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Editorial

Prof Gitanjali Chawla & Dr Saumya Shukla

The process of globalisation has been a major driving force behind the development of the modern world for several decades. The system has created economic links between different countries, which resulted not only in economic growth but also in international trade of goods and services, expanding knowledge base and making systems more efficient than ever before. The system that has existed until now shows signs of breaking down. The global economy is experiencing a fundamental transformation. The combination of wars and political tensions, together with supply chain problems and increasing protectionism have transformed how nations conduct their trade and diplomatic relations. The global economic system which used to depend on free trade has now become less important in many regions throughout the world because national governments have turned away from its core principles. People used to think that globalization only moved in one direction. The expansion of international trade led to the reduced significance of national boundaries because businesses needed to establish ties with other nations through their products and services and technological capabilities. The world seemed to progress towards becoming a single unified economic system. On the contrary, the system now appears even more vulnerable because of three major problems, namely COVID-19, rising geopolitical tensions and international trade bans. Globalization has not ended yet. It continues to exist, but its current form shows significant transformation. The current state of globalization is a weaker one because of various factors that are operative now.

The main factor driving this situation emerges from countries implementing protectionist trade measures. Countries from around the world implement tariffs and subsidies while they work to reduce their dependency on imported goods. The current focus has moved away from achieving cost efficiency towards establishing safety measures and building self-sufficient capabilities. The COVID-19 pandemic brought about another significant change that transformed all aspects of society. Countries learned that excessive dependency on specific geographic areas for essential products creates a dangerous situation after global supply chains collapsed. Companies began to establish production

facilities in different locations while maintaining operations close to their main markets. Geopolitical factors now have an increased influence on how organizations make their financial choices. Modern trade operations extend beyond commercial activities because they now serve as instruments for nations to establish dominance, safeguard their interests, and create future strategies. Major power conflicts are leading to global divisions that prevent countries from forming a unified international system.

As India maintains a strong connection with the global economy, all worldwide economic shifts directly impact the country. India relies on foreign countries to supply its entire crude oil requirements. The increase in global oil prices leads to higher costs for all products, including fuel, transport and food. The process affects household budgets without delay. There are additional expenses because of increased oil prices, which force the country to pay higher import costs. The rupee loses value, which also creates additional costs for imports and drives inflation rates higher. The government uses tax reductions and subsidy programs as tools to protect citizens from increasing fuel costs. This short-term solution provides immediate assistance but at the same time reduces funds to support the development of infrastructure, educational institutions and healthcare facilities. The Reserve Bank of India faces difficult responsibilities; it must choose between raising interest rates to control inflation, along with lower economic growth, and maintaining low rates to support economic expansion, but also accept higher inflation. The global economic downturn has also decreased demand for Indian goods and services, exerting pressure on industries such as textiles, manufacturing and IT services.

India's international connections are changing because of rising global uncertainty. Countries need to identify dependable relationships which can offer them better choices in obtaining essential goods. India can use this opportunity to establish itself as a center for manufacturing and service industries. India maintains its vital connection with Middle Eastern countries which continue to hold great strategic value. The region supplies most of India's oil and is also home to millions of Indian workers. The workers send money back home to their families which helps sustain their households while boosting economic growth. India is also strengthening its relationships with other developing nations. Multiple partnerships need to be established to decrease risks that arise from reliance on any one specific area in a world characterized by increasing divisions. The process of balancing competing interests proves to be a challenging task. Countries expect that India will declare its position because current global conflicts require such actions. India, however, prefers to keep its diplomatic options open with all nations. The current world needs an approach that combines strategic independence with diplomatic relations.

The current situation is showing the way to a new way for globalization to operate. The world is developing as a collection of regional systems that operate with greater restraint, instead of forming one interconnected global network. Countries maintain their trading relationships while working together, but now exercise greater caution regarding their choice of trading partners. The expansion of digital globalization continues to progress with strong momentum. The worldwide distribution of data and services, together with online employment activities, enables people to connect across international boundaries at unprecedented levels, even though physical trade experiences a decline. Globalization exists in a state of transformation because it operates at multiple levels, creating new complexities that shape its future development. The situation presents India with both obstacles and advantages. The increasing worldwide uncertainty brings fear of inflation, decline in trade and lower economic progress. However, India also has an opportunity to enhance its international supply chain networks while establishing closer relationships with various global regions. The world has moved away from its previous path which led to total system integration. It is now developing into separate parts which operate with increased caution and follow political motivations.

The drivers of globalization continue to operate through their existing systems. The ongoing development of technological innovations decreases communication and transportation expenses while economic incentives motivate international business partnerships. Human beings maintain their natural drive to explore new frontiers, enabling cultural and intellectual exchanges. The existing forces in the world maintain their power to create worldwide connections despite the more fragmented state of international relations. Globalization persists, but its form has changed from earlier times.

The articles in this issue of *Indian Journal of Social Enquiry* reflect processes of change be it in geopolitics or cultural matrices. The opening article by Shambhu Nath Dubey interrogates the legal, political and ethical dimensions of India's proactive strategic response to terrorism, its reinforcing its supremacy through indigenization. Using Operation Sindoor as a case study, the research brings to the fore, the systemic structural paradigmatic shift in India's approach to provocation; the precision in use of military forces and strategic investments in indigenising its defence capabilities.

Astha Priya examines the shifts evident in NEP 2020 and NCFSE 2023 as it nurtures and cultivates scientific temper in learners and at the same time highlights the gaps in policy frameworks and pedagogical realities. Her research is undergirded by Piaget's constructivism, Vygotsky's social scaffolding, Dewey's inquiry-based pragmatism, and

Kolb's experiential learning. Savita Singh in her article titled, 'Inflation, Algorithms, and Real Wage Compression: Evidence from India's Gig Delivery Workforce' presents a tour de force in urban economies led by the gig delivery workforce is a bubble that is waiting to burst. Using a combined macro-micro framework, her research reveals the dark underbelly of this algorithm controlled labour, making a strong case for policy shifts that should factor in the realities of income insecurity and urban precarity.

In a pertinent article, Mehak Sharma & Anuradha Sharma highlight the potential threats of Artificial Intelligence using data from government organizations and prominent academic institutions such as Yoshua Bengio's 2025 study, The International AI Safety study (2025), World Economic Forum assessments, McKinsey Global Institute projections, OECD monitoring frameworks, MIT Technology Review, and research from the International Labor Organization amongst others. They make a strong case of policy framework for effective and ethical governance of AI.

For our literature enthusiasts, we have two interesting and engaging articles – one by Anupama Jaidev & Nishtha Dev titled, 'Translating the In-Scribed Body: Cultural Alterity and a Draupadi's Counter Narrative' and 'Spectacle of Wrestling: The Narrativization of Nation-State and Citizenship in Gopinath Mohanty's Short Story 'The Somersault" by Indrani Das Gupta. Anupama and Nishtha explore un-making of the legendary Draupadi in Mahasweta Devi's short story as representative of the subaltern consciousness, highlighting the disrobing of the tribal identity while drawing cultural parallels and exploring the interstices of both gender and caste as "heterotopic spaces of alterity". Indrani delves the Indian nation-state's politics of inequality and disparity by examining Gopinath Mohanty's short story, 'The Somersault', highlighting the difference in wrestling (Bhartiya Kushti) as an "ethico-somatic framework" and it being a commodified spectacle entrenched in the politics of the time.

The closing article by Srijana Sidharth challenges assumptions surrounding 'common sense', as neutral, or universal, devoid of influences of ideologies or hegemonies; instead she foregrounds it as "historically constructed and shaped by dominant social groups". She draws on postulations by Antonio Gramsci and Satish Deshpande to support her arguments effectively. All articles in the volume interrogate prevailing worldviews and perspectives, and offer new insights for readers to delve into; they pave the way for new research. We also would like to place on record our appreciation and gratitude for our reviewers whose efforts go a long way in enhancing the quality of our articles. We continue to strive in our endeavour to offer a platform for insightful and pertinent research.

Sovereignty through Indigenization: Redefining India's Counter-Terrorism Strategy Post-Operation Sindoor

Shambhu Nath Dubey

Abstract

India has witnessed multiple waves of terrorism since 1945, shaped by both internal and external factors. In recent history, Operation Sindoor, a tactful military response launched in May 2025 following the brutal terrorist attack in Pahalgam points out a figurative shift in India's counter-terrorism policy. This paper situates the operation within broader terrorism theory, evaluates India's evolving security strategy, and interrogates the legal, political, and ethical dimensions, multilateral approach, to understand state responses to terrorism. By analyzing the integration of indigenous defense technologies and the synergy between military action and diplomatic engagement, this study interprets Operation Sindoor not merely as a tactical event but as a symbolic and structural transformation in India's counter-terrorism posture. It argues that India has successfully transitioned toward a "dual-track" strategy that seamlessly blends hard-power deterrence with assertive multilateralism, underpinned by an indigenous ecosystem that ensures strategic autonomy.

Keywords: *Operation Sindoor, Terrorism, Counter – terrorism, India, Jammu and Kashmir*

Theoretical Foundations and the Historical Context of Indian Counter-Terrorism

Terrorism, of course as a phenomenon, cannot be bounded by linear descriptions.

Probably, the best way to define terrorism is to label it is a strategic tool used by non-state actors to accomplish political goals through the methodical use of violence and terror. According to academics like Bruce Hoffman (2017), terrorism is essentially a communication act, intended to affect a large population that extends well beyond the immediate victims. Likewise, according to Martha Crenshaw (2011), terrorism is a "deliberate creation of fear" that uses psychological weakness in order to compel political compromises.These theoretical criteria have been verified in India's multi-decade battle against a variety of insurgencies, from the prolonged dispute in Jammu and Kashmir to the Khalistan Movement in the 1980s . In the past, India's reaction was defined by "strategic restraint", a theory intended to manage internal security by legal and paramilitary measures whilst limiting escalation into a full-scale nuclear battle with Pakistan. However, the advent of transnational Islamist terrorism, cutting across boundaries, especially after 1993 Mumbai Bombings and the 2008 Mumbai attacks, posed a growing risk to this stance. Significant turning points were the 2016 Uri incident and the 2019 Pulwama bombing, which indicated the limits of defensive tactics and led to the philosophical, more so, doctrinal shift favoring "proactive deterrence". This development implies that India now sees counterterrorism as a comprehensive strategic challenge that necessitates the deployment of power outside its borders with the objective to attack the infrastructure of terror at its origins rather than considering it as a mere internal policy crisis thereby raising concerns with respect to the procedural aspects of policy formulation itself (Fair, 2014).

What lies at the heart of this transition towards a confrontational stance is the recognition of the basic premise on which the theory of "startegic restraint" is based upon i.e. the identification of India's tolerance level as a lack of determined willpower to resolve issues with immediate effect thereby often encouraging, rather provoking, state sponsored acts of terrorism. According to scholarly research on deterrence, a state must exhibit both the ability and the will to impose consequences that exceed any perceived advantages for the aggressor to be able to effectively avert unconventional attacks. What prevented India from laying this kind of security setting was its past experiences complimented by internal threats, especially Maoist (Naxalite) insurgencies in central India, which required the government to strike a balance between aggressive military operations and socioeconomic growth. Nevertheless, the outside challenge

posed by organisations like Jaish-e-Mohammad(JeM) and Lashkar-e-Taiba (LeT) demanded an alternative approach to the hitherto existing security scenario, one that takes into account the logistical locations and safe areas situated beyond the Life of Control (LOC). The events preceding Operation Sindoor in 2025 marked the pinnacle of this doctrinal development. The final impetus for this change was the 22nd April incident of Pahalgam that involved the horrific attack and killing of 26 innocent victims. Amidst this deep crisis, the Indian administration was deeply obliged to re-evaluate its whole security architecture owing to the attack's extreme brutality followed by the religious profiling of the victims. Resultantly, India abandoned the calculated restraint philosophy and adopted a wider strategy which fuses military strike capabilities with both domestic industrial self-sufficiency and legal engagement.

Infact, one of the most audacious counterterrorism initiatives in Indian history was Operation sindoor, which was initiated on May 6-7, 2025 in response to the terror assault in Pahalgam on April 22, 2025. In military and scholarly circles, it has been characterised as both decisive and controversial. It is credited for attacking the nine terror infrastructure targets deep into Pakistan and Pakistan-Occupied Kashmir (PoK). In addition its military aspects, Operation Sindoor was crucial in setting a benchmark for India's counterterrorism strategy. Sindoor underscored that no terrorist center crossing the borders and the LOC is inaccessible for the Indian military, making a difference from the 2016 surgical strike and 2019 Balakot airstrike that depicted India's resilience against serious terrorist assaults (Pant, 2025). The headquarters of Lashkar-e-Taiba (Muridke), Hizbul Mujahideen (Muzaffarabad) and Jaish-e-Mohammad (Bahawalpur), were among the primary targets of this unprecedented military operation led by India. These organisations had been considered a cross-border terror threat for decades, but they had escaped retaliation due to Pakistan's frequently used threat of invoked nuclear war in addition to the absence of risk taking attributes and necessary military capabilities issues that India was grappling with (GOI, 2026). Appearing like a seamless web, this operation had disproved a number of long-held beliefs in India's diplomatic and strategic thinking. For the first time, New Delhi has declared that any terrorist strike in the future will be seen as an act of war and that it will not differentiate between terrorists and those who encourage it. This expression is significant because it explicitly imposes culpability on the Pakistani state, stating that their decisions

to pursue the policy of terrorism can no longer constitute "plausible deniabilty". The Pakistani state must recognise the fact that cross-border terrorism against India is no longer a "cost-free option", even though they may have drawn varying conclusions out of the events that unfolded from Operation Sindoor. Pakistan will automatically have to incur real and unbearable costs upon failing to realise the gravity of this issue (Behera, 2025).

Remarkably, the Operation was given this figurative name "Operation Sindoor" in a bid to connect state actions with cultural analogies. The state portrayed its military response as a moral and safeguarding effort to reclaim the 'honor' of the nation and the victims by using the moniker Sindoor (Vermillion), which is a traditional symbol of existence, respect and longevity in Indian Culture (PIB, 2025). Bruce Hoffman's (2017) argues, that counterterrorism must address psychological and emotions avenues of war as much as the physical, is absolutely in sync with this symbolic framing. As the IAF carried out precision strikes and the Indian Army supplied real-time ground information and surveillance, the operation's execution further demonstrated a high degree of inter-service coordination. According to official accounts from the Cabinet Committee on Security (CCS) the strikes were a "non-military preemptive action" directed exclusively at terrorist organisations, upholding a legal defense under Article 51 of the UN Charter (UN, 1945). With this accuracy, India was able to manage the risk of a full-scale conventional conflict while also accomplishing its tactical goals, which included destroying over 100 high-value targets and breaking down logistical networks. While processing the entire series of events behind the arrival of this security turning point, India has established a "new normal" in the subcontinent, where state-sponsored terrorism will eventually be dealt with a massive military response rather than a merely diplomatic protest, as indicated by the strategic precision exhibited during Operation Sindoor (Pant, 2025). The subsequent sections in this article carry forward the operational ramifications of Operation Sindoor , the broader regional dynamics at work and how India's reaction to terrorism has evolved.

The Pahalgam Incursion and the Operational Mechanics of Operation Sindoor

On 22 April 2025 a terrorist attack in Baisaran Valley of Pahalgam that was an example of an attempt to sabotage, but deliberately the sabotage was aimed at

destroying public trust, destroying cohesion in the community and economic security of the Kashmir valley tourism industry. Target selection was not haphazard. Tourists and newlywed couples were strategically selected to gain the most international press attention while also igniting religious tensions within communities domestically. The attackers had linked themselves to Pakistan-based militant networks, apparently as a subgroup of the mainstream terror group, with links to Pakistani military and intelligence institutions (The Hindu, 2025). Eyewitness testimony corroborated that the victims were detached from their captors and killed for religious conviction, a move that no doubt went against the grain of sectarian retaliation. Attackers had complex infantry weapons, M4 carbines, which cannot easily be purchased in India, indicating the presence of state level, more importantly, an outside logistical support.

In retaliation, Operation Sindoor, launched by India during the night of May 6 to 7, 2025, depicting India's most extensive cross-border military campaign to date in the post-Kargil era, hitting nine different terror-infrastructure sites in the depths of Pakistan and Pakistan-Occupied Kashmir (PoK). On the one hand, where the 2016 surgical strike was limited to a single field of special forces operating within a narrow geographical area, Operation Sindoor was multi-domain and coordinated with land based forces on one day and air and unmanned systems on the next. On 7 May the air battle involved 114 aircraft from the Indian Air Force and the Pakistan Air Force, the largest BVR aerial engagement over South Asia since 1971 (Basrur, 2025). Precision-guided munitions, comprising air-launched BrahMos supersonic cruise missiles and SCALP deep strike missiles, were employed to render command centres, training camps, and infiltration launch pads inoperable while aiming to intentionally reduce civilian collateral damage; a tactical and diplomatic calculation (Basrur, 2025).

The main targets of India's brave action were Let (Muridke), JeM (Bahawalpur) and Hizbul Mujahideen (Kotli) bases. In this process, notably, more than 70 terrorists were killed, including close relatives of JeM commander Masood Azhar. The first strikes were completed in a startingly short amount of time, roughly 23 minutes, highlighting operational effectiveness and the element of surprise induced by tactics like radar blackouts and the skillful application of NOTAMs (Notice of Airmen). In retaliation, between May 8 -10, 2025, three Indian civilians were killed by Pakistani drone strikes and cross-border firing

in retaliation. India replied staunchly to this by applying commensurate force to neutralise about 11 Pakistani airbases, including Rahim Yar Khan Airbase in Rawalpindi, thereby destroying 20% of Pakistan's air force infrastructure. Whilst deploying diplomatic steps globally by briefing almost 42 countries about the operation, including the UAE, Russia and the U.S, Modi gained favourable reviews for maintaining transparency. PM's continuous monitoring went on in the middle of it all. Modi continued to oversee developments continuously, presiding over several security consultations and offering strategic counsel. Finally, after obtaining the intended operational goals, PM Modi finally confirmed the terms of the ceasefire on May 10, 2025.

