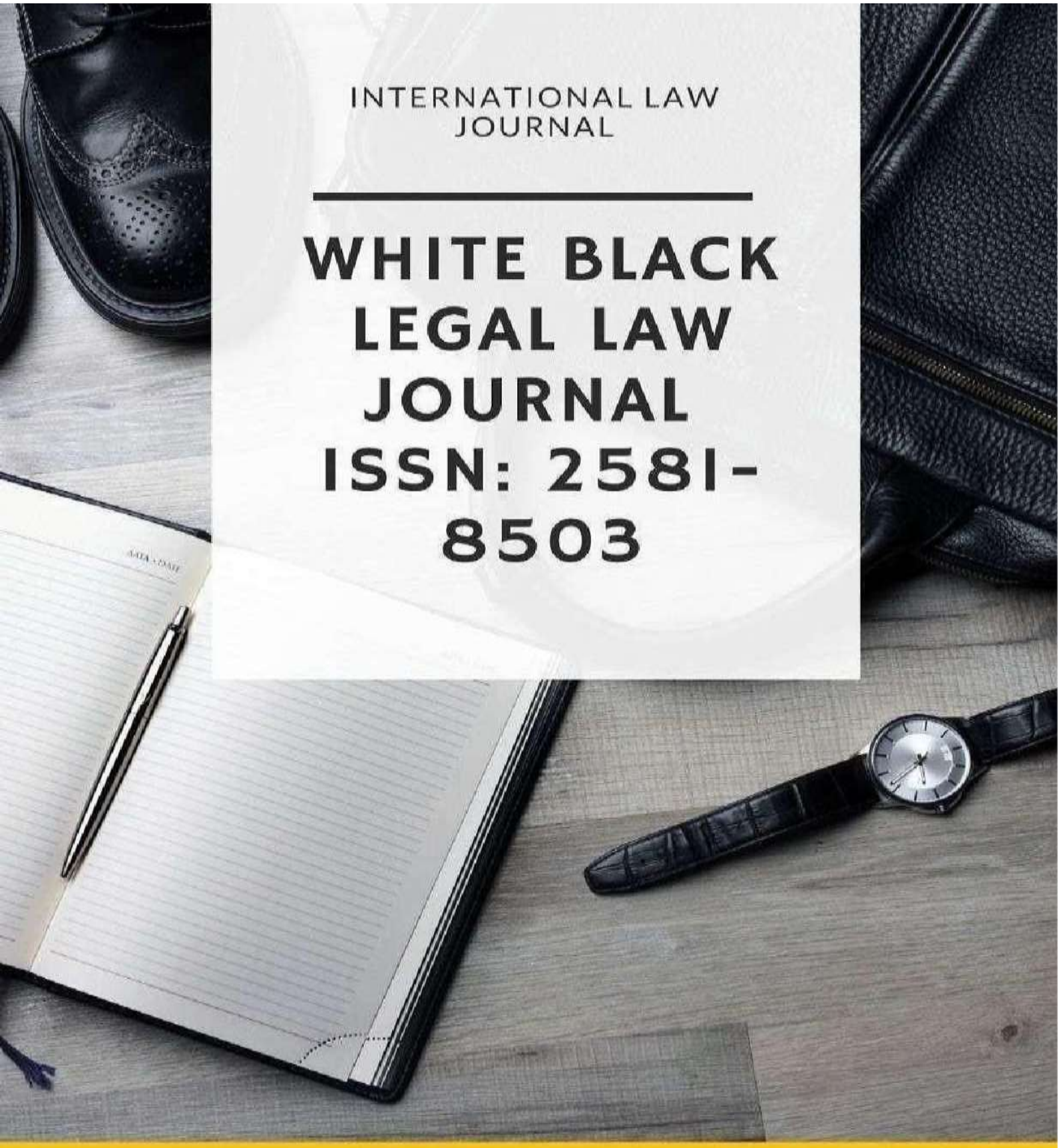

INTERNATIONAL LAW JOURNAL

WHITE BLACK LEGAL LAW JOURNAL

ISSN: 2581-8503

Peer - Reviewed & Refereed Journal

The Law Journal strives to provide a platform for discussion of International as well as National Developments in the Field of Law.

WWW.WHITEBLACKLEGAL.CO.IN

DISCLAIMER

www.whiteblacklegal.co.in
Volume 3 Issue 1 | May 2025 ISSN: 2581-8503

EDITORIAL TEAM

Raju Narayana Swamy (IAS) Indian Administrative Service officer

Dr. Raju Narayana Swamy popularly known as Kerala's Anti-Corruption Crusader is the All India Topper of the 1991 batch of the IAS and is currently posted as Principal Secretary to the Government of Kerala. He has earned many accolades as he hit against the political-bureaucrat corruption nexus in India. Dr Swamy holds a B.Tech in Computer Science and Engineering from the IIT Madras and a Ph. D. in Cyber Law from Gujarat National Law University. He also has an LLM (Pro) (with specialization in IPR) as well as three PG Diplomas from the National Law University, Delhi- one in Urban Environmental Management and Law, another in Environmental Law and Policy and a third one in Tourism and Environmental Law. He also holds a post-graduate diploma in IPR from the National Law School, Bengaluru and a professional diploma in Public Procurement from the World Bank.

Dr. R. K. Upadhyay

Dr. R. K. Upadhyay is Registrar, University of Kota (Raj.), Dr Upadhyay obtained LLB , LLM degrees from Banaras Hindu University & Phd from university of Kota.He has succesfully completed UGC sponsored M.R.P for the work in the ares of the various prisoners reforms in the state of the Rajasthan.

