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A Literature Review of Research on Algorithmic Evidence in China

Ziwen Yan
China University of Political Science and Law, Beijing, China
Corresponding author E-mail: 18811595090@163.com

Abstract

As big data, machine learning, and automated analytics increasingly enter the field of criminal justice, algorithmic evidence has become a frontier issue in Chinese evidence scholarship. Existing studies mainly revolve around two closely related questions. The first is whether algorithmic evidence should be accommodated within existing statutory categories of evidence, such as electronic data, appraisal opinions, and specialized-issue reports, or instead be understood as an independent new form of evidence. The second is how algorithmic evidence should be distinguished from adjacent concepts, including electronic data, big-data evidence, AI evidence, and scientific or expert evidence. A systematic review of representative Chinese scholarship shows that existing research has already revealed, with considerable clarity, the technical dependence, derivative character, professional complexity, and black-box risks of algorithmic evidence, but has not yet established a stable connection between conceptual characterization and rule construction. This article argues that neither subsuming algorithmic evidence wholesale under any single existing evidentiary category nor simply declaring it a new independent category can adequately capture its normative complexity. A more persuasive approach is to understand algorithmic evidence as a two-tier structure composed of a raw-data layer and an algorithmic-conclusion layer. This framework better explains the principal disagreements in the existing literature and helps clarify the relationship between algorithmic evidence and related concepts. On that basis, future research should move beyond disputes over labels and focus instead on the systematic design of review rules, particularly with respect to admissibility, reliability, explainability, modes of challenge, and procedural safeguards.

Keywords: Algorithmic Evidence, Criminal Procedure, Electronic Data, Evidence Review Rules, Two-tier Structure

1 Introduction

Digital technologies are reshaping the way facts are established in criminal proceedings. In handling complex cybercrime, financial crime, and other data-intensive cases, investigative, prosecutorial, and adjudicative authorities increasingly rely on algorithm-centered analytical tools to filter and correlate massive volumes of data and then introduce the resulting reports, identification results, or risk assessments into the litigation process. Against this backdrop, scholars have gradually adopted the term “algorithmic evidence” to describe materials generated through algorithmic processing of raw data and used to prove facts in a case. Facial-recognition matching results and social recidivism risk assessments alike reflect the deep involvement of algorithms in the formation of evidence.

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Algorithmic evidence has generated sustained controversy not merely because the term itself is novel, but because it directly challenges a Chinese evidentiary system whose basic framework is built around statutory categories of evidence. Traditional electronic data usually takes the form of digital traces generated naturally during the occurrence of an event and later extracted and preserved. By contrast, algorithmic evidence is often produced only after raw data has been preprocessed, features have been extracted, models have been run, and outputs have been generated. Its probative content therefore does not simply mirror the underlying traces themselves; it also contains a distinctly analytical and judgment-laden element. For that reason, algorithmic evidence is neither the same as ordinary static electronic data nor necessarily equivalent to opinion evidence produced by a natural person. How it is legally characterized has direct implications for the rules governing collection, preservation, challenge, and evaluation.

Chinese scholarship has already generated a relatively rich body of discussion on the legal characterization of algorithmic evidence and its relationship to adjacent concepts. Yet the existing literature still displays two conspicuous features. First, debate over the category to which algorithmic evidence belongs is far more developed than analysis of specific review rules. Second, adjacent concepts are often used interchangeably, causing the object of analysis to shift from one discussion to another. Against this background, this article draws on representative Chinese scholarship to examine the principal theories concerning the legal characterization of algorithmic evidence and its relationship to electronic data, big-data evidence, AI evidence, and scientific evidence.

2 Literature Review

Domestic research on algorithmic evidence has, on the whole, evolved from discussions of "big-data evidence," to "algorithmic evidence," and more recently to "AI evidence." Early debates centered on big-data investigation and big-data proof, focusing on how massive volumes of data, once technically processed, could become new evidentiary resources. As machine learning, automated modeling, and predictive analytics have been used more frequently in judicial settings, an increasing number of scholars have recognized that the label "big data" tends to obscure the decisive role played by algorithmic models and technical rules in the formation of evidence. As a result, "algorithmic evidence" has gradually become the more precise analytical concept.

