment work mixed with the fact judgment work, the evidence collection work is not only a process of confirming facts and exploring the truth. If in the process of collecting evidence, the case personnel are only "in the pursuit of efficiency and accuracy... Ignore the true value of technology and its emotional effect on people, resulting in emotional absence "[2], then it is easy to lead to mechanical rigidity in understanding the facts, but it is impossible to grasp the value orientation of the evidence itself. The main application scenario of enabling the exclusion of illegal evidence by science and technology is to confirm the factual issues in the process of the exclusion of illegal evidence, such as "whether the interrogator beat or intimidated the interrogated person", "whether the interrogator has induced confession", etc., and whether the analyzed evidence is illegal evidence and whether it should be excluded still needs to be confirmed manually. And should not be fully put into technical decisions.

3.3 Data Security is More Important than Efficiency Improvement in Handling Cases

The report to the 19th CPC National Congress put forward: "Adhere to the overall national security concept. "A major principle of our Party's governance is to balance development and security, increase awareness of potential dangers, and prepare for danger in times of peace." Under the overall national security concept, the security of procuratorial data is an issue that all legal technology applications need to attach great importance to. The improvement of case handling efficiency is, of course, an important task of the current judicial reform and procuratorial business innovation. However, compared with the procuratorial data security, the value of improving the efficiency of handling cases is still relatively second level. It should be warned that because procuratorial personnel are generally unfamiliar with data statistics and analysis technology, especially the emerging technologies such as big data mining technology and artificial intelligence algorithm, and lack objective understanding, grass-roots procuratorial organs generally cannot rely on their own strength to complete the technical work required for the application of procuratorial business technology. Therefore, outsourcing technology development to corresponding science and technology enterprises has become an inevitable choice for many procuratorial business departments.[3] However, subject to the essential characteristics of big data mining and other technologies, technology development enterprises must obtain a large amount of business data when processing procuratorial business data to serve as the prerequisite basis for technology empowerment. In this process, data leakage may occur due to the negligence in data handover or the personal quality of technical personnel. Even after the technical development work is completed, science and technology enterprises may also, based on their profit-seeking instinct, take the initiative to steal procuratorial data through the technical system they participate in the construction by installing "Trojan horse" and presetting "backdoor", which must be strictly prevented. Therefore, in the process of technology enabling the exclusion of illegal evidence, the security of procuratorial data should be prioritized to improve the efficiency of handling cases, and should never sacrifice the security of procuratorial business data to pursue the efficiency of handling cases.

4. THE CONSTRUCTION OF WORKING MECHANISM FOR THE EXCLUSION OF ILLEGAL EVIDENCE ENABLED BY AI

On the basis of the previous analysis, the specific application of AI enabling the exclusion of illegal evidence also needs to construct a refined classification mechanism for the working mechanism of the exclusion of illegal evidence, so as to optimize the allocation of judicial resources and the precise application of technical means.

4.1 Establish a Hierarchical Working Mechanism of "Normal Exclusion" and "Abnormal Exclusion" of Illegal Evidence

Taking into account the efficiency of handling cases, the timing and degree of scientific and technological means involved in the elimination of illegal evidence should be dealt with in different levels. Generally speaking, the exclusion of illegal evidence can be divided into two levels according to the timing and degree of the intervention of scientific and technological means in the exclusion of illegal evidence. The first level is "normal exclusion", that is, the evidence involved in each criminal case is coarse screening and preliminary screening, with the help of image analysis technology, text recognition technology, such as torture, confession and other common illegal evidence of the transfer of conventional evidence for preliminary investigation, to confirm whether there is illegal evidence. In the case of "normal exclusion", the degree of refinement required for the involvement of science and technology in the exclusion of illegal evidence is not high, and the main technical points are fast, convenient and cheap. The second level is "abnormal exclusion", which mainly refers to the handling process of big cases, important cases, difficult cases and other cases with greater difficulty and higher requirements for the exclusion of illegal evidence. In the case of "abnormal exclusion", the existence of illegal evidence is complex, the manual exclusion is more difficult, and the evidence has a great differentiated impact on the results of criminal suspects' conviction and sentencing, so the precision degree of technology involvement in the exclusion of illegal evidence is higher, and the technical points are transferred to accuracy, reliability and rigor. The difference between the two levels requires the establishment of a corresponding supporting hierarchical working mechanism for the exclusion of illegal evidence, so as to form a dynamic adjustment trend of the intervention of science and technology in the exclusion of illegal evidence.

