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AI in Legal Systems: A Comparative Analysis of India's and China's Administration of Justice

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ABSTRACT

AI raises a lot of concerns for judges and legal systems. The potential benefits of AI for court administration and the accompanying requirements are important factors to take into account. Regardless of the kind of case, the fundamental goal of legal processes is the simplification of complexity. Not every legal assignment requires sophisticated bespoke work. As a result, different types of IT, such as artificial intelligence, show varying degrees of applicability in different scenarios. As part of larger changes, the Chinese authorities and judicial system have chosen in recent years to heavily integrate artificial intelligence. This significant use of AI in the judicial system is unique to China and is the result of enduring problems the courts face, such as an extreme increase in their cases and a lack of qualified staff. As a result, a number of pilot operations have been started around the country, integrating different AI systems into different areas of the legal system. Lately, artificial intelligence has also been integrated into the Indian legal system. This article examines the shortcomings in the Indian legal system's effective integration of artificial intelligence (AI) and offers remedial strategies based on the Chinese model that may be used to ensure the continued growth and successful integration of AI in India's law system.

Keywords: Artificial Intelligence, China, India, Judicial System, Courts.

I. INTRODUCTION

The captivating TV miniseries *Class of 09* is a riveting story of artificial intelligence's (AI) impact on the criminal judicial system in the United States. In the concluding segment, an AI system mistakenly accuses an activist of a crime because of her opposition to AI, which she said in a book that has not yet been printed. The AI saw this as a threat. Throughout the course of the case, the counsel argues that the legal system holds AI computations in high regard, and so human judges have little authority to determine her guilt or innocence¹. Although the current story does not depend on AI-driven making choices, it does highlight the possibility that in the future; such a scenario may come to pass.

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Globally, more and more automated technologies are taking over jobs that were formerly performed by people. A few years ago, a lot of people thought that grammar validation and search engines were advanced types of information technology. These days, face recognition software is often used to check passengers at airports, and Google Maps provides users with unsolicited advice about where to go, such as alerting them when a restaurant could be closed. Phone and tablet both provide courteous, spoken responses for spoken questions. News sources debate the idea of "robot" justice, implying that computers are able to forecast court rulings with sufficient accuracy to do away with the necessity for human judges. When we talk about future developments, we frequently dream about the ways in which these inventions will make our lives easier.

The Chinese legal system and administration have recently adopted a calculated strategy to integrate artificial intelligence into broad judicial changes. China is unique in that it has placed a strong focus on using AI in the courts, a move motivated by the ongoing difficulties that the courts face. A notable increase in loads and a lack of skilled experts in the judiciary are two of these difficulties. As a result, the nation has established many pilot programs throughout the whole country, deploying a variety of AI systems across multiple aspects of the legal system. A portion of these systems concentrate on optimizing standard procedures, such as document review and transcribing, with the goal of increasing productivity. More ambitious projects, meanwhile, are in motion with the goal of directly supporting the decision-making process.

II. KNOWING ARTIFICIAL INTELLIGENCE (AI)

The process of making a machine behave in a way that would be considered intelligent if carried out by a person is known as artificial intelligence (AI)². John McCarthy is credited with coining the phrase "Artificial Intelligence" in 1956. He is credited with providing this definition, which is important in defining human intellect as the standard by which AI skills are measured. According to this definition, intelligence is the ability to reason abstractly, logically, and consistently; to recognize connections; to solve problems; to find patterns in seemingly chaotic data by applying prior knowledge; to take on new tasks; to skillfully adjust to novel situations; and to learn on one's own without extensive or direct instruction. From this angle, the issue that emerges is: What does this mean for AI?

For AI to function effectively, it requires access to substantial amounts of 'big data.'³ Luc Julia, a key contributor to the development of the digital assistant Siri, illustrates this concept by stating that, for a machine to accurately identify a cat with a 95% certainty, approximately 100,000 pictures of cats are needed. Over time, there has been a significant accumulation of

data, contributing to the recent surge in interest in AI. AI manifests in various forms, including speech recognition and image recognition. However, this article primarily focuses on machine learning and natural language processing. The prospect of deep learning, where the technology autonomously learns, remains a topic for future exploration.

