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Introduction

Welcome to the Indian Journal of Legal Affairs and Research (IJLAR), a distinguished platform dedicated to the dissemination of comprehensive legal scholarship and academic research. Our mission is to foster an environment where legal professionals, academics, and students can collaborate and contribute to the evolving discourse in the field of law. We strive to publish high-quality, peer-reviewed articles that provide insightful analysis, innovative perspectives, and practical solutions to contemporary legal challenges. The IJAR is committed to advancing legal knowledge and practice by bridging the gap between theory and practice.

Preface

The Indian Journal of Legal Affairs and Research is a testament to our unwavering commitment to excellence in legal scholarship. This volume presents a curated selection of articles that reflect the diverse and dynamic nature of legal studies today. Our contributors, ranging from esteemed legal scholars to emerging academics, bring forward a rich tapestry of insights that address critical legal issues and offer novel contributions to the field. We are grateful to our editorial board, reviewers, and authors for their dedication and hard work, which have made this publication possible. It is our hope that this journal will serve as a valuable resource for researchers, practitioners, and policymakers, and will inspire further inquiry and debate within the legal community.

Description

The Indian Journal of Legal Affairs and Research is an academic journal that publishes peer-reviewed articles on a wide range of legal topics. Each issue is designed to provide a platform for legal scholars, practitioners, and students to share their research findings, theoretical explorations, and practical insights. Our journal covers various branches of law, including but not limited to constitutional law, international law, criminal law, commercial law, human rights, and environmental law. We are dedicated to ensuring that the articles published in our journal adhere to the highest standards of academic rigor and contribute meaningfully to the understanding and development of legal theories and practices.

USE OF ARTIFICIAL INTELLIGENCE IN JUDICIAL DECISION-MAKING: EFFICIENCY AT THE COST OF FAIRNESS?

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Abstract:

The amalgamation of Artificial Intelligence (AI) into the Judicial system worldwide has sparked an intense debate over how courts will function in the future. The AI-driven tools provide the judicial system with improved operational efficiency through their capability to decrease judicial backlogs, their ability to achieve consistent results, and their function of optimizing court management. The e-Courts project and AI-assisted judicial tools in India demonstrate an increasing dependence on technology for the smooth functioning of court operations. The increasing use of AI in judicial decision-making raises serious concerns about fairness, transparency, and accountability. This article critically examines whether the efficiency that is offered by AI comes at the expense of the fundamental principles of justice, such as the principle of natural justice. This study examines the tension between the AI system that delivers operational efficiency and the requirement to achieve fairness. The unregulated application of AI technology in judicial settings will create a serious risk to fundamental rights protected by Articles 14 and 21 of the Indian Constitution. This article highlights issues such as algorithmic bias, opacity, accountability, and access to justice. A comparative study of developments in the United States, the European Union, and the United Kingdom is undertaken to draw lessons for responsible adoption.

INTRODUCTION

Artificial Intelligence (AI) refers to a computer system designed to perform tasks that normally require human intelligence, such as learning from data, recognizing patterns, making decisions, and solving problems. Instead of working only on fixed instructions, AI can analyze a large amount

of data, recognize patterns, make decisions, and also solve problems. In recent times, AI has gained huge recognition in the judicial system, mainly to help courts to organize and to reduce serious problems such as judicial backlog and log delays that occurred while providing justice. Courts around the world, including India, are overwhelmed with millions of cases that are left pending, which weakened the public confidence in the judicial process, prolonged litigation, which frustrates litigants, and increased costs. AI appears alluring because it provides faster processing of the case, well-organized or structured court work, and overall efficiency in decision-making. AI is increasingly being integrated into courts as a support system tool in decision-making that assists judges and lawyers in legal research, case law analysis, and drafting orders by quickly scanning a large database of statutes and precedents. It is also being used in a case management system where the AI helps in organizing cases, such as scheduling hearings, tracking progress, and managing digital records. However this growing use of AI also brings in itself few concerns, such as whether the efficiency gained through AI may compromise the core values that are there in the judicial system. Legal decisions are not merely technical, rather it includes understanding, empathy, most importantly, transparency and fairness. Many AI systems function as “black boxes,” which means AI makes it difficult to understand how certain conclusions or outcomes were made, which challenges one of the main bases of the judicial system, which is transparency. There is also a risk of algorithmic biases that lead to unfair outcomes for vulnerable or marginalized groups. Besides, excessive reliance on AI could lead to a reduction in the role of human intelligence or judgement which is very important in interpreting laws with sensitivity and also when dealing with sensitive cases.

