

Exploring the Principles of the Constitution in the Digital Age

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Abstract: *The fast rate of development of digital technologies has radically changed the form of governance, social interaction and the provision of fundamental rights. Online platforms, surveillance infrastructures, artificial intelligence, and big data analytics are already affecting the process of making decisions that have historically been controlled by constitutional guiding principles. This essay discusses the reinterpretation of main constitutional principles, i.e. the rule of law, a right to privacy, a freedom of expression, equality, federalism, and a judicial review in the digital era. [David Lyon, Surveillance Society: Monitoring Everyday Life 52–60 (Open Univ. Press 2001)] The paper emphasizes the problem of algorithmic governance, mass data capture, platforms powered public discussion, and the digital power mutation into the hands of the State and individual entities. Although digital innovation brings about some possibilities on the way of increased participation and efficiency, it is endangering constitutional values by being characterized by the lack of transparency in policymaking, undermining privacy, and practicing discrimination based on algorithms, and exercising an over-reaching power by regulation. The paper, based on the doctrinal and analytical approaches, contends that constitutionalism should develop in order to tackle these new realities. It argues that the constitutional principles are still essential but need to be interpreted dynamically and adapted by institutions. The article promotes rights-based digital governance and transparency in algorithms, proportional regulation of online speech, enhanced data protection controls, and firm judicial control. It finally concludes that the Constitution needs to be a living tool in the digital realm and is necessary to assure that technological advancement does not surpass democratic responsibility, equality, and human dignity.*

Keywords: Digital Constitutionalism; Rule of Law; Algorithmic Governance; Right to Privacy; Freedom of Expression; Judicial Review

1. Introduction

The blistering development of digital technologies has completely transformed the contemporary governance, social life, and personal independence. Now artificial intelligence, analytics and smart data analytics, social media, and cloud computing as well as surveillance infrastructure input influence nearly every part of human life, whether it is access to welfare programs and access to financial services, or it is political participation and personal interaction. What used to be influenced mainly by human judgment is now to a large extent mediated by automated systems and algorithmic models in making decisions. Constitutional systems, though, were designed in the era which could never have imagined the predictive analytics, the presence of biometric identification, or discussions fueled by platforms. [David Lyon, Surveillance Society: Monitoring Everyday Life 52–60 (Open Univ. Press 2001).]

Conventionally, constitutions are tools of checking State authority, secure basic liberties and democratic accountability using institutional checks and balances. The new types of authority that address these goals in the digital era are data-based technologies and privately owned platforms. Not only are laws enacted through legislatures but nowadays citizens are controlled by invisible algorithms, automated profiling systems, and corporate policies creating access to information, opportunities and participation by the people. This change is a major deviation to classical constitutional suppositions, as the power was mostly concentrated in the hands of a central authority, which was the State.

One of the unique characteristics of digital governance is the integration of limits between the power of publicity and that of privateness. Technology corporations start to take the

roles that were historically regarded as the prerogative of the State, e.g. policing speech, managing identities, and voting. At the same time, governments implement new technologies in the field of surveillance that allows observing people in a way never seen before. These changes undermine the fundamental constitutional principles by increasing executive power, undermining the procedural protections, and permitting a variety of social control, which in most cases cannot be effectively reviewed.

Structural inequalities are also brought about through the digital ecosystem. Algorithms often reproduce the prevailing social biases, causing discriminatory effects on the employment and credit access, enforcement of the law, and the provision of welfare. Online media promotes misinformation and polarisation, and internet blocking and the ability to regulate what is posted on the internet casts the question of the freedom of expression in a serious way. Simultaneously, the centralization of digital power jeopardizes the balancing of the federal muscle as well as democratic pluralism because the control power of regulation is concentrated.

It is on the background of this that constitutional principles are confronted with a time of critical review. The classical principles of rule of law, equality, privacy, freedom of expression, federalism and judicial review needs to be redefined to deal with technology mediated government. The digital age of constitutionalism cannot be limited to formal action of the State but should also be involved in the process of algorithmic decision-making and governance of the private platforms.