Senior Editor

Dr. Neha Mishra

Dr. Neha Mishra is Associate Professor & Associate Dean (Scholarships) in Jindal Global Law School, OP Jindal Global University. She was awarded both her PhD degree and Associate Professor & Associate Dean M.A.; LL.B. (University of Delhi); LL.M.; Ph.D. (NLSIU, Bangalore) LLM from National Law School of India University, Bengaluru; she did her LL.B. from Faculty of Law, Delhi University as well as M.A. and B.A. from Hindu College and DCAC from DU respectively. Neha has been a Visiting Fellow, School of Social Work, Michigan State University, 2016 and invited speaker Panelist at Global Conference, Whitney R. Harris World Law Institute, Washington University in St.Louis, 2015.

Ms. Sumiti Ahuja

Ms. Sumiti Ahuja, Assistant Professor, Faculty of Law, University of Delhi,

Ms. Sumiti Ahuja completed her LL.M. from the Indian Law Institute with specialization in Criminal Law and Corporate Law, and has over nine years of teaching experience. She has done her LL.B. from the Faculty of Law, University of Delhi. She is currently pursuing Ph.D. in the area of Forensics and Law. Prior to joining the teaching profession, she has worked as Research Assistant for projects funded by different agencies of Govt. of India. She has developed various audio-video teaching modules under UGC e-PG Pathshala programme in the area of Criminology, under the aegis of an MHRD Project. Her areas of interest are Criminal Law, Law of Evidence, Interpretation of Statutes, and Clinical Legal Education.

Dr. Navtika Singh Nautiyal

Dr. Navtika Singh Nautiyal presently working as an Assistant Professor in School of law, Forensic Justice and Policy studies at National Forensic Sciences University, Gandhinagar, Gujarat. She has 9 years of Teaching and Research Experience. She has completed her Philosophy of Doctorate in 'Intercountry adoption laws from Uttranchal University, Dehradun' and LLM from Indian Law Institute, New Delhi.

Dr. Rinu Saraswat

Associate Professor at School of Law, Apex University, Jaipur, M.A, LL.M, Ph.D,

Dr. Rinu have 5 yrs of teaching experience in renowned institutions like Jagannath University and Apex University. Participated in more than 20 national and international seminars and conferences and 5 workshops and training programmes.

Dr. Nitesh Saraswat

E.MBA, LL.M, Ph.D, PGDSAPM
Currently working as Assistant Professor at Law Centre II, Faculty of Law, University of Delhi. Dr. Nitesh have 14 years of Teaching, Administrative and research experience in Renowned Institutions like Amity University, Tata Institute of Social Sciences, Jai Narain Vyas University Jodhpur, Jagannath University and Nirma University.
More than 25 Publications in renowned National and International Journals and has authored a Text book on Cr.P.C and Juvenile Delinquency law.

Subhrajit Chanda

BBA. LL.B. (Hons.) (Amity University, Rajasthan); LL. M. (UPES, Dehradun) (Nottingham Trent University, UK); Ph.D. Candidate (G.D. Goenka University)

Subhrajit did his LL.M. in Sports Law, from Nottingham Trent University of United Kingdoms, with international scholarship provided by university; he has also completed another LL.M. in Energy Law from University of Petroleum and Energy Studies, India. He did his B.B.A.LL.B. (Hons.) focussing on International Trade Law.

ABOUT US

WHITE BLACK LEGAL is an open access, peer-reviewed and refereed journal providededicated to express views on topical legal issues, thereby generating a cross current of ideas on emerging matters. This platform shall also ignite the initiative and desire of young law students to contribute in the field of law. The erudite response of legal luminaries shall be solicited to enable readers to explore challenges that lie before law makers, lawyers and the society at large, in the event of the ever changing social, economic and technological scenario.

With this thought, we hereby present to you

www.whiteblacklegal.co.in
Volume 3 Issue 1 | May 2025 ISSN: 2581-8503

ARTIFICIAL INTELLIGENCE AND CONSTITUTIONAL RIGHTS: NAVIGATING THE LEGAL FRONTIER IN THE DIGITAL AGE IN INDIAN PERSPECTIVE

AUTHORED BY - VISHAL GUPTA

1. Introduction

The proliferation of AI technologies in India presents, in a way, previously untraversed obstacles to the very constitutional framework, which was christened roughly seven decades ago. The architects of the Indian Constitution could never have envisaged a world where algorithms would take every decision, affecting citizens' fundamental rights; where facial recognition technology could enable mass surveillance; and where automated systems could potentially replicate and even multiply societal biases. However, these technologies are being rapidly deployed across a variety of sectors such as law enforcement, judicial administration, delivery of public services, healthcare, financial services, and private industry.

The nation of India stands at that intersection where its democratic system, established by the constitution, is faced with what some scholars graciously refer to as the "algorithmic state." The inherent contradiction lies in the total balance between technological innovations and the realization of constitutional values and rights. Such an interpretative ethos to become the "people's document," for it could face the challenges of time unforeseen by its framers, has been upheld by the highest court of the land in Shayara Bano v. Union of India (2017). By their nature, new AI technologies pose the same challenge: they permit a construction of the Constitution that merits no jumbled-doubts around its minimum core, considering the urgency of the current realities of technology.