At the same time, some scholars, from the perspective of AI applications in the justice system, have proposed concepts such as "AI evidence" or "machine opinion." This line of analysis places greater emphasis on machine-generated conclusions and technological black boxes, and therefore resonates more strongly with foreign debates over automated decision-making, explainability, and the governance of high-risk models. Although the terminology varies, most studies now share a basic consensus: such materials rest on electronic data as their material basis, rely on algorithmic processing as their mode of production, and use probabilistic inference or model-based computation as their mode of proof. The associated risks are not confined to the authenticity of the data, but also include model reliability, training-sample bias, parameter settings, opacity, and difficulties in adversarial challenge.

Although the existing literature has identified the risks of algorithmic evidence with considerable richness, it has not established a stable correspondence between conceptual characterization and rule design.

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Some studies focus on the question of which statutory evidentiary category algorithmic evidence belongs to, whereas others seek to bypass classification disputes and move directly to rules of control. The former approach helps clarify basic categories, but can leave discussion at the level of concepts; the latter responds to practical institutional needs, but may lose explanatory force if it is not anchored in doctrinal analysis. Further clarification of the legal characterization of algorithmic evidence and its relationship to related concepts therefore remains necessary.

3 The Legal Characterization of Algorithmic Evidence

3.1 Embedded Approaches within Existing Evidentiary Categories

The prevailing approach in Chinese scholarship is to incorporate algorithmic evidence into the existing statutory categories of evidence. On this view, algorithmic evidence should be accommodated within the current evidentiary framework rather than recognized as a new evidentiary category. The differences among the various strands of this incorporation approach do not lie in whether algorithmic evidence is considered distinctive, but in the criterion used for classification - whether emphasis is placed on its external form, its mode of production, or its evidentiary function. Precisely because these classificatory criteria differ, studies that all fall within the incorporation approach nonetheless point toward markedly different models of doctrinal treatment and procedural regulation.

3.1.1 The appraisal-opinion approach

The appraisal-opinion approach emphasizes the professional, scientific, and technologically complex character of algorithmic evidence. Ordinary judges and parties cannot, on common sense alone, understand either the process by which such evidence is generated or the meaning of the conclusions it yields; for that reason, its probative function is said to be closest to an appraisal opinion. The strength of this approach is that it allows the existing framework for reviewing expert opinion evidence to be brought to bear in a relatively natural way. In particular, the dual-track model of “electronic data plus appraisal opinion” further distinguishes between the stage of raw-data collection and the stage of model operation and output, thereby permitting electronic-data rules to govern the former and appraisal-opinion rules to govern the latter.

Yet the appraisal-opinion approach cannot fully resolve the institutional difficulties posed by algorithmic evidence. First, the current judicial appraisal system in China is highly formalized and institutionally structured, whereas algorithms used in big-data investigations and platform governance are often controlled in advance by investigative authorities or private technology companies. Such arrangements do not satisfy the traditional requirement of neutrality and may not fit within the existing catalogue of judicial appraisals. Second, the paradigm case of an appraisal opinion remains a judgment rendered by a natural-person expert through professional knowledge, while the decisive judgment in algorithmic evidence often comes from the operation of the model itself, with the human expert doing no more than explain or endorse the machine-generated conclusion. Third, treating algorithmic evidence as appraisal opinion in its entirety may obscure issues concerning the source, extraction, and chain of custody of the raw data, and thereby shift the focus of review too far downstream to the conclusion alone. The appraisal-opinion approach is thus illuminating, but better understood as a partial reference point than as a complete classificatory solution.

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3.1.2 The electronic-data approach

The electronic-data approach is another influential view. Starting from the medium and form of presentation, it argues that algorithmic evidence exists in digital form, relies on electronic data as its underlying material, and is stored and output through electronic media; accordingly, it should still be classified, in formal evidentiary terms, as electronic data. The practical attraction of this position is obvious. If algorithmic evidence is treated as a special form of electronic data, then investigation, extraction, sealing, transfer, and review can all proceed within the existing rules on electronic data. That both reduces institutional costs and avoids further expansion of the system of statutory evidentiary categories.