The Indian Air Force, Indian Army, and the Indian Navy showed outstanding tri-service synergy under PM's strategic suggestions and the military leadership operational command. Raksha Mantri Rajnath Singh praised this tri-service for accomplishing their goals and for their remarkable discipline exhibited during this fierce battle. To quote him "they could have done much more……." (Kumar, 2025, para. 1), but without injuring any innocent individual and with the least amount of collateral damage, they portrayed their humungous courage. The human element - the training, diligence and bravery of the Armed forces personnel - was what guaranteed success, even though advanced weaponry played a significant role. "Our weapons are advanced… our soldiers have demonstrated exemplary courage…", the chief of Defence Staff stated in the post-operation briefing (CDS Gen Anil Chauhan, 2025, para. 4). According to various scholars, this operation also served as an example of India's Integrated Deterrence Matrix that integrates various powers levers for a comprehensive deterrence effect including the 'Military Domain' comprising targeted attacks using cutting-edge weaponry demonstrating conventional strength, 'Digital Domain' that pushed information control, electronic warfare and cyberspace operations, 'Economic Domain' including financial pressure, trade restrictions and sanctions, 'Diplomatic Domain' involving international outreach to obtain support from other countries and 'Narrative Domain' that depicts the efficacy of an effective communication approach in shaping global perception (Pallathadka & Roy, 2025).

Aatmanirbhar Bharat and the Technological Sovereignty of the Indian Defence Ecosystem

What was incredibly unique about Operation Sindoor from a strategic standpoint is that it outperformed the Atmanirbhar Bharat's initiative domestically produced platforms. India was world's largest arms importer for many years, a reliance that has major strategic ramifications in addition to financial costs. Export controls, end-user agreements, maintenance dependencies, the actual risk of supply interruptions or politically promoted technical restraints by the suppliers calculating their own diplomatic balances are all inherent loopholes of weapons system created by foreign acquirement. Nonetheless, by 2025, persistent policy change had significantly changed this foreign weapon import setting, where Operation Sindoor served as the ultimate combat confirmation than the transition to indigenous capacity was a strategic change rather than merely a preference for the acquisition.The DRSO-developed Akash Surface-to-Air Missile system methodically neutralised Pakistan's retaliation drone swarms and cruise missile on the evening of 7 to 8 May. Technical expertise and doctrinal maturity were demonstrated by Akash's capacity to function in autonomous engagement style, tracking and deflecting several ongoing threats without regular human operator input (PIB, 2025). Given the political demands of the war, the BrahMos supersonic cruise missile's seeker and propulsion components were gradually indigenised, giving it stand-off strike capability that no foreign-origin substitute could have guaranteed. And its reliability against hardened targets deep within Pakistani territory proved that indigenous precision-strike design was the right investment. Operation Sindoor also demonstrated the breadth of India's burgeoning defence-industrial base. For the first time in an Indian military campaign, domestically produced UAVs and loitering munitions served as the primary intelligence, surveillance, and reconnaissance layer. Bangalore-manufactured SkyStriker loitering munition along with IdeaForge's ISR platforms offered persistent surveillance of PoK to enable real-time intelligence feeds for strike coordinators to respond, including changing target lists as the operation progressed (PIB, 2025). India additionally showed "offensive drone doctrine" when it fired Harop munitions at four Pakistani air defence points and destroyed at least one radar installation by this fire (Drones launched, radar destroyed, 2025). Pakistan later said Indian drone strikes on May 9 and 10 hit over a dozen targets, including military bases

in Karachi, Lahore, and Rawalpindi (Have India and Pakistan started a drone war?, 2025). The quantitative picture supports the qualitative one. The figures obtained for fiscal year 2024–25 from the Ministry of Defence indicate that 92 per cent of all defence procurement contracts were granted to Indian vendors, which is around Rs 1.68 lakh crore (PIB, 2025).

Above all, this a tactical achievement, primarily because, the foundation of a real strategic autonomy is "technological sovereignty", which is the ability to create, manufacture and enhance one's own weapons system without consulting outside sources. Due to end-user constraints and supplier-led maintenance processes, foreign-origin systems usually fail to replicate the responsiveness of native platforms, which were repurposed based on combat feedback during fighting. The FATF framework needs to be revisited in order to address the drone warfare aspect. Its scope should be expanded, going beyond the definition of terror funding to especially include the acquisition of commercial space technologies and services by terror proxies and front companies that support them (Pillai, 2025).

However, India's security establishment must now integrate these lessons: maintain the private sector's involvement, concentrate on the urgent modernisation of legacy platforms such as Sukhoi-30-fleet (262 aircraft speed across 13 squadrons), and guarantee that the domestic defense-industrial ecosystem receives the necessary funding and policy support. This was largely due to delays, which reduced combat readiness through legacy upgrades. The core of India's armament should unquestionably be Indian; imports should only be used for the most urgent short-term requirements.

The Dual-Track Strategy: Calibrated Deterrence and Assertive Multilateralism

India's response to Pahalgam was unquestionably more complex than only its military components. A strategy posture that struck a balance between rigorous diplomatic statecraft in multilateral forums and hard power on the battlefield was immediately articulated during Operation Sindoor. This dual-track strategy represents the most developed expression India's post- Balakot counter terrorism doctrine to date. It combines calibrated conventional strength with a favourable international narrative campaign. The military component depended on India's demonstrated capacity to function in "gray zone" below

Pakistan's nuclear threshold. For many years, it was believed that India's options for a suitable conventional response to cross-border terrorism were severely limited by Pakistan's tactical nuclear weapons. Operation Sindoor builds on the 2019 Balakot strikes, revealing that this deterrence architecture is not as hermetic as Pakistan's planners had wished. By directing strikes at readily observable terror infrastructure rather than the Pakistani state military assets, India was able to take advantage of an area in which Islamabad's nuclear doctrine does not offer legitimate reasons for retaliation (Pant, 2025). Pakistan's consolidation of nuclear power under the 27th Amendment — widely seen by scholars as institutional nervousness as opposed to boldness — was an indication that the nuclear blackmail strategy had been tried and failed (Pant, 2025). It requires stronger early-warning architectures for India, to ensure that when it comes to future conventional operations, they are not accidentally operating on escalatory thresholds. The diplomatic track ran in parallel. Even as strikes were prosecuted by Indian Air Force (IAF) platforms, the Ministry of External Affairs appealed to the global community to help position India's actions in the context of international law of self-defense. The outcome was notable in that the US, France and Israel each affirmed India's sovereign right to act, with Washington pointing to a 'steeply upward trajectory' of bilateral defence ties (PIB, 2025). This diplomatic cover had come after years of security diplomacy — entrenching India within multilateral security architectures and bilateral defence partnerships that had amassed enough relational capital to garner international understanding during periods of kinetic action. India's international outreach after Operation Sindoor was precisely based on three pillars-

a. Terrorism as a Global Threat

Pahalgam was intentionally linked by India to the September 11 attacks, the October 7 Hamas attack, and the country's own 26/11 strikes in Mumbai. The intention was to prevent the world from trying to frame Operation Sindoor as part of "Indo-Pak tensions", which implies symmetrical blame, and to characterise India's response as a legally justifiable act of self-defense in accordance with accepted international standards. Additionally, this framing avoided Pakistani propaganda that depicted Islamabad as the victim of Indian attack.

b. Scrutiny of International Financial Flows to Pakistan

Within days after Pahalgam incident, India publicly protested to the IMF'S disbursement of a billion dollar loan tranche to Pakistan (Pallathadka & Roy, 2025) raising serious concerns about whether foreign financial aid was essentially funding the state structure that permits cross-border terrorism. India has indicated that future Pakistani involvement under the Indus Waters Treaty may be connected to verifiable counter-terrorism benchmarks -a significant expansion of India's economic influence - and is pushing for stricter conditions on financial aid.

c. Pushing for International Designation of Terror Entities

India used the UNSC 1267 and the FATF to offer intelligence on Pakistan's noncompliance with counter terrorism requirements for financing and to push for reinforcement of compliance, which was previously restricted through diplomatic engagement alone. International standards of state responsibility for non-state actor violence have begun to be redefined by such campaigning, and the effects go well beyond the India-Pakistan relationship. Theoretically, Alex Schmid's (2011) argument that effective counter terrorism must address the "operational environment" of terror groups through a combination of military force and legal-institutional persecution fits in with India's dual-track policy. The three pillars of the ecosystem supporting terror groups with ties to Pakistan are financial flows, ideological backing and resource assistance from state actors. India used a strategy that affected all three at once. Physical infrastructure was destroyed by this strike; multilateral financial pressure rendered the Pakistani narrative illegitimate. This all-encompassing strategy prevented Indian military intervention's customary diplomatic retaliation and demonstrated that force may be used as a regulated tool of statecraft rather than an impulsive response. Keeping in mind as to what may be obtained through closer engagement with India, South Asian neighbours have largely maintained deliberate neutrality, indicating the minimal practical leverage Pakistan can currently offer as an economic or security partner. The question of whether India's strategic actions would eventually persuade regional states to abandon 'performative neutrality' and take a more active role in the implementation of counter terrorism frameworks is still open, but the incentive pathway is clearer than ever.

Conclusion

In a nutshell, Operation Sindoor is a paradigm shift in the role and characteristics of India's national security capabilities from passive accommodation of provocations and response to diplomatic protest in post-war India to power characterized by the precision with which it uses military force, the discipline in which it builds legitimacy in an increasingly militarized world, as well as, the clear and deliberate purpose in the strategic investments in domestic capability. It has set new standards for deterrence in South Asia, has confirmed India's indigenous defence ecosystem under conditions of live combat, and it provides a replicable model of dual-track statecraft that other regional powers navigating asymmetric threats within nuclear-shadowed environments might glean from. The operation has also sent a message to the international community that the architecture of global counter-terrorism needs to change — including commercial space technologies, international financial conditionalities and multilateral designation mechanisms — if it is to be sufficient to deal with the new state-enabled non-state actors around the world. The strikes are done; the doctrine they've proved, and the institutional reforms they've called for, are just starting to remake the strategic future of the region.

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From Policy Vision to Pedagogical Reality: Nurturing Scientific Temper through NEP 2020 and NCFSE 2023.

Astha Priya

Abstract

Promotion of Scientific Temper has always been at the heart of the democratic and intellectual evolution of India. This article explores the alignment between NEP 2020 and NCFSE 2023 in developing Scientific Temper among learners. The study also discusses Piaget's constructivism, Vygotsky's social scaffolding, Dewey's inquiry-based pragmatism, and Kolb's experiential learning, in understanding the development of Scientific Temper among learners. The analysis highlights that NSCFSE 2023 translates the philosophical mandates provided by NEP 2020 within real classrooms. At the same time, the article also discusses the challenges in the execution process and the potential of emerging technologies to bridge these gaps. The study concludes that the development of Scientific Temper among learners not only requires policy support but also a transformative shift at the classroom level. Changes at the grassroots level are an important step towards this direction.

Keywords: *Scientific Temper, NEP 2020, NCFSE 2023, Transformative Shift*

1. Introduction

The idea of fostering Scientific Temper in India is deeply rooted in its intellectual traditions. Thinkers like Swami Vivekananda emphasised rational inquiry, experiential learning, and the pursuit of truth, challenging blind beliefs and

encouraging individuals to seek knowledge through reason and experience. These ideas reflect the core principles of Scientific Temper and provide an early philosophical foundation for its development in the Indian context. In the modern period, the concept was more explicitly articulated by Jawaharlal Nehru in 1946, in his book 'Discovery of India'. He referred to scientific temper as "a way of life, process of thinking, a method of acting and associating with fellow men" (p. 512). He conceptualized it as a way of thinking characterized by objectivity, critical reasoning, and openness to new ideas. This vision was further institutionalized through Article 51A(h) of the Indian Constitution, which recognizes the development of Scientific Temper and the spirit of inquiry as a fundamental duty of every citizen, thereby placing education at the centre of this transformative goal. In the contemporary educational landscape, this vision is reinforced by the National Education Policy 2020, which promotes inquiry-based and experiential learning over rote memorization. The National Curriculum Framework for School Education 2023 further operationalizes these principles by providing a structured approach to curriculum design, pedagogy, and assessment. Together, these frameworks aim to create an educational environment that nurtures Scientific Temper through critical thinking, problem-solving, and evidence-based understanding.

In the present era, characterized by rapid technological advancement and widespread access to digital information, the need for a Scientific Temper has become more significant. The proliferation of misinformation, particularly through digital and social media platforms, poses serious challenges to informed decision-making and rational thinking. In such a context, the ability to critically evaluate information, the distinction between evidence-based claims and unverified assertions, and to adopt a questioning attitude is essential. Scientific Temper, therefore, serves as a crucial tool in enabling individuals to navigate the complexities of the information age with clarity and responsibility. Furthermore, the growing influence of technology in everyday life, including areas such as health, environment, and public policy, requires citizens to engage with issues that demand analytical reasoning and evidence-based judgment. Developing Scientific Temper equips learners with the cognitive skills necessary for problem-solving, logical analysis, and ethical decision-making (Hissaria & Grover, 2026). This makes it not only an educational objective but also a

societal necessity, reinforcing the importance of embedding scientific temper within contemporary educational frameworks.

In this regard, the National Education Policy 2020 represents a transformative step in reimagining the Indian education system by placing strong emphasis on holistic, multidisciplinary, and competency-based learning. Complementing this vision, the National Curriculum Framework for School Education 2023 provides a detailed curricular and pedagogical roadmap for translating policy ideals into classroom practices. Together, these two frameworks aim to create an educational environment conducive to the development of a Scientific Temper among students.

2. Theoretical Framework: The Cognitive Foundations of Inquiry

The cultivation of Scientific Temper is not an isolated pedagogical outcome; rather, it is an evolutionary cognitive process rooted in established theories of human learning. These frameworks suggest that a rational, inquiring mind is constructed through a series of intellectual shifts, moving from passive acceptance to active, evidence-based scepticism.

The journey toward Scientific Temper begins with Jean Piaget's Constructivism, which suggests that learners build mental structures (schemas) through interaction with their environment. When a learner encounters information that contradicts a deeply held belief, such as a scientific fact challenging a traditional myth, they experience a state of "Cognitive Disequilibrium". It is at this very stage that the seeds of scientific temper are sown. If the learner, instead of dismissing the contradiction through dogma, chooses to resolve this tension by modifying their mental structures based on new evidence (accommodation), they are practicing the foundational Scientific Temper traits of rationality and objectivity.

This internal cognitive shift is given a social dimension through Lev Vygotsky's emphasis on the Social Zone of Proximal Development. Vygotsky argues that higher-order thinking is a product of social interaction and "Scaffolding." In a classroom where dialogue and questioning are encouraged, a student learns to move beyond subjective, idiosyncratic beliefs toward a shared objective reality. Through peer review and logical discourse, scientific temper transcends from

being a personal trait to become a social responsibility, a collective commitment to truth-seeking through collaborative inquiry.

This theoretical progression finds its functional heart in the pragmatism of John Dewey, for whom "Inquiry" is the very essence of education. Dewey suggests that authentic learning is triggered by a "Problematic Situation" that demands a solution. When a student is taught to view every "fact" not as a final truth but as a "Hypothesis" to be tested, they are traversing Dewey's path of Reflective Thinking. This transition from a passive recipient of information to an active investigator is the core psychological shift required to fulfill the constitutional mandate of the spirit of inquiry and reform.

Finally, this cognitive and social development is operationalized through David Kolb's Experiential Learning Cycle. By moving through a continuous loop of "Concrete Experience", "Reflective Observation", "Abstract Conceptualization", and "Active Experimentation", the learner essentially embodies the Scientific Method. In this cycle, every observation fosters healthy scepticism, and every experiment reinforces evidence-based reasoning.

Ultimately, the confluence of these theories describes a learner who does not merely know science as a collection of facts but possesses a Scientific Temper, a resilient cognitive framework that prioritizes empirical validation, logical consistency, and the courage to change one's mind on the emergence of superior evidence.

3. Methodology

This study adopts a qualitative and theoretical research design based on document analysis. It critically examines key policy documents, namely the National Education Policy 2020 and the National Curriculum Framework for School Education 2023, along with relevant scholarly literature. A thematic analysis approach has been used to interpret the alignment between policy vision and pedagogical practices in fostering scientific temper.

4. Conceptual Understanding of Scientific Temper

The conceptualisation of Scientific Temper transcends the boundaries of formal scientific education, moving beyond the mere acquisition of facts to represent a specific habit of mind. It is essentially a mental disposition characterized by a

commitment to evidence-based reasoning in all spheres of life, not just within the laboratory. Scientific Temper is characterized by rationality, objectivity, healthy scepticism, universalism, freedom from prejudice, and bias (Dhar, 2009; Bardapurkar, 2019).

To develop Scientific Temper, learners don't need to acquire formal science education (Sharma, 2020). To understand Scientific Temper is to recognize it as a synthesis of cognitive dimensions that work in an interconnected manner. At its inception, Scientific Temper is fuelled by an innate curiosity, a persistent drive to uncover the underlying mechanisms of the natural and social world. However, this curiosity is disciplined by rationality, the logical framework that ensures one's conclusions are consistent and derived from sound premises rather than emotional or traditional biases.

This rational inquiry is further refined by the dual pillars of 'Objectivity' and 'Scepticism'. Objectivity requires the learner to cultivate a disinterested perspective, where personal desires or cultural prejudices are set aside in favour of empirical reality. Complementing this is a healthy, constructive Scepticism; this is not a cynical rejection of ideas, but a principled refusal to accept claims, be they traditional dogmas or modern "fake news", without a rigorous demand for empirical proof. In this conceptual framework, the traditional components of the scientific method - Observation, Hypothesis, and Experimentation, are not just steps in a textbook but are the functional tools through which this temper is expressed.