The research looks at the intersections of AI technologies with three overlapping substantive constitutional rights: the right to privacy under Article 21, the right to equality under Article 14, and freedom of speech and expression under Article 19. Moreover, it explores implications for federalism (Articles 245-246), right to information (Article 19(1)(a)), and principles of natural justice implicit in constitutional governance.

With India's ambition to become a global technological hub under initiatives like Digital India

buttressed by its newly promulgated and comprehensive laws on data protection, there has never arisen in such urgency the need for constitutional clarity on AI governance. These burgeoning systems and other public-facing expressions of AI raise fundamental questions about the limits of technological innovation in a constitutional democracy. This paper seeks to contribute to this burgeoning area of jurisprudence by highlighting the central constitutional issues and possible interpretative strategies that might yield constitutional protection for rights in the digital age.

2. Constitutional Framework and AI: Theoretical Foundations

2.1 The Living Constitution Doctrine

India's Constitution, following the living constitution doctrine, has developed by way of judicial interpretation. This approach would suggest that the provisions of the Constitution must be interpreted dynamically with a view to settle contemporary needs in a way that does not harm the basic framework of values. The Constitution in K.S. Puttaswamy v. Union of India must be interpreted as a "dynamic document," responding to pushes dictated by changing needs of society, but granting core commitments on liberty, equality, and justice.

The living constitution doctrine would provide a basis for extending constitutional protection to match the challenges posed by Artificial Intelligence which the Constitution drafters did not foresee. The Supreme Court must now extend such constitutional protection to meet with the challenges of industrialization, environmental degradation, and globalization, as it has historically done in order to respond to equally demanding social challenges.

2.2 Fundamental Rights in the Digital Age

The Supreme Court has shown willingness to reinterpret fundamental rights in light of technological changes. The recognition of privacy as a fundamental right in Puttaswamy exemplifies this approach, with the court noting that privacy encompasses informational privacy and data protection: concepts words expressly grapple with through AI technologies. Justice Chandrachud specifically says "right to privacy in the constitutional setting of India transcends across the spectrum of fundamental rights and protections contained in Part III of the Constitution."

Equally, in Shreya Singhal v. Union of India (2015), the court acknowledged that free expression includes digital speech, requiring constitutional protections even within the online

milieu. The basis of these interpretative expansions suggests that fundamental rights themselves should be interpreted as means that belong or apply to whichever technological milieu or form in which the enacting or denying of the right is thought to occur.

2.3 Constitutional Values and AI Governance

Beyond any specific rights, the Indian Constitution has particular basic values to guide appropriate conduct on the framework for AI governance. The primacy of justice, liberty, equality, and fraternity would hence be part of the benchmark principles from which judicial interpretation and policy formulation in the domain of AI are to be developed. Further, the Directive Principles of State Policy, provided in Part IV, although non-justiciable, offer immense guidelines on how AI is to be pursued for the advancement of social welfare, socioeconomic justice, and public health.

3. Article 21: Right to Life and Personal Liberty in the Age of AI

3.1 Privacy Rights and AI Surveillance

Privacy is declared as a Fundamental Right emanating from Article 21-based from the Puttaswamy judgment. The nine judges bench mentioned that this right has informational privacy as in direct challenge from AI surveillance technologies. Justice Chandrachud also remarked that "informational Privacy is a facet of the Right to Privacy, not disentangled therefrom" since "the axiom of 'knowledge-is-power' stands true now with perilous import to an individual in an ecosystem of pervasively available data."

This three-pronged test that requires Grammatical Error legalized legitimacy, legitimate aim, and proportionality to determine any violation made by the processing of personal data by AI systems. Under this test, all breaches of privacy deriving from the causation must:

Such infringement must have statutory support (legality)

Such infringement must further state goal(s) (aim of legitimacy)

They must be comports of proportionate aim (being proportional)

The FRT deployed by the law enforcement authorities in Indian cities would directly infringe upon the lethargy of the Constitution under the provided test. There is no particular law on the use of FRT; therefore, the 'legality' aspect of the Puttaswamy test raises several questions. Although the aim of public safety has been accepted as a legitimate aim for this kind of mass surveillance through FRT, the consideration of proportionality becomes constitutionally suspect.

In the judgment in the case of Justice K.S. Puttaswamy v. Union of India (the Aadhaar case, 2018), the framework that was used was to test the constitutionality of the Aadhaar biometric system. While the establishment was upheld by the majority, with a few safeguards recommended, Justice Chandrachud in his dissent raised concerns regarding privacy in large-scale biometric databases that impact AI-driven surveillance. He observed that "Profiling can predict the emergence of future traits and attributes in an individual, thus causing apprehensions regarding predictive policing and social sorting empowered by AI systems.

3.2 Algorithmic Decision-Making and Due Process

Article 21 guarantees that by stating, "No person shall be deprived of his life or personal liberty except by procedure established by law", it ends up guaranteeing procedural fairness. Questions arise, however, whether such algorithmic decisions would be satisfying constitutional due process requirements as governmental agencies advance in applying AI in decision-making within welfare distribution, immigration processing and criminal justice.

As held in Maneka Gandhi v. Union of India (1978), the concept that procedural rules must be "fair, just and reasonable" has been adopted under Article 21. But since such AI systems operate in a way that is somewhat "black box" with little or no capability for explanation, they may thus begin to violate this standard, particularly when the decisions are such that the affected individuals cannot meaningfully contest. Opaque AI systems are particularly challenged by the right to receive reasoned decisions from authorities; in cases like S.N. Mukherjee v. Union of India (1990) found that this right should be framed expressly as reading: "the right to receive adequate, cogent, and intelligible reasons from the authority".

