USING AI IN ARBITRATING LABOR & EMPLOYMENT DISPUTES IN CHINA

AND THE U.S.

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I. Introduction

The application of artificial intelligence (AI) in labor arbitration is reshaping traditional modes of dispute resolution, and this transformation is unfolding along markedly different trajectories in China and the United States. Since 2018, China has promoted the construction of "Smart Labor Arbitration Courts" under the framework of "Internet + Mediation and Arbitration," with intelligent arbitration systems now deployed in various regions nationwide. In contrast, the U.S. has primarily relied on private technology companies to develop auxiliary arbitration tools. Behind this institutional divergence lies a deeper divide in the legal foundations and philosophical approaches of the two countries' labor dispute resolution mechanisms.

Existing research on AI in labor arbitration tends to focus on single jurisdictions, and the lack of systematic comparative studies makes it difficult to understand how different legal systems shape the adoption and configuration of technology. This paper seeks to fill this gap by offering a comparative analysis of the institutional frameworks, current practices, and developmental trends of AI application in Chinese and American labor arbitration. It aims to reveal the underlying logic of how AI is integrated into labor dispute resolution systems.

The choice to compare China and the United States is particularly meaningful. In China, labor arbitration follows a "one arbitration, two trials" model with arbitration as a mandatory precondition for litigation. Its administratively driven structure provides an institutional foundation for government-led intelligent reform. In contrast, rooted in contractualism and the principle of judicial deference, U.S. labor arbitration functions as an independent alternative to litigation in labor-management conflicts. As a result, the use of AI is strictly governed by collective bargaining agreements and procedural safeguards established in case law.

The two systems diverge across multiple dimensions, including institutional positioning, normative values, procedural design, and rule-making. This divergence shapes not only the routes through which AI enters the arbitration process but also its boundaries. At the national level, China has set a clear goal of building an integrated, large-scale, end-to-end intelligent arbitration platform—enabling deep AI involvement in decision-making. In contrast, the U.S. emphasizes

decentralized, opt-in auxiliary tools that support parties, representatives, and arbitrators in tasks such as document drafting, evidence retrieval, and administrative management across a range of discrete functions.

The paper is organized into four main parts. The second and third parts systematically examine the legal frameworks and institutional characteristics of labor arbitration in China and the U.S., assess the current role and impact of AI in practice, and analyze the associated ethical concerns and future trajectories. The fourth part builds on the comparison to explore how institutional foundations influence the adoption of AI technologies and proposes directions for potential regulatory frameworks in these two countries.

By structuring the analysis in this way, the paper seeks to provide a foundational framework for understanding both the shared patterns and the divergent pathways of technology-enabled legal procedures under different national legal contexts. This research aims to achieve three practical objectives through rigorous institutional comparison: first, to clarify the functional boundaries of AI within the labor arbitration systems of China and the U.S.; second, to identify the key institutional conditions that shape the effectiveness of AI implementation; third, to reveal emerging trends in how AI is being integrated into labor dispute resolution mechanisms. These findings will serve as a groundwork for future discussions on AI ethics in adjudication and inform institutional reform efforts.

II. AI IN CHINESE LABOR ARBITRATION

With the deep integration of AI technology into China's judicial sector, ¹ its innovative application in labor dispute arbitration has attracted considerable attention from both academia and practice.² As will be explained later in this part, labor dispute arbitration commissions in China function as quasi-judicial institutions;³ consequently, the Chinese labor arbitration system is deeply

Early scholarly views held that labor arbitration committees are neither judicial nor administrative institutions, but the activities of arbitration institutions constitute a form of arbitration litigation that reflects certain judicial characteristics. See Yushan Wang, On the Nature of China's Labor Dispute Arbitration Institutions and the Characteristics of Arbitration Work, 11 China Lab. Sci. 26, 26-27 (1987).

Recent scholars argue that the essential meaning of labor arbitration's "quasi-judicial nature" lies in its conformity with the basic characteristics of judicial proceedings, but differs from traditional judicial proceedings in that its decisions lack complete finality and the adjudication process lacks complete compulsiveness. This view has been adopted by most research. See Huyong Zhou, New Thoughts on the Construction of Labor and Personnel Dispute Arbitration-Trial Connection Mechanisms, 5 Pol. & L. Rev. 101, 104 (2017); Jianfeng Shen & Ying Jiang, The Existential Foundation, Characterization and Arbitration-Trial Relationship of Labor Dispute Arbitration, 4 Legal Sci. 146, 154-55 (2019); Lungang Wang & Linrui Ji, Quasi-Judicial and Pan-Administrative: An Empirical Study of the Nature of Labor and Personnel Dispute Arbitration Tribunals, 6 China L. Rev. 88, 96 (2019).

¹ Tian He & Yanbin Lü eds., Rule of Law Blue Book: China Court Informatization Development Report No.8 (2024) 15-18 (Social Sciences Academic Press 2024).

² In Chinese academic discourse, the application of AI in labor arbitration has received increasing attention. *See* Ke Yuhang, The Prospects of Applying Artificial Intelligence in Labor Arbitration: Insights from the Practice of Smart Court Development, 18 TIMES LEGAL STUD. 25 (2020). Government agencies have also prioritized AI integration into labor arbitration. From September 24 to 25, 2024, the First Civil Division of the Supreme People's Court and the Department of Mediation and Arbitration Administration of the Ministry of Human Resources and Social Security jointly held an on-site conference in Xiamen on the coordination between labor arbitration and judicial adjudication. The event showcased the Xiamen Coordination System, an AI-powered platform that provides labor arbitrators with diversified decision-support functions. See Shuqui Zhang, Data-Driven Empowerment: A "Xiamen Model" of Labor Dispute Coordination System Jointly Developed by the Court and the Ministry of Human Resources, LEGAL DAILY (Sept. 29, 2024), http://www.legaldaily.com.cn/index article/content/2024-09/29/content 9062367.html.

³ The Ministry of Human Resources and Social Security, Supreme People's Court & Ministry of Justice, Opinions on Further Strengthening Labor and Personnel Dispute Mediation and Arbitration and Improving Multi-Element Resolution Mechanisms, No. Renshebu Fa [2017] 26 (Mar. 21, 2017). This document proposes to "improve the labor and personnel dispute mediation system and the quasi-judicial arbitration system."

influenced by the judicial system. It has been argued that AI technology's supporting role in judicial decision-making can be categorized into two types: first, facilitating the collection and circulation of judicially relevant information and achieving networked and platform-based judicial procedures; second, substantively applying AI technology to handle legal cases.⁴ In current practice, the latter is becoming the focal point of constructing China's judicial system supported by artificial intelligence. This proactive stance toward AI technology is also reflected in labor arbitration.

Under the current legal framework, China's system of mandatory arbitration as a precondition to litigation for labor disputes sets distinctive institutional boundaries for the application of AI technologies. This part briefly outlines China's labor arbitration system and then analyzes specific applications of AI technology in labor arbitration, highlighting the key issues and their implications.

A. Arbitrating Labor Disputes in China

In China, the labor dispute resolution system follows a framework of "negotiation–mediation–arbitration–litigation." Specifically, "negotiation" refers to direct negotiations between the individual employee and employer; "mediation" can be conducted through internal enterprise labor dispute mediation committees, grassroots people's mediation organizations established according to law, or mediation organizations set up in towns or sub-districts; "labor arbitration" is conducted by labor dispute arbitration commissions composed of representatives from the labor administration department, trade unions, and employers, with the labor administration department holding the principal responsibilities; and "litigation" involves judicial recourse to the people's courts when a party contests the arbitration award.⁵ Among these procedures, negotiation and mediation are voluntary processes, which parties may choose to pursue or not; by contrast, labor arbitration functions simultaneously as a core dispute resolution mechanism and as a mandatory precondition for litigation. This institutional arrangement reflects respect for party autonomy while ensuring efficient dispute resolution through administrative-led arbitration procedures, thus forming a multitiered dispute resolution model with Chinese characteristics.⁶

In the Chinese legal context, labor arbitration specifically denotes the quasi-judicial adjudication of labor disputes by legally established labor dispute arbitration commissions, rooted in a mandatory statutory procedure stipulated by the Law on Mediation and Arbitration of Labor Disputes. Unlike the private autonomy-based U.S. model that relies primarily on collective bargaining agreements, the jurisdiction of Chinese labor arbitration derives directly from statutory provisions. Additionally, labor dispute arbitration commissions are institutionally integrated within the labor administration system and execute administrative functions—such as managing and training arbitrators, overseeing arbitration and mediation administration, and coordinating labor inspection duties—under the guidance of local human resources and social security authorities.⁷

It is particularly noteworthy that, unlike the bifurcated system of "employment arbitration" and "labor arbitration" in the United States, labor disputes in China—whether individual or collective—are uniformly adjudicated through a single arbitration procedure. Moreover, arbitration awards may

⁴ Linghan Zhang, Concerns and Responses to Technological Dependence in Smart Justice, 28 Legal Sys. & Soc. Dev. 180, 180-81 (2022).

⁵ Labor Dispute Mediation and Arbitration Law art. 4, 5, 10, 19 (China). arts. (promulgated Dec. 29, 2007, effective May 1, 2008) (China).

⁶ Baohua Dong, On the Fundamental Positioning of Labor Dispute Resolution Legislation in China, Legal Sci., No. 2, at 152 (2008).

⁷ See Article 3, Rules on the Organization of Labor and Personnel Dispute Arbitration, issued by the Ministry of Human Resources and Social Security of the People's Republic of China (effective from May 1, 2017, revised 2022), available at: https://www.gov.cn/zhengce/2022-08/31/content 5711326.htm (accessed July 17, 2025).

be directly enforced pursuant to China's Civil Procedure Law, underscoring the deep involvement of public authority in resolving labor disputes.

1. Institutional Framework

The Chinese labor dispute arbitration system is characterized by a mandatory, administrativelyled structure with quasi-judicial attributes, fundamentally differing from privately initiated commercial arbitration that is based on party autonomy and voluntariness. This system has a clear historical development and practical considerations. Its origins can be traced back to the Labor Law of the Chinese Soviet Republic of 1931, which, in its 1933 revision, established the principle of mandatory arbitration. After the founding of the People's Republic of China, the Regulations on Labor Dispute Resolution Procedures in 1950 formally established the current process, a framework that has been continuously developed and refined in subsequent regulations. This uniquely Chinese approach to labor dispute resolution has been widely accepted by society. It was finally written in the 1994 Labor Law, which first introduced the procedural model of "one arbitration followed by two trials."8 Then labor arbitration was subsequently systematized by the comprehensive 2008 Law on Mediation and Arbitration of Labor Disputes. This law made systematic provisions for the arbitration process, becoming the core legal foundation for labor arbitration today.

The system's main function is driven by three practical needs: first, during specific historical periods, judicial bodies were primarily tasked with political functions, and labor disputes were seen as non-confrontational conflicts that required specialized resolution channels. The demand for social stability made the administrative channel for resolving group disputes quickly a primary choice, with the arbitration system providing a more professional and efficient method of dispute resolution; second, the system ensures the diversion of cases through arbitration, which not only alleviates the burden on courts but also provides parties with multiple avenues for legal relief. The cost-free nature of the labor arbitration system reduces the barriers for workers to assert their rights.

Scholars have argued that the current labor arbitration system in China is fundamentally a statecontrolled, judicially centered model. Its formation stems from historical administrative control thinking, where labor disputes are handled through judicialized processes, while non-litigation mechanisms such as social mediation and arbitration are viewed as preliminary steps to the judicial process, effectively denying their finality and authority.

Established through a series of normative legal instruments, it initially emerged in the 1994 Labor Law, which first introduced the procedural model of "one arbitration followed by two trials," and was subsequently systematized by the comprehensive 2008 Law on Mediation and Arbitration of Labor Disputes. Other labor-related laws and regulations, including Labor Law, Labor Contract Law etc., have provided substantive legal grounds for arbitration awards.

Labor arbitration jurisdiction primarily includes core disputes arising from employment contracts.¹⁰ It has gradually expanded to incorporate broader issues. Notably, the revision of the Regulation on Work-related Injury Insurance in 2010 explicitly integrated disputes related to work-

⁸ Labor Law of the People's Republic of China arts. 77, 79, 83 (promulgated July 5, 1994, effective Jan. 1, 1995) (China).

¹⁰ Labor Dispute Mediation and Arbitration Law art. 2 (China). The legal scope includes confirmation of employment relationships; contract formation, performance, modification, termination, and rescission; dismissal or resignation-related issues; working hours, rest, social security, benefits, training, and occupational safety matters; wage and compensation claims including injury medical fees and economic restitution; and other labor disputes prescribed by law.

injury compensation. More recently, with the rapid growth of the platform economy and associated non-standard employment relationships (often not formalized through written contracts), several localities have piloted the inclusion of platform-worker disputes within arbitration jurisdiction.¹¹

The administrative and quasi-judicial duality of labor arbitration is reflected structurally and procedurally. Arbitration commissions operate under government supervision, issuing awards enforceable by law. 12 In the meantime, arbitration procedures adhere to principles of legality, fairness, timeliness, and prioritization of mediation. 13 Procedural norms—such as arbitrator recusal and the allocation of the burden of proof—align closely with judicial procedures. This dual character aims to balance the professional efficiency provided by administrative bodies with fairness in dispute resolution. Arbitration is generally a prerequisite for litigation, designed for efficiency, and is cost-free for workers. 14

Significantly, China's labor arbitration system aligns closely with broader social governance and multi-layered dispute resolution frameworks, encouraging diverse stakeholder participation.¹⁵ This social governance perspective influences both the organizational structure and personnel sourcing of arbitration bodies, shaping procedural practices by prioritizing mediation and ensuring integration between non-litigation dispute resolution mechanisms and arbitration procedures.¹⁶

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Ninistry of Human Resources and Social Security et al., Guiding Opinions on Safeguarding the Labor Security Rights and Interests of Workers in New Forms of Employment, No. Renshebu Fa [2021] 56 (July 16, 2021) (China). The guiding opinion states that "courts at all levels and labor dispute mediation and arbitration institutions should strengthen guidance on labor dispute case handling, facilitate smooth arbitration-trial connection, determine the relationship between enterprises and workers based on employment facts, and handle cases involving labor security rights and interests of workers in new forms of employment in accordance with laws and regulations." Mediation and Arbitration Management Division, Ministry of Human Resources and Social Security, Zhejiang Wenzhou: Establishing a "Dual-Line Integration + Multi-Element Innovation" New Employment Form Labor Dispute Resolution Mechanism, Ministry of Human Resources & Soc. Security of the People's Republic of China (Nov. 5, 2024), https://www.mohrss.gov.cn/SYrlzyhshbzb/ztzl/ldrszytjzc/jyjl/202411/t20241105_529115.html.

12 Labor Dispute Mediation and Arbitration Law art. 18 (China). Article 18 provides: "The labor administrative department of the State Council shall formulate arbitration rules in accordance with the relevant provisions of this Law. The labor administrative departments of the people's governments of provinces, autonomous regions, and municipalities directly under the Central Government shall provide guidance for labor dispute arbitration work

within their respective administrative regions."

13 Labor Dispute Mediation and Arbitration Law art. 3 (China). Article 3 provides: "In resolving labor disputes, decisions shall be based on facts and follow the principles of legality, fairness, timeliness, and emphasis on mediation, and the legitimate rights and interests of the parties shall be protected in accordance with law."

14 See Labor Dispute Mediation and Arbitration Law art. 53 (China). Article 53 states, "Labor dispute arbitration shall be free of charge. The expenses of labor dispute arbitration committees shall be guaranteed by public

shall be free of charge. The expenses of labor dispute arbitration committees shall be guaranteed by public finance." *See also*, Mediation and Arbitration Division, Ministry of Human Resources and Social Security & Civil Division One, Supreme People's Court, Answers to Reporters' Questions on the Opinions on Issues Related to the Connection Between Labor and Personnel Dispute Arbitration and Litigation (I), Ministry of Human Resources & Soc. Security (Feb. 28, 2022),

https://www.mohrss.gov.cn/xxgk2020/fdzdgknr/zcjd/zcjdwz/202202/t2022028 436944.html.

The officials noted that "after the law came into effect, there were inconsistent understandings across regions regarding the scope of final arbitration decisions... which affected the effectiveness of arbitration as a prerequisite." They further stated: "For cases where arbitration committees lawfully apply summary procedures to make final arbitration decisions, people's courts should not revoke them on grounds of violating legal procedures; for cases where arbitration committees make new dispositions through arbitration supervision procedures, people's courts should accept them in accordance with law. The above provisions are conducive to effectively exercising the prerequisite function of arbitration and promoting fair and efficient case resolution."