But the difficulties of this approach are equally clear. Electronic data normally refers to the digital recording of objective activities, whereas algorithmic evidence is not a mere record; it is the product of filtering, correlation, modeling, and inference. In other words, the raw-data layer may indeed fall within electronic data, but the outputs of the model - identification results, risk scores, and relational judgments - are no longer simple "traces." They are machine-generated conclusions with a distinctly opinion-like character. If one reviews them solely through the lens of authenticity applicable to electronic data, one risks overlooking decisive issues such as model selection, training samples, threshold settings, error rates, and bias control. The electronic-data approach is therefore more persuasive as an account of the foundational material layer of algorithmic evidence than of its conclusion layer.

3.1.3 The approach of specialized-issue reports

The specialized-issue-report approach draws on Article 100 of the Supreme People's Court's Interpretation on the Application of the Criminal Procedure Law and argues that algorithmic evidence can be treated as a report produced by a person with specialized knowledge on a specialized issue. Rather than insisting that algorithmic evidence must map neatly onto one traditional evidentiary category, this view searches for an existing procedural interface in positive law. Algorithmic evidence typically does not enter court in the form of raw data alone; it is more often submitted as an analytical report or written opinion, and its evidentiary force commonly depends on technical personnel explaining the source of the data, the logic of the model, and the meaning of the output. In that respect, algorithmic evidence bears a relatively strong structural resemblance to specialized-issue reports.

This approach, however, also has limits. Specialized-issue reports focus on whether a "person with specialized knowledge" can adequately explain the issue in question, whereas the central risk of algorithmic evidence often lies not in the adequacy of the explanation, but in the reliability of the model itself. If algorithmic evidence is fully absorbed into the category of specialized-issue reports, review may continue to focus on the explainer rather than on the algorithmic system and the training data. Put differently, this approach provides a procedural channel through which algorithmic evidence may enter litigation, but it does not necessarily exhaust the full range of its evidentiary attributes.

3.1.4 The physical-evidence approach

The physical-evidence approach maintains that algorithmic evidence may, under certain conditions, be understood as a special form of physical evidence. On this view, large datasets and analytical reports both

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possess an objectively existing external form and can be preserved and presented through electronic media, written text, or other fixed means. They therefore do not necessarily belong to the category of opinion evidence centered on human judgment. Especially where the relevant datasets, analytical processes, and outputs can be repeatedly retrieved and displayed, algorithmic evidence appears closer to an objectively ascertainable evidentiary material than to a conclusion resting solely on the subjective judgment of an expert.

The significance of this view lies in its attempt to move beyond the reflex that any technically complex material must be classified as an appraisal opinion. It highlights the fact that part of algorithmic evidence does indeed take the form of objectively existing data and computational results. But the limits of the approach are equally clear. The core of physical evidence lies in its objectively existing state as such, whereas the principal risks associated with algorithmic evidence do not primarily stem from its external medium. They arise from technical intervention in data selection, model training, parameter setting, and inferential output. The fact that a conclusion can be repeatedly displayed is therefore not enough to determine its evidentiary character; nor does a measure of reproducibility eliminate the judgmental and inferential components embedded in it. The physical-evidence approach thus identifies an important material aspect of algorithmic evidence, but cannot fully account for its legal characterization.

3.1.5 The classified-incorporation approach

The classified-incorporation approach does not attempt to subsume all forms of algorithmic evidence under a single evidentiary category. Instead, it proposes that different types of algorithmic evidence should be allocated to existing statutory categories according to their particular form of presentation and probative function. On this view, algorithmic evidence is not a unified object of a single legal nature; depending on the case, it may appear as electronic data, appraisal opinion, an inspection record, or some other form of evidentiary material. The approach is distinctly pragmatic. Its concern is not conceptual elegance, but preserving the stability of the current evidentiary system while minimizing the costs of institutional adjustment.