While criminal justice is foremost, it is true that several states are using predictive policing and risk assessment tools. Article 21 protections, then, are directly implicated. Supreme Court's jurisprudence surrounding issues such as pre-trial detention and the right to a fair trial, evolved through cases such as Hussainara Khatoon v. State of Bihar (1979) and Motiram v. State of Madhya Pradesh (1978), rejects automated risk scores that aren't transparent enough to be effectively challenged.

3.3 Informational Self-Determination and AI Systems

The Puttaswamy ruling recognized informational self-determination as an aspect of privacy. Justice Kaul also observed, "the right of an individual to exercise control over his personal data

and to be in a position to control his/her life would also include his right to control his existence on the Internet." These AI systems that collect, process, and make decisions with the data directly implicate this right to informational self-determination.

The Constitution (73C) partially recognizes this constitutional right through statutory provisions operationalizing consent, purpose limitation, and data minimization. However, AI systems inferring or predicting something about individuals on the basis of seemingly non-personal data may evade the rest of the personal data protection framework while continuing to make intrusions into individual privacy rights. Thus, the protections the constitutional right of privacy requires may go well beyond the protection that data protection legislation woven through the above principles currently provides.

4. Article 14: Equality Before Law and Non-Discrimination

4.1 Algorithmic Bias and Discrimination

Article 14 provides for the guarantee of equality before law and equal protection of the laws. AI systems trained on historical data could further amplify and multiply existing social biases due to caste, religion, gender, or economic status, which may result in breaches of Article 14 protections. The body of Supreme Court jurisprudence on Article 14 prohibits arbitrary action and demands rational classification with intelligible differentia.

In E.P. Royappa v. State of Tamil Nadu (1974), the Court stated, "Equality is anti-thesis to arbitrariness." AI systems making decisions upon correlations rather than causation might embrace arbitrary classifications that contravene this principle. Such arbitrary actions may yet further endorse the notion of "manifest arbitrary," conceived in Shayara Bano v. Union of India must be noted in light of AI systems producing discriminatory outcomes against culpability.

The problem of algorithmic bias poses a greatest challenge in India's multilayered, multiverse of layered context. The AI systems may encode an existing set of biases regarding caste, region, religion, and language, peculiar to India. Law professor Anupam Chander called this the "emerging Jim Code," systematically discriminating against historically marginalized communities. Thus, the constitutional mandate of equality requires that AI systems be built and utilized with sufficient safeguards against historical discrimination being inscribed into them.

4.2 Digital Divide and Algorithmic Exclusion

The Supreme Court has established that substantive equality, not mere formal equality, is the requirement under Article 14. In the case of the State of Kerala v. N.M. Thomas (1976), the Court held that equality in treatment with the unequal would operate to propagate inequality. AI systems that fritter away populations on account of certain divides like the digital divide may be against the principles of substantive equality. Article 14 could render some upliftments required for the marginalized, for instance, in case the access to certain services or opportunities was by AI mediation alone.

This is of particular import in the Indian context as the digital divide is still sharp. In 2018, the National Sample Survey Office found that a mere 23.8% of Indian households had internet access. AI systems that require basic levels of digital literacy or access for essential services could therefore leave out crucial portions of the populace and heighten Article 14's concern.

The Supreme Court has acknowledged the notion of algorithmic exclusion in cases concerning the Aadhaar system. In Puttaswamy, Justice Chandrachud's dissent noted that these failures in authentication of biometric systems could risk the exclusion of huge vulnerable groups from the basic services. The same kind of concern holds in AI systems working in exclusion against people who cannot be adequately modeled and classified by algorithms due to their lack of similarity to a training set or representation therein.

4.3 Reasonable Classification and AI-Based Categorization

Article 14 allows for a reasonable classification line to be drawn by intelligible differentia that has a rational relation to the achievement of what was sought. In the case of AI systems that classify individuals based on complex statistical patterns, the question arises whether those classifications can be justified according to the Constitution. Conventional Article 14 analysis requires the grounds of classification to be forthright, hard enough when these are the result of complex machine learning processes.

Furthermore, the rational relationship between classification and legislative objectives may be sufficiently called into question by AI systems that optimize for proxy variables or make classifications based on correlations instead of causal relationships. The courts need to develop alternatives to evaluate whether AI classifications meet the rationality standard in view of Article 14.

5. Article 19: Freedom of Speech and Expression in the AI Ecosystem

5.1 Automated Content Moderation and Free Speech

Article 19(1)(a) accords freedom of speech and expression, with reasonable restrictions, as contained in Article 19(2). Social media platforms make use of AI-based content moderation systems-that often restrict speech beyond any constitutional bounds. Although private platforms are not bound by fundamental rights directly, the Supreme Court has increasingly recognized horizontal application of rights through the interpretation of the state action doctrine.

The Supreme Court invalidated Section 66A of the Information Technology Act in Shreya Singhal v. Union of India (2015), owing to its chilling effect on free speech. In a similar vein, the criterion for analyzing (over-) moderation by way of AI making an automated moderation standard will be analyzed for having unintentionally censored protected speech since it is incapable of reflecting certain dimensions like a sense of sarcasm or parody, or mere political criticism.