III. INTEGRATION OF AI IN COURTS

Dispensing justice in particular instances is part of administering justice, and the court also has a supporting function in setting social norms. Whatever the nature of the case, the main activity for courts and judges is information processing. Information is presented to the court by the parties, changes take place during the legal process, and the final ruling constitutes information in and of itself. Most typical instances have predictable outcomes for the most part. In many cases, the court's ruling is produced using a mostly automated procedure that depends on information that is provided. The foundation for enforcement is the judgement document. In some cases, the filing party can provide data digitally, removing the necessity for manual re-entry, because the court predominantly accepts digital submissions. Furthermore, given the high degree of confidence in the result, if the predicted conclusion is obvious, the case processing might be entirely or partially automated using AI.

Since the introduction of the AIDP in 2017, China's technological sector and courts have made significant strides towards adopting and expanding artificial intelligence (AI). Numerous pilot projects in big cities have demonstrated a range of AI platforms and uses, and successful projects have spread to the provincial or national levels. AI-based recommendation systems and AI-clerical assistance systems are the two main application categories where the "Smart Courts" that the AIDP envisioned have seen early implementations. Chinese courts use artificial intelligence (AI) for legal research. The AI-powered 'China Judgements Online' portal helps judges find relevant court papers quickly.

In USA⁴, Judges are assisted in risk assessment by artificial intelligence (AI) tools such as COMPAS (Correctional Offender Management Profiling for Alternative Solutions)⁴, which anticipate the likelihood of reoffending based on factors such as mental health, social and financial background, and criminal history. Similar to this, the US Sentencing Commission uses AI in the development and use of sentencing guidelines to ensure just and equal punishments. Chatbots are used in the US judiciary to answer frequently requested public queries on court procedures, scheduling, and other pertinent subjects. This lessens the effort for court employees while also making information more easily accessible to everyone.

The Digital Case System, which offers real-time case updates⁵ and facilitates remote court

participation, was introduced by the UK Ministry of Justice in 2020 for crown courts. This technique makes it easier to submit evidence digitally, which helps to cut down on the amount of paper used. The Bar Council's Ethics Committee⁵ provides guidelines for criminal law solicitors who use the web portal⁶.

The Supreme Court since 2021 is using an AI-managed tool that is designed to handle material and hand over it to justices so they may make decisions without actively engaging in the process. SUVAS (Supreme Court Vidhik Anuvaad Software) is an additional tool used by the SC of India. Its function is to translate legal papers from English into vernacular languages and vice versa. The Punjab & Haryana High Court rejected a bail request in the case of *Jaswinder Singh v. State of Punjab*⁷ on the grounds that the prosecution had evidence linking the petitioner to a serious and fatal attack. The sitting court turned to ChatGPT for insights in order to have a more thorough understanding of the decision to issue bail in cruelty instances. It is important to clarify that the judge in the court will not consider these comments, nor does it imply any position on the merits of the case. The only purpose of the reference was to improve understanding of bail jurisprudence where one of the factors is cruelty.

IV. ETHICAL PRINCIPLES IN COURT PRACTICE

Technology is a provided, but there is still much disagreement over how best to use it in our daily lives. There are already more than 25 papers that provide ethical guidelines for using AI. These documents come from respected institutions including the Council of Europe, the European Union, and the Institute of Electrical and Electronics Engineers (IEEE). The Council of Europe's Commission for the Efficiency of Justice (CEPEJ) has also looked at this matter. The Working Party on Quality (GTQUAL) of CEPEJ developed ethical guidelines for the use of AI in court administration, which CEPEJ formally endorsed in December 2018. The five 'Ethical Principles' overlap substantially, which makes it difficult to handle them all in a complete and methodical manner.