¹⁵ Aimed at enhancing the modernization of the national governance system and governance capacity through the construction of diversified dispute resolution mechanisms, the Supreme People's Court of China formally listed "diversified dispute resolution mechanism reform" as an important reform project in the Second Five-Year Reform Outline for People's Courts (2004-2008), No. Fa Fa (2005) 18 (Oct. 26, 2005), also known as "reform of the contradictions and disputes resolution mechanism connecting litigation and non-litigation procedures." This reform has also had a significant impact on the field of labor arbitration. See Fei Long, On the Construction of China's Diversified Dispute Resolution Mechanism from the Perspective of National Governance, 7 App. L. 2, 2, 10 (2015).

¹⁶ Shen & Jiang, *supra* note , at 150.

This layered, progressive dispute resolution framework enhances the professionalism, credibility, and flexibility of labor dispute settlement, mitigating potential tensions arising from direct administrative intervention.

2. Filing & Pre Arbitration Process

The application procedure serves as the essential foundation of the labor dispute resolution system and functions as a statutory gateway to legal remedy,¹⁷ with procedural design prioritizing convenience and efficiency. 18 Chinese labor arbitration clearly defines its jurisdiction and enforces strict timing rules for initiating arbitration: parties must file within one year from when they knew or should have known—their rights were infringed; 19 disputes over unpaid wages during employment are exempt from this limitation.²⁰ Additionally, the law requires labor arbitration commissions to accept or reject applications in writing within five days of receipt, and if accepted, to formally notify both parties and serve the respondent within five days of acceptance.²¹

Before initiating labor arbitration, the parties are encouraged to resolve the dispute through informal mechanisms such as negotiation and mediation.²² If mediation fails, the case proceeds to the formal arbitration procedure. However, throughout the entire arbitration process, mediation is emphasized by law as a preferred, statutory procedural step²³—mandated before the tribunal issues its award—because it aids in resolving conflicts and reducing contention.²⁴ It can occur at multiple stages in labor arbitration: typically, once the arbitration commission receives an application, it initiates pre-filing mediation; during arbitration, the arbitrator conducts mediation before the hearing, and mediation may be resumed at any point during the hearing; even after the hearing concludes, but before the award is issued, the parties can still reach a settlement.²⁵ The mediation process adheres to fundamental principles of voluntariness, legality, and flexibility, taking into account both legal risks and contextual reasoning. For collective or high-stakes cases, third parties such as trade unions or employer representative organizations are often brought in to assist with mediation.²⁶ Once a mediation agreement is reached, the arbitration commission issues a binding

According to Article 5 of China's Law on Mediation and Arbitration of Labor Disputes, parties to a labor dispute must first apply for arbitration with a labor dispute arbitration commission; only if they are dissatisfied with the arbitration award may they file a lawsuit with a people's court. Even for disputes involving fundamental labor rights that may fall within the scope of labor inspection, coordination with the arbitration procedure is required. For instance, Article 15 of the Regulations on Labor Security Supervision stipulates: "For matters that should be resolved through labor dispute procedures, the administrative department of labor security shall inform the parties to proceed in accordance with labor dispute resolution procedures." Therefore, filing for arbitration constitutes a mandatory precondition for initiating statutory remedies.

¹⁹ Labor Dispute Mediation and Arbitration Law art. 27 (China).

²¹ Labor Dispute Mediation and Arbitration Law art. 29 (China).

²² Labor Dispute Mediation and Arbitration Law art. 5 (China) ("When a labor dispute arises, if the parties are unwilling to negotiate, negotiation fails, or they fail to perform a settlement agreement reached, they may apply to a mediation organization for mediation; if they are unwilling to mediate, mediation fails, or they fail to perform a mediation agreement reached, they may apply to a labor dispute arbitration committee for arbitration; if they are dissatisfied with the arbitration award, except as otherwise provided in this Law, they may file a lawsuit with the people's court.").

23 Id. art. 3 (China) ("In resolving labor disputes, decisions shall be based on facts and follow the principles of

legality, fairness, timeliness, and emphasis on mediation, and the legitimate rights and interests of the parties shall be protected in accordance with law."). ²⁴ Id. art. 42(1) ("The arbitration tribunal shall conduct mediation before making an award.").

²⁵ Id. art. 41 ("After applying for labor dispute arbitration, the parties may reach a settlement on their own. If a settlement agreement is reached, the arbitration application may be withdrawn.").

²⁶ Xiong Li, Rational Review and Reform Prospects of China's Labor Dispute Mediation System, 4 China Legal Sci. 158, 160 (2013).

Mediation Statement, which has the same enforceability as an arbitration award.²⁷

During the preparation phase of arbitration, mechanisms such as evidence exchange and prehearing conferences help the parties clarify the core issues, structure the allocation of the burden of proof, and define the scope of their claims, thereby improving the efficiency of subsequent proceedings.²⁸

3. Choosing an Arbitrator

In China, the appointment of labor arbitrators and the formation of arbitration panels are administratively directed, in contrast to the party-led selection process typical in commercial arbitration. Arbitration panels are normally composed of three arbitrators, including one presiding arbitrator, while simple cases may be handled by a sole arbitrator.²⁹ The arbitration commission must formally notify both parties in writing of the panel's composition within five days of accepting the case.30

The commissions themselves are established under the labor administration system. They comprise representatives from the labor administration department, trade unions, and employers, and the total number of committee members must be odd.³¹ Arbitrators are drawn from a roster maintained by the commission,³² and must meet criteria including legal training, professional titles, or experience in human resources, labor unions, or legal practice.³³

This design reflects China's goal of ensuring multi-perspective panels that balance administrative oversight, labor interests, and professional expertise, thereby enhancing fairness and effectiveness in labor dispute resolution.³⁴

4. The Hearing

During the hearing phase, the process follows a standardized sequence of evidence submission

https://www.mohrss.gov.cn/SYrlzyhshbzb/rdzt/dlfjwn/rscjhm/201709/t20170911_277181.html.

²⁷ Labor Dispute Mediation and Arbitration Law art. 42(2)-(3) (China), "If an agreement is reached through mediation, the arbitration tribunal shall prepare a mediation agreement. The mediation agreement shall specify the arbitration request and the result agreed upon by the parties. The mediation agreement shall be signed by the arbitrators, sealed with the seal of the labor dispute arbitration committee, and served on both parties. The mediation agreement shall take legal effect after being signed and received by both parties;" See also art. 51, The parties shall perform legally effective mediation agreements and arbitration awards within the prescribed time limit. If one party fails to perform within the time limit, the other party may apply to the people's court for enforcement in accordance with the relevant provisions of the Civil Procedure Law. The people's court that accepts the application shall enforce it according to law."

²⁸ The element-based case handling model has been promoted across China in recent years. Specifically, when a claimant files for arbitration, the arbitration institution guides them to complete a "case element sheet," which is then confirmed or supplemented by the respondent during the defense stage. Based on the content of these submitted sheets, the arbitration body identifies both disputed and undisputed issues. In an element-based hearing, undisputed elements are confirmed directly, while disputed elements are subject to evidence presentation, crossexamination, investigation, and argument. This practice was first introduced in 2013 by arbitration institutions in Shenzhen, Guangdong Province, as part of their reform toward element-based adjudication, and has since been adopted in various provinces and municipalities. The purpose of this model is to enhance pre-hearing guidance in labor and personnel dispute arbitration, enabling parties to quickly grasp the contours of the dispute and clarify the focal points of claims and defenses, thereby improving the efficiency of hearings and decisions. See Ministry of Human Resources and Social Security of the People's Republic of China, Comprehensive Development and Efficiency First—A Review of Labor and Personnel Dispute Mediation and Arbitration Work Since the 18th CPC National Congress (Sept. 11, 2017),

²⁹ *Id.* art. 31. ³⁰ *Id.* art. 32.

³¹ *Id.* art. 19.

³² *Id.* art. 20.

³³ *Id*.

³⁴ Shen & Jiang, *supra* note , at 150.

– cross-examination – argument – mediation, though less formal than civil litigation.³⁵ The general rule in Chinese labor arbitration follows the civil-law principle of "he who asserts must prove"—each party bears the burden of proof for their claims.³⁶ However, Article 6 of the Labor Dispute Mediation and Arbitration Law stipulates a rebuttable presumption: when evidence related to a claim is under the employer's control, the employer must produce it; failure to do so may result in adverse inferences.³⁷ This rule is designed to balance differences in resource and evidence-gathering capabilities among the parties.

5. The Award & Finality

Labor arbitration awards in China are legally binding documents that conclude labor disputes, possessing quasi-judicial authority. Typically, an award comprises four sections: factual findings, evidence analysis, legal application, and the dispositive ruling. When rendering decisions, arbitration panels consider both individual fairness and broader societal implications, with particular emphasis on protecting workers' rights. The reasoning is clearly articulated in the award to ensure final resolution of the dispute and to guide employers toward compliant labor practices.

Chinese labor arbitration awards are legally enforceable, though their finality varies based on the nature of the dispute. Specifically, in cases involving claims for unpaid wages, work-related medical expenses, economic compensation, or damages are subject to "final and binding" arbitration awards. Workers may appeal the final and binding arbitration decision in court, but employers cannot directly litigate against an arbitration award. Employers must file a motion to annul the award in court, citing statutory grounds. Conversely, other types of disputes are subject to non-final awards, allowing either party to appeal to the courts. ³⁹Once an arbitration award becomes effective—either as a final award or as a non-final award not appealed within the statutory period—it may be enforced by the courts. ⁴⁰

This limited appeal mechanism reflects the administrative nature of China's labor arbitration system, which is characterized by strong governmental oversight. Consequently, labor arbitration awards are subject to indirect judicial supervision, ensuring that the administrative framework maintains its intended protective function for workers.⁴¹

B. Use of AI

Artificial intelligence (AI) has progressively permeated various aspects of arbitration practice in China, evolving from a mere tool to an integral component of the entire arbitration process. In the Chinese context, AI's application transcends its basic utility, embedding itself into the arbitration

³⁵ Labor Dispute Mediation and Arbitration Law art. 38, The parties have the right to present evidence and engage in debate during the arbitration process. When the presentation of evidence and debate are concluded, the chief arbitrator or sole arbitrator shall solicit the final opinions of the parties.

³⁶ *Id.* art. 6. When a labor dispute arises, the parties bear the responsibility to provide evidence for their own claims. Where evidence related to the disputed matter is under the control and management of the employer, the employer shall provide it; if the employer fails to provide such evidence, it shall bear the adverse consequences. ³⁷ *Id. See* also, art. 39(2), Where workers are unable to provide evidence related to arbitration requests that is under the control and management of the employer, the arbitration tribunal may require the employer to provide such evidence within a specified time limit. If the employer fails to provide the evidence within the specified time limit, it shall bear the adverse consequences.

³⁸ *Id.* art. 47.

³⁹ *Id.* art. 50.

⁴⁰ *Id.* art. 51.

⁴¹ Yongqian Tu, The Concept and Institutional Framework of Finalization of Labor Dispute Arbitration with Chinese Characteristics: An Interpretation of Article 47 of the Labor Dispute Mediation and Arbitration Law, 31 Legal Sci. 66, 67, 73 (2013).

workflow to enhance efficiency and fairness. The integration of AI not only assists in individual case adjudication but also enriches traditional arbitration models through process optimization, knowledge management, and intelligent decision-making, thereby driving systemic innovation in dispute resolution mechanisms.

1. Current Use

"Smart arbitration" refers to the comprehensive utilization of information technologies like big data and AI to advance the informatization and intelligence of arbitration operations and management systems, aiming to modernize both the arbitration system and its capabilities. Since the introduction of the "13th Five-Year Plan for National Informatization" by the State Council in 2016, which first proposed "smart courts" and "smart judicial services," there has been a significant push towards the application of advanced technologies such as big data and blockchain in the judicial sector. In response to the demand for intelligent governance, the Ministry of Human Resources and Social Security issued the "Internet+ Mediation and Arbitration 2020 Action Plan" in 2018, designating the establishment of "Smart Labor Arbitration Commissions" as a key objective. The introduction of the concept of "Smart Labor Arbitration Commissions" has propelled the adoption of AI and other technological tools in the field of labor arbitration.

a. Online Case Filing & Hearings

The capability of AI tools to swiftly process data and execute instructions has been applied to handle repetitive tasks and procedural work, such as online case filing and hearings. Compared to traditional labor arbitration filing methods that require parties to submit materials in person, online filing and hearings have significantly simplified the arbitration process, shortened arbitration time, and reduced the workload of arbitrators, thereby enhancing the unique advantages of labor arbitration in swiftly resolving collective disputes and ensuring social stability.⁴⁶

During the filing process, AI-driven online filing systems support intelligent form filling, enabling the system to automatically identify key information in evidence, such as labor contracts and wage records, thereby reducing manual input errors. Additionally, AI technology reduces procedural burdens on parties by verifying the completeness of materials.⁴⁷

In current Chinese practices, many regions support online case filing. For instance, the Qingdao Labor and Personnel Dispute Arbitration Court in Shandong Province has established "online hearings" and "Internet+ mediation" systems, allowing parties to complete case filing applications, upload and supplement electronic evidence, and modify arbitration requests online. Simultaneously,

⁴⁵ Notice of the General Office of the Ministry of Human Resources and Social Security on Issuing the "Internet + Mediation and Arbitration" 2020 Action Implementation Plan, No. Renshetingfa [2018] 83 (July 31, 2018) (China).

See Ming Zhang & Yuanzhong Shao, Focus on Weihai: AI Reshaping the Labor Arbitration Ecosystem, CHINA LABOR AND SOCIAL SECURITY NEWS, June 20, 2025, at 3.

⁴² See Huyong Zhou, Research on Intelligent Arbitration of Labor and Personnel Disputes 42 (Law Press 2023).

⁴³ Notice of the State Council on Issuing the 13th Five-Year Plan for National Informatization, No. Guofa [2016] 73 (Dec. 27, 2016) (China).

⁴⁴ He & Lü, supra note , at 1518.

⁴⁶ Lingling Hou, Reflection and Reform of the One-Arbitration Final System for Labor Disputes, 34 Legal & Com. Stud. 160, 165 (2017); Yujuan Zhai, Research on Labor Dispute ADR: Including an Interpretation of the Labor Dispute Mediation and Arbitration Law of the People's Republic of China, 27 L. Rev. 133, 138 (2009).

⁴⁷ For example, in the practice of Weihai City, Shandong Province, arbitrators imported over 200 pages of evidence—including payroll ledgers and attendance records—into the "Huancui Smart Arbitration" system. The system used OCR to extract key data and applied AI for comparison and analysis. Within five minutes, it completed evidence verification and generated a list of critical data points according to the arbitrator's instructions. In contrast, the same task would typically require four hours of manual review. The system has improved hearing efficiency by 60%.

parties need only provide basic information on the platform to be matched with the nearest grassroots mediation organizations to receive labor and personnel dispute mediation services.⁴⁸

The application of information technology has also made online arbitration hearings possible. The Guangdong Labor and Personnel Dispute Arbitration Commission has introduced corresponding rules to regulate the expanded application of online hearings, including "Internet+ arbitration" online hearings, asynchronous hearings, and electronic labor contract dispute handling. These regulations define online arbitration hearings, clarify their scope of application, and affirm their legal effect equivalent to offline hearings. ⁴⁹ The rules concerning Internet asynchronous hearings also allow both parties to independently choose times to log into the platform to complete defense and evidence examination, further reducing coordination costs. ⁵⁰

Current developments in smart arbitration courts have moved beyond merely constructing informatized business process systems or handling procedural matters online. They are exploring the development direction of "virtual arbitration courts," attempting to use information technology to establish online dispute resolution institutions without physical entities, effectively possessing actual adjudicatory functions.⁵¹

b. Identity & Transcription Tools

During labor arbitration hearings, AI-driven identity verification and speech transcription technologies are transforming traditional court recording methods. These tools not only enhance hearing efficiency but also standardize processes, improving the procedural integrity and transparency of arbitration.