The advantage of this position lies in its explicit recognition of the heterogeneity of algorithmic evidence and its relative compatibility with the case-specific logic of judicial practice. Given the diversity of application scenarios, output forms, and probative functions, this path indeed offers considerable operational flexibility. Yet its limits are also evident. If classification depends entirely on external form in a particular case, functionally similar algorithmic conclusions may be assigned different legal characterizations across cases, undermining consistency in the application of rules. More fundamentally, while the classified-incorporation approach can explain how these materials might be distributed among existing categories, it has greater difficulty explaining why different forms of algorithmic material should be subject to different standards of review. For that reason, although the approach is practically flexible, it struggles to provide a stable theoretical framework.

3.1.6 The investigative-experiment approach

The investigative-experiment approach argues that, in certain settings, algorithmic analysis reports may be analogized to records of investigative experiments. The rationale is that algorithmic systems often operate by setting conditions, inputting data, and running a program to simulate, compare, or verify specific

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factual relationships. In formal terms, this resembles the use of recreated conditions in an investigative experiment to test the possibility of a factual proposition. Particularly in contexts such as trajectory analysis or behavioral reconstruction, algorithmic operation appears to perform a kind of technical verification, and some scholars have therefore attempted to place such materials within the normative framework governing investigative experiments.

The analogy, however, is incomplete. The essence of an investigative experiment lies in empirically testing a factual proposition by recreating the conditions under which the event occurred. Algorithmic evidence, by contrast, more often filters, correlates, models, and infers on the basis of pre-existing data; its principal function is not to recreate facts, but to generate analytical conclusions. The two therefore differ in their mode of production, conditions of use, and procedural requirements. Treating algorithmic outputs as records of investigative experiments would blur the distinction between algorithmic inference and empirical verification, and would also risk obscuring the very issues that most urgently require scrutiny, such as model reliability, data bias, and system error. The investigative-experiment approach thus offers a suggestive analogy, but not a stable basis for classification.

3.1.7 A brief assessment of the embedded approaches

Taken as a whole, incorporation remains the dominant path through which Chinese scholarship understands the legal characterization of algorithmic evidence. Whether in the form of the appraisal-opinion approach, the electronic-data approach, the specialized-issue-report approach, or the physical-evidence, classified-incorporation, and investigative-experiment approaches, their common feature is a reluctance to create a new evidentiary category and an effort instead to locate algorithmic evidence within the existing statutory framework. The theoretical significance of this path lies in its respect for the stability of the current system and in its attempt to make algorithmic evidence intelligible within an already familiar doctrinal structure.

At the same time, the disagreements among the various incorporation approaches also show that algorithmic evidence is difficult to absorb fully into any single existing category. On the surface, the dispute concerns the standard of classification; in substance, it reflects the internal complexity of algorithmic evidence itself. Some views emphasize its status as objectively existing data material, others its expert or judgment-like character, and still others its external form and procedural interface in a specific case. The incorporation approaches therefore reveal the multiple affinities between algorithmic evidence and established evidentiary categories, but still struggle to respond fully to the particularities of its mode of generation and its associated risks. That difficulty provides the theoretical background against which the independent-evidence approach, the evidence-method approach, and the two-tier account have developed.

3.2 Independent and semi-independent approaches

In contrast to incorporation approaches, the independent-evidence approach argues that algorithmic evidence has outgrown the interpretive capacity of existing statutory evidentiary categories and should therefore be recognized as a new category of evidence. This view accurately identifies the extent to which algorithmic evidence challenges the traditional taxonomy of proof and has helped spur debate over whether rules developed for established evidentiary categories remain suitable for emerging algorithmic materials.

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3.2.1 The independent-evidence approach

The independent-evidence approach maintains that algorithmic evidence can no longer be fully absorbed by the existing statutory categories of evidence and should therefore be recognized as an independent evidentiary category. On this view, algorithmic evidence is neither a mere data record nor simply equivalent to a traditional appraisal opinion. Rather, it consists of machine-generated conclusions produced after data has been processed through a model. Its distinctiveness lies not only in its external form, but also in its mode of production and risk structure. For that reason, simply classifying it as electronic data or appraisal opinion often fails to capture the normative issues it raises.