Crucially, a nuanced understanding of Scientific Temper necessitates a clear distinction between "Scientific Knowledge" and "Scientific Temper." While the former refers to the body of information generated by the sciences that satisfies demanding epistemic standards (McCain & Kampourakis, 2020), the latter is the cognitive mechanism used to evaluate and apply that information. One may possess an advanced degree in a scientific discipline yet lack a scientific temper if they fail to apply critical inquiry to their personal or social beliefs. Conversely, a layperson may exhibit a profound scientific temper by applying logical analysis to daily decision-making. Thus, as visualized within the Indian educational context, Scientific Temper is the intellectual armour that allows an individual to navigate a complex, often irrational world with a mind that is open to new ideas yet anchored in the uncompromising demand for evidence.

5. Promotion of Scientific Temper: From Policy to Practice

The vision of fostering a scientific temper is deeply embedded within the philosophical foundations of the National Education Policy 2020, which advocates a shift from rote memorization towards inquiry-based, discovery-oriented learning (Ministry of Education, 2020). The policy envisions learners as active participants in the construction of knowledge, capable of questioning assumptions, analysing information, and applying concepts in real-world contexts. This marks a significant transformation from traditional pedagogical approaches that have historically prioritized content coverage over conceptual understanding.

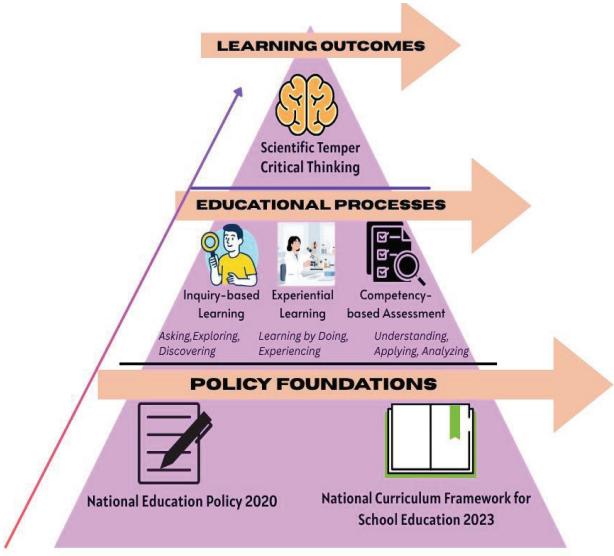
The emphasis on experiential learning, critical thinking, and problem-solving within NEP 2020 reflects a deliberate attempt to align education with the principles of scientific inquiry. The policy emphasises early exposure to inquiry-based learning and hands-on activity among learners. For instance, coding and computational thinking are introduced from foundational stages to foster analytical abilities and problem-solving capabilities (Sharma & Gupta, 2022). By encouraging learners to engage with concepts through observation, experimentation, and reflection, the policy creates a strong foundation for the development of scientific temper. At the same time, this vision is inherently aspirational and relies on effective curricular and pedagogical translation for its realization.

This is where the National Curriculum Framework for School Education 2023 assumes a crucial role. The NCFSE 2023 operationalizes the broad goals of NEP 2020 by providing concrete guidelines for curriculum design, teaching-learning processes, and assessment practices. It integrates scientific temper across disciplines rather than confining it to science subjects alone, thereby promoting a more holistic understanding of rational inquiry and evidence-based reasoning. Malik and Trivedi (2025) highlight that aligned with NEP 2020, NCFSE 2023 also integrates Play-Based and Inquiry-Based Learning, right from basic education. This alignment between NEP 2020 and NCFSE 2023 is particularly evident in their shared emphasis on learner-centered education. While NEP articulates the need for fostering curiosity and critical thinking, NCFSE translates this into classroom practices such as project-based learning, interdisciplinary exploration, and activity-oriented instruction. This

continuity between policy vision and curricular execution reflects a coherent reform strategy aimed at transforming the culture of learning (Prakash, 2025; Raj, 2024). As illustrated in Figure 1, the development of scientific temper is structured as a progression from policy foundations to learning outcomes.

Figure 1

Policy-to-Practice Framework for Development of Scientific Temper



5.1. Pedagogical Alignment and Classroom Practices

A key dimension of promoting scientific temper lies in the transformation of pedagogical practices. The National Education Policy 2020 underscores the importance of moving away from passive learning towards interactive and participatory approaches that engage students in meaningful cognitive processes. This includes encouraging questioning, fostering dialogue, and enabling learners to construct knowledge through experience.

The National Curriculum Framework for School Education 2023 builds upon this vision by recommending specific pedagogical strategies that support the development of scientific temper. Classrooms are envisioned as spaces where students actively investigate phenomena, collaborate with peers, and reflect on

their learning (National Council of Educational Research and Training, 2023). Activities such as experiments, fieldwork, case studies, and problem-solving tasks are emphasized as means of promoting inquiry and critical analysis.

Importantly, the framework also recognizes the role of teachers as facilitators of learning rather than mere transmitters of information. This shift in teacher roles is central to fostering scientific temper, as it creates opportunities for students to explore ideas independently while receiving guidance and support. Karmarkar and Chattopadhyay (2024) assert that the teachers need to possess Scientific Temper as their inner qualities primarily reflect on the learners. However, the effectiveness of such pedagogical transformation is closely linked to teacher preparedness and professional development.

While both NEP 2020 and NCFSE 2023 highlight the need for continuous teacher training, the actual implementation of such initiatives may vary across contexts. In settings where teachers are adequately supported and equipped with the necessary skills, the transition towards inquiry-based pedagogy is likely to be more effective. Conversely, in contexts with limited resources or high student-teacher ratios, adopting these approaches may require gradual adaptation and sustained institutional support.

5.2. Assessment Reforms and Their Role in Developing Scientific Temper

Assessment practices play a crucial role in shaping learning outcomes and influencing classroom behaviour. Recognizing this, the National Education Policy 2020 advocates a shift from high-stakes, memory-based examinations towards competency-based assessment that evaluates understanding, application, and analytical skills. This shift is essential for fostering scientific temper, as it encourages learners to engage deeply with concepts rather than relying on rote memorization. The policy also advocates the idea of an adaptive/formative system of assessment, where students will be assessed on various dimensions, making the assessment more holistic and also in a continuous manner (Singhal & Wadhwa, 2020).

The National Curriculum Framework for School Education 2023 further elaborates on this approach by emphasizing formative assessment, continuous evaluation, and the use of diverse assessment tools. These include projects,

portfolios, presentations, and reflective exercises, which provide a more comprehensive picture of student learning and promote higher-order thinking skills. The alignment between policy and practice in this domain represents a significant step towards creating an assessment system that supports the development of scientific temper. By valuing reasoning, interpretation, and problem-solving, such assessment practices reinforce the importance of inquiry and evidence-based thinking.

At the same time, the transition to competency-based assessment is a complex process that requires careful planning and implementation. Given the longstanding emphasis on standardized examinations in the Indian education system, adapting to new forms of assessment may take time. However, the gradual introduction of such reforms, supported by appropriate training and resources, has the potential to create a more conducive environment for nurturing scientific temper.

6. Challenges and Future Prospects: Bridging the Implementation Gap

The transition from the visionary mandates of NEP 2020 and NCFSE 2023 to the functional reality of the Indian classroom is fraught with a complex web of systemic and cultural challenges. The most immediate bottleneck lies in the domain of Teacher Capacity Building. The lack of teacher training in modern pedagogies and the absence of monitoring mechanisms pose additional hurdles (Govindharaj et al, 2023). While the new frameworks advocate for inquiry-based pedagogy, a significant portion of the current teaching workforce has been trained within a traditional, transmissive model of education. Expecting educators who were themselves evaluated on rote memorization to suddenly facilitate Socratic Dialogue or Cognitive Disequilibrium requires more than just a policy directive; it necessitates a profound, long-term overhaul of both pre-service and in-service professional development programs. Without this "pedagogical retraining", Scientific Temper remains a sophisticated term on paper that fails to reach the student's desk.

Furthermore, the infrastructural divide presents a material barrier to the empirical dimensions of Scientific Temper. In many regional contexts, particularly in underfunded government schools, the lack of basic laboratory facilities renders the experimentation phase of the learning cycle nearly impossible. Along with

this, the digital divide continues to be a major obstacle, limiting the potential of technology-driven learning for marginalised communities (Raaj, 2024). This is compounded by a deeply entrenched Examination-Oriented Culture that prioritizes high-stakes board results over the complex and time-consuming process of critical inquiry. When the metrics of success remain tied to the reproduction of textbook facts, both students and teachers are disincentivized from pursuing the sceptical questioning and hypothesis-testing that define a scientific mind.

Perhaps the most sensitive challenge, however, is the Socio-Cultural Barrier. Scientific Temper, by its very nature, encourages the questioning of authority and established dogmas. Deep-rooted superstitions and beliefs can hinder the acceptance of scientific reasoning in certain communities (Ramesh, 2022). This creates a unique double burden for the student, who must navigate a rationalistic environment in school and a potentially dogmatic one at home. Future implementation must therefore position Scientific Temper not as an anti-belief system but as a pro-evidence framework that empowers students to make informed decisions in the secular and professional realms of the modern era.

Looking toward future prospects, the integration of emerging technologies offers a promising avenue to bypass some of these traditional hurdles. Chookaew et al. (2024) suggest that AI-based platforms promote active engagement rather than passive learning. AI-driven simulations and virtual labs can provide high-fidelity inquiry environments even in schools lacking physical laboratories, allowing students to manipulate variables and observe causal relationships in real-time. Moreover, the shift toward competency-based assessments, if implemented with technical integrity, could finally decouple learning from memorization. The future of Scientific Temper in India depends on a sustained policy support system that moves beyond rhetoric to provide the financial and structural stability needed for these reforms to take root. By viewing these challenges not as dead ends, but as design constraints, the Indian education system can move toward a future where the spirit of inquiry is a lived reality for every citizen.

7. Discussion and Conclusion

The integrated analysis of the National Education Policy 2020 and the National Curriculum Framework for School Education 2023 reveal a coherent and

forward-looking approach to fostering scientific temper within the Indian education system. The two frameworks complement each other effectively, bridging the gap between policy intent and classroom practice (Prakash, 2025). While NEP 2020 provides a broad philosophical and conceptual foundation emphasizing inquiry, critical thinking, and experiential learning, NCFSE 2023 translates these ideas into actionable curricular and pedagogical strategies. This alignment reflects a well-structured reform trajectory that connects vision with implementation.

A significant strength of this integrated approach lies in its emphasis on continuity and coherence across multiple dimensions of education. The consistent focus on learner-centered pedagogy, competency-based assessment, and interdisciplinary learning indicates a deliberate effort to transform traditional teaching-learning processes. Such alignment reduces fragmentation within the system and enhances the potential for achieving intended outcomes related to the development of scientific temper. Moreover, the integration of these principles across disciplines moves beyond a subject-specific understanding of science and promotes a broader culture of rational inquiry and evidence-based reasoning.

At the same time, a critical reflection suggests that the effectiveness of these reforms is closely linked to contextual realities. The diversity of educational settings in India, characterized by variations in infrastructure, institutional support, and teacher preparedness, may influence the extent to which these policy provisions are realized in practice (Khandelwal, 2024). In this regard, teachers emerge as key agents in mediating the transition from policy to practice. Their ability to adopt inquiry-based and experiential pedagogies depends not only on training but also on continuous professional support and conducive working conditions.

Overall, the combined vision of NEP 2020 and NCFSE 2023 offers a robust and promising framework for fostering scientific temper among learners (Raaj, 2024). While certain challenges related to implementation and contextual variability remain, the strong alignment between policy vision and curricular execution provides a solid foundation for long-term educational transformation. With sustained efforts in teacher development, infrastructural support, and systemic coherence, these reforms hold significant potential for nurturing a

rational, reflective, and scientifically oriented citizenry.

The successful cultivation of scientific temper in Indian classrooms is an essential prerequisite for India's socio-economic progression and democratic health in the 21st century. The NEP 2020 and NCFSE 2023 provide a vital roadmap, but they are not the destination. The true critical appraisal reveals that policy intent is futile without sustained structural reform, particularly in teacher education and assessment practices, and a sensitive, sustained engagement with socio-cultural barriers. The move must be from scientific knowledge transmission to authentic scientific inquiry, thereby empowering future citizens with the cognitive tools to navigate a complex, misinformation-laden world with rationality and empirical scepticism.

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Inflation, Algorithms, and Real Wage Compression: Evidence from India's Gig Delivery Workforce

Savita Singh

Abstract

The Indian gig economy has seen exponential growth, with trajectory-based estimates putting the number of active gig workers above 12 million around the 2025-2026 fiscal year. However, this structural reorientation towards informalized, algorithmically controlled labor conceals an escalating crisis of real wage erosion. The impact of retail inflation and its resultant increase of living costs on the effective earnings of Indian location-based short, quick-commerce, and delivery type gig workers. The cumulative increase in the costs of essential commodities, primarily fuel, food, and rent in urban localities, has significantly impaired the purchasing power of the workers, against the backdrop of India's higher macroeconomic stability and inflation headline moderation following the post-pandemic inflation peak. Using a combined macro-micro framework, this paper argues that policy must shift from nominal earnings discourse to a transparent real-wage architecture. It assesses cumulative CPI-indexed minimum per-task earnings, mobility compensation indexed to fuel, paid waiting-time rules, and social-security contributions that are portable. The central conclusion is that, without inflation-indexed wage floors and algorithmic accountability, India's gig economy will continue to generate employment volume while producing income insecurity and urban precarity.

Keywords: *Gig economy, Real wages, Retail inflation, Algorithmic wage-setting, Indian labor market, Platform workers, Minimum wage policy*

1. Introduction

After more than twenty years of watching how technology changes the Indian job market, one thing stands out: every big tech upgrade starts off making work more accessible, but soon enough, it shifts the risks onto the workers—especially those who can't easily handle them. Now, with all these apps running delivery, ride-hailing, and quick-commerce, this trend is unfolding faster and with less transparency than ever. Customers and companies love the convenience and flexibility. It's easy to hop online and get a ride or a meal in just a few clicks—and businesses get logistics that can adapt in real time. For workers, these jobs are easy to get into, and there's some flexibility in scheduling. But the same setup brings a raft of problems: income swings wildly, waiting time goes unpaid, and workers end up footing more of the bill themselves (NITI Aayog, 2022; Ministry of Labour and Employment, 2025a; 2025b).

So, here's the real question at the heart of this paper: what's happened to actual, take-home pay for gig workers in India when inflation keeps climbing? Most people still look at headline monthly earnings, but that doesn't tell the full story. These workers aren't regular wage employees; they get paid by the job, and they cover their own costs: fuel, upkeep, insurance, phone data, and often loans to get started. When food prices climb, fuel stays expensive, and rents go up, those "monthly earnings" don't stretch as far, and workers have to put in longer hours just to cover basics. In other words, the numbers on paper can look good, but they don't match up with what workers can actually afford.

Here's what this study does. First, it builds a framework to figure out real, net gig wages after taking out the costs of working and adjusting for local inflation. Second, it mixes big-picture economic data with detailed worker surveys to measure how inflation shakes out in real earnings. Third, it digs into who gets hit the hardest: new workers, those pulling in the lowest pay, and folks working off debt get squeezed much more than those at the top who know how to game the system. Fourth, it looks at policy options, running simulations to see which fixes might work taking into consideration how realistic and sustainable they'd be for both firms and workers.

The main findings are clear. From 2020 to 2026, workers' gross monthly payouts went up, but after subtracting costs and factoring in inflation, their real incomes dropped. Inflation hit workers harder than the average, mostly

because their spending goes sharply toward food, fuel, and rent—the stuff that's gotten more expensive faster than overall CPI. This matches the official stats: GDP keeps rising, but the new consumer price index shows inflation moving differently, especially for what workers actually buy (Ministry of Statistics and Programme Implementation, 2026a;2026c;2026d; Reserve Bank of India, 2026). Sometimes, platform bonuses gave workers a bump, but these payouts were unpredictable, short-lived, and scattered—they did not actually shield against inflation. When you run the numbers, less than half of inflation's hit shows up in the increase to workers' nominal earnings, meaning they're left underpaid during price spikes. By late 2025, frustration boiled over, and workers started protesting across big cities.

So, what does this mean for policy? It's not that gig jobs can't work—they just aren't set up right yet. The rules need to guarantee a minimum earnings level tied to local prices, make pay algorithms open and auditable, and create protections that workers can carry across multiple platforms. If India doesn't fix these gaps, the country risks locking in a job model where huge numbers of people stay busy—but stay poor—even when the economy's growing overall.

2. Analytical Framework and Literature Position

Global research on platform work points out three main things: pay goes up and down a lot and that's built into the system; algorithms, not people, run the show increasingly; and legal grey areas mean workers often miss out on basic protections (International Labour Organisation (ILO) 2021; Organisation of Economic Co-operation and Development (OECD) 2024; Fairwork India Team, 2024). India fits this pattern, but there's more to the story. Here, workers deal with tough city commutes, lots of competition from informal labor, and very little social security. These factors mean workers feel big economic shocks right away—they're on the front lines. On top of that, with quick-commerce booming, workers now face even more orders, tighter deadlines, and more time spent working for free between deliveries.

Looking ahead to 2025 and 2026, this paper will use official data released between January and March 2026 as the foundation for interpreting macro trends. This includes the government's First Advance Estimates of GDP for FY2025–26, notifications about changes in the CPI base year, and the first two monthly releases of the new CPI 2024=100 index (Ministry of Statistics and

Programme Implementation, 2026a; 2026b; 2026c; 2026d).