The constitutional standard laid down by Article 19(2) establishing certain reasonable grounds for restrictions before any speech can be limited is limited to a few different heads. AI-directed content moderation systems using probabilistic methods inevitably lack the precision to satisfy constitutional jurisprudence. Further, in S. Rangarajan v. P. Jagjivan Ram (1989), the Court noted that restrictions must be narrowly tailored to deal with certain harms rather than with broad measures against an expression.

5.2 Algorithmic Personalization and Democratic Discourse

Cases like Secretary, Ministry of Information & Broadcasting v. Cricket Association of Bengal (1995) have recognized and established the right to receive information as an integral part of 19(1)(a) of the Constitution. Justice P.B. Sawant observed: "the right to acquire and disseminate information has fairly been acknowledged as a time-honored aspect of the right to freedom of speech and expression." AI-driven content curation that results in filter bubbles hampers this right since it restricts access to sensitive, dissenting views that are inherent to democratic discourse.

The substantive right part of freedom expression consists of rights against interference by the

government and also includes positive aspects like the European right to a tolerant, wide marketplace of ideas. Algorithmic, personality-driven filtering narrowly constrains public information exposure, thus producing severe detrimental effects against the positive facet of free expression.

5.3 Compelled Speech and AI-Generated Content

Article 19(1)(a) protects both the right to freedom of speech and individual volition from being infringed upon. The level of sophistication of content generated by AI systems raises hard issues of attribution and compelled speech. If the content produced by AI systems is misattributed to individuals, for example, deepfakes, then compelled speech issues may arise when people are expected to confirm AI-generated content.

In the case of National Legal Services Authority v. Union of India (2014), the Supreme Court acknowledged self-expression as an inherent part of autonomy and thereby is entitled to protection as enshrined under Articles 19 and 21. AI technology that distorts self-expression or creates false attribution might thereby violate this safeguard.

6. Other Constitutional Implications of AI

6.1 Federalism and AI Regulation

The Constitution of India gives a federal structure with division of legislative powers between the Union and States. AI regulation touches upon multiple entries from the three lists in the Seventh Schedule: "criminal law" (Entry 1, List III), "public order" (Entry 1, List II), and "communications" (Entry 31, List I). Such diversity in allocation of powers will complicate coherent governance on AI.

While both the Central and State Governments have deployed AI systems, there arises a conundrum regarding the appropriate regulatory authority(s) and conflicting regulation. For instance, in case the Union government were to deploy national facial recognition systems and yet States would establish their own algorithms with their own regulatory paradigms, it would raise a plethora of constitutionally encumbering questions on federalism and regulatory coexistence.

6.2 Directive Principles and AI Policy

Though not judicially enforceable, these Directive Principles of State Policy in Part IV of the Constitution guide state policy and influence the interpretation of fundamental rights. Several Directive Principles concern the regulation of AI:

Article 38(1) provides explicit social welfare through securing social, economic, and political justice.

Article 39(b) speaks to equitable distribution of material resources.

Article 41 recognizes the right to work and education.

Article 44 calls for a uniform civil code, raising alerts regarding how AI algorithmic systems can standardize legal norms.

Not only must AI systems once verified respect the fundamental rights; equally important, they must also contribute to attaining constitutional goals. In this regard, the Supreme Court has nowadays leaned toward taking Directive Principles into consideration while interpreting the fundamental rights. Consequently, one may feel these Principles would be followed while framing AI governance.

6.3 Constitutional Remedies and Algorithmic Accountability

Article 32 establishes the right to constitutional remedies, empowering citizens to directly petition the Supreme Court for the enforcement of fundamental rights. Novel means by which AI systems might violate constitutional rights prompt inquiries into what remedies and standing requirements apply to them.

Traditional constitutional remedies such as writs of habeas corpus, mandamus, prohibition, quo warranto, and certiorari may need reformulation to meet the concept of algorithmic harms. For instance, in instances where a decision affects rights by an AI system, against whom will the writ be issued: the developer, deployer, or operator? Meanwhile, can the courts come up with remedies to address systemic algorithmic bias and not just individual acts of harms?

7. Comparative Perspectives and Policy Approaches

7.1 Global AI Governance Models

India's constitutional approach to AI can be informed by international models while remaining grounded in its unique constitutional values. Several key approaches deserve attention:

7.1.1 European Union's Rights-Based Approach

The European Union AI Act is a risk-oriented regulatory approach to AI, with AI systems rated based on their potential harm to fundamental rights. This is in line with constitutional proportionality analysis, which enables higher levels of protection in high-risk applications. The EU's recognition of rights to explanation and to contest automated decisions in the General Data Protection Regulation provides a model for operationalizing due process in the algorithmic context.

7.1.2 Canada's Administrative Law Framework

Canada's Directive on Automated Decision-Making applies constitutional law principles to the algorithmic systems used by the government. The directive requires algorithmic impact assessments, transparency, quality assurance, and recourse mechanisms. All these principles relate to the constitutional requirements of procedural fairness stipulated by Article 21.

7.1.3 South Korea's Constitutional Challenges

South Korea has been witnessing some high-profile constitutional challenges to algorithmic systems, with its Constitutional Court taking a close look at whether AI-based content recommendation systems infringe the right to informational self-determination. Such cases serve as informative precedents for how constitutional courts can adjudicate over issues arising from complex socio-technical systems.

7.2 India's Emerging AI Governance Framework

Recent policy developments in India suggest an evolving approach to AI governance that must be harmonized with constitutional requirements.

7.2.1 NITI Aayog's Responsible AI Framework

The approach of 'Responsible AI for all' adopted by NITI Aayog is based on principles like safety and security, parity, inclusiveness and non-discrimination, privacy and security, transparency and accountability. These are principles very much in line with constitutional values but will require specific regulatory measures and judicial interpretations to be operationalized.

