CASTE AND AI: DO ALGORITHMS REPLICATE CASTE DISCRIMINATION IN INDIA

DOI: 10.5281/zenodo.17239739

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1. INTRODUCTION

CASTE

Caste is an important part of Indian life; it is a hierarchical system that has historically resembled the varna system in Hinduism. A person's capacity to get married, study, obtain employment, and advance in society is greatly influenced by their caste.

The caste system in Hinduism separates people into four varnas: Brahmins, Kshatriyas, Vaishyas, and Shudras. These varnas are believed to have descended from Bramha (the creator), with the Bramhins at the top, who were once supposed to be the most intelligent people. Then came the Kshatriyas, who were the rulers of the troops and dominated the society. The third varna was composed of the Vaishyas, who were well-known traders and merchants, while the Shudras handled all the menial labour.

Following a few decades, these four varnas were further divided into 3000 castes based on occupation and 25,000 subcastes.

ΑI

Artificial intelligence is the study of creating software that can perform tasks that typically require human help. Even though AI makes daily chores easier for humans, it also causes many individuals to lose their employment because it takes on human labour and duties. Artificial intelligence algorithms are the set of rules and principles that enable a computer to learn, recognize patterns, and form opinions without consulting a person. In order to pave the way for future developments in artificial intelligence, several Indian universities, notably IIT Kanpur, began doing research in the 1960s. One of AI's main principles is to make technology accessible to all citizens.

The platforms that help people include ChatGPT, Perplexity AI, and others. A wide range of industries have benefited from artificial intelligence (AI), including healthcare

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(by facilitating early disease detection), agriculture (by providing farmers with real-time crop price and market data), infrastructure, and more.

This article looks at the connection between caste and AI in India. It begins by discussing caste and artificial intelligence, outlining the relationship between social structures and technology, and examining how badly designed algorithms can occasionally make caste inequalities worse. The essay goes into considerable detail to present real-world case illustrations.

2. CASTE DISCRIMINATION

As is well known, the caste system is a historical social framework that assigns individuals to various groups according to their social standing. Caste discrimination is particularly prevalent in southern Asia. People from lower castes are denied access to resources like food, shelter, education, and other necessities and are compelled to work in a system of strict social hierarchy and discrimination.

Since ancient Varna times, the upper class (so-called Brahmins) in India has mistreated and taken advantage of the Shudras. For example, the Vedas, which were reserved for brahmins, Kshatriyas, and Vaishyas, could not be heard or recited by Shudras. Any Shudra who was discovered to have studied or recited the Vedas might face harsh penalties.

3.HOW ALGORITHMS CAN REINFORCE CASTE DISCRIMINATION

An artificial intelligence algorithm is a comprehensive set of guidelines that a computer or other machine can follow to solve problems or complete a task without the aid of a person. We can think of it as a recipe that tells us how to bake brownies.

Caste discrimination is a significant issue in India, as is widely recognized, with individuals of lower castes experiencing social persecution and marginalization. As AI becomes more prevalent in various areas, there have been concerns raised about the rise of preconceived conceptions.

Caste discrimination can be made worse by algorithms that reinforce negative preconceptions, social biases in data, and prejudice in real-world judgments. This occurs due to a number of factors, including underrepresentation, distorted data, and insufficient regulation.

4.1) Biased data: Most algorithms are designed to mirror the state of the world, which often

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hides the lower caste and marginalized groups while exaggerating the upper class. It suggests

that the algorithms are maintaining outdated trends, like the varna system, in which higher

castes are more prevalent, especially in industries like healthcare and jobs.

4.2) **Digital stratification**: AI development teams and data often lack members of

disadvantaged castes. They consequently have fewer digital opportunities and feel more

socially isolated.

4.3) Automated decision-making: Algorithms may reinforce prejudice when they use

historical data that has already been biased.

5. LEGAL AND POLICY FRAMEWORK IN INDIA

India boasts one of the most extensive legal systems in the world that forbid discrimination

based on caste. However, the legal system is still developing in terms of regulating new

technology like artificial intelligence (AI). Examining the constitutional, legislative, and

regulatory rules that pertain to caste discrimination, this part evaluates how well they handle

algorithmic or technical harms.

5.1)constitutional provisions

the Indian Constitution forbids caste-based discrimination and expressly assures equality:

• Article 14 ensures that everyone is treated equally before the law and has equal

protection under it.

• Article 17 outlaws untouchability and renders its practice illegal in all its forms.