- 1. Security of Data:** - Data security is essential. When processing court judgements through the use of interdisciplinary design models and verified sources and unchangeable data, it is important to do so in a technologically secure environment.
- 2. Consistent with Fundamental Rights:** - Ensure that the creation and application of AI technologies and services respect fundamental rights such as equality of treatment, privacy, and a fair trial.
- 3. Transparency:** - To enable external audits, data processing methods need to be transparent and easy to comprehend. Currently, transparency is mandated by law. The choices,

information, and presumptions made by algorithm users must be made available to the public in a thorough, appropriate, and timely manner. In order to provide strong legal protection against judgments based on these components, this disclosure should make it possible for third parties to review and assess the decisions, information, logic, and presumptions. The courts should be able to conduct judicial review based on this thorough, appropriate, and timely disclosure.

4. **AI under User Control:** - The computer should not be able to prescribe on its own or make judgements since the algorithm used should not act as a prescription. Users need to be aware of and understand what the AI is doing in order to continue having influence over the decisions they make⁸. This means that consumers should be able to readily stray from the algorithm's conclusion⁹.
5. **Equal Treatment:** - Stop prejudice against people and different groups from happening. The previously discussed example of COMPAS highlights the real danger of unfair and unjustifiable discrimination against people and groups. In addition to bias that may be intrinsic in the method itself, bias may also have been introduced by the data the algorithm used.

(A) What lacks in Indian System for Implementation of AI?

Even though AI has a lot of potential benefits for the legal system, there are certain drawbacks that need to be considered. Because AI algorithms rely on training data, they may perpetuate social prejudices and provide unfair results. Concerns over accountability are raised by the use of AI in the field of law, especially when mistakes are made without sufficient human supervision or evaluation of the systems. In addition, attorneys, legal assistants, and other types of judicial and administrative professionals may lose their jobs. This limits socio economically disadvantaged populations' access to legal services, which not only creates economic difficulties but also widens the digital divide.

Concerns about privacy are also raised by the use of AI in the judicial system since these systems have the ability to gather, process, and use personal data, which increases the possibility of abuse¹⁰. Concerns have also been raised concerning AI systems' vulnerability to hacking, cyber attacks, and data breaches, which might reveal private data and cause security problems. Attorneys must make sure that the private information of their clients is protected. But since AI systems don't have to follow the strict confidentiality guidelines that human-operated systems do, they might not provide an identical level of security and safety. Most importantly, AI engines might not always be able to mimic human judgment, which is what

the judicial system depends on.

These worries might seriously affect India's judicial institutions, which would be a significant barrier to the application of AI in the court system. Only until these issues are resolved can AI be implemented in legal systems. However, China has in some manner already established majors for resolving these difficulties; as a result, if these approaches are properly examined and applied to India's contemporary legal systems, they can also serve as a model for Indian legal systems. Following is the analysis:-

- 1. Societal Bias:** - The results of AI systems may reflect any bias that was present during training. AI's outputs could just reproduce historical and societal divides based on factors like gender, caste, ethnicity, and ideology, producing outcomes that don't truly represent merit.

Apart from previous state-sponsored national champions, the new AI 'national team' in China has already achieved worldwide success in their respective disciplines without receiving any special treatment. Furthermore, there is fierce local rivalry in the industries selected for national champions, suggesting that customary barriers to competition might not be as common as they formerly were. Interestingly, every business named an AI national champion is actively working on creating technology associated with smart cities, which is Alibaba's specific focus area. In addition, smaller businesses are still able to take advantage of the offered financial benefits despite this popularity. The Chinese government frequently provides financial assistance and subsidies to several IT businesses so they may continue developing AI technologies. For instance, Zhongguancun Innovation Town, Government-funded incubator area, provides a range of services to help Chinese digital firms thrive, frequently matching the industries selected for national champions. Furthermore, these are situations in which there is no explicit support. For example, as of the beginning of 2020, no national champ has been chosen for the development of AI applications for the administration of justice, despite the AIDP's support for intelligent courts and expressed ambition to use AI for evidence collecting, case evaluation and legal document reading⁸.