In China's commercial arbitration practice, a notable example is the AI arbitration assistant developed by the Guangzhou Arbitration Commission. This assistant offers three main functions: pre-hearing identity verification, real-time speech transcription during hearings, and post-hearing ruling consultation.⁵² It demonstrates how AI tools can enhance the efficiency and reliability of arbitration procedures. Regarding identity verification, the AI arbitration assistant utilizes composite technologies to quickly authenticate the identities of parties and their representatives before hearings. Its transcription function generates structured records through real-time transcription, even providing "real-time search" intelligent assistance to arbitrators.⁵³ Similarly, the intelligent arbitration hearing system implemented by the Aihui District Labor and Personnel Dispute Arbitration Court in Heihe City, Heilongjiang Province, integrates multiple AI-based hearing support functions, including real-time speech transcription, hearing record generation, and online editing.⁵⁴

⁴⁸ Shandong Qingdao: Ushering in a New Era of "Smart Arbitration", Ministry of Human Resources & Soc. Security (May 15, 2023),

 $https://www.mohrss.gov.cn/SYrlzyhshbzb/ztzl/ldrszytjzc/jyjl/202305/t20230515_500036.html.$

⁴⁹ See Guangdong Provincial Labor and Personnel Dispute Arbitration Committee "Internet + Arbitration" Online Hearing Rules (Trial Implementation) arts. 3, 4; Notice of Guangdong Provincial Labor and Personnel Dispute Arbitration Committee on Issuing Three Rules Including the "Internet + Arbitration" Online Hearing Rules, Asynchronous Hearing Rules, and Electronic Labor Contract Dispute Resolution Rules, No. Yuelaorenbei [2024] 1 (July 19, 2024) (China).

Notice of Guangdong Provincial Labor and Personnel Dispute Arbitration Committee on Issuing Three Rules Including the "Internet + Arbitration" Online Hearing Rules, Asynchronous Hearing Rules, and Electronic Labor Contract Dispute Resolution Rules, No. Yuelaorenbei [2024] 1 (July 19, 2024) (China).

⁵¹ See Zhou, supra note, at 64.

⁵² Linping He, Guangzhou Arbitration Commission Accelerates Deep Integration of Artificial Intelligence and Arbitration Services, Exploring to Provide More Fair and Efficient Arbitration Services, People's Daily, Nov. 17, 2023, at 11.

⁵³ Id.

⁵⁴ Aihe Human Resources and Social Security Bureau, Digital Empowerment! Aihe District Takes the Lead in the

c. AI Assistants in Hearings: Pioneering AI "Arbitrator Assistants" (e.g., Guangzhou's Zhong Xiaowen)

In the field of labor dispute arbitration, AI is gradually evolving from a supportive tool to an active participant in hearings. Historically, China's dispute resolution mechanisms have faced challenges such as personnel shortages. The application of AI technology has led to the creation of virtual arbitration assistants capable of providing round-the-clock legal services. Their core functions include offering continuous intelligent consultation services, addressing workers' arbitration-related queries through natural language interactions, and alleviating the pressure on arbitration institutions caused by human resource limitations. During arbitration hearings, AI's real-time assistance—such as automatically identifying and suggesting relevant legal provisions and generating questioning outlines—helps provide decision-making references for arbitrators. Additionally, the automation of document generation has become feasible, enabling AI to instantly produce mediation agreements and draft awards based on hearing records, thereby freeing arbitrators from clerical tasks. 8

In practice, the Guangzhou Arbitration Commission in Guangdong Province has set a benchmark in the civil and commercial arbitration sector: it launched the world's first AI arbitration assistant, "Zhong Xiaowen," which completed its inaugural international arbitration hearing without a human tribunal secretary. Utilizing its developed "LCode Arbitration Whole-Process Intelligent Support System," the assistant can automatically analyze cases, generate mediation proposals, and, in 2024, successfully mediated the first AI-led loan contract dispute case.⁵⁹ This system can be adapted for use in labor dispute arbitration.

Compared to civil and commercial cases, the application of AI assistants in labor arbitration demonstrates additional advantages: Balancing Power Dynamics: By providing simplified legal explanations, AI assists in bridging the knowledge gap for workers with limited legal understanding; Enhancing Efficiency in Collective Disputes: AI enables batch analysis of cases, facilitating the consolidation of hearings and improving the processing efficiency of collective disputes; Personalized Mediation Proposals: Leveraging historical data, AI can intelligently recommend tailored mediation solutions, promoting effective dispute resolution; The integration of AI into labor arbitration not only streamlines procedures but also ensures fairer and more efficient dispute resolution, aligning with the evolving needs of modern legal systems.

d. Intelligent Evidence Handling

City to Launch a New Chapter in Case Handling with "Intelligent Arbitration Court System", WeChat Public Account (Apr. 2, 2024), https://mp.weixin.qq.com/s/gQT9r1j871BcqxwBfX4wcg.

⁵⁵ See Zengyi Xie, The Concepts, Systems and Challenges of Labor Dispute Resolution in China, 30 Legal Stud. 97, 108 (2008); See also Hou, supra note [X], at 163.

⁵⁶ For example, in the practice of Weihai City, Shandong Province, AI tools capable of rapidly generating legal documents—such as mediation agreements and arbitration awards—have significantly reduced the workload of arbitrators. See Ming Zhang & Yuanzhong Shao, Focus on Weihai: AI Reshaping the Labor Arbitration Ecosystem, China Labor and Social Security News, June 20, 2025, at 3.

⁵⁷ He, supra note [X].

⁵⁸ For instance, during the 2025 Zhongguancun Forum Annual Conference, the Justice Bureau of Haidian District in Beijing organized a legal outreach event featuring the "AI Legal Education and Mediation" brand from Dongsheng Township as part of the forum's "AI in Haidian: Intelligent Innovation and Science Popularization" session. This AI system offers one-on-one, personalized, and customized legal consultation services, providing the public with around-the-clock, uninterrupted, and intelligent access to legal advice and mediation. See Weilun Xu, Beijing Haidian's "AI Legal Education and Mediation" Debuts at Zhongguancun Forum, Legal Daily (Community Edition), Apr. 6, 2025, at 2.

⁵⁹ Guangzhou Arbitration Commission Advances International and Intelligent Development, Contributing to Greater Bay Area Arbitration Going Global, Guangzhou Mun. Gov't (May 22, 2024), https://www.gz.gov.cn/zwgk/fzzfjs/cxld/content/post 9661833.html.

AI technology is demonstrating its potential in the evidence handling phase of labor dispute arbitration. The integration of blockchain technology with AI algorithms enables systems to automatically verify the authenticity and completeness of electronic evidence. AI-driven analysis can generate structured visualizations, enhancing the transparency and standardization of adjudicatory reasoning.⁶⁰ Even when faced with large volumes of complex evidence, arbitrators can leverage AI to swiftly identify key issues, thereby improving the consistency of decisions.⁶¹

Furthermore, AI provides efficient computational tools for both parties and arbitrators. By utilizing regional economic data and industry wage standards, AI can automatically calculate key amounts such as economic compensation and work-related injury compensation, offering intelligent calculation suggestions and reducing manual errors. For example, the Chongqing Labor and Personnel Dispute Arbitration Court has introduced a legal AI consultation robot that offers precise compensation calculation tools, assisting workers in estimating their entitlements and providing data support to arbitrators to enhance decision-making efficiency.⁶²

e. Decision Support

AI tools can assist arbitrators in summarizing legal elements, thereby supporting the determination of facts in disputes. By automatically extracting key facts from arbitration applications and responses, and mapping the issues to relevant legal provisions, AI can enhance the efficiency of fact-finding and reduce manual errors.⁶³

In the decision-making phase, AI's core value lies in standardizing adjudication criteria. Through natural language processing and machine learning technologies, AI can structure historical cases and extract key legal elements to construct quantifiable adjudication rule models, providing references for arbitrators' discretion. Additionally, AI can simulate and generate mediation proposal options, serving as a reference for arbitrators' intervention in mediation.⁶⁴

f. Quality Control

AI technology can perform quality control on arbitrators' decisions, grounding their reasoning in a broader range of sample elements. By analyzing adjudication standardization and similar case patterns, AI enhances the scientific and consistent nature of arbitration decisions, minimizing the impact of cognitive biases on fairness.⁶⁵

AI can intelligently match and recommend similar cases from historical award databases, comparing the factual characteristics of pending cases with the case library to output similar case

⁶⁰ Xiaochun Liu, China International Arbitration and Technology Empowerment: From the Perspective of Shenzhen Court of International Arbitration's Smart Arbitration System, The Paper (Jan. 10, 2025), https://www.thepaper.cn/newsDetail forward 29895785.

⁶¹ Marrow, Paul Bennett, Mansi Karol & Steven Kuyan. The Computer as an Arbitrator-Are We There Yet? Dispute Resolution Journal 74(4), 2020: 35-76.

⁶² Chongqing: "Yijian Cai" Launches Full-Process Online Dispute Resolution Services, Ministry of Human Resources & Soc. Security (Dec. 17, 2021),

https://www.mohrss.gov.cn/SYrlzyhshbzb/laodongguanxi/gzdt/202112/t20211217 430638.html.

⁶³ For example, the Haidian District Arbitration Court in Beijing has explored a human–machine collaborative working model, using AI software during case mediation to search and compare similar cases, thereby providing both parties with personalized legal and regulatory guidance. See Grassroots Updates | Haidian's "AI + Arbitration" Accelerates Dispute Resolution; Daxing District Delivers Targeted Legal Education in Logistics Parks, Beijing Talent Market News (WeChat Official Account), May 23, 2025, https://mp.weixin.qq.com/s/3aThRmlzUqAuIfvYsBlYwQ.

⁶⁴ For example, the human–machine collaborative working model adopted by the Haidian District Arbitration Court in Beijing also supports AI-assisted functions for generating mediation proposals. From January to May 2025, over 500 disputes were successfully mediated with the assistance of AI software. See supra note [X].

⁶⁵ See Shengcui Zhang & Yang Tian, Application of Artificial Intelligence in Commercial Arbitration: Value, Dilemmas and Paths, 26 Shanghai U. Fin. & Econ. J. 122, 125-26 (2024).

adjudication tendencies. For instance, Zhejiang Province's "Similar Case Consistency" system analyzes 15,000 historical cases to generate visual analysis reports, marking compensation ranges and evidence adoption standards for similar cases, thereby reducing arbitrators' discretionary biases. ⁶⁶When an arbitrator's proposed decision significantly deviates from similar case trends, the system can automatically issue alerts.

2. Ethical Concerns

Although improving judicial efficiency is a common goal of judicial institutions around the world in applying artificial intelligence technology, China's practice in this area demonstrates distinct local characteristics. Motivated by the domestic tech sector's "curve overtaking" development strategy, Chinese courts and arbitration institutions have shown notable enthusiasm for the application of AI technology—an enthusiasm fully reflected in practices such as the construction of smart courts and smart arbitration courts. However, the expansion of both the depth and breadth of technological application has also raised more complex ethical issues. It is worth noting that, due to China's unique institutional structure and legal-cultural traditions, these ethical debates differ in both form and substantive content from those occurring in the U.S. context. The following section explores the challenges that may arise in applying AI to labor arbitration.

a. Non-Delegation Principle

Labor arbitration is essentially a process in which humans apply legal wisdom and experience to make value judgments, and this characteristic determines that final decision-making authority cannot be delegated to AI. Although AI technology can currently provide assistance such as data analysis, case recommendation, and even draft decision generation, arbitrators must retain substantive control over the decision outcome.

Although in current practice, judicial decision-making authority has gradually shifted from peripheral matters to core adjudicative domains, 67 the substantive participation of human adjudicators and their independent judgment on case elements that cannot be digitized are not only important guarantees of substantive justice in judicial decisions⁶⁸ but also constitute the clear boundary currently drawn by rules for technological involvement in adjudication. In 2022, the Supreme People's Court of China issued The Supreme People's Court The Opinions on Regulating and Strengthening the Applications of Artificial Intelligence in the Judicial Fields, which established the principle of Supporting Adjudication in judicial AI applications. This principle explicitly affirms the auxiliary role of judicial AI technology and upholds users' autonomy in decision-making. It draws a clear red line by stating that "artificial intelligence must not replace judges in adjudication," ensuring that judicial decisions are always made by adjudicators and that judicial responsibility ultimately lies with them.⁶⁹ Although this rule does not directly apply to labor arbitration, the principle is still highly relevant: as a quasi-judicial mechanism for resolving labor disputes, labor arbitration can draw important insights from it in constructing a regulatory framework for the

⁶⁸ See Zhang, supra note [X], at 197.

⁶⁶ Zhejiang Launches Digital Application for "Similar Case, Same Arbitration" in Labor and Personnel Disputes, China Organization & Personnel News (Dec. 16, 2024),

https://www.zuzhirenshi.com/detailpage/e3121e68084445fba5351c97d16a3a0a. See Lusheng Wang, Risks and Ethical Regulation of Judicial Big Data and Artificial Intelligence Technology Application, 36 Legal & Com. Stud. 101, 107 (2019).

⁶⁷ Lushang Wang, Risks and Ethical Regulation of Judicial Big Data and Artificial Intelligence Technology Application, 36 Legal & Com. Stud. 101, 107 (2019).

⁶⁹ Opinions of the Supreme People's Court on Standardizing and Strengthening the Judicial Application of Artificial Intelligence, No. Fa Fa [2022] 33 (Dec. 9, 2022) (China).

application of AI, and is likely to follow the same rule in the future.

b. Incentivized AI Use and Institutional Pressure

A notable ethical concern in China's labor arbitration practice lies in the performance evaluation mechanisms established under administrative authority. These evaluation systems directly influence arbitrators' career advancement, compensation, and professional assessment.⁷⁰ Because evaluation outcomes are closely tied to personal interests, arbitrators often adjust their behavior to align with assessment criteria.⁷¹

As AI technology becomes more widely adopted in the judicial sector, some arbitration institutions have begun incorporating "AI technology usage" into performance evaluations—such as requiring arbitrators to increase the frequency of smart system usage or to rely on AI-generated decision recommendations. On the one hand, this overemphasis on technical usage as a performance indicator may encourage arbitrators to use AI tools to meet metrics rather than to address actual case needs. For example, arbitrators may apply AI systems in simple cases merely to improve their usage scores, thereby introducing unnecessary procedural redundancy. On the other hand, the mechanistic nature of AI-related evaluations may erode arbitrators' case-specific discretion. Arbitrators may become more inclined to follow algorithmic suggestions rather than comprehensively assess the complex dynamics of labor relations, thereby undermining the substantive justice of arbitration decisions.

Within the broader institutional context where China's labor arbitration emphasizes "mediation first," an overreliance on quantifiable technical indicators may weaken arbitrators' capacity—and willingness—to mediate and reconcile disputes. This suppresses their initiative and, in turn, dilutes the system's original emphasis on multi-perspective reasoning and institutional flexibility.

c. No Algorithmic Bias

Although AI technology may enhance efficiency and reduce human subjectivity, its decision-making logic relies heavily on historical data and feature modeling. However, some of that data may reflect embedded social or institutional biases, thereby inadvertently reinforcing or amplifying existing structural inequalities. ⁷³ For instance, if past arbitration decisions show that migrant

⁷⁰ Article 25 of the Rules on the Organization of Labor and Personnel Dispute Arbitration provides: "Arbitration commissions shall establish performance evaluation standards for arbitrators, focusing on case quality and efficiency, work ethic, and compliance with laws and regulations. Evaluation results shall be categorized as Excellent, Qualified, or Unqualified."Article 26 further states: "An arbitrator shall be dismissed by the arbitration commission under any of the following circumstances: ... (3) receiving an 'Unqualified' rating in the annual evaluation; ..."

⁷¹ Existing studies have examined the impact of performance evaluation systems on judicial decision-making in China, noting that under such systems, judges tend to prioritize meeting institutional performance targets over exploring the substantive legal purposes of individual cases. This dynamic results in substantive rationality being subordinated to instrumental rationality. See Yongjun Li & Aizhu Fu, "Disciplined" Judiciary and "Bound" Judges: A Deeper Interpretation of the Dilemmas and Misconceptions in the Judicial Performance Evaluation System, 32 LEGAL SCI. 11, 18 (2014). This line of analysis is undoubtedly relevant to understanding how labor arbitrators—who are even more directly influenced by administrative performance evaluations—approach decision-making. In addition, some scholars argue that under the current administrative context, where internal authority within departments has weakened or become absent, labor arbitration institutions often operate under narrow performance metrics. As a result, these institutions may become inclined to seek new "performance growth points" or showcase innovations, which can, in turn, lead to a misalignment of institutional functions. See Shengli Song, Rethinking Institutional Reform and Functional Allocation in Labor and Personnel Dispute Arbitration, ADMIN. & L., No. 8, at 75 (2019).