7.2.2 Digital Personal Data Protection Act, 2023

The Act does not sever the provisions relating to this legislation from its provisions directing

the limited regulation of AI-based generalities of data protection systems based on automated decision-making and profiling. The very limited rights regarding automated decisions and exemptions for government processing clearly indicate why constitutional protections must supplement statutory protections.

7.2.3 AI Standardization and Certification

The Ministry of Electronics and Information Technology has begun work on a framework for AI systems, along with certification mechanisms for high-risk applications. These tech standards should, however, be developed within the bounds of constitutional requirements, so that the certification processes embrace considerations of fundamental rights.

8. Technical Challenges to Constitutional Rights in AI Systems

8.1 Explainability and the Right to Reasons

Advanced machine learning mechanisms, especially deep learning, engage an open challenge with regard to upholdable rights that demand explainability. The meaning of constitutional due process pursuant to Article 21 was processed through a number of judicial precedents including the case of S.N. Mukherjee v. Union of India (1990): the right to reasoned decisions. However many times, such machines work as "black boxes" with limited explanation.

Technical approaches to explainable AI (XAI) are evolving but still remain incomplete. Local Interpretable Model-agnostic Explanations (LIME), Shapley Additive Explanations (SHAP), and attention networks in neural networks represent limited insight into algorithmic reasoning but never attain the constitutional threshold of reasoned decision-making.

8.2 Fairness Metrics and Equality Rights

Article 14's Right to Equality produces technical challenges for the design of AI systems. Meanwhile, there are multiple, sometimes incompatible, definitions of algorithmic fairness identified by computer scientists:

Group fairness/demographic parity: Parallelizing the outcome across protected groups

Individual fairness: Similar treatment of similar persons

Equality of opportunity: Equalizing the false-positive or negative rates across groups

The impossibility of simultaneous satisfaction of varying fairness metrics poses technical challenges for the application of Article 14's guarantee of equality. Such fairness metrics should

be constructed according to the judicial interpretation of what fairness is required in the certain context, whereby the construction of technical definitions of fairness must be actuated by constitutional value rather than mere mathematical convenience.

8.3 Adversarial Attacks and Security Vulnerabilities

AI systems remain susceptible to adversarial attack, whereby subtle modifications to input signals can alter outputs. Such vulnerabilities carry with them considerations on reliability and due process. If a decision-making AI system regarding liberty or property interests can be manipulated through adversarial examples, it may not fulfill the required standards of reliability for constitutional due process.

Technical solutions like adversarial training, defensive distillation, and certified robustness are still progressing toward being comprehensive. The constitutional doctrine should develop a system of requirements for adversarial robustness in cases of high-stakes AI systems involved with matters of core rights.

9. Judicial Approaches to AI Constitutional Challenges

Artificial intelligence (AI) is developing rapidly in the Indian judiciary, with the Supreme Court of India out in front of technology adoption. This transformation entails a range of opportunities and challenges for judicial administration, constitutional interpretation, and access to justice.

9.1 AI Initiatives in the Supreme Court

The Supreme Court has embraced AI through several key initiatives. In 2019, it introduced SUPACE (Supreme Court Portal for Assistance in Courts Efficiency), a tool designed to assist judges by automating routine tasks, organizing case information, and providing analytics on legal data. The system helps judges manage the enormous caseload by identifying patterns across similar cases and extracting relevant precedents.

Additionally, the Court has implemented the Supreme Court Vidhik Anuvaad Software (SUVAS), an AI-powered translation tool that converts judgments into multiple Indian languages, enhancing accessibility for litigants across linguistic divides.

Chief Justice D.Y. Chandrachud has been a vocal proponent of technological integration,

establishing the Supreme Court's AI Committee to explore further applications and develop ethical guidelines for AI use in the judiciary.

9.2 Impact on Judicial Administration

The most immediate impact of AI on the Supreme Court has been in addressing the chronic backlog of cases. As of 2025, over 70,000 cases remain pending before the Court. AI tools assist in categorizing cases by complexity and subject matter, enabling more efficient allocation of judicial time and resources.

Document management systems powered by AI can analyze thousands of pages of submissions rapidly, extracting key arguments and relevant legal principles. This streamlines the pre-hearing process, allowing judges to focus on substantive legal questions rather than document review.

The Court has also deployed predictive analytics to identify cases suitable for alternative dispute resolution mechanisms, helping to divert appropriate matters away from traditional litigation tracks. This strategic case management approach has shown promising results in reducing the overall pending caseload.

9.3 Evidentiary Standards for Algorithmic Discrimination

Adjudicating claims of algorithmic discrimination under Article 14 presents enormous challenges for courts. Traditional constitutional litigation usually depends on proving discriminatory intent or impact. However, cases of discriminatory outcomes by AI systems may occur without the explicit programming of bias. Hence, some new evidence standards for establishing prima facie cases would need to be developed in courts.

The unequal impact case law of the Supreme Court, developed in cases such as Griggs v. Duke Power Co. in the US context, provides an interesting place from which to commence the analysis. Statistical evidence of differential impacts on protected groups could provide a prima facie case that would prove such an algorithmic system necessary and proportional to the government's or private entity's tasks.