UNDERSTANDING ARTIFICIAL INTELLIGENCE IN THE JUDICIAL FRAMEWORK

Artificial Intelligence (AI) in the judicial context refers to the application of an advanced computer system that is capable of analyzing large data, learn from past cases, organizing cases, scheduling hearing and assisting in various aspects of making efficient judicial decisions. It is not designed to replace human intelligence or judgment, but rather to assist the judges while making efficient decisions. AI functions as a supportive tool.

Key types of AI in the judiciary:

- **Natural Language Processing (NLP):** Used for legal research, summarizing voluminous documents, translating judgments into regional language (for example, SUVAS in India), and analyzing legal language for insights.
- **Machine Learning (ML) and Predictive Analysis:** Algorithms analyze historical data to identify trends, predict case outcomes and assist in risk assessment for bail or sentencing (for example, COMPAS in the US).
- **AI-Powered Case Management and Administration:** Systems that automate filing, classify cases, manage scheduling, and handle routine administrative tasks to reduce backlogs and improve efficiency (for example, SUPACE).

Difference between AI-assisted decision-making and fully automated decision-making:

AI-assisted decision making and fully automated decision making differ mainly in the level of human involvement in the outcome. AI-assisted decision-making refers to a system where decisions are made with the help of artificial intelligence, which supports the human authorities by providing recommendations, data analysis, or insights that are based on previous information. In the judicial context, an AI tool helps judges with legal research, risk assessment, or predicting case timelines, but the final decision or the outcome is decided by a human judge, who applies legal reasoning, understanding, discretion, and empathy while making the decision. This ensures fairness and accountability.

On the other hand, fully automated decision-making, as the name itself says, is a decision-making made entirely by AI systems without any meaningful touch of human intelligence. Here, algorithms independently process data and generate outcomes, such as approvals or rejections, based on predefined data or models. This approach raises serious concerns about bias, transparency, fairness, and violation of natural justice in the judicial context.

NEGATIVE IMPACT OF ARTIFICIAL INTELLIGENCE ON JUDICIAL- DECISION MAKING

Artificial Intelligence, as we all know, provides or offers clear advantages in processing large amounts of data and well-organized procedural workflows, whereas an emerging concern where

artificial intelligence is being used is in its way that compromises the main or core function of the judicial system, which is providing fair, empathetic, and understanding decisions. The most frequently mentioned risk is the increasing dependence on algorithmic outputs, which could transfer the judges' main function from judicial decision-making to just approving the outputs given or generated by the machines, also known as artificial intelligence. When judges begin to comply with AI output, they may unintentionally transfer the essential aspects of the judicial judgement to the machines or software system, which weakens the role of human agency in this case, the judges' role to interpret principles, statutes, and one of the most function of scrutinizing the evidence (Katz, D. M., Bommarito, M. J., & Blackman, J, 2017).

Judicial discretion has long been recognized as the cornerstone of fair and context-sensitive ruling. The discretion allows judges to take into consideration the unique circumstances of each case, which include social, cultural, and emotional factors that a rigid algorithm or machine cannot fully understand and capture. Placing too much trust in predictive tools and automated legal analytics can weaken judicial discretion, as decisions may begin to rely more on fixed data patterns and formulas rather than careful legal reasoning (Surden. H, 2019). However, this risk deepens when it is believed that the AI systems are completely objective and error-free, even when the AI is dependent on the data incorporated in them and the assumptions that are programmed into them (Barocas, S., & Selbst, A. D., 2016).