⁷² Article 3 of the Law of the People's Republic of China on Mediation and Arbitration of Labor Disputes establishes the principle of "prioritizing mediation" in the handling of labor disputes. In practice, according to the 2024 Statistical Bulletin on the Development of Human Resources and Social Security, a total of 4.156 million labor dispute cases were concluded by labor mediation organizations and arbitration institutions across all levels in China in 2024, with a mediation success rate of 79.6% for the year.

⁷³ Jiaojun Wu & Waner Guo, Legalized Governance of the Algorithmic "Black-Box" in the Era of Artificial

workers systematically received lower compensation for work-related injuries than urban employees, the AI system might replicate this trend—leading to new decisions that perpetuate insufficient compensation.

The risk of algorithmic bias is even more pronounced in scenarios where labor arbitrators facilitate mediation before they make an arbitral decision. A defining feature of China's labor mediation is its emphasis on tailoring solutions based on the specific circumstances of the parties, integrating legal principles with social reasoning. However, current AI mediation systems primarily rely on algorithmic deductions from historical case data. This reliance risks overlooking the uniqueness of individual cases and amplifying systemic biases embedded in historical datasets. When AI-generated recommendations—despite being rooted in biased data—are presented as neutral and objective technical conclusions, arbitrators may unconsciously adopt them, thus subtly influencing the direction of negotiation.

What makes this issue particularly complex is the informal and flexible nature of labor mediation in China. Outcomes are often not strictly governed by substantive legal rules, making the influence of algorithmic bias more concealed. Such biases are difficult to detect through conventional judicial oversight and are also hard to correct through post-hoc review mechanisms.

d. Procedural Coherence

Under China's "one arbitration, two trials" system for resolving labor disputes, the relationship between labor arbitration and litigation remains theoretically contested. The coordination between arbitration and judicial review also significantly affects how AI technology can be explored, applied, and regulated.

The mandatory "arbitration-first" procedure means that, although arbitration and litigation are formally independent stages, arbitration awards that are challenged will undergo a full retrial in court rather than a limited legality review. This institutional arrangement requires arbitration outcomes to be substantively reviewable, so that courts can re-examine the case during litigation. However, current AI-based mediation systems often treat their reasoning algorithms as proprietary and therefore do not disclose the logic behind their decisions. As a result, the evidentiary assessments or decision rationales formed during arbitration—especially those involving AI-generated analysis—may lack the transparency necessary for meaningful judicial scrutiny. Courts may reject such evidence on the grounds that it does not meet judicial standards for evidentiary review.

Even before the use of AI, China's "one arbitration, two trials" framework was already criticized for inconsistent standards between arbitration and litigation.⁷⁷ The introduction of AI technology

⁷⁴ Xueyao Li argues that, according to Daniel Kahneman's dual-system theory of thinking, judges are compelled to activate System 2—characterized by rational and deliberate thinking—when drafting judicial decisions. However, when relying solely on AI's assistive functions, they are more likely to engage System 1 thinking, which increases the likelihood of falling prey to "amplified bias" effects. Based on this framework, arbitrators conducting labor dispute mediations often operate in rapidly changing negotiation settings that demand quick responses and empathetic engagement with the parties. This makes it more likely that they rely on System 1 thinking, which is fast and intuitive, and therefore more susceptible to AI-driven bias. See Xueyao Li, Judicial Bias and Cognitive Intervention in the Application of Large Language Models, Politics & Law, No. 5, at 65–76 (2025).
⁷⁵ See Shen & Jiang, supra note [X], at 157.

Intelligence, 01 Sci. & L. (Chinese & English) 19, 21 (2021).

B. Bodo., et al. "Tackling the Algorithmic Control Crisis: The Technical, Legal, and Ethical Challenges of Research into Algorithmic Agents." Yale Journal of Law and Technology 19, no. 1 (2017): 136-138.
 See Hou Lingling, supra note [X], at 162; Zhou Huyong, supra note [X], at 105; Shen & Jiang, supra note [X],

⁷⁷ See Hou Lingling, supra note [X], at 162; Zhou Huyong, supra note [X], at 105; Shen & Jiang, supra note [X], at 150. See also Zhenxing Ke, "One Arbitration, Two Trials": The Efficiency Paradox and Reform of China's Labor Dispute Resolution Mechanism—Based on an Empirical Study of 4,431 Court Judgments in Beijing from 2014 to 2018, Renmin U. L. Rev., No. 1, at 46 (2022).

may exacerbate these inconsistencies. Different AI models may apply varying legal reasoning frameworks at different stages of the dispute resolution process, which could result in conflicting outcomes. Therefore, achieving coherence between arbitration and litigation in the age of AI will require foundational infrastructure: namely, data sharing, the creation of a unified labor dispute case database, and coordinated training of AI models across institutions to ensure consistency in legal interpretation and application.

e. Policy Responsiveness

Labor arbitration in China is directly shaped by policy changes, ⁷⁸yet AI models—trained on historical data—often fail to promptly reflect new policy directives. Striking a balance between legal stability and responsive adaptability to policy represents a key challenge for AI integration.

Chinese labor arbitration is grounded in relatively stable labor laws, but its outcomes are substantially influenced by rapidly evolving labor policies. Current AI systems deployed in labor arbitration typically suffer from policy lag: essential parameters like minimum wage levels and social insurance contribution bases are frequently revised, but AI models seldom update accordingly. Without timely model retraining or parameter adjustment, calculation errors become unavoidable when these systems are used in dispute resolution.

3. For the future

AI is playing an increasingly important role in China's labor arbitration system. Its influence is no longer confined to process optimization or efficiency gains—it is poised to reshape the future paradigm of labor dispute resolution. The following section explores near- and long-term developments, with a focus on national strategies and localized innovations.

a. Strategic Direction: National Policy Support for AI in Legal Services

At the national level, the Chinese government has positioned AI as a key driver for improving the efficiency of dispute resolution mechanisms and enhancing the quality of public legal services. The 2017 "New Generation Artificial Intelligence Development Plan" designated "smart justice" as a strategic area, calling for the development of integrated judicial data platforms and AI applications in evidence collection, case analysis, and legal document review. ⁸⁰ In 2019, the joint Opinions by the General Office of the CPC Central Committee and the State Council further advocated for the deep integration of legal services and technological innovation, promoting AI-powered legal platforms capable of handling mass-scale public use. ⁸¹

China's policy blueprint reflects three distinct features:82

Platform Centralization: Aiming to build a unified national AI arbitration platform with extensive processing capacity;

Full-Chain Application: Encouraging AI involvement across the entire dispute resolution cycle—from prevention and mediation to arbitration and litigation;

Deep Integration: Prioritizing not just efficiency but intelligent support for legal decision-

⁷⁸ Tianyu Wang, Labor Policy Should Serve as a Special Source of Law in Dispute Resolution, China Lab. & Soc. Sec. News, June 5, 2020.

⁷⁹ See Tian Yan, Knowing Which Direction: Labor Relations Between Law and Policy 6 (China Democracy & Legal Sys. Press 2022).

⁸⁰ Notice of the State Council on Issuing the Development Plan for New Generation Artificial Intelligence, No. Guofa [2017] 35 (July 20, 2017) (China).

Opinions of the General Office of the CPC Central Committee and the General Office of the State Council on Accelerating the Construction of Public Legal Service System (July 10, 2019) (China).

⁸² Jie Gao, Qijun Xie, Cui Huang, et al., A Comparative Study of AI Development Policies and Strategic Planning in China and Germany, 39 Sci. & Tech. Mgmt. Res. 206, 209 (2019).

making by arbitrators and parties alike.

In the short term, AI is expected to become a standardized auxiliary tool across arbitration institutions. Functions such as online filing, AI-assisted evidence processing, and case recommendation—already piloted in several provinces—are likely to be scaled nationwide.⁸³

In the long term, AI may facilitate deep integration between arbitration and litigation, enabling a unified digital adjudication platform. Such a system would synchronize labor dispute data across institutions, reduce evidentiary duplication, and align decisions across arbitration and court proceedings. This requires interoperable databases, shared standards, and joint AI model training. However, this vision must address barriers such as data security, institutional cooperation, and risks of over-centralization. Wider adoption also depends on solving practical challenges like database construction, technical compatibility, and improving arbitrators' digital literacy. Moreover, it remains essential to preserve human discretion and prevent AI suggestions from overriding arbitrator autonomy.

- b. Local Innovation and Future Trends
- (1) Predictive Analytics The "Wen Xiaozhong" Model (Wenzhou, Zhejiang)84

Wenzhou's "Wen Xiaozhong" system, launched in 2020, demonstrates predictive analytics in labor arbitration. Built on NLP and knowledge graphs, the system offers three functions: first, worker-oriented legal guidance, providing arbitration flowcharts and rights calculators via chatbot, used by over 12,000 users with a 90.4% accuracy rate; second, enterprise compliance alerts, using micro-courses and case push notifications to warn of employment risks; third, assistance for arbitrators, enabling fast retrieval of legal provisions and adjudication rules.

The system promotes a full-cycle dispute resolution approach—from prevention to mediation to arbitration. Going forward, such predictive tools may be made accessible to both arbitrators and parties, enabling probability-based outcome forecasting and early-stage settlement. For workers unfamiliar with legal procedures, this may help reduce information asymmetry and rebalance procedural power. Nevertheless, overreliance on historical data may entrench past decision patterns and hinder legal innovation. Predictive systems must therefore meet disclosure and audit standards to ensure transparency and fairness.

2. Automated Decision-Making – The "AI + Human" Collaborative Model (Futian, Shenzhen)⁸⁵

⁸³ The Notice by the Ministry of Human Resources and Social Security on Issuing the "Internet + Human Resources and Social Security" 2020 Action Plan (2016 No. 105), issued on November 1, 2016, set forth the goal that by 2020, a comprehensive, efficient, high-quality, and well-supervised information network for mediation and arbitration would be largely established. The plan called for near-universal coverage of online case handling, widespread online mediation and arbitration services, the initial formation of information-sharing mechanisms with relevant departments, and the full realization of the leading and supportive role of digital infrastructure in the development of mediation and arbitration. The plan also emphasized the enhanced capacity of mediation and arbitration services to support parties, the development of the human resources and social security system, and broader reform and social stability.

Some scholars have identified four major tasks under China's "Internet + Mediation and Arbitration" initiative: the unification of case-handling systems, improved personnel management, the collection and statistical analysis of case data, and the construction of online mediation and arbitration platforms. Given that an integrated platform for labor mediation and arbitration has already been established and that various regions have begun experimenting with its application, the promotion of additional functions—such as document archiving and evidence recognition—is likely to remain a future trend in China's labor arbitration system. See Ke, supra note [X] at 26.

84 Zhejiang Provincial Human Resources and Social Security Department, Zhejiang Wenzhou: Launching "Intelligent AI" and "Cloud Integration Court" Case Handling Models, Ministry of Human Resources & Soc. Security (Sept. 17, 2020),

https://www.mohrss.gov.cn/SYrlzyhshbzb/dongtaixinwen/dfdt/202009/t20200917 386041.html.

⁸⁵ Guangdong Provincial Human Resources and Social Security Department, Guangdong Shenzhen Futian District: Innovating "AI Digital Employees + Human Employees" Collaborative Arbitration Model, Ministry of Human Resources & Soc. Security (Apr. 9, 2025),

In 2025, Shenzhen's Futian District introduced a collaborative arbitration model for straightforward cases such as work injury disputes. The system, guided by the "Provisional Measures on Government AI Robot Management," defines AI staff's responsibilities in evidence extraction and document drafting. Draft rulings must be reviewed by human arbitrators.

The system, powered by a DeepSeek LLM, structures rulings into 157 elements, improving document generation speed by 70% and evidence accuracy by 95%. Overall arbitration efficiency increased by 30%, while arbitrators retained final decision-making authority. The "AI + Human" framework leverages AI's efficiency while addressing ethical concerns, offering a replicable model for similar jurisdictions.

Futian's experiment points toward fully automated AI adjudication for simple cases in the future. Upon submission, the system could analyze evidence and generate binding decisions, drastically reducing time and cost. However, such automation must remain limited to cases without substantive disputes and should preserve the right to human review to ensure procedural fairness.

III. AI IN U.S. LABOR ARBITRATION

As the use of AI continues to expand across legal and dispute resolution settings, its potential applications in U.S. labor and employment arbitration merit focused attention. Before assessing how AI tools may affect brief-writing and other aspects of advocacy in this specialized field, it is essential to understand the unique characteristics of labor and employment arbitration in the United States. The following sections provide a brief overview of this legal context and then examine how AI technologies, particularly large language models (LLMs), are being used – or could be used – by advocates and arbitrators.

A. Arbitrating Labor & Employment Disputes in the U.S.

In the United States, the term labor arbitration typically refers to the arbitration of grievances that arise under a collective bargaining agreement (CBA) between an employer and a labor union. The arbitrator's authority to decide such disputes stems from an arbitration clause contained in the CBA and is generally limited to interpreting and applying the terms of that agreement.⁸⁶ These disputes often involve issues such as discipline, discharge, seniority, job assignments, or contract interpretation.⁸⁷ The arbitrator's jurisdiction does not extend beyond the bounds of the CBA, and the resolution must be grounded in the parties' mutual obligations as expressed in the agreement.⁸⁸

By contrast, employment arbitration refers to the arbitration of legal disputes between an employer and an individual employee, typically outside the unionized context.⁸⁹ In these cases, the arbitrator's authority is conferred by an arbitration clause in a contract between the employer and the individual employee. 90 Unlike in labor arbitration, the arbitrator's jurisdiction in employment arbitration is usually broader, extending to a range of statutory and common law claims, such as employment discrimination, harassment, retaliation, wage/hour laws, and wrongful discharge.⁹¹

https://www.mohrss.gov.cn/SYrlzyhshbzb/ztzl/ldrszytjzc/jyjl/202504/t20250409 540089.html.

⁸⁶ Martin H. Malin, Ann C. Hodges & Jeffrey M. Hirsch, Labor Law in the Contemporary Workplace 789–90 (3d

⁸⁷ Nolan & Bales, Labor and Employment Arbitration in a Nutshell, 4th ed., chapter 9 ("Nutshell").

⁸⁸ United Steelworkers of Am. v. Warrior & Gulf Navigation Co., 363 U.S. 574, 581–82 (1960).

Nutshell, supra note ___, at 2.
 Katherine V.W. Stone, Mandatory Arbitration of Individual Employment Rights: The Yellow Dog Contract of the 1990s, 73 Denv. U. L. Rev. 1017, 1022-23 (1996).

⁹¹ DAVID B. LIPSKY, RONALD L. SEEBER & RICHARD FINCHER, EMERGING SYSTEMS FOR MANAGING WORKPLACE CONFLICT 114-16 (2003).

Although labor and employment arbitration share many procedural similarities, employment arbitration tends to be more formal in practice: discovery, including depositions, is routine, and parties frequently file pre-hearing motions. ⁹² The following sections will first describe labor arbitration in detail and then explain how employment arbitration differs in key respects.

1. Legal Foundations: Contractualism and Legal Deference

The legal framework for labor arbitration in the United States is grounded in principles of contractualism and judicial deference. This structure was firmly established by the Supreme Court in a seminal trio of 1960 decisions collectively known as the Steelworkers Trilogy: *United Steelworkers v. American Manufacturing Co.*, *United Steelworkers v. Warrior & Gulf Navigation Co.*, and *United Steelworkers v. Enterprise Wheel & Car Corp.* 93 These decisions placed labor arbitration at the core of federal labor policy by sharply limiting the role of courts in both compelling arbitration and reviewing arbitration awards. The Court's approach effectively privatized labor arbitration by reinforcing the notion that arbitrators derive their authority solely from the CBA and that judicial intervention should be minimal. 94

In *American Manufacturing*, the Court emphasized that a judge's role is strictly confined to determining whether the grievance at issue arguably falls within the scope of the CBA's arbitration clause. ⁹⁵ If so, the merits of the grievance are to be decided exclusively by the arbitrator, even if the claim appears frivolous or legally untenable. The Court underscored that processing even seemingly weak grievances could serve important functions in the industrial setting, including therapeutic benefits for the parties. ⁹⁶ Similarly, in *Warrior & Gulf*, the Court instructed that arbitration clauses should be interpreted expansively, with any doubts resolved in favor of arbitration. ⁹⁷ Judicial inquiry into the merits of the dispute was deemed inappropriate, and the Court highlighted arbitrators' specialized knowledge of the "common law of the shop" as a key reason to defer to arbitral decision-making. ⁹⁸

The third case, *Enterprise Wheel*, addressed the judicial enforcement of arbitration awards. Here, the Court held that judicial review of an award is limited to determining whether the arbitrator's decision "draws its essence" from the CBA. The arbitrator is not permitted to dispense personal notions of fairness but must interpret and apply the agreement. Nevertheless, courts should not refuse enforcement simply because they disagree with the arbitrator's reasoning or outcome. The Court explicitly warned against judicial second-guessing, noting that ambiguity in an arbitrator's rationale is not a valid basis for vacating an award.