In this paper, we will discuss the way core constitutional principles should change in line with these new challenges. It claims that constitutionalism is both invaluable but needs to

be actively interpreted and flexed to fit the needs of the institutions. The study aims at showing through an analytic discussion of digital governance practices that only right-based regulatory framework, algorithmic transparency, proportionality of scrutiny to surveillance, and beyond judiciary scrutiny can save constitutional democracy. Finally, the paper argues that the Constitution should be functioning as a living document in digital places, which means that technological advancement should comply with the liberty, equality, and accountability, as well as human dignity.

Algorithms Govern the Rule of Law

The rule of law is the principle of constitutional democracy, in which all operations of public power must be under clear and predictable and accountable legal standards. Aware of current trends in digital governance, automated decision-making systems are bringing about changes in the welfare industry, predictive policing, recruitment process, credit evaluation, and service delivery to the people. These systems tend to be opaque or black boxes with those who implement them and the people in charge unable to fully comprehend the ways that decisions are made.¹

With algorithmic governance there is a change of structure to machine logic and not human discretion. Even though automation would be efficient and consist even, it will undermine procedural protections that have long kept people safe throughout an arbitrary administrative attack. Citizens who are the subjects of algorithmic decisions are often denied any explanations or even a chance to challenge decisions. This lack of procedural fairness can easily be inconsistent with the respect of natural justice and due process principles. Moreover, automated systems will tend to use historical data that is filled with social biases, and yield output that will be disproportionately fulfilled in marginalized communities.²

Indian constitutional jurisprudence adorns that administrative processes are expected to adhere to a level of fairness, reasonableness and non-arbitrariness in administrative processes which touch upon fundamental rights. In *Maneka Gandhi v. Union of India*, the Supreme Court has held that any process which takes away personal liberty has to be "just, fair and reasonable" and, therefore, substantive due process is indirectly incorporated into Article 21.³ and this doctrine has to be further enforced into algorithmic governance, where an automated decision can affect considerably employment, housing, welfare, and education without personalized determination.

Procedural fairness is not the only place where accountability is required in the rule of law. Without the corporate responsibility being decreased, automated systems must not be allowed to spread the decision making over technical infrastructures. Technological tools can bring people to

certain results, and the public authorities should be held accountable. It has been repeatedly determined by the Courts that the delegation of administrative functions does not free the State of constitutional requirements. As such, the scope of the algorithmic systems implemented by government agencies should not be beyond the scope of judicial review, transparency, and auditing measures.

The digital constitutional governance also stipulates that the process of algorithms must be subject to explanation and challenge. Explainability helps people to comprehend the foundation of the decisions impacting their rights, whereas contestability is a reasonable remedy. Researchers have opined that as a result of due process in automated systems, rights to notice, explanation as well as appeal are required.⁶ Human involvement would therefore be at the center of key determinations especially in cases that involve basic rights.

The lack of such safeguards may force digital governance to produce a technocratic regime in which power is held without responsibility and which undermines democratic legitimacy. Technological responsibility should not be allowed at the expense of the law. The use of algorithmic tools should be within the framework of the rights system that does not endanger transparency, judicial control, and human judgment as the fundamental components of the rule of law.

Digital Surveillance and Right to Privacy

Dominant in the digital era has been the constitutional right to privacy that has become one of the most disputed rights. Smartphones, biometric-identification systems, CCTV network and online platforms, as well as internet-connected devices are the means through which governments and corporations accumulate masses of personal information. This information is regularly collated to compose portrait descriptions of the behavior, preferences and associations of individuals. These practices have radically changed the dynamic between the state and the regulating structures and allowed the kind of surveillance that was unimaginable before.⁴

Digital surveillance promotes constant observation of the population which casts some serious concerns in terms of autonomy, dignity and freedom. Continuous data gathering turns people into data subjects and suppresses individual agency and imposes a chilling impact on the freedom of speech and association. Predictive governance is also possible through surveillance infrastructures that help the authorities to predict behavior and act before the sound occurs. Although there is always a security or an administrative efficiency rationale behind them, such practices pose a risk of establishing the acceptability of intrusive oversight that does not go with a democratic mindset.

In India, the importance of privacy as a constitutional right was finally settled in *Justice K.S. Puttaswamy (Retd.) v.*

¹ Frank Pasquale, *The Black Box Society: The Secret Algorithms That Control Money and Information* 3–7 (Harvard Univ. Press 2015).

² Virginia Eubanks, *Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor* 37–42 (St. Martin's Press 2018).