• Article 15(1) forbids the State from discriminating against any citizen on the basis of

religion, race, caste, sex, or place of birth.

The normative foundation for opposing discriminatory acts, particularly those resulting from

algorithmic systems, is provided by these fundamental protections. Nevertheless, Indian courts

have yet to test their use in automated decision-making systems.

5.2) Prevention of Atrocities Act, 1989

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The 1989 Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act The assault, exclusion, and humiliation of Scheduled Castes (SCs) and Scheduled Tribes (STs) based on caste are illegal under this historic law. Although it was initially written in the context of social and physical tragedies, its generalizations about exclusion and discrimination may theoretically be extended to systemic prejudice through computational methods.

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The Act's application, however, mostly concentrates on overt acts of violence or service denial, and it has not yet been utilized to combat algorithmic or data-driven forms of caste bias.

5.3) Policy for Reservations

An important part of India's efforts to combat caste-based disadvantage is affirmative action, which takes the form of reservations in politics, work, and education. The legal recognition of systematic injustice is reflected in reservation policies, which are not directly related to AI but are frequently discussed in relation to algorithmic fairness.

Importantly, under these laws, algorithms used for admissions or recruitment may be legally challenged if they reproduce patterns that contradict the goals of reservations (for example, by favoring names or institutions from the dominant caste).

5.4) Prison Manuals and Recent Supreme Court Rulings

In 2024, the Supreme Court of India struck down provisions in prison manuals that assigned menial tasks to prisoners based on their caste status. The Court held that such assignments were unconstitutional and ordered the removal of caste references from prison records. (Hindustan Times, 2024)

This landmark judgment is notable because it recognizes that caste-based categorization in institutional records can be discriminatory—even if indirectly operationalized. It provides an important precedent for challenging caste proxies in algorithmic systems (e.g., when models use caste-correlated data points such as names or localities).

5.5) University Grants Commission (UGC) Guidelines

In recent years, the UGC has been tasked with addressing caste discrimination in higher education institutions. In 2025, the Supreme Court directed the UGC to develop and notify regulations aimed at preventing caste-based discrimination in universities, including during admissions and faculty recruitment.

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Although the guidelines primarily focus on human decision-making, their scope is increasingly relevant as universities adopt algorithmic tools for admissions, e-learning, plagiarism detection, and student monitoring. Incorporating safeguards against algorithmic bias into UGC norms could be a future policy direction.

5.6) AI and Data Governance Policy Landscape

As of 2025, India lacks a dedicated law on artificial intelligence or a comprehensive antidiscrimination law tailored to algorithmic decision-making. However, several initiatives are underway:

- India AI (a government initiative) has released discussion papers emphasizing the need for fairness, transparency, and accountability in AI systems. These documents recognize caste as a relevant social category in Indian contexts, though concrete guidelines remain in progress.
- The Digital Personal Data Protection Act, 2023 provides safeguards around the collection, processing, and storage of personal data. While caste is not explicitly mentioned as a "sensitive personal data" category, it may be indirectly protected under broader provisions. However, the law does not currently mandate algorithmic audits or fairness assessments.

5.7) Gaps in the Existing Framework

Despite strong protections on paper, several legal and policy gaps exist:

- No explicit regulation of algorithmic discrimination: India's legal framework does not yet treat algorithmic bias—whether intentional or systemic—as a specific form of unlawful discrimination.
- Lack of legal obligation to conduct bias audits: There is no binding requirement for public or private sector entities to test their AI systems for caste bias before deployment.
- Weak enforcement and redress mechanisms: Existing institutions often lack the technical expertise to identify or adjudicate algorithmic harms.
- Ambiguity around caste data collection: While collecting caste data may be essential to measure bias, privacy laws and political sensitivities create a dilemma around its usage.

6. CONCLUSION

In conclusion, Although artificial intelligence has enormous potential to change society, industry, and governance, there is also a chance that it could exacerbate existing disparities. Due to skewed design, discriminatory decision-making processes, and biased data, caste—which is ingrained in social and economic institutions in India—can inadvertently find its way into algorithms. If left unchecked, this not only perpetuates current caste inequality but also gives it legitimacy by claiming technological neutrality.

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Consequently, inclusive data collecting, open algorithmic design, moral regulation, and the active involvement of underrepresented groups in technology development are all necessary to overcome caste bias in AI. The objective should be to employ AI as a tool for eliminating systemic injustices as well as to prevent discrimination. In this way, the concern is not just whether algorithms reproduce caste inequality, but also how society can guarantee that AI develops into a tool for social change, equity, and justice in India.

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