Following the Trilogy, the principle of judicial deference has been consistently applied by federal courts. For example, the "essence" test has been construed narrowly: the question is whether the arbitrator interpreted the contract, not whether the interpretation was correct.¹⁰¹ This limited scope of review has led to relatively few arbitration awards being overturned – and this, in turn, has

⁹² Nutshell, *supra* note , at 452-53.

⁹³ United Steelworkers v. American Mfg. Co., 363 U.S. 564 (1960); United Steelworkers v. Warrior & Gulf Navigation Co., 363 U.S. 574 (1960); United Steelworkers v. Enterprise Wheel & Car Corp., 363 U.S. 593 (1960).

⁹⁴ Nutshell, *supra* note , at 136-42.

⁹⁵ American Mfg., 363 U.S. 564.

⁹⁶ *Id.* at 567–68.

⁹⁷ Warrior & Gulf Navigation Co., 363 U.S. 574.

⁹⁸ Id. at 582-85.

⁹⁹ Enterprise Wheel & Car Corp., 363 U.S. 593.

¹⁰⁰ *Id.* at 597-600.

Hill v. Norfolk & W. Ry. Co., 814 F.2d 1192, 1194–95 (7th Cir. 1987); Ethyl Corp. v. United Steelworkers of Am., 768 F.2d 180, 183 (7th Cir. 1985).

led to arbitration awards rarely being appealed. Moreover, efforts by courts to invalidate awards under the guise of correcting excesses of arbitral authority have been criticized as undermining the foundational principles set by the Supreme Court.¹⁰²

Ultimately, the *Steelworkers* Trilogy enshrined the idea that labor arbitration is a self-contained, contractually bounded system of dispute resolution. Arbitrators are empowered to resolve disputes only to the extent authorized by the CBA, and courts are to respect this private ordering by refraining from intrusive review. This framework has allowed labor arbitration to function as an effective substitute for industrial conflict, rather than as an extension of the judicial process.

2. The Grievance Process

The grievance procedure is the foundation of labor arbitration, serving as the initial step in resolving disputes arising under the CBA.¹⁰³ Nearly every CBA includes a grievance procedure, ¹⁰⁴ which outlines a series of pre-arbitration steps aimed at resolving disputes informally and efficiently. Many grievances resolve during this process, and even for those that do not, the procedure forces both parties to clarify their positions, marshal evidence, and address the strengths and weaknesses of their claims. In doing so, it helps streamline the arbitration process by eliminating extraneous issues and focusing the dispute.¹⁰⁵

Most CBAs define "grievance" and often limit arbitrable grievances to alleged breaches in the application or interpretation of the agreement. Typically, grievance procedures involve multiple steps, beginning with an informal discussion between the employee and an immediate supervisor, and progressing through higher levels of union and management hierarchies. At each stage, different representatives and decision-makers assess the dispute, increasing the likelihood of resolution without arbitration.

To formalize the process, many CBAs require grievances to be written and signed at an early stage, often using standardized forms. Time limits for filing and advancing grievances are also common, promoting timely resolution while discouraging stale claims. Though these deadlines can be waived by mutual agreement, they underscore the importance of efficient dispute resolution. Though a grievance may be filed by an individual employee, the union ultimately controls whether to advance the grievance to each step in the process, and may decide to settle or abandon the claim without the grievant's consent. This reflects the collective nature of the process.

3. Choosing an Arbitrator

¹¹² Id. at 25.

The process of selecting an arbitrator is a critical component of labor arbitration and can significantly influence the outcome of a dispute.¹¹¹ In the early days of arbitration, parties often selected any mutually trusted individual to serve as arbitrator, regardless of formal qualifications.¹¹²

<sup>Trailways Lines, Inc. v. Trailways, Inc. Joint Council, 817 F.2d 1333, 1335 (8th Cir. 1987) (Heaney, J., dissenting from denial of reh'g en bane).
See generally Nutshell, supra note __ at 37-40.
Andrea L. Dooley, The Beginner's Guide to Labor Arbitration Practice 5 (2020) ("Labor Arbitration Practice").
Nutshell, supra note __, at 37.
Id.
Labor Arbitration Practice, supra note __, at 5-6.
Id. at 8-10.
Id.
Vaca v. Sipes, 386 U.S. 171 (1967).
See generally Nutshell, supra note __, at 25-35.</sup>

Over time, however, it became clear that fairness alone was insufficient. Parties began seeking arbitrators with specific expertise in labor-management relations, procedural skills, and familiarity with the relevant industry.¹¹³ As a result, arbitration professionalized, with many arbitrators now working full-time in the field and joining professional organizations such as the National Academy of Arbitrators (NAA).¹¹⁴ Membership in the NAA is limited to experienced neutrals¹¹⁵ and is viewed as a strong endorsement of an arbitrator's qualifications.

Arbitrators are typically selected through one of two methods: permanent panels or alternate striking. Parties usually use permanent panels when they engage in arbitration frequently. The CBA itself, or a side agreement, will contain a list of acceptable arbitrators and a procedure (e.g., a rotation) for determining how disputes are assigned to arbitrators. In alternate striking, each party takes turns eliminating names from a list of potential arbitrators provided by a neutral agency, such as the American Arbitration Association (AAA) or the Federal Mediation and Conciliation Service (FMCS), until only one name remains. 117

Advocates invest considerable effort into learning about potential arbitrators before making a selection. Key factors include educational background, work experience, and past arbitration decisions. Designating agencies and publishers such as Bloomberg-BNA provide biographical information, but many parties also rely on informal networks, prior experiences, proprietary databases, and web searches. Experienced advocates may consult colleagues or internal records to assess an arbitrator's tendencies and suitability for a specific case. Ultimately, the goal is to select an arbitrator who is not only neutral but also knowledgeable and effective in managing the hearing and issuing sound decisions.

4. The Hearing

Labor arbitration hearings are generally less formal than proceedings in civil litigation, reflecting the goal of providing an efficient and accessible mechanism for resolving workplace disputes. Unlike courtroom trials, arbitration hearings are not governed by formal rules of civil procedure or evidence. Instead, the arbitrator and parties retain significant discretion to structure the hearing in a way that suits the needs of the case. While evidentiary principles may guide decisions about reliability and relevance, they are not strictly binding. This flexibility allows the parties to focus on the substance of the dispute without being constrained by technical procedural rules.

Hearings typically are held at neutral locations such as hotel conference rooms, though they may also take place at the employer's or union's premises.¹²³ The arbitrator usually consults with the parties to set the time and place, and if an agency such as AAA is involved, it may facilitate

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113 Id.
114 See generally https://naarb.org/.
115 https://naarb.org/membership-guidelines/.
116 See Labor Arbitration Practice, supra note ___, at 21-22.
117 Nutshell, supra note ___, at 27-30.
118 Labor Arbitration Practice, supra note ___, at 22-31; Nutshell, supra note ___, at 30-35.
119 Id.
120 Elkouri & Elkouri, §5.2.A, at 5-4 (8th ed. 2016) ("Labor arbitration hearings are generally less formal than court trials. The rules of evidence are relaxed, the arbitrator often assumes an active role in questioning witness.
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court trials. The rules of evidence are relaxed, the arbitrator often assumes an active role in questioning witnesses, and procedural technicalities are typically subordinated to the goal of a fair and efficient resolution.").

¹²¹ Charles J. Morris, *The Developing Labor Law* 1433 (John E. Higgins Jr. ed., 6th ed. 2012); Labor Arbitration Practice, supra note ___, at 65.

Labor Arbitration Practice, supra note , at 65; Nutshell, supra note , at 265-67.

¹²³ Nutshell, supra note ___, at 44.

scheduling. Parties frequently use court reporters to transcribe the hearing, particularly in complex cases. However, transcription is not mandatory, and in many cases the record consists only of the arbitrator's notes or an agreed-upon audio/digital recording. AAA Labor Arbitration Rule 19 requires that if a transcript is to serve as the official record, it must be shared with all parties and the arbitrator. 125

The hearing itself is structured but not rigid. It usually begins with procedural preliminaries, such as identifying the issues, accepting joint exhibits which the parties have agreed to beforehand (typically, the CBA and documents describing the grievance's progress through the steps of the grievance process), and stipulations (if any). Dening statements follow, with the party bearing the burden of proof typically proceeding first. In discipline and discharge cases, this is generally the employer; in other cases, it is the union. Witnesses may or may not be sworn, depending on party agreement or the arbitrator's discretion. Testimony and cross-examination proceed in a manner similar to trials, but usually without strict fidelity to rules such as the prohibition on leading a party's witnesses. Arbitrators may conduct site visits to examine evidence that cannot be brought into the hearing room, such as machinery or work processes.

The informality of arbitration promotes a full airing of the dispute without unnecessary procedural hurdles. Nevertheless, the hearing must retain a coherent structure to ensure fairness and clarity. The goal is not only to resolve the dispute but also to provide a forum where the parties feel heard and respected. Excessive formality can undermine these goals by transforming arbitration into a quasi-litigation process, diminishing its unique advantages as a mode of industrial justice.¹³⁰

5. Post-Hearing Briefs

Post-hearing briefs are a standard feature of labor arbitration and serve as a critical tool for advocates to reinforce their case and influence the arbitrator's decision-making process.¹³¹ These briefs can range from five to one hundred double-spaced pages, depending on the complexity of the dispute and the parties' customary practices.¹³² They are particularly valuable in cases involving technical evidence, extensive testimony, or complex contractual interpretation, providing the arbitrator with an organized and enduring presentation of the facts, applicable contract language, and persuasive argumentation.¹³³

Unlike oral closing arguments, which are transient and may be only partially recalled, a written brief provides a lasting record that the arbitrator can consult while drafting the award. A well-crafted brief helps the arbitrator synthesize the evidence, clarify disputed issues, and apply relevant arbitral precedent or contractual provisions.¹³⁴ It also ensures that no significant argument is overlooked, a risk that can arise during the fluid and informal dynamics of a hearing. Accordingly, advocates correctly view the post-hearing brief not merely as a summary, but as a strategic document capable

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124 AAA Labor Arbitration Rule 19 (2022).
125 Id.
126 See generally Nutshell, supra note ___, at 46-49.
127 Id. at 260-63.
128 AAA Labor Arbitration Rule 23 (2022).
129 Nutshell, supra note ___, at 265-67.
130 Theodore J. St. Antoine, The Arbitration Process in Labor-Management Disputes, 14 U. Tol. L. Rev. 1003, 1010-11 (1983).
131 Richard A. Bales, Effective Brief-Writing in Labor Arbitration, __ U. DETROIT-MERCY L. Rev. ___
(forthcoming 2025).
132 Id.
133 See generally Nutshell, supra note ___, at 49-50.
134 Effective Brief-Writing, supra note ___, at __.
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of shaping the outcome. 135

Post-hearing briefs must be based solely on the evidence presented during the hearing; attempts to introduce new evidence or raise new issues are generally improper and can undermine the credibility of the submission. ¹³⁶ The parties typically agree with the arbitrator on a briefing schedule, and the hearing record remains open until the briefs are submitted. ¹³⁷ Reply briefs are rare. ¹³⁸ In many cases, briefs are submitted simultaneously and exchanged through the arbitrator, often via email or secure file sharing. A persuasive brief "frames the dispute in a way that logically leads the arbitrator to the desired outcome," making it an indispensable part of effective labor arbitration advocacy. ¹³⁹

6. The Award

Labor arbitration awards serve multiple purposes: they resolve disputes, guide future conduct between the parties, and promote acceptance of the outcome, particularly by the losing party. To fulfill these objectives, arbitration awards are structured in a deliberate and somewhat formulaic manner. Most awards begin with a detailed presentation of the facts giving rise to the grievance, not as a witness-by-witness summary, but as a synthesized narrative that weaves the evidence into a coherent and chronological account. The award then states the formal issue or issues presented, followed by relevant provisions from the CBA and any pertinent work rules. The heart of the award is the analysis section, in which the arbitrator evaluates the parties' arguments, applies the contract language to the facts, and references applicable arbitral precedent or industry practices. The award concludes with a formal disposition specifying the outcome and any remedies, such as reinstatement or back pay.

Well-written awards are reasoned and comprehensive. Their purpose extends beyond merely resolving the dispute at hand; they also serve an educative function, providing guidance to the parties on interpreting the CBA and managing their ongoing relationship. ¹⁴⁴ By offering a transparent explanation of the arbitrator's reasoning, awards contribute to predictability in labor relations and help prevent future disputes over similar issues. Furthermore, a well-reasoned award enhances the credibility of the process and demonstrates the arbitrator's impartiality.

Effective arbitrators often write awards with the losing party in mind. 145 This audience-

¹³⁵ *Id*.

¹³⁶ Elkouri & Elkouri, §5.7.C, at 5-94 to 5-95 (8th ed. 2016) ("Post-hearing briefs are not an opportunity to introduce new evidence or raise new issues. Rather, they are intended to summarize and argue the evidence and issues as presented during the hearing. Arbitrators generally will not consider facts or exhibits not made part of the hearing record, and attempts to inject new material at the briefing stage are typically rejected.").

Nutshell, supra note ___, at 50.

¹³⁸ *Id*.

¹³⁹ Effective Brief-Writing, supra note ___, at ___

¹⁴⁰ Elkouri & Elkouri, §10.1.A, at 10-2 to 10-3 (8th ed. 2016) ("An arbitration award does more than decide a dispute: it also serves to clarify contract meaning, guide future behavior, and promote acceptance of the outcome by being perceived as fair and well reasoned. These broader functions help stabilize the labor-management relationship beyond the individual case.").

Laura J. Cooper & Dennis R. Nolan, Labor Law Stories 385–88 (2005). [Check this cource!]

Elkouri & Elkouri, How Arbitration Works (8th ed. 2016) ("The analysis and opinion section is the heart of the award. It is here that the arbitrator weighs the evidence, addresses the parties' arguments, and applies the relevant contract provisions.").

¹⁴³ Theodore J. St. Antoine, The Common Law of the Workplace: The Views of Arbitrators 21–23 (2d ed. 2005).

¹⁴⁴ Charles J. Morris, *The Developing Labor Law* 1447 (John E. Higgins Jr. ed., 6th ed. 2012).

¹⁴⁵ Elkouri & Elkouri, §10.4, at 10-12 to 10-13 (8th ed. 2016) ("A well-written opinion may be particularly important for the losing party, helping that party understand the rationale for the decision and increasing the likelihood of acceptance. Arbitrators often write with the losing party in mind, providing clear explanations and referencing evidence and arguments the party presented—even while rejecting them.").

sensitive approach ensures that the losing party feels "heard" and respected, which can foster acceptance of the outcome and reduce the likelihood of post-award litigation or workplace discord. To that end, well-written awards address each significant argument raised by the losing party and explain why it was not persuasive. This method not only reinforces the legitimacy of the decision but also fulfills one of arbitration's therapeutic roles in the industrial setting. Depending on the complexity of the case and the arbitrator's style, awards may range from five to one hundred double-spaced pages.

7. Finality

Labor arbitration awards are widely regarded as final and binding, but that finality is not absolute. There is no appellate tribunal specifically designated for labor arbitration. Instead, a party seeking to challenge an arbitration award must initiate a proceeding in a court of general jurisdiction, typically through a petition to vacate the award. As discussed above in Part III.A.1, such petitions are governed by narrow, well-defined criteria. A court may vacate an award only upon a showing that the arbitrator exceeded the contractual authority granted by the CBA, engaged in misconduct, or rendered an award that violates public policy, among other limited grounds. Mere disagreement with the arbitrator's interpretation of the contract or belief that the award is erroneous on the merits does not suffice. Mere

Given the high degree of judicial deference afforded to arbitrators and the rarity with which petitions to vacate are granted, challenges to labor arbitration awards are uncommon.¹⁵¹ Losing parties typically comply with the award, and rarely pursue judicial review due to its low likelihood of success. The absence of a specialized appellate mechanism, combined with judicial reluctance to disturb arbitration outcomes, reflects the strong federal policy favoring finality in labor arbitration¹⁵² and reinforces the parties' expectation that arbitration will serve as the definitive resolution of their disputes.