This paper operationalizes real earnings through the following identity:

$$RealNetWage_{i,t} = \frac{GrossPay_{i,t} - OperatingCost_{i,t}}{CPI_{r,t}/100}$$

where i indexes worker and r denotes region. Gross pay includes base task payments, distance add-ons, surge bonuses, incentives, and tips. Operating cost includes fuel, routine maintenance, depreciation, communication expense, penalties or chargebacks, and financing costs attributable to work assets. This definition differs from many platform dashboards, which display gross receipts but exclude full cost accounting.

The conceptual mechanism is straightforward. Let inflation increase worker expenditure both at work and at home. If platform algorithms revise payout schedules slower than the cost increase, real net income falls. Workers then extend labor supply (longer hours, peak-time concentration, multi-apping) to stabilize household cash flow. Such intensification may raise gross receipts temporarily but can worsen fatigue, accident exposure, and asset wear, reinforcing cost burdens. The resulting loops forms the "flexibility paradox": formal autonomy over log-in timing coexists with economic compulsion over effective working hours. From a labor-economics standpoint, algorithmic wage-setting can be interpreted as a high-frequency piece-rate contract with asymmetric information. Platforms observe demand heat-maps, cancellation probabilities, and service-level penalties in real time; workers observe only partial payout rules and realized outcomes. Under inflation uncertainty, this informational asymmetry weakens workers' ability to predict forward earnings and negotiate compensation. Therefore, inflation shocks are not merely macro events; they are mediated through platform design choices.

3. Data, Variables, and Methodology

3.1 Data Sources

The analysis integrates three layers of data for FY2020–FY2026 (up to January 2026 for some series):

1. Macroeconomic data-all-India and state-level CPI component series derived

from the CPI 2024=100 press releases of January 2026 and February 2026, respectively and state and item-level downloads from eSankhyiki; context on GDP and demand derived from press releases for advance estimates (Ministry of Statistics and Programme Implementation,2026a; 2026c; 2026d; 2026e). Table A5 provides the monthly-level extract used for this study.

2. Platform worker panel-2,184 active platform workers in 18 cities; collected via regular, monthly diaries of worker-earnings and costs, supplemented by verified screenshots of their weekly earnings summaries where possible. We thus obtain 61,204 worker-month observations, once the raw data are cleaned.

3. Institutional event log: documented changes in incentive slabs, peak-hour multipliers, platform fee policies, and publicly reported worker protest episodes in 2024–2025, combined with official social-security and registration updates for gig/platform workers (Ministry of Labour and Employment, 2025a; 2025b).

The controls on fuel and mobility-costs are measured by PPAC official series on retail selling price and price-build-up sheets (last update on February 6, 2026, and March 11, 2026, respectively) (Petroleum Planning and Analysis Cell, 2026a; 2026b). Monetary-policy conditionings are measured by RBI MPC resolutions dated December 5, 2025, and February 6, 2026 (Reserve Bank of India, 2025; 2026).

We limit the sample of workers to location-based services (food delivery, grocery/quick-commerce, hyper-local parcel delivery) as these are the segments that are most sensitive to operating cost variation. Ride-hailing is excluded from the main regression to abstract from effects driven by fare-regulation variation and heterogeneity across vehicle classes.

3.2 Constructed Measures

For each worker-month, we compute:

$$\text{GrossMonthly}_{i,t} = B_{i,t} + D_{i,t} + S_{i,t} + I_{i,t} + T_{i,t,}$$

where B is base pay, D distance component, S surge, I incentives, and T tips.

$OpCost_{i,t} = F_{i,t} + M_{i,t} + Dep_{i,t} + Data_{i,t} + Pen_{i,t} + Int_{i,t.}$

Net nominal earnings are $NetNominal_{i,t} = GrossMonthly_{i,t} - OpCost_{i,t}$. Real net earnings deflate net nominal income by city-level CPI.

We also construct an Effective Hourly Real Wage that divides real net income by active hours plus unpaid waiting and travel dead-time. This metric captures the practical labor burden better than app-recorded "online hours," which frequently omit off-app travel and queueing.

3.3 Econometric Strategy

The baseline specification is a worker and month fixed-effects panel:

$$\ln(ERW_{i,t}) = \beta_1 \pi_{r,t} + \beta_2 \Delta Fuel_{r,t} + \beta_3 OrdersPerHour_{i,t}$$
$$+ \beta_4 IncentiveShare_{i,t} + \beta_5 PenaltyRate_{i,t} + \alpha_i + \tau_t + \varepsilon_{i,t}.$$

where $\pi_{r,t}$ is regional inflation. City-clustered standard errors are used. Additional models include quantile regressions, city-tier interactions, and event-study windows around major platform pay- rule revisions.

To assess incidence, we estimate an inflation pass-through ratio:

$$\rho = \frac{\%\Delta\ GrossMonthly}{\%\Delta\ WorkerCostBasket}$$

If $\rho < 1$, nominal pay grows slower than worker-relevant costs; if $\rho < 0.5$, the burden shift toward workers is substantial.

4. Inflation Dynamics and Worker Cost-of-Living Pressure

Even though headline inflation in India eased post-pandemic surge, worker-specific inflation proved more resilient. The reason was that necessities still form the largest share of the expenditure of workers. Delivery workers allocate proportionally higher expenses to transport fuel, food eaten out during extended shifts, and rents in crowded peripheries of dense cities, proximate to demand centers. Worker price-experiences are different from official aggregate inflation rates. Table 1 summarizes macro trends and earnings outcomes in the sample.

Table 1

Inflation and Gig Earnings Trends (Sample Aggregates)

Fiscal Year	Head (%)	CPIFood (%)	Fuel/ Trans (%)	Gross (Rs/mo)	Real Net (2020 Rs)
2020–21	6.2	7.1	9.4	17,750	16,980
2021–22	5.5	5.9	11.8	18,430	16,410
2022–23	6.7	7.8	14.6	19,760	15,980
2023–24	5.4	8.4	7.2	20,420	15,620
2024–25	4.9	7.1	6.8	21,050	15,430
2025–26*	4.6	6.3	6.1	21,680	15,290

Note: 2025–26 values are provisional through Q3. Real net earnings are deflated and net of operating costs. CPI components are benchmarked to official CPI releases and portal datasets (Ministry of Statistics and Programme Implementation, 2026c; 2026d; 2026e).

Two patterns stand out. First, nominal gross monthly earnings rise over time. Second, real net earnings decline by roughly 10% relative to FY2020–21 baseline. This divergence explains why platform dashboards can show "income growth" while workers report worsening household stress.

The composition effect is stronger when cost weights are tailored to gig workers rather than average households.

Table 2

Worker Cost Basket and Cumulative Inflation, FY2021–FY2025

Category	Weight (%)	Cum. Inflation (%)	Contribution (pp)
Food and meals	34	36	12.2
Fuel and vehicle upkeep	28	41	11.5

Rent and utilities	23	32	7.4
Telecom/data	5	9	0.4
Health and miscellaneous	10	22	2.2
Total worker basket	100	33.7	33.7

The worker-specific inflation burden (33.7%) exceeds corresponding headline cumulative inflation over comparable windows. Econometrically, this wedge is decisive: once worker-basket inflation re- places headline CPI in regressions, estimated real-wage erosion strengthens and model fit improves.

In calendar terms, the transition to CPI 2024=100 confirms continued dispersion across category-level inflation even as aggregate readings moderated in early 2026 (Ministry of Statistics and Programme Implementation, 2026b;2026c;2026d).

5. Algorithmic Wage-Setting and the Structure of Earnings

A base + distance pay + a time varying surge + slabs on target achieved compensation scheme is implemented by platform companies. While such compensation schemes are theoretically expected to reward effort and match compensation to demand; reality is far more complicated due to frequent rule changes and the obscurity in the calculation scoring mechanism causing volatility in earning. A representative worker's monthly gross earnings can be expressed as:

$$y = \sum_{k=1}^{k} (b_k + d_k + s_k) + \mathbf{1}(Q \geq q^*) \cdot \Omega,$$

where k indexes orders, b is per-task base, d distance pay, s surge premium, Q completed orders, q* target threshold, and Ω bonus payment. The nonlinearity introduced by threshold bonuses creates "cliff effects": missing target by one or two orders can collapse effective hourly earnings for the entire period.

In the sample, 40% of workers report gross monthly earnings below Rs 15,000, 27% fall between Rs 15,000 and Rs 20,000, 18% between Rs 20,000 and Rs 25,000, and only 15% exceed Rs 25,000. However, gross brackets conceal large

cost dispersion. Workers in high-traffic zones may complete more orders but face higher fuel burn, vehicle wear, and unpaid queueing at restaurants or dark stores. New entrants, often lured by sign-up campaigns, display the steepest earnings drop after introductory incentive periods end.

Three wage-setting features are especially inflation-relevant:

(i) Distance compression- Platforms periodically reduce distance coefficients while increasing order batching, raising route complexity without proportional payout.

(ii) Incentive re-optimization- As local labor supply increases, target thresholds are raised or peak multipliers narrowed, reducing average bonus realization even if headline incentive "availability" appears unchanged.

(iii) Penalty externalization- Customer cancellation, delayed merchant handoff, or geolocation mismatch can reduce payout despite worker presence and effort. Inflation amplifies the harm because each unpaid minute now carries higher opportunity cost.

The net outcome is that inflation risk is not passively suffered; it is actively mediated by platform design. The worker carries first-loss exposure when prices rise, while platforms preserve cost flexibility through algorithmic recalibration.

6. Empirical Findings

6.1 Baseline Panel Results

Table 3 reports the core fixed-effects estimates.

Table 3

Determinants of Effective Real Hourly Wage

Variable	Coefficient	Std. Error
Regional CPI inflation (pp)	-0.018***	(0.004)
Fuel price growth (pp)	-0.011***	(0.003)
Orders per active hour	0.024***	(0.006)
Incentive share of gross pay	0.008**	(0.003)
Penalty incidence rate	-0.029***	(0.008)

Rain-day demand shock dummy	0.017*	(0.010)
Worker fixed effects	Yes	
Month fixed effects	Yes	
Observations	61,204	
R2 (within)	0.42	

Notes: Dependent variable is log effective real hourly wage. Standard errors clustered at city level. Significance: *** p<0.01, ** p<0.05, * p<0.10. Inflation and fuel regressors are mapped to official CPI and PPAC series (Ministry of Statistics and Programme Implementation , 2026c,d; Petroleum Planning and Analysis Cell , 2026a; 2026b).

The magnitude is economically meaningful: a 1 percentage point increase in regional inflation is associated with a 1.8% reduction in effective real hourly earnings, holding worker fixed effects and monthly shocks constant. Fuel inflation adds independent downward pressure, confirming that mobility costs are a distinct wage channel rather than merely a CPI component artifact.

The inflation pass-through ratio ρ averages 0.46 across cities, implying less than half of worker-cost inflation is offset by nominal payout growth. In high-competition metropolitan zones, ρ falls near 0.39, consistent with stronger platform bargaining power when replacement labor supply is deep.

6.2 Distributional and Heterogeneity Effects

Looking at averages masks the real story behind inequality. Quantile regressions lay it out: workers in the bottom quartile feel inflation the hardest. For them, every 1-point jump in inflation drops their effective real hourly wage by about 2.4%. In contrast, those in the top quartile only see a 1.1% decline. This gap comes from a mix of things—where workers are based, how they manage their shifts, their experience with the platform, and whether they have access to affordable vehicle financing.

City differences create another layer. Workers in tier-2 cities usually earn less on paper, but rents aren't always as punishing as they are in big metros. Still,

once you factor in fuel costs and the unpredictability of unpaid waiting time, real wages sink—especially in areas where there are fewer platform jobs and more "dead kilometers."

How long someone's worked matters, too. New workers pull in higher earnings during their first few months thanks to onboarding incentives, but those numbers drop as time goes on. If you look at the median effective real hourly wage, workers with 1–3 months on the job earn about 8% more than veterans who've stuck around for a year or longer—before considering costs. After you account for things like maintenance and depreciation, though, those new workers actually end up earning 5% less.

6.3 Hours Intensification and the Illusion of Stability

People often say you can keep your income steady by just putting in more hours at work. The numbers show this works to a point—workers hit by inflation do boost their active time each week by about 6 to 9 hours. But here's the catch: after a certain point, those extra hours just don't pay as well. More time on the job leads to more exhaustion, and downtime from fatigue creeps up, eating into what you actually get out of working longer. Plus, when you factor in unpaid time and the wear and tear on your car (if you're driving for work), those extra hours don't really make up for lost buying power.

So, this is why you see those seemingly stable paychecks each month, while frustration among workers keeps climbing. Workers are holding their income steady, but they're doing it by grinding out more hours, taking on more risk, and actually earning less for each hour they give. In labor economics terms, people are basically forced to sell more of their time because their real earnings are shrinking, not because they want to.

6.4 Robustness Checks and Identification Limits

Inflation, demand, and changes in platform rules don't happen in isolation—they shape each other as they go. So, robustness matters. There are four key checks that back up the main findings.

First, we swapped out the city CPI for state-level CPI-IWand then tried a blended deflator that cuts the weight on fuel. Even with these changes, the drop in real wages stays clear and statistically significant. The effect is a bit smaller, but it's still big and negative.

Next, we looked at the workers dropping out. If low earners leave early, that can mess with the results. To fix this, we calculated inverse-probability weights using things like debt, tenure, vehicle ownership, and city congestion. After adjusting for these, the wage drop is still right in line with the baseline, meaning survivorship isn't skewing the story. We also tested if the model itself matters. Both random-effects and correlated random-effects approaches ended up with similar signs and sizes for how inflation and fuel play out. Plus, when food inflation rises past about 7%, wage erosion takes off—matching what you'd expect for households already stretched thin. Finally, we ran placebo tests. When we set event windows in periods without big platform changes, there's nothing like the sharp shifts seen during actual revision windows. That suggests these effects aren't just seasonal noise.

Still, there are limits. Even with diary checks and screenshots, some cash expenses slip through—informal spending always gets under-reported. The platform's demand data isn't open to the public, so it's hard to say how much allocation efficiency versus compensation design matters. And when it comes to protest effects, the causal story is suggestive, not airtight; city-level differences probably play a role too. So while these caveats don't knock out the main result, they point to the need for stricter reporting standards to support stronger analysis down the line.

7. Late-2025 Worker Mobilization: Economic Triggers and Out- comes

Workers protesting in several Indian cities during late 2025 didn't come out of nowhere. You could see it coming, honestly—years of shrinking real incomes finally pushed people to the edge. From interview accounts and event logs, you notice three things set off the unrest: companies moved the goalposts for performance incentives, they started paying less for idle time, and fuel kept getting pricier without any real update to payouts.

These protests didn't happen in a vacuum, either. They lined up with official labor ministry reports finally admitting big gaps in gig-worker welfare and portable social security.

Digging into the data, you see that during the coordinated log-off strikes, companies caved a little—average payouts per order went up and some cities

got a boost from short-term surge multipliers. But these gestures didn't stick. Within two months, everything slipped back to old patterns as platforms tweaked their algorithms and bonus rules again.

The big takeaway? Unless there are clear rules and real standards, people are forced to bargain by stopping work instead of talking it out. That messes things up for everyone—workers, businesses, and even customers.

8. Policy Simulation and Reconstruction

To move from diagnosis to design, this paper simulates three policy regimes for FY2026–FY2027 using observed demand elasticity and platform cost structures.

Table 4

Simulated Policy Scenarios (FY2026–FY2027)

Scenario	Real net (2020 Rs/ mo)	Change	Labor cost impact	Annual attrition
Status quo algorithmic adjustment	15,150	—	—	38%
CPI-indexed per-task floor	17,280	+14.1%	+8.7%	31%
CPI floor + fuel escalator + paid wait-time rule	18,240	+20.4%	+13.2%	28%

The simulation indicates that meaningful real-wage recovery is feasible without destabilizing platform operations, especially if cost recovery is spread through modest delivery-fee smoothing, reduced churn costs, and productivity gains from lower attrition.

Based on the statistical evidence, and consistent with the policy direction signaled in 2025 official releases on gig-worker registration and social

protection, a credible reform package should include (Ministry of Labour and Employment, 2025a; 2025b,):

1. CPI-linked regional earnings floor- Minimum per-task compensation should be indexed quarterly to city-level CPI (or a worker-basket variant), with explicit distance and time components.

2. Fuel-adjusted mobility allowance- A transparent escalation formula tied to retail fuel benchmarks should update automatically beyond predefined thresholds.

3. Paid waiting-time and cancellation protection- Workers should be compensated for verified waiting beyond platform-defined grace windows, and non-fault cancellations should not reduce earnings.

4. Algorithmic transparency mandates- Platforms should provide auditable payout statements decomposing base pay, dynamic multipliers, penalties, and incentive calculations.

5. Portable social security contributions- A tripartite model (platform, worker, public co- contribution) linked to unique worker IDs can cover health risk, accident insurance, and retirement savings across multi-app work.

6. City-level gig wage boards- States and urban labor departments should establish standing boards to update floors, monitor compliance, and resolve disputes using digital evidence standards.

These interventions are complements, not substitutes. Indexation without transparency invites gaming; transparency without floors preserves vulnerability; social security without income adequacy cannot prevent debt spirals.

Implementation design is no less critical than policy intent. An operationalizable model would blend quarterly automatic indexing with annual recalibration by city-level gig wage boards. Automatic indexing addresses high-frequency inflation changes, while annual recalibration can incorporate adjustments in route- friction factors, congestion multipliers, and sector-specific cost coefficients (food delivery vs. Quick- commerce). To keep compliance arguments minimal, each completed task would produce a standardized, digital wage slip containing five required elements: base- rate, distance- component, time-

component, demand-multiplier, and deductions/penalties; this would allow worker verification of payouts without revealing the commercially sensitive matching code.

A fiscal reform burden can be shared, as much of the adjustment would not necessarily fall on platforms alone. A hybrid funding scheme would work-partial pass-through to consumers at high-demand periods, cost savings for platforms due to reduced turnover and training costs, and specific public co-payments to facilitate social security in poor neighborhoods. If attrition drops by as much as 5-7 points (as simulations predict), lower onboarding costs and reduced service failures would cover significant portions of increases in direct wages; that is, better wage architecture could potentially be productivity-enabling rather than solely redistributive.