The importance of this approach is that it identified at an early stage the limits of traditional evidentiary classification when confronted with algorithmic evidence, and it has pushed forward discussion of the need for institutional adjustment. Its difficulties, however, are equally obvious. China's statutory categories of evidence possess a high degree of stability, and the creation of a new category would likely increase uncertainty in application. More importantly, even if algorithmic evidence were recognized as an independent category, the differences among raw data, model explanations, and output conclusions would still require further treatment. The boundaries between this new category and existing rules governing electronic data or appraisal opinions, as well as the standards for admissibility and reliability review, would also remain to be worked out. The independent-evidence approach thus sharpens the problem, but does not yet amount, by itself, to a mature institutional solution.

3.2.2 The evidence-method approach

The evidence-method approach does not advocate immediately establishing algorithmic evidence as a new category of evidence. Instead, it treats algorithmic evidence as a distinctive method of proof. On this view, what is most significant about algorithmic evidence is not simply the final report or conclusion that is presented in court, but the data-processing process that lies behind it. In other words, the distinctiveness of algorithmic evidence lies first in how it is formed rather than in the category to which it belongs. From this perspective, database matching, trajectory collision analysis, pattern recognition, and probabilistic analysis generated by algorithms can all be understood as technical methods of organizing and presenting facts, without having to be fixed at the outset within a specific statutory evidentiary category.

The strength of this approach is that it shifts the focus of analysis from conceptual classification to modes of production and rule-based control, making it easier to connect the discussion to issues such as reliability review, duties of explanation, and guarantees of adversarial challenge. But its shortcomings are also substantial. Chinese evidence law still uses evidentiary categories as an important normative foundation. If one emphasizes only the "method" dimension without explaining the place of algorithmic evidence within the existing system, the doctrinal basis of the analysis becomes fragile. Moreover, algorithmic outputs themselves enter the proceedings as evidentiary material; describing them solely as "methods" is therefore insufficient to explain their full legal character. An exclusive focus on method may also overconcentrate normative attention on the technical process while neglecting the problems of tendering, challenge, and evaluation that arise once algorithmic output appears in court as an independent piece of proof. The evidence-method

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approach is therefore useful in illuminating the logic of formation of algorithmic evidence, but cannot by itself complete its evidentiary characterization.

3.2.3 The judicial-control approach and other related views

Beyond these two approaches, some scholars place greater emphasis on judicial control of algorithmic evidence and are less concerned with its final conceptual label. On this view, rather than debating whether algorithmic evidence should become an independent evidentiary category, it is more important to build rules aimed at the sources of risk themselves, such as duties of explanation, disclosure of data sources, mechanisms of reviewability, and guarantees of challenge. Following this line of thought, some scholars argue for stronger algorithmic explanation, technical disclosure, and procedural participation in order to limit the expansion of technological black boxes within litigation; others stress the need to rely on persons with specialized knowledge, expert assistants, or external technical auditing to compensate for the comparative lack of technical understanding on the part of judges and litigants.

The practical significance of this approach lies in the fact that it redirects scholarship from conceptual debate to rule-based response and insists that the problem of algorithmic evidence must ultimately be addressed through review mechanisms and procedural safeguards. Yet if legal characterization and adjacent conceptual distinctions are entirely bypassed, rule design may lose its doctrinal foundation. Authenticity, reliability, explainability, and the mode of adversarial challenge are not isolated review issues; they can be developed in a coherent way only after a basic judgment has been made about the nature of the evidentiary material in question. Unless one clarifies what kind of proof algorithmic evidence is, and which internal dimensions of it require separate treatment, "judicial control" risks remaining at the level of general exhortation rather than maturing into a layered and systematic body of rules.

3.3 The explanatory force of a two-tier structure

Overall, Chinese scholarship has gradually moved from attempts at single-category classification toward a more structured understanding of the legal characterization of algorithmic evidence. On the one hand, incorporation approaches remain dominant and seek to locate algorithmic evidence within the existing statutory framework. On the other hand, the independent-evidence approach, the evidence-method approach, and the judicial-control approach all expose the limits of that traditional classificatory framework. Although these positions differ in path, they all indicate that algorithmic evidence is not a homogeneous whole. In light of the foregoing scholarship, its legal characterization cannot be adequately captured by any single evidentiary category. The raw-data layer and the algorithmic-conclusion layer differ in both their mode of formation and the risks they present. A two-tier account of algorithmic evidence as a composite evidentiary phenomenon therefore has greater explanatory force than any model of single-category classification.