9.4 Standards of Review for AI Systems

The standards of review differ in constitutional adjudication based on the right that is being

dealt with. When a law restricts fundamental rights, it must survive strict scrutiny, which requires it to be narrowly tailored to achieve a compelling state interest. Courts must determine the standard of review needed for testing the AI systems affecting different constitutional rights.

When artificial intelligence systems have a bearing on the actual rights to privacy under Article 21, that is, Article 21, the proportionality test exposed by Puttaswamy is the right one for standards. Equitable claims, or claims for violation of Article 14, must satisfy the test of reasonable classification. Restrictions on speech under Article 19 are limited to the grounds enumerated in Article 19(2) and ought to be reasonable. Each of these standards must be adapted to the technical and evidentiary challenges presented by AI systems.

9.5 Remedial Approaches

Indian courts have shown a lot of imagination in formulating remedies for violations of the Constitution, extending to structural injunctions, continuing mandamus, and expert committees. A similar series of remedies could be warranted in the case of AI systems which might include:

- Pre-deployment algorithmic impact assessments for high-risk systems
- Transparency requirements for AI systems that might affect fundamental rights
- Requirements for human oversight of consequential decisions
- Regular auditing for discriminatory effects
- Technical standards of explainability and contestability

In the 1997 case of Vishaka v. State of Rajasthan, the Supreme Court laid down Guidelines in case of sexual harassment when there is no law on the subject. Following a similar pattern, it could happen with respect to the AI sphere of governance, where the Supreme Court may announce some interim constitutional guidelines until the legislation is in place.

10. Proposed Constitutional Framework for AI Governance

10.1 Rights-Based Approach

The present study aims at proposing a rights-based framework for the governance of AI that may be anchored in constitutional principles. This approach places human dignity and autonomy at the center of concern and considers these as non-derogable values that AI systems must respect. Drawing on the supreme court's privacy paradigm in Puttaswamy, we suggest a

constitutional test to apply with AI systems that significantly affect the fundamental rights:

Legality: Clear legislative authorization must back the functioning of AI systems

Legitimate aim: The deployment must serve constitutionally permissible objectives

Proportionality: The impact on rights must be proportionate to benefits

Transparency: Individuals affected must be informed regarding the use of AI and the rationale behind their decisions

Accountability: There ought to be human oversight and a remedy mechanism

Non-discrimination: Systems must not bring forward or justify discrimination

Contestability: Any decision-making that impairs rights must have the right to be contested through reasonable procedures

This framework provides a constitutional standard to evaluate AI systems while facilitating technological innovation within rights-respecting boundaries.

10.2 Risk-Based Regulatory Tiers

Considerations for constitutional rights would build a risk-based model for AI regulation, imposing varying requirements based on their foreseen impacts on the exercise of fundamental rights:

- Minimal-risk AI: Transparency is likely the only requirement for the imperceptibly fundamental-rights-reaching application of minimal or no risk-AI applications (spam filter in Societal Credit Networks, recommendation systems for non-essential services, etc.)
- Medium-risk AI: These applications engage with rights in a manner that is reversible and therefore merit greater safeguards, namely, explainability, regular auditing, and human intervention (employment screening tools, credit scoring).
- High-risk AI device: Applications that directly impact core constitutional rights which may include criminal justice applications, welfare eligibility determinations, or biometric identification in public spaces require the highest level of safeguards: fines, assessments, and monitoring imposed on these devices, with maximum transparency made available, and sufficiently human oversight.

This stratified framework pays respect to the principle of proportionality, allowing proportions of appropriate safety nets for the protection of constitutional rights.

10.3 Institutional Mechanisms

Constitutional rights require institutional safeguards. This research proposes:

1. Independent AI oversight bodies with constitutional status similar to the Election Commission
2. Judicial capacity building on technical aspects of AI systems
3. Mandatory constitutional impact assessments for high-risk AI deployments
4. Public participation mechanisms in AI policy development
5. Technical standards bodies that incorporate constitutional expertise

The Supreme Court's creation of institutions like the Central Empowered Committee for environmental matters provides a model for how courts can establish specialized bodies to address complex technical and constitutional questions posed by AI.

10.4 Constitutional Interpretation Principles for AI Cases

This research proposes specific interpretative principles for courts addressing AI-related constitutional challenges:

1. Technological neutrality: Constitutional rights apply regardless of the technology used
2. Substance over form: Courts should examine the actual impact of AI systems rather than formal descriptions
3. Precautionary approach: When evidence about AI impacts is incomplete, courts should err on the side of rights protection
4. Contextual analysis: Constitutional evaluation must consider the specific context of AI deployment
5. Progressive realization: Constitutional requirements may evolve as technical capabilities advance

These principles provide guidance for courts navigating the novel constitutional questions posed by AI technologies.

11. Conclusion

The enduring strength of our Constitution lies in its adaptability to any unforeseen challenges. With AI now gearing up to transform in governance and social interactions, the way in which the Constitution is interpreted needs to evolve so as to be able to protect such spheres as fundamental rights and allow for innovations that are seen as beneficial. The jurisprudential tropes established in cases such as Puttaswamy, Maneka Gandhi, and Shreya Singhal should serve as raw material for weaving together a constitutional milieu for the age of AI.

This study contends, instead of creating fresh categories of rights or constitutional amendments, that the courts and policymakers hold onto a robust interpretation of existing rights within the ambit of AI challenges. Such an attempt is bound to have far-reaching repercussions for the creation of a uniquely sensitive technology-regulatory framework in India, allowing for a harmonious coexistence of innovation and constitutional democracy.