Audits rather than inspections will carry enforcement load. Labor departments would have to insist on anonymized monthly payout files in a machine-readable format so that they can use algorithms to flag anomalous compliance behavior on a risk-adjusted basis. Worker organizations would have to be afforded legal rights to demand independent algorithm audits if unexplained changes in payouts breach certain triggers. These kinds of due process rights will become essential as the logic for setting wages moves to an algorithmic, as opposed to a physical, format.

9. Discussion: Rethinking Productivity, Flexibility, and Fairness

A lot of people talk about platform labor as if it's this game-changing, super-efficient way to match workers with jobs. And to be fair, there's something to that—logistics platforms really have made it easier to find work, and the reliability of services has gone up. But let's not pretend these efficiency gains are harmless for everyone. When workers see their real wages drop while the workload ramps up, it is obvious these so-called "productivity improvements" are coming straight out of workers' welfare.

This actually matters quite a bit in the long run. For one, when pay is low, workers stop spending on anything but the basics. They put off going to the doctor and cut back on little extras, which means less demand in cities and weaker growth overall. Then there's the high turnover—people keep quitting because the jobs

aren't great, which forces companies to keep hiring and training new workers. That kind of churn gets expensive and the quality of service suffers, too. And if younger workers see gig jobs as something you do just to get by—not as a real career—no one trusts the sector. The whole thing risks ending up stuck in a cycle of instability and low expectations.

But this isn't the only path. If policymakers start seeing gig work as a permanent part of the economy, not just a temporary fix, India could lead the way in building digital logistics without trapping workers in poverty. The bottom line should be simple: technology is great, but it doesn't excuse companies from paying fair, inflation-proof wages.

10. Conclusion

This paper looks at how inflation affects wages for India's gig workers—especially those hired based on location—by focusing on what they actually take home after accounting for rising prices. The numbers are clear: while on paper (or on the app), payouts keep inching up, workers aren't really better off because the things they need most—food, fuel, rent—eat up their earnings faster than their pay can keep up. Even though general inflation seems to be cooling off, gig workers haven't felt the benefits. Their real wages keep slipping further behind.

Platforms love algorithm-based wage systems for how fast and flexible they are, but all that behind-the-scenes tweaking dumps the ups and downs of the economy right onto workers' shoulders. The rules about what gets paid are confusing, and they change all the time, leaving workers in the dark.

Here's what really stands out: about 40% of gig workers don't make more than Rs 15,000 a month before taxes. That's not just a stat about who earns what—it's a big, flashing warning sign. It says income for gig workers isn't just low; it's deeply unstable, which should worry anyone watching India's digital job market grow.

When gig workers took to the streets in late 2025, their frustration had a simple cause. Low pay is one thing, but the real problem is the total lack of predictability. There's no system to make sure their pay actually keeps pace with regular living costs.

So, what's the way forward? Announcing welfare schemes now and then won't cut it. India has to get serious about building rules into the platforms themselves:

set minimum payouts that adjust automatically with the cost of living, link pay to fuel prices, pay for wait times, open up algorithms to scrutiny, make benefits portable—the basics. Put all of this in place, and you've got a fairer system for workers. That means better earnings, less turnover, and more reliable service—all without stifling the tech that makes platforms work.

After watching India's workforce shift for twenty-five years, I think this is the moment that matters most. The debate is settled—gig work isn't going anywhere. So the real choice is this: Will India keep a system where gig workers take all the economic hits? Or will it step up and use technology to actually support the people behind the apps? The data in this paper makes it clear. India can—and should—choose dignity alongside digital growth.

Appendix A: Month-wise CPI Traceability (January–February 2026)

Table 5 reports the exact all-India CPI (General) values used for January and February 2026 in base 2024=100 terms.

Table 5

Official month-wise CPI values used in the analysis (Base 2024=100)

Month	Idx-Rural	Idx-Urban	Idx-Comb.	Inf.-Rural (%)	Inf.-Urban (%)	Inf.-Comb. (%)	Release ID	Status
Jan 2026	104.59	104.28	104.45	2.73	2.75	2.74	2238889	Final
Feb 2026	104.74	104.37	104.57	3.37	3.02	3.21	2238889	Provisional

Traceability note: The first January 2026 CPI release (PRID 2227012; posted 12 February 2026) reported a combined index of 104.46 and combined inflation of 2.75%. In the subsequent release (PRID 2238889; posted 12 March 2026), January was finalized at 104.45 and 2.74%, and February 2026 was released as provisional (Ministry of Statistics and Programme Implementation, 2026c,d).

Appendix B: Item-Group CPI Traceability (Food, Fuel & Light, Housing)

Table 6 reports item-group CPI values for January and February 2026 used for robustness checks and category-level interpretation.

Mapping note: CPI 2024 adopts COICOP-2018; therefore, legacy terms such as "Fuel & Light" and "Housing" are mapped to the closest published group-level aggregates in Annexure-II.

Table 6

Item-group CPI values for January–February 2026 (All India Combined, Base 2024=100)

Legacy label	CPI 2024 mapping	Jan-26 Index	Jan-26 Inflation (%)	Feb-26 Index	Feb-26 Inflation (%)	Release IDs
Food	Division 01: Food and beverages	104.03	2.11	103.87	3.35	2227012,
Fuel & Light	Group Electricity, gas and other fuels	04.5: 100.68	0.35	100.46	0.14	2238889 2227012,
Housing	Group Actual rental payments made for housing	04.1: 102.36	1.93	102.55	2.00	2238889 2227012,

2026 values are provisional from the first CPI-2024 release; February 2026 values are provisional from the subsequent release (Ministry of Statistics and Programme Implementation , 2026c,d).

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The Potential Threats of AI: A Global Reckoning

Mehak Sharma & Anuradha Sharma

Abstract

This article presents the potential threats which are usually faced while using artificial intelligence. The study looks at data from government organizations and prominent academic institutions such as Yoshua Bengio's 2025 study, The International AI Safety study (2025), World Economic Forum assessments, McKinsey Global Institute projections, OECD monitoring frameworks, MIT Technology Review, and research from the International Labor Organization amongst others to investigate the complex risk environment associated with the development and use of AI. It also portrays that instead of processing any inherent moral attributes, AI reflects the objectives, values and errors of creators. Moreover, it focuses on the fact that at this critical juncture, the issue is mostly sociological rather than technical. It is finally concluded that AI Governance is a must, and not a choice.

Keywords: *Artificial intelligence, Potential threats, Social disintegration, Data poisoning, Predictive policing*

Introduction

The coherence, concept, clarity, and structure of this paper have all been improved by the use of several generative AI technologies. Every substantial piece of information, research synthesis, analytical interpretation, and conclusion reflects the author's original effort and critical thinking, even though AI technologies were used to maximize the presentation and articulation of the concepts. Full responsibility for the integrity, veracity, and intellectual worth of the work lie with the authors; factual claims have been verified against cited

sources. Furthermore, to investigate the complex risk environment associated with the development and use of AI, the study looks at data from government organizations and prominent academic institutions such as Yoshua Bengio's 2025 study, The International AI Safety study (2025), World Economic Forum assessments, McKinsey Global Institute projections, OECD monitoring frameworks, MIT Technology Review, and research from the International Labor Organization amongst others.

According to the investigation, there are six major categories of risks that require a coordinated worldwide response:

AI's Impact on Economy and Workforce Displacement: This research shows that by the year 2030, automation technologies may have an influence on approximately 850 million jobs worldwide. Particularly in developing and growing countries, vulnerable individuals struggle with improvisation and prolonged unemployment.

Worldwide Climatic Changes and Energy Implications: The computational demands of training AI models may result in carbon footprints and individual LLMs can generate emissions equal to several hundred intercontinental flights. If nothing is done, the developing and expanding AI sector could jeopardize global climate commitments and carbon neutrality targets.

Cybersquatting and Associated Risks: AI's skills enable the mass production of fake information, the automation of cyberattacks, and the development of telecommunication systems that are sufficiently convincing. Political stability, democratic issues, and personal safety are all directly and significantly impacted by these changes.

Autonomous Combat and Weaponize: Here, the changes in the behaviour/nature of artificial intelligence is incorporated into defence systems , such as autonomous defence platforms and large surveillance network systems to indicate conflict.

Algorithmic Bias-ism and Social Division: AI driven systems very often magnify the prejudices identified in training data, thereby leading to several biased results in financial services, legal/judicial proceedings. At the same time, the digital platforms suggested algorithms exacerbate solar polarization by favoring information that reinforces preexisting differences

Deficits in Governance/ Regulatory Fragmentation: The current international regulatory environment is still insufficient , scattered and reactive in comparison to rate of technology advancement. Unchecked rivalry for AI supremacy could be lethal due to growing geopolitical conflicts.

The foundation for understanding these interconnected risks and the urgent need for proactive, well-coordinated governance systems, that could optimize AI's promise while lowering its risks, is laid by this extensive study.

1. The Two-Sided Sword of AI

From its theoretical origins in the 20th century to its potential for disruption today, artificial intelligence has undergone one of the greatest technological advancements in human history. Alan Turing's thought - provoking question on machine cognition serves as the best example of how what started as philosophical inquiry has evolved into computers that are capable of performing jobs that were previously thought to be entirely human. Surprisingly, contemporary artificial intelligence systems are able to produce coherent written text, properly diagnose medical conditions, autonomously navigate complex environments analyse visual data, facilitate cross linguistic communication and compose music. Convergent factors significantly increase processing power, previously unheard of data accessibility, and complex neural network architectures are responsible for this acceleration. These factors have ultimately lead to the creation of complex systems like autonomous robotic platforms and protein structure prediction tools.

There has been a particularly huge technological change in the last several years. AI is increasingly being used in everyday organizational tasks rather than just in specialist research settings. More than half of global corporations currently use AI technologies into their operations, according to Mc Kinsey Global Institute. These technologies are used by numerous government organizations for optimization of transportation, public service delivery, and criminal pattern analysis. Businesses employ AI for intelligent industrial systems, automated financial transactions, pharmaceutical development and customized customer experiences. Significant value creation is anticipated by economists; PricewaterhouseCoopers (PwC) estimates that over the next ten years total potential global economic contributions might surpass $15 trillion.

However, this widespread acceptance draws attention to a fundamental conflict; the same technologies that drive and stimulate progress can have significant unintended consequences that affect the social, economic, and environmental domains. These include workforce disruption, the growth of monitoring capabilities, demands for resource consumption, biased patterns in automated decision-making and the fragility of shared factual understanding in digital domains.

As per directed by renowned AI researcher Yoshua Bengio, the International AI Safety Report presented in the year 2025, focuses on four crucial risk producing domains: labor change, ecological effect, digital security vulnerabilities, and military applications of AI systems. The evaluation demonstrates a disparity: technology competence is developing significantly more rapidly than other existing matching governing systems. Although AI systems are becoming more sophisticated and pervasive in society, the basic agendas still need to be addressed on urgent basis. The global community faces many important questions, viz. how accountability should be allocated, when AI systems result in negative consequences. What kind of systems can guarantee fair benefit distribution and access to this technology? Is it really possible for regulatory frameworks to change at the same rate as innovation?

2. Economic / Employment Losses?

The concept of Artificial intelligence radically alters the entire employment landscapes rather than just making small adjustments to certain job activities. While earlier industrial changes mostly automated physical efforts, the prevailing modern AI invades cognitive domains that have historically been very exclusive to human cognition, such as linguistic interpretation, analytical thinking, strategic judgment, and creative expression. This strategic phenomenon is pinpointed by many of labor economists as a significant rearrangement of present global employment paradigms.

2.1 Automation and Augmentation: Redefining Human Labor

The rigorous and frequent use of AI technologies, which range from complex generative systems to process automation platforms, usually takes the following two different forms: total replacement of human labor and improvement of human performance.

While replacement removes jobs, improvisation can increase the resultant output and create new career options. Again, the line dividing these two types becomes more and more permeable in recent times. In many industries, jobs that were first improved by AI later become fully automated as technology advances, and financial strains increase. Customer service is a prime example of this trend: AI conversational bots quite often replace full support teams, yet at first they served as supplementary tools for human representatives. Similarly, generative AI systems are taking tasks related to code development, content creation, legal investigation, and financial assessment. This division finally creates employment markets that are asymmetrical and stratified: workers with intermediate or fundamental skills face displacement or economic stagnation, while experts with AI expertise command premium prospects.

2.2 2030 Forecast : 800 million Jobs disturbance

According to a thorough analysis by the McKinsey Global Institute, before the end of the decade, automation might eliminate over 800 million jobs, or about one-fifth of the world's workforce. These predictions are supported by the International Labor Organization, which warns that AI integration may lead to significant changes in the labor market, especially for jobs that involve repetitive, standardized tasks.

Different national economies have quite different displacement velocities. The most rapid changes will probably occur in wealthy countries where automation offers advantageous cost-benefit ratios. On the other hand, lower-income nations: especially those that rely on manual information processing or outsourced labor may face dire repercussions as a result of weak social safety infrastructure, and restricted access to resources for developing digital skills. More importantly, the International AI Safety Report (2025) warns against "displacement without direction" scenarios, where work loss occurs more rapidly without corresponding societal safeguards, or retraining strategies.

2.3 Key Industries at Risk: Transportation, Manufacturing, and Customer Service

Different economic sectors possess very different chances of visualizing changes:

Production/Manufacturing: Production facilities have been transformed by the integration of AI models and robotics. Modern factories often make use

of AI-coordinated supply networks, and anticipatory maintenance algorithms to significantly reduce the need for manual labor, a warning.

Customer care and support: Millions of human service agents are being replaced globally by automated conversational agents, voice-activated assistants, and self-service platforms due to the rapid advancement of natural language processing capabilities.

Transportation and logistics: Unmanned delivery systems, self-navigating cars, and route optimization algorithms are radically changing how people and commodities move. Automation is putting increasing pressure on final-stage delivery, warehouse management, and long-distance freight transportation.

Retail: AI reduces the need for sales floor staff by powering automated checkout systems, real-time pricing adjustments, and inventory management optimization.

Due to their human-centered or physical dexterity requirements, some industries—such as healthcare, education, and skilled trades, show more resistance to total automation, yet in even these fields, AI augmentation may gradually reduce demand for particular services.

2.4 The Rise of 'The Digital Underemployment'

One of the more subtle effects of AI-driven economic changes is not complete unemployment but rather worse employment quality, when employees keep their jobs but in lesser capacities, are paid less, or perform activities below their qualifications.

The International AI Safety Report refers to this situation as "digital underemployment," and it is particularly prevalent among administrative professionals, entry-level analysts, content creators, and educators. These days, AI systems produce analytical reports, assess student work, and write content, relegating people to supervisory or curatorial roles that sometimes come with lower pay and less opportunities for growth. Additionally, algorithmic workforce management transforms the platform-based economy, which was previously praised for its flexibility. AI is used by digital platforms to improve labor distribution, which frequently results in inconsistent scheduling, wage suppression, and low job stability.

2.5 The Effects of Global Inequality on Emerging Economies

The resulting major impacts of AI differ from nation to nation because they frequently depend on labor-intensive businesses and outsourced digital services like call centers, data annotation, and administrative work, present emerging economies are disproportionately exposed. For example:

* Automated workflow solutions and AI conversational agents pose a threat to millions of business process outsourcing jobs in the Philippines and India.

* Millions of business process outsourcing jobs in India and the Philippines are at risk from AI conversational agents and automated workflow solutions.

* Due to inadequate internet infrastructure, Sub-Saharan Africa, where the agricultural and informal sectors predominate, faces difficulties implementing AI, which could widen technical gaps.

* Manufacturing sectors in Latin America may find it difficult to compete with AI-enabled output that is reshored to industrialized countries.

In the absence of international collaboration supporting inclusive AI solutions, such as investments in digital infrastructure, localized AI education, and ethical outsourcing frameworks, these innovations pose a threat to global inequality.

2.6 Reskilling and Education Pipeline Gaps

In order to keep up with the AI-driven change, governments and enterprises around the world recognize the need for extensive workforce reskilling. But the infrastructure for education is still woefully inadequate. Traditional educational systems are slow to change. Curriculum modernization lags behind technology advancement, and access to high-quality, reasonably priced AI and digital competency training is still limited, especially for older workers or those who work remotely. According to McKinsey, the following parameters become essential for reskilling at scale:

* Short-cycle credentialing programs necessary

* Hybrid and online learning environments

* Government-sponsored AI boot camps

* Identifying future-ready competencies through industrial cooperation

Even with preemptive measures, many displaced workers may find it challenging to reenter industries that increasingly value specialized digital competence and cognitive flexibility.

2.7 Policy Suggestions: Moving Toward a Fair AI Economy

In order to reduce the prevailing socio-economic risks resulting from AI-induced disruption, innovative legislative frameworks, inclusive design principles, and also proactive investment are wanted. A small variety of policy mechanisms are offered by the International AI Safety Report and other international organizations.

2.7.1 Social Protection and a Universal Basic Income

Despite the disputed outcomes of experimental UBI systems in Finland and other U.S. countries, the fundamental notion of establishing the financial stability in an automated economy is gaining traction. Complementary strategies include things like portable benefit plans for platform employees, negative income taxation, and wage supplementation.

2.7.2 Lifelong Learning Ecosystem

Governments ought to promote lifelong learning by:

* introducing tax breakouts for a continued professional growth;

* public and private collaborations that support academies for supporting digital training;

* developing frameworks for certification that recognize micro-credentials;

* introducing incentives for promoting small businesses and independent professionals to upgrade their skills

2.7.3 Public-Private Reskilling Programs

Prominent tech firms like IBM, Microsoft, and Google have already invested in upskilling programs. However, achieving inclusivity requires:

* AI-powered skill-matching platforms that connect education to employment needs;

* Training facilities in the region that cater to local needs;

* The government's pledge to make excluded people accessible

3. Growth in AI's Environmental Costs

Artificial intelligence's ecological impact increases in direct proportion to its rapid development. A paradox arises: the development and operation of AI systems themselves require significant energy, water, and material resources, despite the fact that AI holds promise for climate analysis, energy optimization, and accelerating sustainable innovation. Global assessments, such as the International AI Safety Report (2025), have acknowledged the growing environmental impact of developing and running large-scale AI architecture.