4 The Relationship Between Algorithmic Evidence and Adjacent Concepts

4.1 Algorithmic evidence and electronic data

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Algorithmic evidence is most closely related to, and most easily confused with, electronic data. Raw data, log records, communication traces, and platform traces constitute the foundational materials from which algorithmic evidence is generated. In terms of the process of formation, electronic data comes first, while algorithmic evidence is the result of processing and analyzing that data. The relationship between the two is therefore one between foundational material and analytical conclusion. Algorithmic evidence does not exist independently of electronic data: temporally, it presupposes electronic data, and materially, it remains grounded in data traces generated within electronic environments.

That close relationship does not mean that the two can be equated. Review of electronic data focuses primarily on authenticity, integrity, and relevance to the fact to be proved. Algorithmic evidence inherits those concerns, but also raises additional issues of model reliability, comprehensibility of conclusions, and the possibility of effective challenge. Electronic-data rules may therefore serve as the point of entry for algorithmic evidence into litigation, but they do not exhaust the review that algorithmic evidence requires. A court may be able to determine whether the underlying data has been tampered with and whether its source is clear, yet still be unable to answer deeper questions such as why the model produced a particular judgment, whether the training sample was biased, or whether the output is genuinely open to refutation. Electronic data and algorithmic evidence are thus closely related, but they cannot be treated as the same normative object within evidence law.

4.2 Algorithmic evidence and big-data evidence

The relationship between algorithmic evidence and big-data evidence is better understood as a shift in the focus of research than as a fundamental change in the object of inquiry. Big-data evidence emphasizes massive volumes of data and the mining of correlations, asking how data can become a resource for proof. Algorithmic evidence, by contrast, focuses on algorithmic models and computational logic and asks how machines form conclusions on the basis of data. The two overlap extensively in object, but they embody different problematics. The former is more concerned with how data resources enter the process of proof; the latter with how machines generate evidentiary conclusions from those data.

In the current context, “algorithmic evidence” better captures the central point of controversy than “big-data evidence.” The risk to proof does not arise simply from the scale of the data, but from the mediating role played by algorithms in data processing and conclusion formation. One should not therefore treat algorithmic evidence as merely another name for big-data evidence. As scholarship has developed, it has become increasingly clear that the real source of review difficulties is not the sheer fact that there is a great deal of data, but how algorithms filter, model, correlate, and infer within those large datasets to produce machine-generated conclusions with evidentiary significance. The movement from “big-data evidence” to “algorithmic evidence” is thus not a mere change in terminology, but a shift in analytical focus from data resources to mechanisms of proof.

4.3 Algorithmic evidence and AI evidence

The relationship between algorithmic evidence and AI evidence has become a particularly contested issue in recent years. AI evidence usually emphasizes machine-generated conclusions and is therefore more read-

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ily associated with complex models such as deep learning. Algorithmic evidence, by contrast, does not presuppose that the relevant technology has reached the level of "intelligence." Its scope is broader: it includes outputs generated by rule-based and statistical models as well as those produced by machine-learning systems. AI evidence therefore highlights risk more sharply, whereas algorithmic evidence functions better as an umbrella concept. Distinguishing the two helps prevent all model outputs from being indiscriminately grouped under the label of artificial intelligence and preserves necessary distinctions among different levels of technical complexity.

From the standpoint of evidence law, it is safer to use "algorithmic evidence" as the general term. Not all model-generated results introduced into proceedings are outputs of AI systems in the strict sense, and the relevant issues of review can all be discussed within the framework of algorithmic evidence. Yet the concept of AI evidence is not without value. It draws attention to differences in model complexity and degrees of black-box opacity, and thus offers useful guidance for the future development of differentiated review rules.