8. Arbitrating Employment Disputes

Employment arbitration differs from labor arbitration in significant respects, largely because it substitutes for judicial proceedings in statutory claims rather than resolving contract disputes between unionized parties. ¹⁵³ These differences impact arbitrator selection, procedural norms,

 $^{^{146}}$ Dennis R. Nolan, The Relationship Between Arbitrators and the Parties, in Labor and Employment Arbitration 2-4 to 2-6 (Timothy J. Heinsz et al. eds., 2001).

¹⁴⁷ See generally Nutshell, supra note ___, at 203-35.

United Paperworkers Int'l Union v. Misco, Inc., 484 U.S. 29, 41 n.9 (1987) ("A party seeking to vacate an arbitration award must apply to the appropriate court, typically a court of general jurisdiction, and follow the statutory procedures governing such actions.").

¹⁴⁹ See supra notes __- and accompanying text.

¹⁵⁰ See supra notes ___ and accompanying text.

¹⁵¹ Elkouri & Elkouri, §12.4.A, at 12-9 to 12-11 ("Because courts give great deference to arbitrators' decisions, and because the grounds for vacating an award are narrow and difficult to meet, successful challenges to labor arbitration awards are rare. As a result, most arbitration decisions are final and binding, and judicial review is the exception rather than the rule.").

¹⁵² United Paperworkers Int'l Union v. Misco, Inc., 484 U.S. 29, 37–38 (1987) ("Courts are not authorized to reconsider the merits of an arbitration award even though the parties may allege that the award rests on errors of fact or on misinterpretation of the contract. The federal policy of settling labor disputes by arbitration would be undermined if courts had the final say on the merits of the awards.").

¹⁵³ Katherine V.W. Stone, *Arbitration—A Blunt Instrument of Justice: The Promise and Limitations of Arbitration for Resolving Employment Disputes*, 60 U. MIAMI L. REV. 1031, 1032 (2006) ("Employment arbitration differs fundamentally from labor arbitration. Whereas labor arbitration arises under a collective bargaining agreement and resolves disputes between unions and employers, employment arbitration is a substitute for a judicial forum in cases involving statutory rights—such as discrimination, harassment, and wage violations.").

applicable burdens of proof, and the scope of judicial review. 154

Unlike labor arbitration, which is typically confined to interpreting collective bargaining agreements, employment arbitration often involves statutory claims under federal or state laws such as Title VII, 155 the Americans with Disabilities Act, 156 or the Fair Labor Standards Act. 157 Accordingly, the AAA Employment Arbitration Rules and Mediation Procedures require arbitrators on its employment panel to be "experienced in the field of employment law". 158 This requirement has created a panel distinct from the AAA's labor panel, which includes many non-lawyer neutrals.¹⁵⁹ Most employment arbitrators are practicing attorneys, often representing plaintiffs or employers in their legal practices, although they must act with neutrality in arbitrations.

Procedurally, employment arbitration more closely mirrors litigation than does labor arbitration. 160 For example, discovery is expressly authorized by arbitrators "as necessary to a full and fair exploration of the issues," albeit limited to preserve arbitration's efficiency. 161 Dispositive motions, almost unheard of in labor arbitration, are permissible in employment arbitration upon a showing of "substantial cause that the motion is likely to succeed". 162 Moreover, unlike labor arbitration, where employers bear the burden of proof in discipline cases, employment arbitration places the burden of proof on the claimant, consistent with judicial practice in statutory litigation. 163

Employment arbitration awards are typically required to be reasoned, particularly where statutory claims are at issue. AAA Rule 39(c) mandates that awards include a written explanation unless the parties agree otherwise. This requirement promotes transparency and aids judicial review, especially when courts are asked to determine whether the arbitrator correctly applied public laws.

Judicial review of employment arbitration awards is governed primarily by the Federal Arbitration Act (FAA), 164 not Section 301 of the Taft-Hartley Act 165 which governs labor arbitration. Review of employment arbitration awards is limited to specific statutory grounds, such as "evident partiality" or exceeding arbitral authority. However, in contrast to labor arbitration's deference-focused "essence of the agreement" standard, some courts reviewing employment arbitration awards have applied the "manifest disregard of the law" doctrine, though its continuing vitality is uncertain. 167 Judicial review may be more searching when statutory rights are implicated, but federal courts generally have been reluctant to undermine finality by second-guessing arbitrators on the merits.¹⁶⁸ State courts, however, vary in their approach, with California notably allowing judicial review of legal errors that prevent claimants from obtaining a hearing on the merits of

¹⁵⁴ Nutshell, *supra* note ___, at 443-61.

^{155 42} U.S.C. §§ 2000e–2000e-17 (2018). 156 42 U.S.C. §§ 12101–12213 (2018).

¹⁵⁷ 29 U.S.C. §§ 201–219 (2018).

¹⁵⁸ AAA Employment Rule 12.

¹⁵⁹ Nutshell, *supra* note ___, at 443-44.

¹⁶⁰ DAVID B. LIPSKY, RONALD L. SEEBER & LISA B. BINGHAM, EMERGING SYSTEMS FOR MANAGING WORKPLACE CONFLICT: LESSONS FROM AMERICAN CORPORATIONS FOR MANAGERS AND DISPUTE RESOLUTION PROFESSIONALS 22 (2003) ("Employment arbitration often mirrors litigation more closely than traditional labor arbitration. Discovery, motion practice, and formal evidentiary procedures are more common, reflecting its role as a substitute for judicial proceedings in statutory claims.").

¹⁶¹ AAA Employment Rule 9.

¹⁶² *Id.*, Rule 27.

¹⁶³ Nutshell, *supra* note ___, at 450-52.

¹⁶⁴ 9 U.S.C. §§ 1–16 (2018).

¹⁶⁵ 29 U.S.C. § 185 (2018).

¹⁶⁶ FAA § 10(a).

¹⁶⁷ Hall Street Associates, L.L.C. v. Mattel, Inc., 552 U.S. 576 (2008).

¹⁶⁸ Nutshell, *supra* note ___, at 456-61.

unwaivable statutory claims. 169

These differences illustrate that while labor and employment arbitration share structural similarities, the nature of the disputes, the applicable procedural rules, and the review mechanisms diverge significantly. Employment arbitration, functioning as a judicial substitute, demands greater procedural safeguards and transparency to ensure the fair and effective vindication of statutory rights.

B. Using AI in U.S. Labor Arbitration

The use of AI in U.S. labor and employment arbitration is still developing,¹⁷⁰ but early patterns and trends have begun to emerge. Understanding how AI tools are currently being used by practitioners and arbitrators provides a foundation for evaluating both the benefits and challenges associated with these technologies. This section first surveys current applications of AI in the labor arbitration process. It then considers ethical concerns with using AI in labor/employment arbitration. The section ends by exploring potential future developments.

1. Current Use

AI tools are being applied in a range of discrete tasks that support arbitration advocacy and decision-making. These include document analysis, drafting assistance, legal research, and more. Among these, document analysis has become one of the most accessible and commonly used functions, particularly as it relates to the efficient review of evidence and precedent.

a. Analyzing Documents

AI is increasingly used by labor and employment arbitrators and advocates to streamline and enhance document analysis. Given the document-intensive nature of labor and employment arbitration – where voluminous records such as disciplinary records, personnel files, grievance files, and hearing transcripts are routinely examined – AI tools provide a suite of powerful functionalities that support more efficient and thorough review. These tools are not intended to replace human expertise but rather to augment it, enabling faster access to relevant information and freeing up time for higher-level legal analysis.

1. Summarizing Documents

One of the most immediate benefits of AI is the ability to generate summaries of lengthy documents. Generative AI platforms, such as OpenAI's ChatGPT and Anthropic's Claude, as well as legal-specific tools like Casetext's CoCounsel, can produce customizable summaries at varying levels of detail – from brief overviews to comprehensive page-by-page outlines.¹⁷¹ For example, an advocate in a discipline case involving law enforcement might use AI to summarize a police department's extensive internal affairs report, distilling key allegations, witness statements, and investigative findings for inclusion in a grievance brief. Similarly, arbitrators can employ AI to summarize lengthy hearing transcripts, such as the testimony of a critical witness, to quickly assess the main points without rereading the full record.¹⁷²

¹⁶⁹ Pearson Dental Supplies, Inc. v. Superior Court, 48 Cal. 4th 665, 229 P.3d 83 (2010).

¹⁷⁰ See generally Harry C. Katz & Mark D. Gough, *Generative AI and the National Academy of Arbitrators*, February 2025 Report (examining the current state of generative AI adoption and perceptions through a survey of 219 members of the National Academy of Arbitrators conducted in the Fall and Winter of 2024).

David L. Evans et al., *Dispute Resolution Enhanced: How Arbitrators and Mediators Can Harness Generative AI*, American Arbitration Association's DISPUTE RESOLUTION JOURNAL 2-15 (2024) ("Dispute Resolution Enhanced"); *How Arbitrators Are Harnessing Artificial Intelligence*, AAA-ICDR Blog and News (Feb. 20, 2024), https://www.adr.org/blog/how-arbitrators-are-harnessing-artificial-intelligence ("Harnessing AI").

¹⁷² Dispute Resolution Enhanced, supra note __, at 3; Harnessing AI, supra note __.

These summarization tools can be especially valuable in expedited arbitration settings, where time constraints make detailed manual review impractical. They also can assist in preparing for hearings by providing quick reference materials or highlighting areas needing further examination. Platforms like CoCounsel offer summaries linked directly to source pages, enabling users to verify the AI-generated content with ease. 173

2. Searching Documents—Beyond Keywords

AI tools allow users to search documents not only for keywords, but for underlying concepts and ideas.¹⁷⁴ Conceptual search enables the identification of relevant passages even when the precise terminology varies, a common occurrence in labor arbitration where language can differ between CBAs, policies, and witness testimony.

For instance, an advocate investigating whether management followed progressive discipline procedures might query an AI tool for "progressive discipline steps" across hundreds of pages of disciplinary records, grievances, and witness statements. The AI tool can retrieve relevant content regardless of whether those specific words appear, identifying passages that reference verbal warnings, written warnings, or suspensions in contextually relevant ways. This could be particularly helpful to an arbitrator writing an award who wants to search the transcript – or even the transcript of a single witness – for a particular topic.

3. Creating Timelines

Chronological clarity is often essential in labor arbitration, particularly in cases involving alleged patterns of misconduct, disputes over seniority, or contract interpretation over time. It is equally important in employment arbitration, where the timing of events may be critical to demonstrating harassment or discrimination. AI tools can extract date-specific data from document sets and generate visual or textual timelines that present the sequence of events in an accessible format.¹⁷⁵

For example, in a case involving repeated absenteeism, an advocate might use AI to compile attendance records, emails, and disciplinary notices to create a timeline showing each absence, corresponding employer responses, and relevant contract provisions on leave or attendance policies. Arbitrators can use AI to generate timelines of grievance procedures, documenting when grievances were filed, responded to, and processed through each contractual step. This functionality reduces the need for manual collation and organization of dates, allowing both advocates and arbitrators to focus on evaluating the significance of events rather than assembling them.¹⁷⁶

The capacity of AI tools to generate visual timelines from unstructured data is particularly helpful in hearings where parties may dispute the sequence or timing of events. By providing a neutral, structured presentation of chronological facts, AI can aid arbitrators in clarifying the factual context of the dispute and/or identifying specific inconsistencies in documents or witness testimony (see below).

4. Comparing Documents and Identifying Inconsistencies

AI tools also are capable of comparing multiple documents or witness statements to identify inconsistencies or contradictions.¹⁷⁷ This is particularly useful in employment and labor arbitration

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¹⁷³ Dispute Resolution Enhanced, supra note ___, at 3.

Dispute Resolution Enhanced, supra note __, at 2-3; Harnessing AI, supra note __.

¹⁷⁵ Dispute Resolution Enhanced, supra note ___, at 3; Harnessing AI, supra note ___.

¹⁷⁶ Harnessing AI, supra note ___.

¹⁷⁷ *Id*.

where conflicting versions of events are common. For example, an advocate might use AI to compare deposition transcripts or hearing testimony from multiple supervisors to identify discrepancies in their accounts of a workplace incident.

AI platforms can highlight contradictory evidence automatically, such as differing statements about whether a grievant received a safety instruction or was present at a particular location. Arbitrators can employ this technology to assess the consistency of evidence, enhancing their ability to evaluate credibility and make informed findings of fact. These tools can also compare multiple versions of CBAs, employment policies, or investigation reports, flagging differences in wording or structure that might otherwise be overlooked.

This functionality is not limited to text comparison. Some AI systems can synthesize cross-document patterns and provide contextual analysis of discrepancies, supporting a more nuanced evaluation than simple side-by-side comparison. As noted by the AAA, AI's ability to identify evidentiary inconsistencies across witnesses "spotlights potential issues" that may otherwise be missed during manual review.¹⁷⁸

b. Drafting Text

AI tools are increasingly employed by both advocates and arbitrators in labor and employment arbitration to assist with drafting a wide array of legal texts. These applications, when used responsibly and ethically, can enhance efficiency and support clarity without displacing the decision-making authority of human professionals. Below are several prominent uses of AI in drafting arbitration-related documents.

1. Outlining Party Positions and Arguments

AI-powered platforms can help advocates organize and articulate their positions by generating outlines and initial drafts of briefs. These tools can synthesize relevant facts and applicable legal standards to create structured presentations of a party's case, which advocates can then refine and expand upon. In labor arbitration, for instance, an advocate might input the core facts of a discharge case and receive a draft outline presenting the just cause standard, the grievant's employment history, and key factual disputes for resolution. In employment arbitration, advocates can use AI to structure arguments related to statutory claims, such as discrimination or wage-and-hour violations, ensuring that each claim element is addressed coherently. AI-powered legal drafting tools are increasingly recognized for their ability to enhance efficiency and consistency in outlining legal arguments.¹⁷⁹

Arbitrators may also use AI to review parties' submissions and extract key arguments. Tools capable of summarizing documents and highlighting principal claims and defenses can assist arbitrators in identifying the central issues in dispute and ensuring that all arguments are appropriately addressed in the award. AI also can be very useful to an arbitrator to summarize arbitral precedent cited in party briefs.

2. Proofreading

Proofreading is one of the most straightforward and widely adopted uses of AI in legal drafting. AI tools can detect typographical errors, suggest grammatical corrections, and identify formatting inconsistencies. While traditional word processors offer basic proofreading, advanced AI systems

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¹⁷⁸ *Id*.

Thomson Reuters, *The Promise of AI-Powered Legal Drafting for In-House Teams*, https://legal.thomsonreuters.com/blog/the-promise-of-ai-powered-legal-drafting-for-in-house-teams/?utm_source=chatgpt.com.

¹⁸⁰ Dispute Resolution Enhanced, supra note ___, at 24.

can provide context-sensitive suggestions, flagging ambiguous language or inconsistencies in terminology. This is particularly useful when preparing formal submissions such as post-hearing briefs or drafting arbitral awards, where clarity and precision are critical.¹⁸¹

3. Drafting Small-Scale Parts of Awards

While arbitrators must never delegate to AI the ultimate responsibility for deciding a dispute, ¹⁸² AI may assist with drafting specific sections of an arbitral award that do not involve legal analysis or factual determinations. For example, an arbitrator may use AI to draft background sections describing the parties, such as a summary of the employer's operations or the nature of the grievant's job duties. In disputes involving technical issues, AI may assist in drafting descriptions of specialized machinery or industry-specific processes relevant to the case. This use of AI preserves the arbitrator's decision-making role while enhancing drafting efficiency. ¹⁸³

4. Drafting Administrative Correspondence and Other Documents

Advocates frequently use AI to assist with routine drafting tasks. In labor arbitration, this may include drafting initial grievance statements, responses to grievances, or requests for information relevant to the grievance such as personnel files, disciplinary histories, and comparator evidence. AI tools can generate templates or initial drafts tailored to the specific issue, which advocates can customize to reflect the facts of the case.¹⁸⁴

In employment arbitration, AI can help draft discovery requests, motions, proposed orders, or settlement agreements. These documents often follow standardized formats, making them well-suited to AI-assisted drafting. By automating routine tasks, AI allows advocates to devote more attention to strategic and substantive matters.