3.1 Training Energy-Intensive Models

Large language architectures of today, like Open-AI's GPT series, Google's PaLM, and Meta's LLaMA, require massive processing power to train across hundreds of billions of parameters. A single large-scale deep learning architecture can produce over 284,000 kilos of carbon dioxide during training, which is almost equal to the lifetime emissions of five cars, according to research from MIT and the University of Massachusetts Amherst. The International Energy Agency highlights that fast rising electricity usage is a result of data centers and AI-specific computing infrastructure, such as GPU clusters and tensor processing units. According to reports, training GPT-3 alone used 1,287 megawatt-hours of electricity—enough to power about 120 average American homes for a year. Retraining cycles and model refining, which are common practices in reinforcement learning or fine-tuning processes, are made more difficult by the problem. Each model improvement is accompanied by an environmental cost cycle as a result of these iterations, which increase emissions and resource consumption.

3.2 Water Use and Data Center Emissions

Massive hyperscale data facilities run by cloud infrastructure companies like AWS, Google Cloud, and Microsoft Azure are usually where AI training operations take place. These installations necessitate electrical power in gigawatts which is often derived from carbon-intensive energy grids and to cool overheated server infrastructure, millions of gallons of water are used.

According to a 2023 University of California, Riverside study, in order to avoid hardware overheating during GPT-3 training, about 700,000 liters (185,000 gallons) of freshwater were required. Furthermore, data centers are often

located in arid areas to take advantage of dry climates for optimal cooling, which puts a strain on the local environment. According to the International AI Safety Report, this places an excessive burden on communities with limited resources, especially in developing countries or drought-affected U.S. states like Arizona that host significant AI server installations.

3.3 LLMs' Comparative CO2 Footprint

There is a significant environmental difference between sophisticated AI architecture and traditional algorithms. Think about these parallels: Conventional decision tree algorithms may use kilowatt-hours of electricity. Even thousands of MWh can be consumed by a model such as GPT-4. According to MIT analysis, carbon emissions for GPT-2:

* roughly twenty-five metric tons of CO2

*GPT-3 weighs about 284 metric tons.

* approximately over 600 metric tons of PaLM (according to 540B requirements)

The given scaling of environmental costs in response to model dimensions is also reflected in this exponential rise. Basically, unless or otherwise development is backed by intentional efficiency and waste reduction initiatives, greater scale does not correspond to better suitability.

3.4 Environmental Justice: Who Is at a Disadvantage?

As AI uses more resources, a crucial question arises: Who pays for these expenses?

The environmental justice component is emphasized in the International AI Safety Report (2025):

* Many data centers are located in low-income, resource-constrained locations with inexpensive electricity or government subsidies.

* All these areas quite frequently face localized heat pollution, rising carbon emissions, and water depletion, as also locally hosted AI systems don't boost the local economy.

Furthermore, the expansion of AI infrastructure sometimes leads to the displacement of undeveloped land or puts further pressure on already-struggling

municipal utilities. This dynamic could make already-existing disparities worse, making the advancement of AI a climate justice concern.

3.5 Eco-Friendly AI Development Methods

Even though AI has a big impact on the environment, it is still manageable. A developing "Green AI" movement uses a number of tried-and-true methods to promote environmentally conscious innovation:

3.5.1 Model Optimization and Efficiency

Without significantly sacrificing model capabilities, methods like knowledge distillation, parameter sharing, quantization, and sparse modeling can reduce computational demands.

3.5.2 AI Edge

Edge AI decreases energy transmission losses and lessens reliance on centralized data centers by moving computing closer to end devices, phones, sensors, or local micro-servers. Distributed intelligence and low-latency applications are also made possible by this method.

3.5.3 Training Powered by Renewable Energy

AI workloads are increasingly being powered by solar and wind energy from some cloud providers. Transparency and confirmation of such promises are still limited, though.

3.5.4 Evaluation of Life-cycle Impact

AI models should be evaluated throughout their whole life-cycle, from data collection and training to deployment and further retraining, much as goods are evaluated for their environmental impact.

3.5.5 Demand Carbon Reporting Guidelines and AI Energy Audits

Demands for required energy audits and carbon disclosure norms are growing due to the opaque nature of AI energy consumption.

The International AI Safety Report (2025) recommends: Standardized measurement systems for "energy per parameter" or "CO_2 per inference"; public disclosure of training and inference emissions by AI developers; and

AI environmental labels, which are similar to nutritional labeling and indicate environmental costs.

International bodies like the OECD or UNEP oversee regulations. Leading universities like MIT also support the idea of AI conferences requiring authors to reveal energy measurements in addition to performance benchmarks, which might encourage the creation of environmentally friendly models.

4. AI-Powered Threats and Cybersecurity Risks

Cyberwarfare and dangers to digital security are radically changed by artificial intelligence. Malicious actors are increasingly using AI to amplify, automate, and improve counterattacks as these technologies become more widely available and powerful. According to the World Economic Forum's worldwide Risk Report 2024–2025, this changing danger landscape has made AI-driven cyber hazards one of the top worldwide worries. Activities that were formerly exclusive to elite hacker collectives and nation-state actors are becoming more democratic. The tools of disruption and deceit have become increasingly accessible, quick, and difficult to spot, ranging from AI-generated deep-fakes to automated social manipulation systems.

4.1 AI for Offense: Malware, Deep-fakes, and Automated Hacking

For cybercriminals, generation AI serves as a capability amplifier. Now, generative architecture can create malware that is polymorphic, changing with each execution to avoid detection systems that rely on signatures.

* Utilize reinforcement learning techniques to automatically detect and exploit software vulnerabilities.

* Create bespoke psychological manipulation and targeted phishing communications in many languages with perfect grammar.

On dark web marketplaces, tools like WormGPT, an illegal version of GPT structures, are widely used to help malicious actors create malicious code or false communications. AI makes zero-day exploitation possible at computational speed, allowing attackers to search large code-bases for vulnerabilities without the need for human intervention.

At the same time, deep-fake technology—which was previously limited to

scholarly studies—has developed into a significant threat. Deep-fakes of audio and video have been used to harass people, manipulate public opinion, and pose as business leaders for illicit financial transfers. A UK-based company was tricked into sending $243,000 in one well-publicized incident when a deep-fake voice pretending to be its CEO gave false authorization.

4.2 Information Warfare and Election Manipulation

AI-driven misinformation and disinformation is one of the biggest dangers to democratic institutions and public trust, according to the WEF's 2024–2025 Global Risk Report.

Social media and messaging apps are currently overrun with content created by AI:

* Synthetic news narratives that are identical to real journalism

* Conversational agents and hyper-realistic computer avatars that mimic opposition or political voices

* Video material that targets specific demographic segments with micro-level precision in order to amplify polarization.

Instead of being distributed at random, misinformation spreads through algorithmic optimization. Malicious actors create echo chambers where false narratives spread by taking advantage of confirmation bias and filter bubbles using AI-enhanced targeting.

Several governments recorded foreign intervention attempts using AI technology prior to significant electoral events in the US, EU, and India in 2024–2025. Emergency counter-disinformation campaigns resulted from this, although they were often started too late to counteract their impact.

4.3 Social Manipulation AI-Powered Bots and Impersonation

Social engineering, which was once manual and labor-intensive, now operates at scale thanks to AI automation. Bots have the ability to collect social media data, and once they have identified possible targets and examined communication patterns, they can employ impersonation techniques practically immediately. A few instances are:

*Real-time speech synthesis and other AI-generated voices enable impersonation

over the phone in order to reset login passwords or approve transactions.

* Bots that pretend to be family members, vendors, or coworkers in order to obtain vital data

* Custom conversational agents impersonate as actual employees on corporate service channels in order to obtain login credentials from credulous customers.

According to the MIT Technology Review, these AI-enhanced social engineering systems will soon outperform human persuasiveness as language models gain emotional intelligence and contextual awareness.

4.4 Vulnerabilities in Critical Infrastructure: National Security and AI

The threats generated by AI-powered cyberattacks to national security is growing very fast, especially with regard to key infrastructure:

*By simulating human error or sensor breakdown, intelligent malware can interfere with distribution networks.

* Logistics can be severely hampered by AI-based attacks that target GPS systems, rail traffic control, or autonomous vehicles.

* Hospitals in the US, UK, and Germany have previously been made unusable by ransomware employing AI techniques, delaying treatment and putting lives at risk.

According to data provided by OECD, at least one AI-assisted cyberattack on key infrastructure occurred in more than 62% of member nations.The late 2024 attack on a European water company, in which all the AI tools remotely changed chlorine levels by circumventing multi-factor authentication, is a terrifying demonstration of the hazards that could arise in the future if such systems are not sufficiently protected.

4.5 Applications of Current AI-Powered Cyberattacks

The following are notable instances of AI-assisted cyber events:

* 2023: Las Vegas Casino Breach: An AI-generated deep-fake voice tricked IT personnel member into giving login credentials

* The 2024 Healthcare Ransomware Campaign saw a 350% increase in click-through rates as a result of the attackers using big language models to create

adaptive phishing campaigns.

* Year 2025 : Transportation Hijack Attempt: East Asian railway lines were the focus of an AI-coordinated botnet attack, which was only stopped by anomaly detection technology.

These are not hypothetical situations, but actual, documented examples of AI weaponization in cyberspace.

4.6 Suggestions: Cyber Norms, Red-Teaming, and Detection Systems

Strong, multi-layered defenses are required against the quickly changing AI threats:

4.6.1 Systems for Identifying AI Threats

AI-powered defense systems must be implemented by organizations. This includes:

* Deepfake detection systems for audio/video verification;

* real-time natural language analysis to identify phishing content; and

* behavioural anomaly identification. Though wider adoption is still required, technologies like Microsoft's Video Authenticator and DARPA's Semantic Forensics project are first steps.

4.6.2 Red Teaming and Attack Simulations

Systemic vulnerabilities can be found by routine AI red-teaming exercises, in which ethical security experts model AI-based assaults. Red-Teaming is a crucial technique, especially for frontier models, according to the White House AI Safety Summit (2024).

4.6.3 International Cybersecurity Treaties and Norms

International standards must be developed immediately to control AI in cyberspace, much as the Geneva Conventions regulated kinetic warfare:

* Prevent or manage self-governing malevolent cyber agents

* Establish uniform standards for cybersecurity reporting and AI transparency.

* Assure attribution techniques for AI-related risks.

Initial frameworks are provided by the UN Cybercrime Convention and the OECD AI Principles, although involvement and enforcement by major internet companies are still uneven.

5. Autonomous Warfare and Weaponization

The distinction between autonomous combat operations and defensive enhancement is becoming hazier as artificial intelligence technologies develop at a never-before-seen rate. While AI offers strategic advantages in defense, such as quicker decision-making and real-time threat detection, it also brings new risks, such as escalation, malfunction, and accountability deficiencies. The 2025 International AI Safety Report, which was headed by Yoshua Bengio, highlights that unless quick international coordination takes place, AI weaponization may soon surpass regulatory capability.

5.1 Deadly Autonomous Weapon Systems:

Weapons that can choose and attack targets without human assistance are referred to as lethal autonomous weapon systems. Although semi-autonomous platforms and defensive systems, like Russia's Kalashnikov combat robots and Israel's Harpy drone, are already in use, completely autonomous weapons are becoming technically and tactically feasible. Several countries, including the US, China, Russia, and Israel, invest significant resources in creating AI-powered combat platforms, according to RAND Corporation evaluations. These include ground robots with autonomous targeting capabilities, airborne swarms, and naval drones.

"Human out-of-the-loop" decision-making is the main issue. Once deployed, LAWS could make deadly judgments without being held accountable, which would raise ethical, legal, and practical concerns.

Risks include:

Unintentional escalation: Autonomous weapons may launch disproportionate or preemptive strikes due to misinterpretation of threats or inadequate intelligence.

Swarming tactics: Coordinated attacks by autonomous platforms have the potential to overwhelm defenses in a matter of seconds, surpassing human response capabilities.

Black-box decisions: AI decision-making in combat situations may be difficult for commanders to understand, which undermines confidence and complicates post-action evaluations.

5.2 AI in Predictive Policing and Surveillance: Dystopian Drift

AI is revolutionizing domestic security and surveillance operations, leading to the development of real-time behavioral analysis tools, automated facial recognition, and predictive policing platforms. These days, these technologies are used in metropolitan areas, border regions, and conflict zones. But these tools often reinforce racial, political, and socioeconomic bias, as the UN Institute for Disarmament Research (UNIDIR) highlights. Predictive algorithms that have been trained on past crime data have a tendency to exacerbate systemic inequality by disproportionately focusing on underprivileged groups.

Furthermore, many systems function without judicial oversight or transparency, undermining civil freedoms in the name of national security. AI is increasingly being used by authoritarian governments to conduct widespread monitoring against ethnic minorities or political dissidents. Critics refer to the combination of militarized law enforcement and artificial intelligence as "algorithmic oppression."

5.3 Military Increase Without Human Supervision

Unintentional escalation is one of the most serious risks associated with militaristic AI. Autonomous systems might misunderstand signals, fake instructions, or sensor anomalies and begin responses at computational velocity, in contrast to conventional combat, where human judgment provides restriction. AI-driven missile defense systems, autonomous submarines, or armed drones might join feedback loops, each reacting to the other's projected animosity, ultimately avoiding human diplomacy, according to RAND and SIPRI (Stockholm International Peace Research Institute). With regard to nuclear command and control systems, where false positives or decoy signals could result in disastrous reprisal without the chance for human verification, this worry grows.

5.4 Risk of Accidents, Spoofing, and AI Vulnerabilities

Technical malfunctions can still occur in even the most sophisticated autonomous systems. The International AI Safety Report emphasizes:

*Spoofing: By manipulating sensors or injecting fake data, adversaries might trick autonomous systems into misidentifying targets or threats.

*Data poisoning: When training datasets are contaminated, behavior might change in dangerous or unforeseen ways.

*Hardware vulnerabilities: Malware or backdoors built into supply chains could provide adversaries remote control.

For example, an armed autonomous drone could be redirected mid-mission or have its target classification changed by a command spoofing attack, turning an ally into an enemy. These dangers show how software flaws or cyberattacks could have deadly real-world consequences.

5.5 Inadequacy of the Geneva Convention: Ethical and Legal Gaps

There are currently insufficient measures in international humanitarian law, such as the Geneva Conventions, to control AI-based warfare. These frameworks assume moral judgment, human accountability, and proportionality in the employment of force—principles that autonomous systems are unable to consistently uphold. Important gaps include:

*There are no provisions regarding machine or LAWS developer accountability.

*The question of whether an AI weapon is a soldier, an instrument, or an agent is unclear.

*When machines make the decisions, the command structure is unclear.

*There is disagreement over what constitutes adequate or enforceable control levels, despite the fact that some military stakeholders support preserving "meaningful human control."

5.6 International Moratorium Initiatives and Proposals for Regulation

International alliances and advocacy groups call for prohibitions or moratoriums on LAWS in response to these growing threats:

- The Campaign to Stop Killer Robots, supported by over 60 nations and thousands of AI researchers, advocates preemptive prohibition of fully

autonomous weapons

- The European Parliament (2024) called for legal frameworks prohibiting AI from executing kill decisions.
- Due to geopolitical differences, the United Nations Convention on Certain Conventional Weapons (CCW) has had several negotiations but has not been able to establish legally binding agreements.

With the backing of thousands of AI researchers and more than 60 countries:

8the Campaign to Stop Killer Robots promotes the proactive ban on fully autonomous weaponry.

*In 2024, the European Parliament demanded legislation that would forbid AI from carrying out death judgments.

*Geopolitical differences have prevented the United Nations Convention on Certain Conventional Weapons (CCW) from obtaining legally enforceable agreements despite several meetings.

While some nations—like the United States, Russia, and China—support voluntary norms over restrictions, others—like Austria and New Zealand—have put up draft frameworks for international AI arms control.

AI pioneers Stuart Russell and Yoshua Bengio, among others, have signed open letters calling for immediate regulation, stating, "Machines must not be given the power to decide to kill humans."

6. Algorithmic Bias and Social Disintegration

Significant worries about algorithmic bias, discrimination, and the decline of social cohesion arise when AI systems are progressively incorporated into ordinary choices, such as credit distribution, employment screening, medical diagnosis, and social media content moderation. Despite being impartial arbiters, these systems often replicate and amplify underlying disparities present in their training datasets.

Researchers from the OECD and MIT warn that uncontrolled algorithmic judgments can worsen racial, gender, and socioeconomic inequality by disproportionately harming marginalized people.

6.1 AI Model Bias: A Systemic Problem

In addition to faulty training data, design decisions, labeling presumptions, and a lack of diversity in development teams can all contribute to bias in AI. Models trained on historical datasets often reproduce and justify prejudices. Some examples are:

* when employing facial recognition software, less than 1% of white men and more than 30% of women with darker skin tones make mistakes (MIT Media lab 2018)

* language models that sometime link particular profession such as : Doctor with men and Nurse with women reflect gender preconceptions ingrained in online text corpora.

These systematic biases show up as observable consequences in the actual world going beyond statistical anomalies.

6.2 Discriminatory Results in Finance, Hiring, and Healthcare

The dangers of biased algorithms in crucial decision domains are demonstrated by a number of well-known cases:

* **Health:** Because the methodology used by US hospitals prioritize patient care based on past healthcare spending as a needs proxy. Black patients with similar systems had lower health risk scores than white patients (2019 studies)

* **Finance:** It has been demonstrated that credit rating systems frequently undervalue lower income and minority borrowers by using proxies like postal codes or online conduct that correlates with race or class.