The challenge, therefore,is to pose questions regarding how these systems must be designed, deployed, and governed in a way that respects constitutional values and those that send in claims for a member of a given public. The answer shall emerge from not just bringing law and technology to the stage, but also from deliberating on what is the acceptable market for algorithmic systems in relation to constitutional democracy devoted to liberty, equality, and justice.

As pointed out earlier by Justice Chandrachud in Puttaswamy, "The Constitution does not cease to be a living document in tune with the times; it must, with a flexible process, adapt itself to sustain the cravings of future generations." In this declarative intent lies a potential way forward toward tackling the interplay of artificial intelligence and constitutional rights in India's digital future.

References

1. Constitution of India, 1950.
2. Justice K.S. Puttaswamy (Retd.) v. Union of India, (2017) 10 SCC 1.
3. Justice K.S. Puttaswamy (Retd.) v. Union of India (Aadhaar case), (2018) 1 SCC 809.
4. Maneka Gandhi v. Union of India, (1978) 1 SCC 248.
5. Shreya Singhal v. Union of India, (2015) 5 SCC 1.
6. E.P. Royappa v. State of Tamil Nadu, (1974) 4 SCC 3.
7. Shayara Bano v. Union of India, (2017) 9 SCC 1.
8. S.N. Mukherjee v. Union of India, (1990) 4 SCC 594.
9. Hussainara Khatoon v. State of Bihar, (1979) 3 SCC 532.
10. Motiram v. State of Madhya Pradesh, (1978) 4 SCC 47.
11. State of Kerala v. N.M. Thomas, (1976) 2 SCC 310.
12. Secretary, Ministry of Information & Broadcasting v. Cricket Association of Bengal, (1995) 2 SCC 161.

13. S. Rangarajan v. P. Jagjivan Ram, (1989) 2 SCC 574.
14. National Legal Services Authority v. Union of India, (2014) 5 SCC 438.
15. Vishaka v. State of Rajasthan, (1997) 6 SCC 241.
16. Digital Personal Data Protection Act, 2023.
17. Information Technology Act, 2000 (as amended).
18. NITI Aayog. (2021). Responsible AI for All: Adopting the Responsible AI Approach in India.
19. Ministry of Electronics and Information Technology. (2023). Draft National Strategy for Artificial Intelligence.
20. Agarwal, A., & Chander, A. (2021). Artificial intelligence and discrimination in the Indian context. In S. Chesterman (Ed.), The Oxford Handbook of AI Governance. Oxford University Press.
21. Bailey, R., Bhandari, V., & Parsheera, S. (2021). Use of facial recognition technology for policing in Delhi: Policy considerations. Data Governance Network Working Paper.
22. Basu, A., & Hickok, E. (2021). Artificial intelligence in the governance sector in India. Centre for Internet and Society.
23. Bhatia, G. (2019). The transformative constitution: A radical biography in nine acts. HarperCollins India.
24. Chander, A. (2017). The racist algorithm? Michigan Law Review, 115(6), 1023-1045.
25. Datta, A., Tschantz, M. C., & Datta, A. (2015). Automated experiments on ad privacy settings. Proceedings on Privacy Enhancing Technologies, 2015(1), 92-112.
26. Dixon, L., Li, J., Sorensen, J., Thain, N., & Vasserman, L. (2018). Measuring and mitigating unintended bias in text classification. Proceedings of the 2018 AAAI/ACM Conference on AI, Ethics, and Society, 67-73.
27. Internet Freedom Foundation. (2021). Project Panoptic: Tracking facial recognition in India. https://panoptic.in/
28. Kaminski, M. E., & Selbst, A. D. (2019). The legislation that isn't: Congressional inaction and the AI challenge. Harvard Journal on Legislation, 56, 99-137.
29. Khosla, M. (2020). India's founding moment: The constitution of a most surprising democracy. Harvard University Press.
30. Padmanabhan, G. (2021). AI and the Indian Constitution: The missing perspectives. Indian Journal of Constitutional Law, 10(1), 45-67.

31. Parsheera, S. (2018). A gendered perspective on artificial intelligence. International Association of Privacy Professionals. https://iapp.org/news/a/a-gendered-perspective-on-artificial-intelligence/
32. Ramanathan, U. (2019). Biometrics, aadhaar and the constitution. Indian Journal of Law and Technology, 15, 189-221.
33. Surden, H. (2019). The ethics of artificial intelligence in law: Basic questions. In M. Dubber, F. Pasquale, & S. Das (Eds.), Oxford Handbook of Ethics of AI. Oxford University Press.
34. Wachter, S., Mittelstadt, B., & Russell, C. (2018). Counterfactual explanations without opening the black box: Automated decisions and the GDPR. Harvard Journal of Law & Technology, 31(2), 841-887.
35. Yeung, K. (2018). Algorithmic regulation: A critical interrogation. Regulation & Governance, 12(4), 505-523.
36. Zalnieriute, M. (2021). The rule of law and automation of government decision-making. Modern Law Review, 84(2), 214-249.
37. Doshi-Velez, F., & Kortz, M. (2017). Accountability of AI under the law: The role of explanation. Harvard Public Law Working Paper No. 18-07.
38. O'Neil, C. (2016). Weapons of math destruction: How big data increases inequality and threatens democracy. Crown Publishers.
39. Pasquale, F. (2015). The black box society: The secret algorithms that control money and information. Harvard University Press.
40. Zuboff, S. (2019). The age of surveillance capitalism: The fight for a human future at the new frontier of power. Public Affairs.