³ *Maneka Gandhi v. Union of India*, (1978) 1 S.C.C. 248 (India).

⁴ David Lyon, *Surveillance Society: Monitoring Everyday Life* 52–60 (Open Univ. Press 2001).

Article 21.⁵ The Court has identified four-parts test where the infringement of privacy must be lawful, seek a legitimate purpose and necessity, proportionality etc and have due processes before privacy is invaded. The framework has become the constitutional standard used to assess digital surveillance regimes.

The Court also added that informational autonomy, i.e. control over personal data, is part of privacy. This idea corresponds to the international human right principles that acknowledge data protection as an aspect of human dignity. Data protection legislation transforms the constitutional principles into the functional protection by way of mandatory consent, restriction of purposes, typically the data minimum, and the accountability criterion. These regimes are however subject to checking and effective enforcement to be effective.

The danger of uncontrollable surveillance is that there is the possibility of function creep whereby the data originally used to achieve one objective is repurposed to achieve larger scope of control. These scholars have cautioned that these practices are leading to the creation of what is known as surveillance capitalism, whereby individual data is a product sold to both the State and the company, compromising the principles of democracy.⁶ Digital surveillance systems are building powers imbalance and harming democracy.

The concept of privacy in the digital age is hence perceived as informational self-determination- the right to decide the manner in which personal data is gathered, processed and shared out. The measures that are needed to ensure that the culture of extensive surveillance is not normalized slowly is strong constitutional protection. A rights-based vision of digital governance is necessary to the survival of human dignity, self-rule of autonomy and democratic liberty in a society that is more driven by data.

Freedom of Speech and Public Cyberspace

Digital sites have radically changed freedom of expression by inviting immediate communication with the rest of the world and unlimited accessibility to information. Social media and online discussion have enabled the excluded groups and led to the mobilization of politics and the democratic involvement outside the confines of the conventional institutions. Similar institutions have, however, become channels of misinformation, hate message, and concerted political game-rigging, giving conventional constitutional democracies a complicated regulation problem.

States become more active in the digital realm by regulating content and/or implementing intermediary liability, blocking whole web sites, applying exceptional action including internet blockades and large-scale takedown orders. Although such interventions are necessarily motivated by the discussions on the national security or the state order, they very often provide disproportionate limitations of the speech and access to data. Internet blackouts, especially, have

become crude weapons of derailing education, business, healthcare, and political involvement, and that is something that is being taken seriously as per the constitutional freedom of expression.⁷

Freedom of expression is a principle of democracy known by the Indian constitutional jurisprudence. Article 19(1)(a) of the Constitution secures speech, but can be reasonably restricted under Article 19(2). In *Shreya Singhal v. The Supreme Court*, coined 66A of the Information Technology Act as unconstitutional, vague, and over broad, stressing the need to suppress speech on the Internet due to inconvenience or disagreement must be limited to a narrow case and only constitutionally supported.⁸

In *Anuradha Bhasin v. recently*. The Supreme Court, Union of India estimated that indefinite internet blackouts breach the constitutional protection and that any restriction of the digital communication must meet the proportionality and necessity requirements.⁹ These observations reaffirm that constitutional protection completely applies to cyberspace and that any power over the regulation of online speech is subject to judicial review.

Together with the State regulation, the private platforms have enormous power over the discussion because of the policy of content moderation and amplification of algorithms. The role of such corporations is that of de facto gatekeepers of speech and they define visibility, reach, and access. Nevertheless, their forms of governance are largely commercial in focus as opposed to being constitutional. There is usually no openness to the moderation choices or rational appeal possibilities to users.

This forms a constitutional dilemma of two folds: how to avoid State excesses and at the same time hold to account any digital intermediaries in the private sector. The conventional doctrine of free speech is concerned with the State action, but the control over expressive freedoms conducted on platforms grows similar to how the public officials act. Researchers believe that cultural attributes like transparency, equality, and procedural fairness should guide the activities of the privately-operating platforms with the functions of a quasi-public.¹⁰

The principles of order of the constitution thus require that there should be proportionate control of the content over the internet, disclosure of the practice of moderation, and a well organized method of redressing grievances. Liberation of speech in the digital environment should not be regarded as being safeguarded only against government censorship, but anarchic personal control as well. With digital space becoming a contemporary civic forum, constitutionalism will have to adapt so as to protect the freedom of speech and cognizance of justifiable harms in a rights-based approach.