- 2. Accountability:** - Unlike licenced attorneys, artificial intelligence (AI) systems are not subject to specialised codes of conduct or ethical standards as they are not obliged to earn a practicing licence. The issue of accountability and responsibility arises: who is to blame when an AI system gives false or deceptive legal advice—the user or the developer? Even in situations where judges retain last say in matters of decision-making, the incorporation of AI into the legal system poses difficulties. Over-reliance on technology-driven

suggestions carries a danger, frequently because of automatic biases. A New York lawyer used ChatGPT¹¹ for legal study, based to a recent news article, and included six court citations in a brief¹¹ that was filed with the court. The opposing counsel, however, was unable to independently verify the veracity of any of the instances, which forced them to acknowledge as much. Following this, the judge punished the attorneys involved, fining their company \$5,000 in total. This instance emphasises that attorneys should use caution when using artificial intelligence.

China's continuous judge scarcity, damaged reputation, and pressing need for modernization are the main reasons for the country's interest in integrating AI into its legal system. China's economic expansion and emphasis on the application of law have resulted in a notable increase in the amount of court¹² cases during the previous forty years. But as of 2015, the amount of judges has only increased by three times to keep up with the roughly 30-fold growth in instances since 1978. The necessity to simultaneously improve the legal system's legitimacy and public image by professionalising court employees exacerbates the current staffing shortages. The Supreme People's Court (SPC) implemented stricter internal assessments and a quota in 2014, limiting the percentage of court employees qualified to hear cases to 39%. Judges who failed the exams were moved to support and administrative positions in the courtroom [5]. The number of judges fell by 49% by 2017 [5], from over 200 thousands to over 120 thousand, as a result of this approach. Therefore, although if China's objectives of encouraging overall "take on of law" and the "professionalisation of the justice" are not intrinsically at odds, the country is now dealing with a scenario in which the number of cases being filed is rising in tandem with decreasing law power. In light of this, the SPC's reform plan now places a high premium on the deployment of artificial intelligence technologies to dramatically improve court efficiency and accomplish judicial modernization.

3. Job Loss: - AI is capable of functioning on its own, learning from and using data without the assistance of its original programmers or coders. However, this independence raises the possibility of undiscovered economic and technical divides. These differences may lead to improper data processing and perhaps jeopardise the foundation established by the Competition Act of 2000. Simultaneously, AI-powered legal software is gradually replacing human attorneys, which may eventually result in employment losses for the nation's aspirant attorneys.

According to a PwC analysis, China is expected to benefit the greatest from AI in this regard, with GDP growth of as much as 26 percent by 2030. Additionally, predictions suggest that over the next 20 years, AI may help to create 12% more jobs. Acknowledging these potential

benefits, President Xi¹³ has repeatedly emphasised the critical role AI plays in the nation's overall economic development. China has demonstrated a strong commitment to using artificial intelligence (AI) for commercial gain, as seen by the impressive 500% rise in robotic upgrading installations each year since 2012. China already has more than twice as many robot installations as Europe does due to this growth rate, which is noticeably greater than the slightly over 100% rate seen in Europe.

4. Privacy & Transparency: - For learning and prediction, AI systems usually rely on large datasets, and these datasets frequently contain sensitive data, such as financial or personal information. Compliance with data protection rules is a concern for organisations using AI algorithms that require such data for efficient training.

AI has been used by the Chinese government to improve social governance, especially in the judicial system. The judicial system, which faces obstacles notably a lack of transparency², problems with local protectionism², and meddling in court cases by local authorities, is consciously working to become more professional under Xi Jinping. Numerous measures have been put into place to solve these problems. These include giving provincial governments control over local court administration instead of local government, creating a database where judges can report attempts by local politicians¹⁴ to meddle, and putting in place an instance registration system that makes it harder for judges to turn down difficult or complex cases.