4.2 Establish the Illegal Evidence Exclusion Workflow of "Machine Preliminary Screening, business qualitative, Case Management Analysis, and Notification by the Prosecution Commission"

It has been argued before that scientific and technological means can only be used as decision AIDS for case

personnel, and it is impossible to make value judgments independently. Therefore, in the process of enabling the exclusion of illegal evidence by science and technology, it is necessary to establish the illegal evidence exclusion workflow of "machine preliminary screening, business qualitative, case management analysis, and prosecution commission notification", so as to better serve the exclusion of illegal evidence by means of scientific and technological means. First of all, the original data of judicial handling is processed and screened through algorithmic tools, and the workload of manual exclusion of illegal evidence can be greatly reduced after the preliminary screening of massive business data. On this basis, it is necessary for procuratorial personnel to manually screen the case handling information after the initial screening of the machine, and qualitatively identify the suspicious risk points, make it clear whether the machine misjudgment or the doubtful evidence, and draw a preliminary qualitative conclusion. After the exclusion of illegal evidence in different cases is collected and sorted out to the case management department, as the key department for the summary and analysis of procuratorial big data, the case management department needs to summarize and analyze the exclusion of illegal evidence in a period of time, and complete the regular summary and sorting report of the exclusion of illegal evidence with the help of technical means. The analysis report completed by the case management department shall be regularly submitted to the inspection committee for discussion and analysis, and the analysis conclusions shall be notified to form business feedback results. According to this workflow, the enabling effect of science and technology on the exclusion of illegal evidence can be better optimized and promoted.

4.3 Establish a Hierarchical Management System for the Exclusion of Illegal Evidence According to the Scale of the Necessity of Scientific and Technological Intervention

According to the different demand for the exclusion of illegal evidence in a specific case, the necessity of the exclusion of illegal evidence in the intervention of science and technology is naturally different. Considering the ethical controversy brought by the intensity of technology application and the cost of technology input, it is impossible for all cases to exhaust all the current technical means to exclude illegal evidence. Therefore, it is necessary to establish a hierarchical management system for the exclusion of illegal evidence according to the necessary scale of scientific and technological intervention. For example, for minor crime cases and felony cases, the necessity of scientific and technological intervention in the exclusion of illegal evidence is different. In felony cases, the legal consequences are extremely serious compared with those of minor crimes, which makes the case personnel must be extremely careful and precise in the exclusion of illegal evidence. At this time, the problem of human rights protection for criminal suspects becomes more prominent in the process of handling cases, so the necessity of involving scientific and technological means in the exclusion of illegal evidence overcomes the cost of technological application. On the one hand, the establishment of the hierarchical management system of the exclusion of illegal evidence is conducive to the better use of science and technology to serve the exclusion of illegal evidence, avoid unnecessary technology application costs are too high, resulting in waste of judicial resources; On the other hand, it is also conducive to the regular analysis of illegal evidence exclusion work, grasping the key points and forming a systematic working mechanism.

5. CONCLUSION

The advancement of science and technology has enabled many previously unthinkable conveniences to be realized in the promotion process of prosecution business innovation, but we also need to be sobering about the risks and costs associated with it. While constantly promoting the expansion of technology application scenarios, it is necessary to strengthen the basic theoretical research on AI-enabled procuratorial business supervision, so as to achieve targeted procuratorial business innovation. Specifically for the exclusion of illegal evidence, the scientific research on illegal evidence itself has replaced the technology application itself to become the most important research task for the exclusion of illegal evidence enabled by science and technology. There are reasons to believe that if the basic research of illegal evidence is fully carried out, there will be no major obstacles to the application and promotion of related technologies.

REFERENCES

[1] Huang Zhengxian . Between Legality and Authenticity--On the Exclusionary Logic of the Exclusionary Rule of Illegal Evidence in Our Country. Party and Government Cadre Journal, 2021, vol.11, no.2, p.50-57.
[2] Xie Yu and Xie Yi . Emotional Absence and Regression of Technical Governance in the Age of Big Data. Research on Dialectics of Nature, 2022, vol.38, no.1, p. 124-128.
[3] Zheng Xi . Research on Data Security Protection in Criminal Justice. Oriental Methodology,2021, vol.13, no.5, p. 80-92.