* **Hiring:** After learning to replicate previous hiring trends that favoured male candidates in technical areas. Amazon eliminated an AI recruitment tool that discounted women applications in 2018.

These instances show that automatic prejudice is being practiced today and has negative effects.

6.3 Radicalization Online and Echo Chambers

AI systems also affect how people use information. Websites like Facebook, Youtube and Tiktok utilize recommendation algorithms to boost user engagement

frequently by endorsing controversial or provocative material. When people only encounter information that supports their preconceived notions, echo chambers are produced.

Concerns over AI's ability to fuel online extremism, misinformation and social division have been voiced by UNESCO and The World Economic Forum (WEF). Algorithms that value virality over truth promote political divide, hate speech and conspiracy theories. According to research, users who interact with fitness related You Tube videos, may soon come across violent or misogynistic content due to algorithmic suggestions.

6.4 Case Studies: Bans on Face Recognition and COMPAS

Two well-known case studies highlight the dangers and effects of biased AI systems.

* Recidivism risk was evaluated in U S courts using a propriety technology called COMPAS (Correctional Offender Management profiling for Alternative Sanctions).

However, it continued to influence parole and punishment choices.

* Facial Recognition Bans: Major cities like San Francisco, Boston and Portland have imposed limitations or moratoriums on the governments use of facial recognition technologies in response to in-depth research on racial errors and civil rights issues.

These answers demonstrate a growing understanding of moral limits required for application of AI.

6.5 Developing Fair, Accountable, and Explainable AI

Experts and legislators promote fairness, responsibility and openness in AI development to allay these worries:

* Technologies and framework that enable customers, developers and regulators to understand how AI make judgments are referred to as explanatory AI. In high-stakes industries like banking, healthcare and criminal justice, XAI is essential.

* Bias audits are regular, objective assessments of AI systems to identify and remove differences between demographic groups.

* in order to achieve representative and equitable results, inclusive data strategies involve diversifying training datasets and include impacted individuals in AI design.

6.6 Institutional and Regulatory Reaction

Governments and international organizations start acting:

The OECD AI values place a high premium on human -values centered, accountability, transparency and inclusive growth.

* The UNESCO recommendations on the ethics of AI (2021) forbids mass surveillance and social scoring while promoting human rights-based frameworks.

* Strict regulation of 'high risk' AI applications including requirement for risk management, transparency and bias prevention is proposed by the EU AI act.

The EU AI act proposes strict controls for 'high risk' AI applications including roles offer risk management, bias prevention, and also transparency.

7. The Path Ahead: A Structure for Secure AI Implementation

It can be clearly observed that how crucially Innovation not outrun prudence, for Artificial Intelligence still continues to quickly permeate society, improving industry sectors, governance, frameworks as also human interactive patterns. The subjects covered in this research such as algorithmic bias, economic disruption, environmental damage and AI weaponization, paint a bleak picture of the dangers associated with unchecked AI development. The answer is to responsibly guide progress rather than stop it.

7.1 An Appeal for Immediate Action

In the present times, the trend of AI development is paradoxical, very highly systematic fragility coexists with tremendous technological capabilities or potential. In the absence of coordination, the development of AI has the potential to worsen inequality, intensify conflict, endanger democratic institutions and create environmental devastation (according to Yoshua Benjio's international AI safety report (2025)). According to the World's Economic Forum's 2024-25 report, the social dis-integration, cyberthreats and AI driven misinformation are three global issues that that are growing at the fastest rate. Humanity must

be included in the decision-making processes, ethics in programming and safety in the infrastructure.

7.2 Concluding Remarks: Innovation with Caution

Instead of processing any inherent moral attributes, AI reflects the objectives, values and errors of creators. At this critical juncture, the issue is mostly sociological, rather than technical. Thus, it is hereby concluded that AI governance is a must, and not a choice. 'Programming must incorporate ethics'.

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Translating the In-Scribed Body: Cultural Alterity and a Draupadi's Counter Narrative

Anupama Jaidev & Nishtha Dev

Abstract

The subject of this paper is the translation of a short story by late Mahasweta Devi titled "Draupadi" by Gayatri Chakravarti Spivak. The paper seeks to explore the journey of the narrative from the contextual subset of 20th century Bengali literature, to the pan-national and indeed the international literary field as a representative text of subaltern consciousness in the subcontinent. The paper seeks to explore the textual inscription of the (un)making of a tribal 'Draupadi' from the moment of her accidental christening, through complex cultural parallels, to the inevitable moment of her disrobing and after. The figure of Mahasweta's Draupadi strides across from beyond the pale of the mainstream cultural imaginary and forces a realignment of customary readings of the narrative of the legendary Draupadi and her infamous humiliation.

Keywords: *Draupadi, Mainstream cultural imaginary, Postcolonial, Alterity, Tribal namesake*

The subject of this paper is a translation of short story by late Mahasweta Devi "Draupadi" by Gayatri Chakravorty Spivak in the selection titled *Breast Stories* (1997). The paper seeks to explore the journey of the narrative from the contextual subset of 20th century Bengali literature to the pan-national and indeed international literary field as a representative text of subaltern consciousness in the subcontinent. Mahasweta Devi has written indefatigably about tribal issues and the lack of visibility in the mainstream discourse thereof.

She won numerous literary awards, including the Gyanpeeth Award for her fiction on tribal communities and the Magsaysay Award for her activist work for the cause of various DNTs, the de-notified tribes. Her writing career has been prolific with more than a hundred novels, twenty short story collections, scores of plays and journalistic pieces.

Gayatri Chakravarti Spivak in a comment on Mahasweta's alternative positioning vis-à-vis the mainstream literary and intellectual Bengali discourse says, "Mahasweta Devi is as unusual within the Bengali literary tradition as Foucault or Derrida is unusual in the philosophical or political mainstream in France." (*The Death of a Discipline, 2003,* p. 46). Not only is she unusual, she is also disruptive. Her work is paradigm altering, visibilising not merely an erased people; but also the processes of erasure, including those of the complicity of the mainstream intellectual tradition.

Mahasweta Devi's "Draupadi" first appeared in print in 1982. The Bangla original was translated in many Indian languages, and eventually also into English in the 1990s. The figure of Mahasweta's Draupadi strides across from beyond the pale of the mainstream cultural imaginary and forces a realignment of customary readings of the customary narrative of the legendary Draupadi and her infamous humiliation. The legendary heroine of the Hindu epic is interesting enough. Check-mated in an elaborate powerplay of patriarchal authority and cultural duplicity, she is, at once, humiliated and victorious. She is feminine and vulnerable in one instance and invincible and goddess-like in the next, suitably defended by the supreme Lord of the cosmos.

The postcolonial, tribal namesake is different. Named by her mother's Hindu mistress, she takes on a dubious intercultural significance. Claimed by narratives she does not understand, neither those of the Hindu cultural signifiers, nor those of postcolonial powerplays; she is nonetheless their 'target'. The tribal-nontribal interface is destructive by definition. The marks of the nation-state's violent inscriptions are borne by Draupadi's bare body. The inscriptions on the bare body, however, are laid bare in Draupadi's refusal to be clothed again. In the very moment that the body of the tribal woman is the ultimate object of the state's invasion, it also becomes the final bastion of resistance against it.

The paper seeks to explore the textual inscription of the (un)making of a 'Draupadi' from the moment of her accidental christening, through complex

cultural parallels, to the inevitable moment of her disrobing and after. The subaltern's text appears before a larger pan Indian and international readership thrice removed in language, space and time. It is mediated through three interventions: one, the trace of the tribal tongue, as talismanic as incomprehensible, finds inadvertent mention in the story. What-is-the-meaning-of-the-tribal-song is a recurrent concern for both Arjan Singh and Senanayak. All that their best investigators can find is that it is "Mundari language". The exact message remains undeciphered in the text right till the end. Spivak at one place mentions,

> I cannot take this discussion of deconstruction far enough to show how Dopdi's song, incomprehensible and trivial (it is in fact about beans of different colours), and ex-orbitant to the story, marks the place of that 'other' that can be neither excluded nor recuperated. (*The Death of a Discipline, 2003,* p. 4)

Two, the fictionalization in Bengali is about the author ventriloquizing on behalf of the tribal subaltern subject, about a calamitously difficult moment in the tribal experience some ten years after the most strained phase of peasant insurgency and the state's ruthless repression of it. It takes another 20 years for this volatile bit of fiction to acquire an English translation. That the story still resonates after thirty years of its translation, is a paean to its intrinsic, artistic value, yes, but it is also a worrisome reminder of the ongoing and indeed escalating tribal peasant distress. The referent out there, in the case of certain fictions, is just way too urgent to be disregarded.

The movement from the context out there to the somewhat deferred Bangla original to finally the belated English translation also points to the massive time lapses it takes a subaltern narrative to find regional visibility, and in turn for a regional text to find an international audience. For the subaltern text to achieve this regional to postcolonial contiguity in this overstretched time frame is, perhaps, only natural; but contexts often do not have the luxury of enduring intact like fiction: they come together and fall apart a lot more quickly and calamitously than narratives. And they have collateral. And consequences.

The tribal identity and presence: tribal space as the heterotopic space of alterity. The nature of the modern polity in the subaltern heterotopic space is increasingly 'biopolitical' in its most sinister implications. Mitchel Foucault (1988) explains

biopolitics as the form of politics wherein the state wields absolute power over people as living beings. Typically, it is power of and over life. Giorgio Agamben describes biopolitics as "the growing inclusion of man's natural life in the mechanisms and calculations of power" (Agamben, 1998, p. 119). Biopolitics for Agamben is most conspicuous in its targeting of the human body as the site of political control.

The final control that the state seeks to establish is indeed over the bodies of the tribal insurgents. It is not necessarily interested in their welfare; it is merely interested in obtaining their bodies: dead or alive. The very body of the designated insurgent becomes the site for state control.

The space Draupadi inhabits is the forest of Jhadkhani and the surrounding villages, the place of primitive, incomprehensible "Neanderthal darkness" (metaphorically, a space left behind in time). It is at once the stuff of simplified handbooks and dossiers and at the same time, that of complete incomprehensibility: the space the state wants to control, without ever having to effectively administer. It is a space that can be cordoned off village after village and machinegunned indiscriminately, all in the name of law. It is by definition enemy territory, and as such needs to be contained. The only state presence is of police precincts, and naturally, the relationship the state has with these regions is all about "apprehension and elimination" (p. 23).

The police and the military presence sum up the nature of the state's intervention in the impoverished region. There are no schools, no hospitals here, the only state presence is in terms of police precincts. The police, paramilitary and military forces periodically invited to contain insurgency here, are always from other parts of the country. They do not understand the region or the people. In fact, all Santhali, Mundari, Oraon "Afro-Asiatic tribes look the same to the special forces" (p. 20) because they have no long-term contact with them and therefore no acumen to comprehend or appreciate difference or complexity. Their understanding of the tribals is a very simple text-bookish understanding, which has no room for the complexity and grace of these ancient communities. For them the tribals are merely current or potential insurgents, an opinion promoted mercilessly by the colonial British who designated several tribal communities as born criminal in the Criminal Tribes Act. The deeply entrenched prejudices against them have survived their decriminalization. Commenting

on the plight of the millions thus 'decriminalized', G N Devy, in his study of denotified tribes titled *A Nomad called Thief* (2006) observes that the post-Independence nomenclature of Habitual Offenders Act (HOA) hasn't quite managed to change the attitude towards these tribes, since the provisions of the former CT Act are still preserved in the HOA (p. 22). Devy points out how these DNTs face systemic persecution and are therefore constantly "on the run", since "freedom has not yet reached them" (p. 23).

In "Draupadi", the nomads are not just mere thieves. They are the designated "enemy of the state", the traitors. They are often apprehended and destroyed at the behest of powerful landowners, moneylenders, brothel owners and local musclemen. They have no say in most matters, because literally their very language is incomprehensible to the state. The state machinery at one level is determined to figure them out, but very often aligns its interests with those of are engaged on total disregard of tribal people and tribal territories in pursuit of their own selfish ends regards them as completely dispensable.

The inhabitants of this tribal heterotopia are not citizens; they have no rights. They can be and are killed off with impunity: they constitute what Partha Chatterjee describes as the "political society" (*Lineages of Political Society,* 2011) not individual citizens but collective populations that the state administers as it deems fit, without allowing these collectivities any enduring stakes or rights in the body politic.

Draupadi is evoked in the text from various perspectives. First is the inevitable mythopoeic throwback in terms of the name herself: her name anticipates her humiliation and triumph. She is named, thus fated to be Draupadi. Kamaljit Sinha in her article "Deconstructing Patriarchal Structures in Mahasweta Devi's Draupadi" describes her as "at once a palimpsest and a contradiction": evoking comparisons with the legendary heroine and also exploding through them. (Sinha, 2016, para. 3). Radha Chakravorty, too, in her reading of Draupadi's naming remarks: "One of the most notable features of Mahasweta Devi's writings is the visionary, utopia or myth-making impulse that acts as a counterbalance to her dystopian, "forensic", critical perspective on the contemporary world." (Chakravorty, 2011, p. 69).

The police dossier with which the story opens, pronounces her the enemy of the state, a most dangerous criminal who must be exterminated. Her positionality is

clearly irrelevant to the powers that be. The police fact-file baffles the uniformed policeman who can't understand why she doesn't have a tribal name. She has an unlisted name, and that is beyond comprehension. These state actors are so convinced of their rudimentary and simplistic ethnographic stereotypes of the tribals that they cannot comprehend these 'primitive' and 'simple' people as capable of any complexity or difference. Draupadi's name has an explanation. Surja Sahu's wife named her, since her mother worked for the former. Thus, a tribal supposedly comes to acquire a non-tribal Hindu name. The situation involves a *double entendre*. The Hindu mistress names her after supposedly the Hindu legend of Draupadi. The legend is assumed to be Hindu all right, but unlike Radha or Sita, Draupadi is not a popular name for Hindu girls. The legend, sensationally seared into the collective cultural memory is a bit of an uncomfortable presence. Not only because of what happens to her, but also because of who she is: the polyandrous heroine who is also a queen. It has been argued that the legend of Draupadi was a tribal legend to begin with and was incorporated into the great epic of the land at some later stage. The naming of Draupadi thus becomes an inadvertent restoration of an identity lost in time. Yet, in the tribal tongue, she is 'Dopdi': a shorn, diminished, obfuscated variant. The legendary Draupadi in the *Mahabharata* is well known to have been salvaged by the master of the cosmos from a very public disrobing and humiliation. What is not all that well known is that her very presence in the epic is ultimately an appropriation by those that writ the will of the mainstream Hindu pantheon. One might argue of this acceptance of Draupadi within the epic is an emblem of a shared, syncretic lore: except that this is really not a case of an equal sharing. Draupadi is 'claimed' in this cultural mainstreaming also because her genesis in tribal traditions is clearly denied here. Drauapdi/ Dopdi in the text is, therefore, a hearkening back to a forgotten legacy.

The issue that lies at the heart of the story is of peasant insurgency. The ongoing peasant distress and its outfalls, and the state' response to it, all need to be understood in the context of the post- Independence state and its relationship with resistance. As Dipesh Chakrabarty points out, the nation state seeks to promote an idea of political engagement wherein political participation is sanctioned in terms of guided and disciplined interactions between the state and its subjects. Consequently, it sees disruptive resistance movements as aberrant and criminal and takes it upon itself to destroy them (Chakrabarty, p.

3294). This is especially true of tribal insurgency movements which come up intermittently during the fifties and sixties, and after that become a constant feature in the tribal belts (Guha, p. 1891). According to Partha Chatterjee, the aggravation is further compounded because of the casting of the legions of peasantry as a mere "object" to be "acted upon, controlled and appropriated within the respective structures of state power" (Chatterjee, 2013, p. 7).

In "Draupadi" reported/ rumoured instances of peasant insurgency float around the regions of Jhadkhani: the actions that supposedly keep erupting every now and then, thereby justifying the ongoing operations where special forces force these wild tribals to meet their makers against their will. It is against the state's logic to have any kind of communication with the insurgents, so it reacts with violence and repression, killing with utter impunity, even when it runs out of people to kill. As the heterotopia, normalcy of any kind stands completely suspended. No one plays by the rules in this space marked by death and destruction. It has real or rumoured 'actions', i.e., instances of insurgency, which are curbed by unsparing and unmitigated 'operations', i.e., the state's repression of insurgency. There are 'kounters' and counter narratives. It is only in terms of 'kountered' and 'kountering' narratives that any alternative views to the officially offered ones are made available, thereby revealing that the heterotopia's fracture from the mainstream is as complete as it is painful.

Typically, the state in the heterotopia functions as a thanatopolitical presence; (reference) the state operates in terms of its power to kill. Death is the routine default consequence. Killings have a touch of medieval brutality and spectacle about them. Encounters, or Kounters as the tribals call them, result in head counts of mangled, mauled corpses. Tribal corpses in body bags, entire villagers 'kountered', corpses left for wild animals to scavenge are the general givens in terms of death rituals routinely denied. Dulna's killing besides a forest stream in the fashion of a wild game hunt. His corpse is allowed to rot and scavenged clean by a variety of animals: it is supposed to function as bait for his associates. The assumption is that they will come to take the corpse away for the funeral rites, and when they do, they can be similarly shot dead too. They avoid his fate literally by denying him the very last rites which are generally considered sacred across cultures. Such sentimentalism is a luxury they cannot afford.

Dopdi's apprehending precedes her destruction: the catchphrase being

apprehend and destroy. Senanayak, the encounter expert and extreme left politics specialist believes in knowing and becoming the enemy in order to anticipate and apprehend them. He succeeds in apprehending Draupadi after the special forces spend six years chasing her with no luck. He understands the peasant insurgents so well that he plans a sympathetic book on them sometime in the future. His theoretical 'becoming one of them' is supposed to ensure his long-term survival and relevance; ironically predicated upon his ability to exterminate them in the immediate present.