⁷ Access Now, *The State of Internet Shutdowns Around the World* 6–12 (2023).

⁸ *Shreya Singhal v. Union of India*, (2015) 5 S.C.C. 1 (India).

⁹ *Anuradha Bhasin v. Union of India*, (2020) 3 S.C.C. 637 (India).

¹⁰ Tarleton Gillespie, *Custodians of the Internet: Platforms, Content Moderation, and the Hidden Decisions That Shape Social Media* 83–91 (Yale Univ. Press 2018).

⁵ U.N. High Comm'r for Hum. Rts., *The Right to Privacy in the Digital Age*, U.N. Doc. A/HRC/27/37 (June 30, 2014).

⁶ Shoshana Zuboff, *supra* note 7, at 131–45.

Equality and Algorithms-level Discrimination

The equality under law is a fundamental guarantee under the constitution and a fundamental pillar of social justice. Artificial intelligences systems have penetrated the digital era making employment, creditworthiness, law enforcement, access to healthcare, and welfare distribution decisions. Such systems are often based on historical data which inculcates the existing social inequalities and structural hierarchies. As a result, women, minorities, and economically marginalized groups tend to be recreated or increased in terms of discrimination through algorithmic results.¹¹

In contrast to the antique discriminatory approaches, algorithmic bias is often both manifested and structuralized deep in technical structures. Those who have experienced unfavorable results may not know the decisions have been affected by instances of automated systems and are thus unable to figure out or oppose the unfair treatment. This nontransparency negatively affects the principle of substantive equality because it hides such discrimination under the banner of technological neutrality.

The Indian constitutional law acknowledges equality as though it were formal, non-discrimination but in reality equality is a substantive fairness. Article 14 does not allow arbitrariness and requires equal protection of the laws. The Supreme Court has always believed that the action of the State should be reasonable and it should not be discriminant. In *E.P. Royappa v. The Tamil Nadu, state*, the Court made the pronouncement that arbitrariness is the opposite of equality and this has gained greater significance in the context of algorithmic governance whereby computerized systems can make arbitrary decisions without a individualized evaluation.¹²

The new way of indirect inequality is algorithmic discrimination. Some communities are at risk of being over-represented by predictive policing; some groups of people will face disadvantages due to automated hiring system; some populations will not be included in credit algorithms. These results are inconsistent with free commitments in the Constitution in terms of equality and social justice.

The world of constitutionalism in the digital era thus demands active control of the systems of artificial intelligence. The governments should require algorithmic impact assessment, bias auditing, inclusive data practices and transparency standards. Authorities that use AI have to be responsible to the discriminatory effects and a person who suffers such an outcome has to have remedies. Researchers highlight that equality should be incorporated into the digital strategy based on the participatory administration and ethical control.¹³

¹¹ Virginia Eubanks, *Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor* 45–53 (St. Martin's Press 2018).

¹² *E.P. Royappa v. State of Tamil Nadu*, (1974) 4 S.C.C. 3 (India).

¹³ Sandra Wachter, Brent Mittelstadt & Chris Russell, *Bias Preservation in Machine Learning: The Legality of Fairness Metrics Under EU Non-Discrimination Law*, 123 W. Va. L. Rev. 735, 742–49 (2021).

Equality cannot be limited to lawful documents and digital infrastructures continue to marginalize people. The principles of the constitution should be applied to technological systems, whereby innovation should be used to dispense justice as opposed to enhancing structural inequality. The key to the achievement of substantive equality in an increasingly automated society is a rights-based approach to artificial intelligence.

Cyber-Constitutionalism and Judicial Review

The courts have a revolutionary role to play in enhancing constitutional principles to suit the change in technology. Jurisdictional accountability can be achieved by judicial review, which refuses administrative or technological encroachment of major executive rights by judicial review. In the time when algorithms, surveillance technologies, and regulations regarding the use of platforms are coming to dominate the everyday setting, courts are essential protectors of basic rights.

Courts have grown active in taking part in online matters especially those related to privacy, surveillance, and online speech as well as data security. The proportionality analysis has become an ordinary application to determine by courts whether technological actions which aim at achieving legitimate purposes undoubtedly encroach upon constitutional freedoms. This strategy can allow a rational compromise between innovation, security and individual rights.