A related concern is the occurrence of automation bias, where the decision-makers tend to over-reliance or over-trust the outputs given by the AI systems, sometimes when there is clear logical uncertainty, and also when there is conflicting evidence. Automation complacency rises when a person is handling too many tasks at the same time, and their attention is divided between manual work and automated systems, compelling them to rely more on the automated systems. Research in cognitive psychology and human-computer interactions shows that both naïve and experts, including judges, may heavily trust the algorithmic systems, just so it appears to be advanced and authoritative (Parasuraman, R., & Manzey, D. H., 2010).

Moreover, the prioritization of speed over careful reasoning is another challenge that the critics highlight. AI systems are designed to maximize efficiency, which means generating summaries,

predictions, and classifications. But the justice system has traditionally valued transparency and the articulation of reasoned judgments. When the institution pressures the judges to make quick judgments or rapid resolution of cases, then there is a risk that the judges will rely on AI systems at the expense of fairness, empathy, thoughtful analysis, and detailed legal writing (Raghavan, M., Barocas, S., Kleinberg, J., & Levy, K., 2020).

FAIRNESS UNDER THREAT: RISKS AND ETHICAL CONCERNS

A. Algorithmic Bias and Discrimination

The most serious ethical conflicts surrounding the vast use of AI in judicial decision-making are the risk of algorithmic bias and discrimination. AI relies heavily on historical datasets, while frequently mirroring the existing inequalities in society, discrimination, and the bias in the enforcement of law practices (Barocas, S., & Selbst, A. D., 2016). As AI relies heavily on these predictive studies, the resulting outputs may reproduce or even duplicate these biases in society, particularly against the weaker sections or marginalized communities. Studies have shown that AI-based bail and sentencing tools often may unreasonably label certain individuals as “high risk” either due to their caste, colour, or socio-economic background, even though the available facts do not support or justify such a conclusion (Angwin, J., Larson, J., Mattu, S., & Kirchner, L., 2016).

B. Lack of transparency and the “Black Box” problem

One of the major challenges when fairness is under threat is due to the lack of transparency associated with AI systems. This is commonly referred to as the “Black Box” problem. The machine-learning models generate outputs without providing a clear explanations to how the particular conclusion was reached by the AI systems. This blurriness in the conclusion makes it difficult for the judges to understand or evaluate the AI recommendations or even to challenge or verify the algorithmic reasoning. Such decision-making conflicts with the principle of reasoned decision, which requires the decision to be transparent, explainable, and also open to review (Surden. H, 2019). In the Indian legal context, this principle holds a significant role, as the Supreme Court has constantly emphasized the importance of the principle of reasoned decision as an essential component of Articles 14 and 21 of the Indian

Constitution. The inability of the AI systems associated with decision-making poses the risk of violating the principle of natural justice, especially the right to fair hearing, which means the right to know the grounds or the reasons on which the decision was made.

C. Absence of Accountability

The absence of clear accountability frameworks further threatens the fairness of AI systems associated with judicial decision-making. When an AI system influenced the decision-making results to cause injustice, it remains unclear who will be responsible for this injustice that has occurred, whether the judges who heavily relied on the outputs given by the AI tool, the software developer who designed the algorithm, or the State that sanctioned it (Raghavan, M., Barocas, S., Kleinberg, J., & Levy, K., 2020). This circulation of responsibility makes it harder to fix accountability on one particular person and weakens the system that supports the rule of law. In the judicial system, accountability or responsibility is based on the clear and identifiable decision-makers who can be held responsible through reviews, appeals or constitutional remedies, but when opaque AI systems, which are introduced into these clear structures raises the risk of creating accountability gaps, where the mistakes are blamed upon the technology rather than the human judgment (Bennett Moses, L., & Chan, J. (2018).