According to one analyst, China has started enacting steps to protect privacy in response to these serious concerns. The Personal Information Security Specification (the Specification)¹⁵, a privacy standard that was unveiled in May 2018, is at the centre of this effort. This standard focuses on protecting personal data and giving people control over their own information in an effort to build on the more comprehensive privacy laws set forth in the 2017-18 Cyber Security Law. The standard has a number of extremely thorough requirements, one of which defines sensitive personal information broadly to include things like reputational harm. Because of the standard's wording, some observers think that certain of its rules are stricter than those in the General Data Protection Regulation.

(B) How can AI be effectively used in Courts?

A fair procedure is defined under Article 6 of the European Convention on Human Rights¹⁶, and subsequently by the Ethics Guidelines. It requires, among other things, an open and honest procedure, treating all parties fairly, and a decision that is well-founded. As mentioned in the section above, every attempt to simplify the legal system should be open, justifiable, and offer a level playing field to all parties involved.

For a long while now, it has been known that erroneous data—such as judgements made under false legal circumstances—has a negative effect on the accuracy of AI results. Still, having correct data by itself is not enough. Patterns can be found by text recognition using the processing of natural languages, which evaluates the text-related behaviours of judges and attorneys from an outside perspective. However, patterns such as statistical associations by themselves are insufficient to support a conclusion. It is essential to structure and give legal importance to legal material in order to make it easier for artificial intelligence to process and understand.

AI has to be able to explain the reasoning behind its results. Both substantive reasons and specifics of the processing method may be included in this explanation. Research suggests that, in terms of technology, artificial intelligence ought to be able to provide the same kind of explanation that people anticipate from their leaders. Practical experience, however, indicates that humans might be able to explain some things more easily than AI.

The people who interact with AI, including judges, ought to understand how it works. It is imperative that Ethics Guidelines be implemented and integrated into the institution's operations related to judicial procedures. For the AI to function, human users must primarily define the tasks, measurements, and assessments. It is essential to do ongoing testing to make sure the AI stays focused on its goals. It is imperative that the system be built to provide seamless and robust modifications, and regular auditing is crucial.

V. CONCLUSION

The use of AI in China's legal system is the result of particular conditions and demands; this tendency was further accelerated by the COVID-19 epidemic, which forced almost all of trials to be conducted online. In this regard, AI features that support court processes—like translating trial records and assisting with the filing of evidence—have improved judicial efficiency. However, the rapid adoption of robot judges and AI legal systems, in addition to the increased stress caused by the epidemic, have revealed difficulties and potential roadblocks related to an AI-dependent court.

The main issues include the potential for over-reliance and behavioural changes when more sophisticated tools are added, as well as the danger of overestimating the usefulness and efficacy of AI systems.

Some AI functions are still too primitive to be useful in real-world scenarios. For example, active pilot programmes that use face and emotional recognition technologies to evaluate the reliability of testimony are unstable and not yet commercially feasible. Likewise, using AI to

detect dishonesty has been demonstrated to be untrustworthy. It is imperative that the results of these systems' trials, unless they are supported by established protocols, have no direct bearing on case decisions. The uneven availability of digitalized and easy to access case data is another identified shortcoming.

In this regard, India is lagging far behind other countries in implementing AI in its judicial systems. It reverts to the traditional physical function of judges in upholding court rulings. But although if COVID 19 has accelerated the digitalization of e-courts, artificial intelligence is still far behind, limited to a few domains. The primary issue lies in the fact that India needs the administrative and technological know-how necessary for such an execution. And for this reason, even in its infancy, AI is threatening justice instead of being useful. It is imperative that administrators recognise such grey areas and adopt workable solutions, as exemplified by the United States and the United Kingdom and mainly China.

India has also ratified the Agenda for Sustainable Development 2030, which intends to establish and execute the 17 SDGs in order for the nation to reach the developed nation status by 2035. One of the biggest obstacles to achieving SDG 9 is the absence of AI throughout the judiciary. Should we persist in our current pace and neglect these crucial components of AI deployment, the 2035 deadline will remain but an aspiration. Thus, now is the moment to recognise our shortcomings and pursue the best possible solutions for using AI to administer justice in India.

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