This development can be traced in Indian constitutional jurisprudence. *C. in the case of Justice K.S. Puttaswamy (Retd.) v. Union of India*, the Supreme Court explained a strict proportionality test on the assessment of privacy infringements, with a strong focus on the legality, necessity, and procedures. The Court, *Union of India*, the Court offered constitutional safeguards to digital communication saying that any restricted access to the internet should be also temporary, proportional, and reviewed periodically.¹⁴ These rulings show that the courts can reconsider conventional rights regarding digital realities.

Another argument that the Constitution is a living document, able to react to new ways of power, is strengthened by judicial review. The threat to liberty is not only evident through physical coercion, but it is also clear that the aggregation of data, profiling by algorithms, and other technological forces contribute to the rise in court judgments. Court consideration, by interpretation of the constitution, turns the abstract rights into the tangible protections against internet excesses.

Notably, judicial supervision makes constitutional accountability stretch into new areas of authority, such as personal online channels and mechanical administrative systems. Although the classic doctrine revolves around the State action, the courts are starting to realize the quasi-public duties that the technology corporations perform. The scholars contend that regulatory patterns of the private actors in the

¹⁴ *Justice K.S. Puttaswamy (Retd.) v. Union of India*, (2017) 10 S.C.C. 1 (India).

digital world should be informed by the constitutional values because their choices have a huge influence on the civil liberties.¹⁵

Judicial review has therefore two roles in this case and they are; acting as a check to state excess and acting as a guideline to legislative adaptation to technological progress. In the absence of proactive judicial involvement, digital governance has the possibility of going beyond the reach of democracy. Digital constitutionalism also relies on an autonomous judiciary that can interrogate technological authority and make sure that innovation does not become overly supporting of basic rights, dignity, and equality.

2. Conclusion

Digital age did not make irrelevant the constitutional principles, on the contrary, it made them all the more urgent and extended their areas of implementation. In the modern world of society, power is no longer exercised only in a statutory way, through executive decrees or even physical institutions. It works based on the algorithms, data infrastructures, biometric mechanisms and privately controlled digital platforms that determine speech, opportunity, and access to critical services. This new topography requires constitutionalism to face new forms of power, which are diffuse, technologically auxiliary, and largely invisible.

As illustrated in this paper, digital governance is restructuring key constitutional principles such as the rule of law, privacy, freedom of expression, equality, federalism and judicial review. The use of algorithms to make decisions negatively impacts transparency and accountability. Surveillance and gathering of masses of data is a threat to autonomy and dignity. The concept of platform governance makes the classical doctrine of free speech complicated. Artificial intelligence systems pose a threat to create structural inequality. The testing of federal balances is through centralization of digital authority. All these developments indicate that technology innovation, despite being efficient and participatory, poses new threats to the democratic order.

Technological power can be elusive of significant democratic control, unless constitutional changes are made. The surveillance can be accepted as the rule in the banner of safety; the biases of algorithms can strengthen the ongoing disparities; the digital monopolies can redefine the discourse of people without responsibility. The threat is not technology, but the potential uncontrolled or poorly controlled use of technology. The constitutional silence in cyberspace would in effect allow the accumulation of power to be unreachable through the law.¹⁶

¹⁵ Prabhash Ranjan & Rahmatullah Khan, India's Digital Federalism: Challenges of Regulating Cyberspace, 14 NUJS L. Rev. 245, 252–58 (2021).

¹⁶ Julie E. Cohen, *Between Truth and Power: The Legal Constructions of Informational Capitalism* (Oxford Univ. Press 2019).

Constitutionalism, however, has the normative flexibility and institutional resources that can be used to respond. Proportional regulation, transparency requirements, auditing bias, and robust judicial supervision through methods of rights-based digital governance, can help to curb technological extravagance and enhance innovation. The role of the courts is a pivotal moment in finding how to apply the constitutional values to digital settings in which the emerging variants of governance should not lose their roots in the legality, fairness, and accountability.

Finally, the dilemma facing constitutional democracies is to have technology be a tool of human progress and not a tool of oppression. The Constitution has to go deeper than its textual sources into code, platforms and data architectures. It has to influence the creation of technology using human-centered principles whose foundation lies on liberty, equality, dignity, and justice.

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