VIOLATION OF NATURAL JUSTICE

A. Audi Alteram Partem (Right to be Heard)

The principle of audi alteram partem, or the right to be heard, is a cornerstone of natural justice. This means that no individual should be punished without an opportunity to challenge or oppose the evidence that's been presented against them. The fact that courts are using artificial intelligence to make judicial decisions is a huge problem for this principle. Artificial Intelligence uses a lot of information and, using that information, AI makes predictions, which are not clear or available to the people involved in the decision that AI is making about them. The access to exact inputs, or historical precedents that the AI systems had used to come up with or generate a particular conclusion, is rarely available to the litigants. Consequently, they are unable to respond or rebut the information that is

inadequately influencing their case. This lack of transparency weakens the adversarial process and risks turning court hearings into routine procedures, where decisions are guided more by the opaque algorithmic outputs rather than reasoned human decisions. In India, the Supreme Court in *Maneka Gandhi v Union of India* (1978), emphasized that procedural fairness includes allowing the affected party to present their case and respond to objections. If left unregulated, the AI systems can threaten the fundamental rights of the individual (*Maneka Gandhi v Union of India*, 1978).

B. Nemo Judex in Causa Sua (Against Bias)

The principle of *nemo judex in causa sua* prohibits any judge from being biased in their own cause, which is threatened when AI systems are used to make judicial decisions. The bias in AI systems exists because of their training data, which contains the information that shows the institutional and historical data of society. If judges rely heavily on the recommendations or conclusions given by the AI systems without carefully reviewing them, then the judges might unintentionally continue the discrimination that was there before, and by doing this, it violates the requirement of being impartial while making decisions. In *A.K. Kraipak v Union of India* (1969), the Supreme Court scrutinized a notification issued by the Ministry of Home Affairs, which governed the selection of officers from the State Forest Service to the Indian Forest Service. The selection board, chaired by a nominee from the Union Public Service Commission, included Naqishbund, a serving Chief Conservator of Forests who was also a candidate for selection. The court ruled that Naqishbund's dual role created a conflict of interest, which resulted in bias during the selection process. The court quashed the notification stating that the selection process violated the principle of natural justice by allowing the candidate to be part of the deciding body (*A.K. Kraipak v Union of India*, 1969).

C. Right to Reasoned Judgement

Another core principle of natural justice is the right to receive reasoned judgments. Judicial decisions must be understandable, clear, and explain how the decisions were taken and how legal reasoning has been applied to the facts of the case. However, in the case of AI systems

that give outputs or conclusions that are heavily relied upon by the judges often give only the conclusion and do not submit the reasoning behind giving such outputs. The judges adopt this AI system for faster and more efficient decision-making, and the judges eventually accept the suggestions or outputs given by the AI systems; the process of judicial reasoning is bypassed as the judges have adopted the recommendations given by the AI systems. This reduces the judgments to mere algorithmic pronouncements. In *S.N. Mukherjee v Union of India*, the Supreme Court held that while there is a general principle obligating administrative authorities exercising quasi-judicial functions to record reasons for their decisions, the Army Act and its rules do not impose such a requirement on military confirming authorities, except in specific circumstances like recommendations for mercy. Consequently, the confirmation and rejection orders in this case were upheld despite lacking explicit reasons (*S.N. Mukherjee v Union of India*, 1990).