5. Drafting Contract Language

AI also can play a role in negotiating and revisising CBAs. During contract negotiations, parties may use AI to propose initial language for new provisions or to refine existing clauses based on prior usage or examples. For instance, if the parties disagree with an arbitrator's interpretation of a contract term, they may, in the next round of bargaining, use AI to generate alternative language aimed at clarifying their intent. Similarly, AI can assist in drafting side agreements or memoranda of understanding related to specific workplace issues. AI tools can draw from historical contract language and propose tailored revisions to fit the parties' current needs.¹⁸⁵

c. Managing Cases

AI is increasingly being integrated into the operations of arbitration institutions to enhance efficiency and standardization in case management. For instance, AAA has implemented AI tools to streamline various administrative tasks. These tools assist in preparing casework reports, drafting correspondence to parties and arbitrators, tracking case progress, ensuring compliance with procedural deadlines, facilitating hearing logistics, and scrutinizing draft awards and procedural orders. The integration of AI in these processes not only accelerates administrative workflows

 $^{{}^{181}\ \} Bloomberg\ Law,\ AI\ Tools\ for\ Legal\ Writing,\ https://pro.bloomberglaw.com/insights/technology/ai-tools-for-legal-writing/?utm_source=chatgpt.com.$

¹⁸² See infra Part II.B.2.a.

¹⁸³ AAA Dispute Resolution Journal, *How Arbitrators and Mediators Can Harness Generative AI*, 2024, https://go.adr.org/rs/294-SFS-516/images/DRJ%20Journal%20Article%202024.pdf.

¹⁸⁴ Thomson Reuters, *Navigating Legal Drafting: A How-To Guide for Law Firms Using AI-Powered Tools*, https://legal.thomsonreuters.com/blog/navigating-legal-drafting-a-how-to-guide-for-law-firms-using-ai-powered-tools/?utm_source=chatgpt.com.

¹⁸⁵ *Id.*

¹⁸⁶ See Aude F. Bouveresse & Hugh Carlson, Are Arbitral Institutions Using Artificial Intelligence? The State of Play in Adopting AI, KLUWER ARBITRATION BLOG (May 8, 2024),

but also reduces the potential for human error, thereby promoting consistency and reliability in arbitration proceedings.

Similarly, JAMS has recognized the evolving landscape of dispute resolution by introducing tailored arbitration rules specifically designed for AI-related disputes.¹⁸⁷ These rules leverage the inherent strengths of arbitration – such as speed, flexibility, and efficiency – to address the unique challenges posed by AI technologies.

However, the extent to which individual arbitrators will adopt AI-driven case management tools is unclear. Independent arbitrators typically handle a limited number of cases concurrently, which may not justify the investment in sophisticated AI systems designed for large-scale operations. The administrative tasks managed by individual arbitrators are often less complex and can be effectively handled through traditional methods or basic digital tools. Moreover, the personalized nature of arbitration – where arbitrators tailor their approach to the specific nuances of each case – might not align seamlessly with standardized AI processes. Thus, while AI offers significant benefits for institutional arbitration settings, its direct relevance and utility for individual arbitrators remain limited, suggesting that AI adoption may be context-dependent, aligning with the scale and nature of the arbitration practice.

d. Transcribing Proceedings

Arbitration institutions increasingly are turning to AI to streamline the transcription of hearings and depositions. For example, the American Arbitration Association–International Centre for Dispute Resolution (AAA-ICDR) has partnered with Optima Juris to offer an exclusive AI-powered transcription service tailored specifically to the demands of arbitration proceedings. This service uses advanced automatic speech recognition technology combined with a two-layer human proofreading process, yielding transcripts that are reported to be "99 percent accurate" – on par with high-performing human stenographers. AI-generated transcripts are typically delivered in three to five days – approximately twice as fast as traditional court reporter transcripts – and at less than half the cost. Additionally, rough drafts with up to 97 percent accuracy are available within 24 hours, offering immediate utility for case preparation and strategy development.

Beyond the AAA, other arbitration institutions also are exploring or implementing AI transcription services to enhance efficiency, reduce costs, and address the growing shortage of professional court reporters. The demand for real-time, cost-effective transcription has led many providers to consider AI solutions as not only viable but increasingly essential components of their service offerings. As AI transcription technology improves, it is poised to become a standard feature of arbitration administration, particularly for remote and hybrid proceedings where traditional stenography may be impractical or cost-prohibitive.

In the context of employment and labor arbitration, the use of AI-generated transcripts raises

https://arbitrationblog.kluwerarbitration.com/2024/05/08/are-arbitral-institutions-using-artificial-intelligence-the-state-of-play-in-adopting-ai/.

¹⁸⁷ See JAMS, Pioneering Dispute Resolution: The New JAMS AI Rules, JAMS ADR BLog (Feb. 22, 2025), https://www.jamsadr.com/blog/2025/pioneering-dispute-resolution-the-new-jams-ai-rules.

¹⁸⁸ Kendal Enz, AI-Powered Transcription Revolutionizes AAA-ICDR Arbitration, Enhancing Efficiency and Cost-effectiveness, AAA-ICDR BLoG (May 15, 2024), https://www.adr.org/blog/AI-powered%20Transcription%20Revolutionizes%20AAA-

ICDR%20Arbitration?mkt_tok=Mjk0LVNGUy01MTYAAAGYcVZkFk4Vk5Ga6S92cq6XIOGeK0WzZPHL9xQTCCwYrf2z_trlYIQfLLu2OjSk2-zGWCdVfs2m6YbKLGy-qbno5X1fXp_LA47VniLh_kjhS78k.

¹⁸⁹ See Lucy Greenwood, *The Use of Technology in Arbitration: Transcription, Translation, and AI*, 2023 ICCA Congress Series, available at https://www.arbitration-icca.org/publication/use-technology-arbitration-transcription-translation-and-ai (noting the growing role of AI-powered transcription in international arbitration settings).

important considerations about the level of precision required in different cases. Traditionally, parties and arbitrators have relied on various approaches to capture hearing testimony: engaging professional court reporters for verbatim transcripts, using audio recorders for subsequent reference, or simply taking detailed notes. The method employed typically depends on the complexity of the dispute, the need for an exact record, and cost considerations.

For relatively straightforward cases – such as those involving routine disciplinary disputes or contract disputes where the underlying facts are mostly agreed – AI-generated transcripts based on digital audio recordings may suffice. These transcripts provide a usable, cost-effective record without the formality or expense of stenographic services. However, in more complex or high-stakes cases, where precision is critical – such as when legal counsel anticipates filing post-hearing briefs with extensive citations to the record – greater accuracy may be needed. In such instances, enhanced AI transcription services with human editing or traditional court reporting may be more appropriate.

The use of AI in creating transcripts is currently in transition. As the technology evolves, it promises to offer arbitrators and parties a spectrum of tools that can be adapted to the specific needs of each case. This flexibility will allow for more tailored, efficient, and affordable options, reducing barriers to accurate record-keeping and allowing arbitrators to focus more on substantive adjudication than on administrative logistics.

2. Ethical Concerns

As AI becomes increasingly integrated into arbitration practice, ethical concerns have emerged regarding its appropriate and responsible use. Arbitrators, as fiduciaries of fairness and impartiality, must remain vigilant in how they employ AI tools, balancing technological efficiencies with core ethical obligations. The use of AI cannot substitute for the arbitrator's own judgment, nor can it compromise confidentiality, fairness, or the integrity of the arbitration process.

a. Decision-Making and the Arbitrator's Professional Mandate

At the heart of arbitration lies a fundamental principle: the arbitrator must exercise independent judgment.¹⁹⁰ While parties are free to agree – by contract or stipulation – to submit their dispute to AI for resolution, such agreements remain the exception rather than the norm. When parties agree to arbitrate before a designated arbitrator or tribunal, they do so with the expectation that the decision will reflect the independent analysis and judgment of the named arbitrator(s), not a decision delegated in whole or in part to AI. This presumption is embedded in the rules and practices of major arbitral institutions. For example, the AAA emphasizes that no resort to technology relieves arbitrators of their professional obligations, including the duty to make independent decisions grounded in evidence and law.¹⁹¹ Similarly, international arbitration institutions uniformly require arbitrators to fulfill their professional mandate and not delegate decision-making authority to any third party, technological or otherwise. The Silicon Valley Arbitration and Mediation Center (SVAMC) echoes this prevailing norm, stating that arbitrators must not delegate any part of their professional mandate to AI tools, particularly in connection with decision-making responsibilities.¹⁹² These requirements reinforce that AI may be used as a tool to support, but never

¹⁹⁰ See AA-ICDR Guidance on Arbitrators' Use of AI Tools — March 2025 ("Canon V requires arbitrators to retain complete control over decision-making. Arbitrators should use AI tools that support—not replace—the arbitrator's judgment and expertise.").

¹⁹¹ AAA Principles Supporting the Use of AI in Alternative Dispute Resolution, at 12, 19 (2023), https://www.adr.org (noting that "[n]o resort to technology removes any human from any existing duty" and emphasizing the continuing responsibility for independent professional judgment).

¹⁹² SVAMC Guidelines on the Use of Artificial Intelligence in Arbitration, Guideline 6 (2024),

replace, the arbitrator's core duty: rendering a decision based on independent evaluation of the facts, law, and arguments presented by the parties.

b. Confidentiality, Data Security, and Technical Competence

The use of AI tools raises heightened concerns about confidentiality and data security, particularly when using open-source or third-party AI platforms. Many generative AI models process user data through external servers, which may store prompts, responses, and uploaded documents. Arbitrators have an ethical duty to safeguard all confidential, privileged, or sensitive information, including party names and case speifics. Both the AAA Principles and the SVAMC Guidelines stress that AI tools should not be used to process such information unless they meet appropriate data security standards and ensure compliance with confidentiality obligations. Special attention must be given to the policies of AI providers regarding data use, retention, and storage – failure to assess these risks may lead to inadvertent disclosure or data breaches.

Additionally, arbitrators are expected to maintain a baseline level of technical competence, including familiarity with AI's capabilities, limitations, and security risks. As AI technology rapidly evolves, so too does the obligation to remain current. SVAMC Guidelines emphasize that arbitrators should engage with technical experts as needed and be capable of assessing whether an AI tool is suitable for specific arbitration-related tasks. ¹⁹⁶ The AAA similarly highlights that competence requires continuous learning and adaptation as technologies develop. ¹⁹⁷

c. AI Hallucinations, Bias, and Evidence Integrity

A well-documented risk associated with generative AI tools is "hallucination" – the generation of plausible-sounding but factually inaccurate or fabricated content. Arbitrators must not rely on AI outputs without verification, particularly where the AI tool cannot cite verifiable sources. As SVAMC cautions, arbitrators should not assume that AI-generated information is accurate, nor should they rely on such content if it lies outside the case record, unless appropriate disclosures are made and parties are allowed to comment. Cross-checking and validation are essential to avoid errors that could compromise the fairness of the proceeding.

Another critical concern is algorithmic bias. AI systems are trained on vast datasets that may contain embedded biases, which can influence outputs and recommendations. Arbitrators must be aware of these risks and exercise independent judgment to mitigate any influence of biased AI outputs, especially in tasks such as evaluating evidence or analyzing arguments.²⁰⁰

Furthermore, AI's ability to fabricate text, audio, images, and video necessitates caution in assessing the integrity of evidence. AI can be misused to falsify documents or create deepfakes, posing a risk to the authenticity of evidence submitted in arbitration. Arbitrators should be alert to

https://www.svamc.org ("An arbitrator shall not delegate any part of their personal mandate to any AI tool.").

¹⁹³ AAA-ICDR Guidance on Arbitrators' Use of AI Tools — March 2025 ("Arbitrators should not put confidential information, such as party names or case specifics, into tools that do not guarantee data protection.").

¹⁹⁴ SVAMC Guidelines, Guideline 2, at 9, 17; AAA Principles, at 13.

¹⁹⁵ David L. Evans et al., Dispute Resolution Enhanced: How Arbitrators and Mediators Can Harness Generative AI, Dispute Resolution Journal 2024, at 13.

¹⁹⁶ SVAMC Guidelines, at 11, 15, 16, 18.

¹⁹⁷ AAA Principles, at I (Competence), II (Confidentiality), https://www.adr.org.

¹⁹⁸ AAA-ICDR Guidance on Arbitrators' Use of AI Tools — March 2025 ("AI tools provide valuable assistance but occasionally generate incomplete or inaccurate information. Arbitrators should apply their expertise to critically evaluate and verify outputs and to ensure that information

aligns with the standards of accuracy and reliability required in arbitration. When using AI tools, arbitrators should cross-reference outputs against primary sources to ensure accuracy.").

¹⁹⁹ S AAA Principles, at I (Competence), II (Confidentiality), https://www.adr.org.

²⁰⁰ SVAMC Guidelines, at 15–16 (bias risks); AAA Principles, at 11, 15, 16, 18.

these risks and consider employing technical tools or experts when the authenticity of evidence is in question.²⁰¹

d. Use and Disclosure of AI

SVAMC Guidelines note that arbitrators should not use or rely on AI-generated information outside the arbitral record without appropriate disclosure and an opportunity for parties to respond.²⁰² Even when AI is used purely as an aid (e.g., drafting procedural orders), the arbitrator remains responsible for the final output and should be transparent about AI usage where it might affect party rights or the record's integrity.

Disclosure of AI use is not always required, but may be appropriate when fairness, transparency, or due process demands it.²⁰³ For example, if an arbitrator uses AI to conduct independent research or to generate draft decisions, parties should be informed. Disclosure helps ensure that the proceedings remain balanced and that parties have confidence in the process.²⁰⁴

3. For the Future

a. Predictive Analytics and AI Forecasting in Arbitration

One promising application of AI in arbitration is predictive analytics – the use of historical data to forecast how arbitrators, in general or individually, might rule on specific legal arguments, claims, or grievances. AI systems can be trained to identify patterns in past awards, examining factors such as procedural decisions, the treatment of evidentiary issues, or the interpretation of particular contractual clauses. Parties might use this information to evaluate case strength, refine their arguments, or inform arbitrator selection by analyzing the tendencies of specific neutrals. Arbitrators themselves might use predictive tools to survey broader trends in arbitral reasoning or to understand how similar disputes have been resolved.²⁰⁵

However, in the United States, the predictive value of such tools is significantly limited by the lack of access to comprehensive and representative datasets of arbitration awards. Unlike court decisions, which are routinely published and widely accessible, the vast majority of arbitration awards are never published. For an award to be published, several hurdles must be cleared: first, the arbitrator must choose to seek publication – something most arbitrators decline to do; second, both parties must consent, and the losing party frequently refuses; and third, legal publishers must select the award for publication. In doing so, publishers tend to favor awards that are unusual or legally provocative, as these are more likely to attract attention and downloads.²⁰⁶

Consequently, published arbitration awards do not reflect the broader body of arbitral decision-making. They are skewed toward atypical outcomes and exclude routine awards that apply well-established legal principles. Moreover, most published awards are housed in proprietary, paywalled databases. Access is typically limited to subscribers, and large language models and other AI tools are generally unable to access these materials. As a result, the limited and unrepresentative dataset

²⁰¹ SVAMC Guidelines, Guideline 5, at 11, 19.

²⁰² SVAMC Guidelines, Guideline 7, at 12.

²⁰³ AAA-ICDR Guidance on Arbitrators' Use of AI Tools — March 2025 ("Arbitrators should disclose their use of generative AI tools when such use materially impacts the arbitration process or the reasoning underlying their decisions.").

²⁰⁴ SVAMC Guidelines, Guideline 3, at 10, 17.

²⁰⁵ David L. Evans et al., *Dispute Resolution Enhanced: How Arbitrators and Mediators Can Harness Generative AI*, *Dispute Resolution Journal* 2024, at 3–4 (describing potential uses of AI for pattern recognition and analysis of arbitrator decision-making).