4.4 Algorithmic evidence and scientific or expert evidence

Algorithmic evidence bears an obvious affinity to scientific evidence and expert evidence. All three rely on specialized knowledge, technical methods, and complex inference, often extending beyond the everyday understanding of ordinary judges and litigants. All therefore require reliability review. In that sense, there is some force in treating the conclusion layer of algorithmic evidence as a new form of expert opinion.

At the same time, algorithmic evidence cannot simply be equated with traditional scientific or expert evidence. Traditional scientific evidence focuses on the qualifications of the expert, the reliability of the method, and error rates. Algorithmic evidence must address those issues as well, but it must also confront the intelligibility and contestability of the underlying data, code, and model system itself. Algorithmic evidence is thus closely related to scientific evidence, yet still calls for more targeted rules of review built on, but extending beyond, the traditional framework.

5 Conclusion

A review of the major strands of Chinese scholarship on algorithmic evidence shows that the controversy appears, on the surface, to concern the allocation of algorithmic evidence to a particular evidentiary category. In substance, however, it points to a single core question: when technology intervenes in the production of facts and the process of proof, how should the existing law of evidence reallocate objects of review and forms of procedural protection?

Overall, Chinese research on algorithmic evidence has moved from scattered discussion toward a more systematic body of analysis, but it still remains at a stage in which conceptual positioning and rule construction pull against one another. The debates surrounding incorporation approaches - such as appraisal opinions, electronic data, and specialized-issue reports - as well as the independent-evidence approach and other newer theories, all converge on the composite character of algorithmic evidence. It rests on electronic

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data as foundational material, while also generating machine-produced conclusions with a discernible opinion-like quality through algorithmic processing. For that reason, neither an attempt to absorb algorithmic evidence entirely within a single existing evidentiary category nor a summary declaration of complete independence can adequately respond to its normative complexity. A two-tier account, under which algorithmic evidence consists of a raw-data layer and an algorithmic-conclusion layer, better explains the principal disagreements in the existing literature and also helps clarify its relationship to neighboring concepts. On that basis, future research should not remain at the level of conceptual labels. It should instead turn toward the construction of review rules that coordinate admissibility, reliability, explainability, and procedural safeguards, and thereby develop an evidentiary framework capable of accommodating both technological logic and procedural justice.

References

[1] Liu, P.X. (2019). On Big Data Evidence. Global Law Review, 41(1), 21-34. (in Chinese)

[2] Yang, J.W. (2022). Algorithmic Evidence: Algorithms as Evidence and the Prospective Rules for Their Application. Local Legislation Research, 7(3), 37-51. (in Chinese)

[3] Zhang, D. (2023). The Independence of Algorithmic Evidence: Jurisprudential Reflections and Institutional Solutions. Chinese Criminal Law Journal, (5), 107-124. (in Chinese)

[4] Pan, J.G. (2024). Risks and Regulation of Criminal Evidence Use in the Digital Era: From the Perspective of Algorithmic Evidence. Rule of Law Research, (6), 26-37. (in Chinese)

[5] Zheng, F., & Ma, G.Y. (2022). The Triple Dilemmas and Solutions of Big Data Evidence. Journal of Chongqing University (Social Science Edition), 28(3), 207-218. (in Chinese)

[6] Ma, G.Y. (2021). On the Examination of Artificial Intelligence Evidence in Criminal Procedure. Chinese Criminal Law Journal, (5), 158-176. (in Chinese)

[7] Citron, D.K. (2008). Technological Due Process. Washington University Law Review, 85(6), 1249-1313.

[8] Ferguson, A.G. (2017). The Rise of Big Data Policing: Surveillance, Race, and the Future of Law Enforcement. New York: New York University Press.

[9] Oswald, M. (2018). Algorithm-assisted decision-making in the public sector: Framing the issues using administrative law rules governing discretionary power. Philosophical Transactions of the Royal Society A, 376(2128), 20170359.

[10] Rudin, C. (2019). Stop Explaining Black Box Machine Learning Models for High Stakes Decisions and Use Interpretable Models Instead. Nature Machine Intelligence, 1, 206-215.

[11] Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993).

[12] Waldman, A., & Martin, K. (2022). Governing algorithmic decisions: The role of decision importance and governance on perceived legitimacy of algorithmic decisions. Big Data & Society, 9(1).

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