CONSTITUTIONAL AND HUMAN RIGHTS IMPLICATION (INDIAN PERSPECTIVE)

A. Article 14: Equality and Non-Arbitrariness

Article 14 of the Indian Constitution guarantees equality before the law and protection against arbitrary treatment by the State. However, this principle may be unintentionally violated due to the judicial decisions made by the AI-driven systems. AI systems, or algorithmic systems, are trained on historical data that contains embedded biases reflecting earlier societal damage or discriminatory practices. If such biased data are used to make decisions, for example, bail or sentencing, it can produce unreasonable output that causes harm, especially to the weaker sections or the marginalized communities. This threatens the equality before the law. The Supreme Court established in *E.P. Royappa v. State of Tamil Nadu* that state actions must avoid arbitrary conduct, as such behavior violates the equality rights protected by Article 14. The decision-making process requires execution of its operations through an impartial approach, which must not permit any form of discrimination (*E.P. Royappa v. State of Tamil Nadu*, 1974).

B. Article 21: Due Process and Fair Trial

Article 21 protects the right to life and personal liberty, which the courts have interpreted to include the right to a fair trial. The integration of AI into the judicial process may result in a loss of procedural fairness, because algorithmic outputs are not eligible to duplicate or recreating human abilities, such as empathy and understanding. The AI-driven systems make decisions based on speed and computational efficiency, but this approach endangers the main function of justice, which requires a thorough evaluation of all facts and circumstances, together with their human impact.

C. Right to Privacy and Data Protection

AI-based judicial systems rely heavily on large-scale personal data, including criminal records, socio-economic details, and behavioral patterns. The collection, storage, and analysis of such sensitive information raises serious privacy concerns. If this information were to be misused or accessed without valid authorization, it could lead to surveillance or discriminatory targeting. This potentially violates the right to privacy recognized in Justice K.S. Puttuswamy v. Union of India (2017).

COMPARATIVE JURISPRUDENCE: LESSONS FROM OTHER JURISDICTIONS

A. United States

The United States has been one of the first countries to use AI-based tools, which assist judges with bail decisions and sentencing through risk assessments such as COMPAS (Correctional Offender Management Profiling and Alternative Sanction). A ProPublica investigation from 2016 revealed that the AI system COMPAS's unfair risk analysis, which unreasonably labeled black defendants as high risk even though their actual crime violated less serious offences when compared to the white offenders. This exposed serious concerns regarding racial discrimination and the lack of transparency in decision-making.

B. European Union

The European Union uses a different approach for handling rights than the United States because it focuses on protecting rights through prevention measures. Under the EU Artificial Intelligence Act (2024), AI systems that are used in the judicial decision-making processes are considered to be high risk, which means that they must meet strict transparency requirements, proper documentation, human oversight, and protection of fundamental rights (European Parliament & Council of the European Union, 2024). The EU considers judicial AI systems to pose a threat to equal treatment and fair legal procedures because it requires strict control to use these tools in court decisions. The approach demonstrates a cultural value system that treats human dignity as more important than technological efficiency and maintains fundamental rights as the highest priority.

C. United Kingdom

The United Kingdom occupies a middle ground. The official guidance for administrative AI systems states that organizations must keep algorithmic tools as secondary components that operate under judicial judgment and require substantial human oversight (UK Ministry of Justice, 2022). The UK approach shows institutional restraint because it understands that uncontrolled automated systems will damage public trust in the legal system.

Lessons for India

The data shows that people in different places experience the same worry which predicts that AI systems will violate fairness standards when they operate without any rules. The worldwide patterns indicate that organizations need to achieve efficiency improvements while they implement strong protective measures which maintain equality rights and transparency standards and judicial independence.

CONCLUSION

The debate surrounding the use of artificial intelligence in judicial decision-making ultimately turns on a central constitutional question: can efficiency coexist with fairness? AI provides significant benefits because it enables faster case processing, decreases case backlogs, improves

research abilities, and establishes uniformity in standard procedures. The judicial system in India, which faces excessive case load, benefits from these efficiency gains. The need for fast processing and standardization of procedures must not take precedence over essential judicial values. Courts function as more than dispute-resolution centers because they protect rights, equity, and human dignity. The process of making decisions about liberty and reputation requires people to understand the situation and develop empathy while they present their reasoning, because artificial intelligence lacks these capabilities.

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