²⁰⁶ Id. at 13; see also AAA, *Principles Supporting the Use of AI in Alternative Dispute Resolution*, at 12 (2023), https://www.adr.org (noting limits on AI effectiveness where data inputs are incomplete or biased).

available for analysis significantly constrains the ability of AI tools to generate reliable forecasts of how arbitrators – either generally or individually – might decide particular issues.²⁰⁷

Unless and until more arbitration awards are published in an accessible and representative manner, the use of AI for predictive analytics in arbitration will remain promising but constrained. Future efforts to anonymize and systematically publish awards could help build the necessary data infrastructure to support this use of AI, but for now, the promise of accurate arbitration outcome prediction remains largely unrealized.²⁰⁸

b. Prepare for Negotiation, Mediation, and Arbitration by Running Simulations.

AI can assist advocates in preparing for negotiation, mediation, and arbitration by enabling them to run simulations that test different strategies and predict potential outcomes. In the context of negotiation, for example, future AI tools should be able to simulate how varying opening offers or proposals may influence the final settlement. By inputting historical data, industry norms, and specific party profiles, these tools could help advocates identify which initial offer is most likely to yield a favorable resolution. AI also could model how different negotiation tactics – such as anchoring, concession patterns, or deadline pressures – might affect the counterparty's responses and the overall trajectory of the negotiation.

Similar AI-driven simulations could be valuable in arbitration preparation. For instance, an advocate preparing for arbitration might use AI to simulate the impact of different framing strategies on the arbitrator's decision-making. By analyzing a database of past awards, AI might identify patterns in how arbitrators have responded to specific legal arguments or evidentiary presentations. An advocate might then simulate the effect of emphasizing certain arguments over others, or presenting evidence in different sequences, to assess which approach is statistically more likely to persuade the arbitrator. These simulations, though limited by the available data and the current capabilities of AI, might nonetheless help advocates refine their case strategy, anticipate challenges, and make informed decisions about how best to present their case.

c. Emotion analysis

Some AI tools offer emotion analysis by evaluating tone, word choice, and facial expressions in real time to gauge participants' emotional states during interactions.²⁰⁹ While this technology may have limited utility in most arbitration hearings, it could prove more valuable when arbitrators are asked to assist with mediation. In that context, emotion analysis might help neutrals identify moments of frustration, resistance, or openness to compromise, thereby informing their approach to facilitating resolution. However, the accuracy and practical value of emotion analysis remain uncertain, and arbitrators should approach its use cautiously, particularly given the risks of misinterpretation and privacy concerns.

IV. ANALYSIS

The preceding sections have outlined how AI technologies are being implemented in labor arbitration practices in the United States and China, each shaped by distinct institutional

²⁰⁷ Id.; see also Lucy Greenwood, *The Use of Technology in Arbitration: Transcription, Translation, and AI*, 2023 ICCA Congress Series (noting challenges due to limited access to arbitral awards and the proprietary nature of arbitration data).

²⁰⁸ AAA, *Principles Supporting the Use of AI in Alternative Dispute Resolution*, at 19 (discussing the need for process improvement and the potential for more systematic data sharing in ADR).

²⁰⁹ See David L. Evans et al., *Dispute Resolution Enhanced: How Arbitrators and Mediators Can Harness Generative AI*, *Dispute Resolution Journal* 2024, at 32.

environments. While both jurisdictions recognize the potential of AI to enhance efficiency, their approaches diverge significantly in terms of legal foundations, procedural design, and regulatory logic. This section conducts a comparative analysis of the two systems, focusing on how institutional design influences the configuration of AI technologies in labor arbitration.

A. Arbitrating Labor Disputes in China and the U.S.

The labor arbitration regimes in China and the U.S. diverge markedly across multiple dimensions: institutional positioning, guiding values, procedural structures, and rule development. These differences stem from distinct legal traditions and social governance models, shaping not only how labor disputes are resolved in practice but also the specific pathways and limits for integrating AI tools. Here, we identify three fundamental differences between the two systems to illustrate how institutional design conditions the use of AI in labor arbitration.

Firstly, the difference in legal foundations has fundamentally impacted the labor arbitration systems. In China, labor arbitration is characterized by an administratively led, quasi-judicial model, with its authority directly granted by law under the Labor Dispute Mediation and Arbitration Law. Arbitration commissions exercise compulsory jurisdiction, making arbitration a mandatory precursor to litigation—an arrangement that underscores deep state involvement in labor relations. This administrative structure lays the groundwork for comprehensive AI integration, as system-wide data flows and regulatory support align with state-led governance. In contrast, the United States employs a contract-autonomy arbitration model, whose legitimacy is entirely grounded in arbitration clauses within collective bargaining agreements. It adheres to the judicial deference principles established by the Steelworkers Trilogy, under which courts review only procedural legality—not substantive merits—thus creating a space of private-law autonomy for dispute resolution. This emphasis on independence and autonomy results in detailed and comprehensive rules on arbitrator selection and procedural design. These differences in legal foundations lead to diverging permissions and scope for AI applications: China's administrative structure provides a basis for more comprehensive AI integration, while the U.S. contractual framework inherently limits how deeply AI can influence arbitration.

Secondly, the differences in value orientation and social functions run throughout the labor arbitration process. China's system emphasizes equitable outcomes; its arbitration awards must reflect a pro-labor bias and respond to shifts in labor policy. The high rate of case resolutions via mediation in labor arbitration serves as evidence of the strong guidance inherent in an administratively led system. ²¹⁰ In contrast, the U.S. prioritizes procedural autonomy and relationship preservation; arbitration is viewed as a management tool for labor—management cooperation. The arbitrator's authority derives from the arbitration clause and is usually limited to interpreting and applying that agreement's terms, maintaining case-by-case flexibility. ²¹¹ These differing value orientations shape the development of AI systems: in China, algorithm design must consider policy direction, whereas U.S. systems focus more on ensuring procedural compliance.

Finally, differences in procedural positioning and institutional structure determine the varying legal effects of arbitration in China and the United States. In terms of procedure initiation, China

²¹⁰ See Qin Yu & Wenjia Zhuang, Labor Legislation, Local Mediation and Dispute Resolution in 40 Years of Reform and Opening: An Empirical Analysis Based on Labor Dispute Success Rates, 58 J. Sun Yat-Sen U. 171, 176 (2018).

²¹¹ Martin H. Malin, Ann C. Hodges & Jeffrey M. Hirsch, *Labor Law in the Contemporary Workplace* 789–90 (3d ed. 2019).

adopts a mandatory statutory arbitration system, where all labor disputes must go through arbitration before litigation. It also implements a free arbitration policy to lower the threshold for workers to safeguard their rights. In contrast, the United States strictly distinguishes between labor arbitration and employment arbitration: the former requires union consent to initiate, while the latter depends on arbitration clauses in individual employment contracts, with parties typically bearing the arbitration costs themselves. Regarding the linkage with judicial proceedings, China adopts a differentiated finality system to balance efficiency and fairness—some arbitration awards are final and binding, while others may be appealed. The U.S., however, adheres to a comprehensive finality principle, where courts only review procedural defects, and substantive rulings are rarely subject to judicial intervention. This difference in legal effect not only influences the attitudes of parties toward participating in arbitration, but also shapes the boundaries of AI application. In China, AI systems are designed to support a unified, full-process workflow, whereas in the United States, the fragmented procedural structure leads to more dispersed and piecemeal applications of AI technology.

B. Use of AI in China and US

Differences in the legal systems of the two countries have profoundly shaped the paths of AI application. In China, relying on an administratively led system, full-process intelligentization of labor arbitration is promoted through policy mandates and resource integration, with an emphasis on comprehensive technological upgrading. In contrast, the United States follows a more market-driven logic, exploring the boundaries of regulatory compliance through demand-oriented technological iterations, while maintaining procedural rigidity. The following section attempts a comparative analysis of the two approaches to AI implementation. Specifically, it examines three key areas: document automation, online platforms, and the boundaries and regulation of AI-assisted decision-making.

First, in the field of document automation—where large language models are widely applied—both China and the United States have accumulated substantial practical experience. In China's ongoing efforts to build intelligent labor arbitration systems, full-process automation of standardized documents has become a key objective. Some labor arbitration institutions have already achieved comprehensive AI integration across the entire documentation cycle—from document generation and verification to digital archiving.²¹³ Intelligent application systems in the arbitration filing stage offer features such as automated generation and error correction of standardized arbitration applications, while electronic archiving systems and database construction have contributed positively to procedural efficiency.²¹⁴ In the U.S. labor arbitration context, AI

²¹² See Benjamin Liebman, Artificial Intelligence in U.S. Judicial Practice: Problems and Challenges, 2 China L. Rev. 54, 55-56 (2018).

²¹³ For example, the Shunyi District Arbitration Commission in Beijing has implemented a real-time case tracking and positioning system that generates a unique barcode for each arbitration case after filing. The printed barcode is attached to the final page of the case file. When staff members print documents, make phone calls, or send mail, they simply scan the barcode to instantly update the case progress in the system. The system automatically records key information—such as processing time, responsible personnel, and case file location—based on preset functions, allowing arbitrators to monitor case progress in real time. See China Labor and Personnel Dispute Mediation and Arbitration, Beijing Shunyi: "Digital ID" Empowers "Smart Arbitration", Sept. 11, 2024, https://mp.weixin.qq.com/s/lcWCuKXDIHo-b-VAG61-zQ.

²¹⁴ According to arbitrators from the Weihai Arbitration Commission, AI-supported functions such as electronic document archiving have improved hearing efficiency by 60%. See Ming Zhang & Yuanzhong Shao, Focus on Weihai: AI Reshaping the Labor Arbitration Ecosystem, China Labor and Social Security News, June 20, 2025, at 3.

tools are more often positioned as market-driven document-assistance tools, offered by third-party legal service providers. These tools serve all stakeholders, including parties to arbitration, their legal representatives, institutions, and arbitrators. Services such as customized arbitration agreement generators, document quality-check functions, and electronic signature systems have gained some level of recognition in practice. This contrast reflects a fundamental difference in approach: China focuses on building a systematic AI-driven document ecosystem, whereas the United States tends to develop a decentralized suite of specialized tools.

Second, online arbitration platforms have become a key area of procedural innovation in both countries, but their system architectures differ significantly. The core distinction lies in China's emphasis on administratively led system integration, versus the United States' reliance on flexible combinations of market-based services. In China, drawing on previous experience with integrated e-government platforms, the construction of online labor arbitration systems is characterized by broad scenario coverage and deep integration.²¹⁵ On the party-facing side, arbitration interfaces are embedded into government service apps at various levels, enabling features such as facial recognition for case filing and electronic evidence submission.²¹⁶ On the arbitrator-facing side, platforms include support modules such as evidence archiving, similar-case recommendation, and automatic identification of key issues in dispute. 217 On the administrative side, arbitration commissions' management portals are connected with data systems of other government departments, supporting identity verification, document validation, and real-time monitoring of case handling efficiency. In the United States, online arbitration is more often manifested as a modular combination of solutions. Various AI technology providers offer services that support functions such as digital case submission, video hearings within online platforms, and electronic evidence exchange. Administrative workflows within arbitration institutions also benefit from AI tools, which improve case management efficiency and standardization. However, due to the inherently individualized nature of arbitration, the application of AI tools often reflects the personal preferences of arbitrators, making it difficult to fully standardize processes. This contrast in system design highlights the broader divergence between China's state-led model and the U.S. marketdriven approach, and it also suggests the different challenges that each system may face in the future evolution of arbitration technology.

Finally, the boundaries and regulation of AI-assisted decision-making have become subjects of considerable attention and debate in both China and the United States. In China, arbitration

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²¹⁵ For example, the Jiangsu Government Services App has integrated an online platform related to labor arbitration. After real-name authentication, users can access the provincial-level "Service Cluster" channel, where the "Mediation and Arbitration" application is easily found under the "Local Services" section. See No Need to Run Around for Labor Disputes—Use the Jiangsu Government Services App to Choose Your Own Rights Protection Channel, Jiangsu Government Services (WeChat Official Account), Mar. 4, 2019, https://mp.weixin.qq.com/s/40vPsiHcGZYMmKcyTvwgjg.

²¹⁶ Shandong Qingdao: Ushering in a New Era of "Smart Arbitration", Ministry of Human Resources and Social Security of the People's Republic of China, May 15, 2023,

https://www.mohrss.gov.cn/SYrlzyhshbzb/ztzl/ldrszytjzc/jyjl/202305/t20230515_500036.html.

²¹⁷ From September 24 to 25, 2024, the First Civil Division of the Supreme People's Court and the Department of Mediation and Arbitration Administration of the Ministry of Human Resources and Social Security held an on-site conference in Xiamen on the coordination of labor and personnel dispute arbitration and adjudication. At the event, they introduced the achievements of Xiamen's arbitration–adjudication coordination system. The system features one-click case filing, information sharing, and case law retrieval functions. Judges can directly download arbitration hearing transcripts and closing documents, enabling on-demand access and improving case-handling efficiency. See Shuqui Zhang, Data-Driven Empowerment: Courts and the Ministry of Human Resources Jointly Build a "Xiamen Model" for Labor Dispute Coordination, Legal Daily, Sept. 29, 2024, http://www.legaldaily.com.cn/index_article/content/2024-09/29/content_9062367.html.

institutions have placed particular emphasis on AI decision-support tools such as similar-case recommendation systems. These tools operate by learning from past arbitration case databases, extracting factual patterns, and providing arbitrators with intelligent suggestions for matching similar cases. In practice, such tools have already shown a certain degree of influence over adjudicative reasoning. In the United States, stakeholders have generally taken a cautious stance toward the use of AI in decision-making. Its application is typically restricted to narrowly defined scenarios—for example, AI tools may assist in drafting sections of arbitration awards that do not involve legal analysis or factual determinations, such as background information or descriptions of industry-specific procedures. Such use is premised on preserving the arbitrator's decision-making authority, and there is a strong emphasis on the arbitrator's core responsibility to make independent determinations based on the evidence and the law. This divergence in application boundaries reflects broader differences in the two countries' approaches to legal technology: while China has explored more substantive roles for AI in adjudication, the U.S. remains firmly committed to maintaining human control over the core functions of legal decision-making.

Overall, the differences in how China and the United States apply AI in labor arbitration reflect fundamentally distinct logics. In China, government-led technological empowerment is geared toward systemic transformation, while in the U.S., technology is viewed as an auxiliary tool, with an emphasis on controllable risk. 220 These divergent paths of development are rooted in institutional differences such as the positioning of arbitration systems and underlying procedural philosophies. As quasi-judicial bodies with administrative attributes, Chinese labor arbitration institutions operate within a top-down bureaucratic structure that enables the mandatory implementation of unified technical standards. The system's strong emphasis on efficiency further provides a normative basis for deep AI integration into arbitration processes, allowing various AI tools to be directly embedded in case handling procedures. In contrast, the market-based service model in the United States means that technology is applied according to demand. AI tools are typically used only where they significantly reduce service costs, and the principle of procedural due process imposes strict limits on their application. Moreover, the centralized management of government data in China supplies rich data resources for model training and facilitates data sharing and integration across different levels of government. By contrast, the United States operates under a rigorous legal framework for privacy protection, where the circulation and use of data are guided by a cautious approach. The transformation of transparency and openness requirements into concrete rules remains under discussion, and the use of AI is consequently more restricted.²²¹

V. CONCLUSION

China's administratively led model for promoting technology is characterized by centralization and efficiency, enabling the rapid implementation of end-to-end intelligent labor arbitration processes and significantly improving case-handling efficiency. However, this standardized approach also faces the challenge of balancing procedural efficiency with case-specific justice. In

²¹⁸ Zhejiang Launches Digital Application, supra note [].

²¹⁹ See Benjamin Liebman, Artificial Intelligence in U.S. Judicial Practice: Problems and Challenges, 2 China L. Rev. 54, 55-56 (2018).

²²⁰ See Zhe He, Toward the Age of Artificial Intelligence: On U.S. AI Strategic Directions and Lessons for China's AI Strategy, 12 E-Gov't 2, 7 (2016); Kai Lu, U.S. Algorithmic Governance Policies and Implementation Approaches, 42 Global L. Rev. 5, 9 (2020).

²²¹ See Linghan Zhang, Conflicts and Reconciliation Between Algorithmic Automated Decision-Making and Administrative Due Process, 6 Oriental L. 4, 14 (2020).

contrast, the United States' market-driven approach to technology application offers flexibility to meet diverse needs, but is limited by fragmented data and commercial barriers, resulting in uneven access to and adoption of technology. The future development of intelligent labor arbitration should be grounded in each country's specific context and follow differentiated paths. Such pluralistic exploration not only contributes to improving national labor dispute resolution mechanisms, but also provides diverse and valuable reference points for the global digital transformation of labor arbitration.