Draupadi too knows her enemy somewhat. When taken prisoner, her immediate response is the anguished war cry *"Maho"* with all the power in her being. She needs to warn her accomplices. Then she mentally catalogues the torture sequence and what she must do to not break before the enemy. She must bite off her tongue so that she may not talk. Her interrogation takes the predictable turn, when in the face of her stubborn refusal to talk, the decree is to "make her".

The (un)making of Draupadi begins: she is repeatedly raped through the night. Rajeshwari Sunder Rajan in "The Story of Draupadi's Disrobing" explains the nature of this assault: "Sexual molestation of any form happens to be patriarchy's method of social control rather than pathology of sexual violence as such." (Rajan, 1999, p. 102). This sexual humiliation is clearly an exercise to demonstrate power. The entire collective act is a sort of collective violation of enemy territory.

Of course, no Gods defend this ordinary subaltern Draupadi's honour with any miraculous interventions. But then, it isn't theirs to defend. It is hers. She seizes agency when she owns her brutally raped body with unashamed dignity, refusing to clothe it dutifully in shame:

> Her ravaged lips bleed as she begins laughing. Draupadi wipes the blood on her palm and says in a voice that is as terrifying, sky splitting, what's the use of clothes? You can strip me but how can you clothe me again? Are you a man? She looks around and chooses the front to spit a bloody gab at and says, there isn't a man here that I should be ashamed. I will not let you put my cloth on me. What more can you do? Come on, Kounter me- Come on, Kounter me-? Draupadi pushes Senanayak with her two mangled breasts and for the first time Senanayak is afraid to stand before

an unarmed target, terribly afraid.

"Draupadi", pp. 36-37.

Her body which is the site of the state's brutal violation and humiliation, is also her final bastion of resistance. In this act of courageously claiming her body as her own, the tribal Draupadi emerges, at least in that brief moment of her voluble, undaunted confrontation of Senanayak, as truly triumphant.

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Spectacle of Wrestling: The Narrativization of Nation-State and Citizenship in Gopinath Mohanty's Short Story 'The Somersault'

Indrani Das Gupta

Abstract

This article examines Gopinath Mohanty's short story, 'The Somersault', within the framework of *Bhartiya Kushti's* cross-pollination with the postcolonial Indian nation-state's politics of inequality and disparity. Mohanty's narrative is analysed in relation to the politics of spectacle and the notion of the public sphere, highlighting the plight of poor citizens within the democratic practices of the nation-state. What this essay showcase is the divide between wrestling (*Bhartiya Kushti*) as an ethico-somatic framework articulated through Mohanty's protagonist, Jaga Palei, and wrestling's encapsulation as a commodified spectacle—drawing attention to issues of political governance and challenges created by a hypermedia-dominated public arena.

Key Words: *Wrestling, Dangal, Spectacle, Public sphere, Democratic practices*

Introduction

Sports and politics are inextricably linked, despite the common refrain to 'keep politics out of sport!'—a connection particularly evident in Indian wrestling, also known as *pahalwani* or *Bhartiya Kushti*. *Pahalwani* or *Bhartiya kushti* has been an integral element of Indian culture, history and heritage[i]. In this essay, the intersection of Indian wrestling with democratic practices, class-

based economic disparity, and media spectacle is examined through Gopinath Mohanty's short story 'The Somersault.'

The first section of this essay outlines a brief overview of the key elements of Indian wrestling and its historical evolution. The next two sections explain Mohanty's short story via the common thread of wrestling as both a sporting spectacle and mass entertainment, and its theorization as a "complex way of life" (Alter, 1992, p. 9). The second section, by positioning the protagonist of Mohanty's story, Jaga, within the state, highlights the spectacle of wrestling and its interrelationship with mass media, offering a discursive representation of the political structure and policies of the nation-state. The third section, through the visualisation of the mediated, commoditised aspect of wrestling, punctures, destabilizes, and unsettles the rhetoric of development, thereby embodying the failures of Nehruvian nation-state policies in addressing poverty.

1. Indian Wrestling: An Overview

Wrestling is not only a popular Indian sport and a leisurely recreation that entertains the public at large but also enacts a public identity through its numerous paraphernalia. In pre-Independence India, the *pahalwan,* via his performance, gave meaning to the complexities of life and dramatized everyday embodied practices by appropriating the motif of the body. In the late nineteenth and twentieth centuries, the *pahalwan* provided a paradigm for comprehending the imagined identity of the nation. As a counter-challenge to the 'somatic politics' of the British colonial state,[ii] the wrestler and the trappings associated with this sport developed into multilayered symbols mapping moral and ethical values onto the body. According to the foremost critic on Indian wrestling, Joseph S. Alter, the *pahalwan* was concerned with embodying the interface of the physical and the moral. Fortifying the body through physical fitness, exercise, and training methods, the *pahalwan* translated "somatic ideology" into nationalist discourse. During the colonial times, Alter asserts, this translation of the body politics framed the wrestler as the "perfect citizen" of the Indian imaginary (1992, p. 195).

One of the most conspicuous features of wrestling, as theorized by Alter in *The wrestler's body: Identity and ideology in north India* (1992), is its performative aspect. The values of the wrestler-in-action, dramatizing skills and exceptional strength, unfolds in a *dangal* (local wrestling tournament), and it is where

the wrestler earns his reputation not only as a competitive sportsman but also personifies "the ideals of a rigorous way of life" (1992, p. 139). However, the competitive aspect of wrestling does not constitute the primary feature of Indian wrestling. Instead, Alter argues that a *dangal* is not as symbolically significant as an akhara. Even as an akhara embodied spiritual strength, Alter notes:

> The word *dangal,* which also means unruly crowd, is cognate with a number of other words which suggest disorder: dang (perplexity, fear); *dangal* (mutiny); and dangi (riotous). A palpable tension permeates many *dangals* whenever two well-known wrestlers compete, and although *dangals* are usually well organized, there is always an underlying sense that the whole affair may degenerate into a free-for-all. (emphasis in the original; 2011, p. 105)

Thus, in Alter's conceptualization, *dangals* are problematic arenas where disorder and transgression of law frequently occur. Nonetheless, Alter emphasises that the *dangal* does not merely explicate chaotic and unruly energies but also embodies the cosmic energy of the akhara. However, a dangal and an akhara, Alter clarifies, are not equivalent. In a *dangal*, unlike an akhara, the guru-disciple relationship fades into the background, foregrounding the "individuality, the public identity, and unique biography" of the pahalwan (Alter, 1992, p. 139). Even though a *dangal* does not strictly adhere to *kushti* laws, Alter insists that the the *dangal* functions as "a cultural critique, a lens through which one sees certain aspects of social integration and conformity thrown into sharp and disjointed relief" (Alter, 1992, p. 141).

It is in the context of *dangal* that Gopinath Mohanty's short story 'The Somersault' is examined in this paper. Mohanty's story 'The Somersault' was first published in Oriya in 1968 and translated into English in 1979 by Sitikant Mahapatra.[iii] The narrative is set in the political climate of 1960s India.[iv] The story of a wrestler's journey from success to defeat is not marked by caste or tribal denominations.[v] Jaga Palei, the protagonist, is portrayed as a poor laborer and wrestler. Mohanty presents Jaga as a universal symbol of misery and struggle, without invoking other affective or political identities. In his monumental work on Indian wrestling, Alter analysed this short story in the context of *dangal's* "emblematic individuality of the competitive wrestler" (1992, p. 140).[vi] However, Alter's analysis omitted political and cultural factors

that influence and shape the individual. In Alter's analysis, Jaga's rise and fall as a *pahalwan* offers only an oblique commentary on society, and which he does not further explicate. This article seeks to address this omission by analysing how the wrestler in Mohanty's story, Jaga, is framed within and against society. This elaborate deliberation on Mohanty's portrayal of wrestling, I believe, can offer a more nuanced understanding of 1960s India.

2. Spectacle, Media and Public Sphere: Community and Hero

In Mohanty's story, the first picture that reverberates in the minds of the readers is the emergence of a new celebrity athlete, Jaga, in the public domain of visual images, representations, and media spectacle:

> The day Jaga Palei of Sagadiasahi defeated Ramlawan Pande of Dharbhanga to enter the finals of the All-India Wrestling Competition-being held in the Barabati stadium - the sky were rent with the jubilant shouts of thousands of spectators. It was not the victory of Jaga Palei that excited them so much. It was Orissa's victory. Orissa had won. This was the feeling everywhere.
>
> . . . A sea of humanity surged forward to greet him, to meet the heretofore unknown, unheard of wrestler. (Mohanty, 1979/1968, p. 81)

This opening montage structures the entire tragic content of Jaga's life, and provides shape, tone and direction to the entire story. Jaga is a wrestler who has won a game in a national sporting event—an all-important semi-final bout against another fellow wrestler. The consequences of this victory are enormous as Jaga's victory is celebrated in media as the victory of the whole region. I call this as 'spectacle' following Alan Tomlinson definition that sporting spectacle are large-scale events attended by many people (2002, pp. 44-60).

In the last three decades, spectacle has become a buzzword of our hyper-mediated life. Historically, the first mention of spectacle was by the Greek philosopher, Aristotle, in his treatise on literature, *Poetics*. For Aristotle, a spectacle constituted a mechanized tool meant only to enhance the visual appeal of tragedy (ch. 6, p. 12). But in contemporary parlance, the discourse of spectacle, as Guy Debord noted in his seminal book *The Society of Spectacle* (1967), is imbricated with power networks and wherein 'authentic social life'

has been corrupted by mediatized representations. Following Debord's work on spectacle, the nature and effect of 'spectacle' has been studied across disciplinary terrains, and its presence is ratified in fields as diverse as politics and identified even in rhetorical gestures. In recent decades, however, spectacle as a category has most often been applied to the domain of sport.

Basing his work on the Olympic Games, John MacAloon outlines four intrinsic elements that comprises the idiom of contemporary spectacle. The first element of spectacle includes "visual sensory symbolic codes." The second element involves "grandeur" while the third element "institutionalize the bicameral roles of actor/audience, performers/spectators." The fourth element of spectacle included the component of "dynamic form, with movement, action and change." It is this fourth element that has become widely popular and is considered as fundamental to modern sports. For MacAloon, this fourth element evokes a theatrical flavour that excites and creates frenzy among spectators, and constitutes sports as the true expression of popular culture (cited in Tomlinson 2002, pp. 50-54). Jaga's victory celebrated by "thousands of spectators" or a "sea of humanity" recalls MacAloon's analysis of spectacle's dynamic 'fourth principle. And it is this principle that shapes the contours of Jaga's narrative.

MacAloon's 'fourth principle' also aligns with Alter's postulation on *dangal*. *Dangal,* as Alter explains, is a locally organized competition which can be sponsored by municipal boards, village panchayats and regional parties (2011, pp. 110-11). As much as a *dangal* involves crowd participation, it remains a small-scale regional event. This difference in the scale of spectacle can be better understood in light of Donald Kyle's (2015) discussion of the distinction between Greek and Roman spectacles. Kyle writes:

> Greek sport was more participatory and Roman spectacles were more spectatory, and Greek competitors were citizens but most Roman performers were not, but sport and spectacle were complementary. . . When states institutionalize sporting contests, sport becomes spectacular. . . (2015, pp. 343-44)

The description of the Greek element of spectacle which were more participatory in nature resonates in Mohanty's story as well. We are told that during his training period under his guru, Khalipha, Jaga visits various towns and villages to display his skills. These local tournaments or *dangal* offer Jaga to showcase

his knowledge and talent to his community and function as stepping stones to greater glory. However, in Mohanty's story, these local tournaments also evoke the separation of Jaga's social condition from the commoditised urban sporting spectacle. Mohanty writes,

> The town people who cared for wrestling soon knew his name. . . But rarely were these people from among the higher circles of society. Mostly they were shopkeepers, tailors, butchers, drivers, carpenters and so on. The lack of fame in all sections of society was in the part due to the *khalipha's* regulations. No showing off, no publicity. (emphasis in the original; 1979/1968, pp. 86-87)

This is clearly an account of how Alter decoded the workings of a *dangal* where the individuality of the wrestler is foregrounded but with the added touch of the guru-shishya idiom embodied in an *akhara*. Nonetheless, whatever the differences between Greek, Roman and Mohanty's description of wrestling posit, one can say with certainty that the marriage of sport and spectacle is intimately bound to each other, and registers values that extends far beyond the terrain of sporting culture.

Jaga's victory representing "Orissa's national consciousness" (Mohanty, 1979/1968, p. 81) is situated in the urban space of state-managed spectacle ("Barabati stadium," "All-India Wrestling Competition"), governed by institutional rules and state regulated frameworks. The picture of the police trying to control the stampede, which takes place after Jaga wins the semi-final match becomes an instance of the state's manifestation of management and supervision of sport. Kyle also affirms that as the state becomes heavily involved in coordinating the games, staging of sport becomes more elaborate and spectacular (2015, p. 344). Interestingly, the unruliness that breaks out in this visualisation of stampede recalls the etymological definition of *dangal* as chaotic. But whereas Alter's (2011) postulation of *dangal* as a site of chaos and confusion depicts a competition where results are often not forthcoming (p. 106). In Mohanty's story, however, the chaos is contained with the results being declared. However, the implications in Mohanty's story are not controlled and symbolise more than unruly energies.

Jaga's victory in Mohanty's story is reported in the newspapers and blared across the radio. The report of the match and Jaga's artistry is exultingly described in

print media, which enable people who have not even watched the match at the stadium to relive this momentous experience of the epoch win of Jaga. Mohanty (1979/1968) writes,

> Excitement spread rapidly to the rural areas as soon as the newspapers published the news. . . The week that followed could legitimately be called 'Jaga Palei Week'. In buses and in trains, in hotels and in the village Bhagabat-tungi, the talk was only about Jaga Palei's wrestling feat. . . Since there were no auspicious marriage dates in the coming year, hundreds of marriages were solemnized in the fortnight following this event and, in these festivities, a frequent subject of discussion was Jaga Palei's wrestling. (1979/1968, p. 82)

The proliferation of the news of Jaga's success to the remotest corners of the state becomes what Akhil Gupta (2006) has observed as the "representation of the reach of the state" (p. 214). The infiltration of the news in the quotidian rhythms of citizens—while travelling in buses or serving as the focal point of discussion during marriage festivities illustrates the enactment of the state and its power in the lives of common people. Whether read as "cultural texts or as sociohistorical documents" (2012, p. 93), the vernacular press, according to Gupta, constitute a form of "situated knowledge" (2012, p. 93).We are told that Jaga's win embodies a symbolic alignment of positive astrological configurations for his local community—leading to even marriages being performed during the 'Jaga Week' —despite not being practically convenient for such endeavours. Jaga, thus, I argue, operates as a hyper mediatized spectacle.

The element of spectacle is not only visible in the proliferation of mediatized images of Jaga's victory but in Mohanty's story (1979/1968), the newspapers position Jaga's victory adjacent to the news items like "'Rocket to Mars,' 'Man's flight in Space,' 'Death of Lumumba' and the subsequent daily events of Congo's politics, 'Success and Failure in *Panchayat Samiti* and *Zilla Parishad* Elections'" (p. 82). What this suggests is not only the inescapability and pervasiveness of sports but also, reifies wrestling as a significant site where socio-political issues are communicated. Also, the news items so mentioned alongside Jaga's achievement pertain to voting and electoral politics, and anticipates the tragic denouement of Mohanty's main protagonist.

Alexander Keyssar (2009) reads voting as central to democracy, and stresses

that "although a nation certainly could have universal suffrage without democracy, a polity cannot be truly democratic without universal suffrage" (p. xx). The description of Jaga's historic victory, set alongside the news of Panchayats' ongoing electoral process and in parallel with international politics such as Congo, not only recalls the nineteenth century discourse of wrestling as intertwined with self projection, self representation, and self government, but also foregrounds the centrality of electoral participation in shaping the political apparatus of the postcolonial nation state.

What Mohanty projects in this juxtaposition of voting with wrestling is to document the spectacle of Jaga's epic win as a narrative of political inclusivity and equality . The mention of Panchayats and Zilla Parishads also brings into focus the idealistic vision of India established at the dawn of Independence under the leadership of the first Prime Minister of Independent India, Jawaharlal Nehru (1889–1964). Sudipta Kaviraj (2011) notes that the Panchayati Raj, or rule by village councils, was established by Nehru as an experiment to counter the economic problems which persisted even after independence. Realizing that formal laws enacted by the state did not penetrate into the hinterlands of the country, Nehru's effort to build these local Panchayats, as Kaviraj points out, was a step to break the stranglehold of the landed gentry over the control of resources (2011, p. 132). Vijendra Singh (2003) argues that the Panchayati Raj being an agency of the state, was connected to issues of planned development and welfare functions of the nation—to bring about parity and equality amongst different classes, castes, and gender (p.132). In describing Jaga's victory alongside Panchayat elections, Mohanty problematizes the spectacle of wrestling and frames it within an engaged mode of citizenship.

Wrestling is shown as crucial to the functioning of the nation-state, just as voting is central to translate the idiom of citizenship into the dialogic space of the public sphere—one that includes both the dispossessed and the dominant classes.[viii] From the position of being merely a subject during the colonial times to becoming a citizen in postcolonial India, public sphere in relation to citizenship involves an ever-widening dimension of duties, responsibilities, and fundamental rights. Citizenship, by definition, is premised on egalitarianism, wherein new members are included to materialize a public space—one that rapidly changes its content to secure political and social identities for those newly incorporated.

The exaltation of citizenship in terms of membership and equality in the new political milieu of independent India after the end of dehumanizing experience of colonialism is depicted by Mohanty in Jaga's stupendous victory and the circulation of the news of his victory across channels. The evocation of Jaga Palei as a "symbol" and "fulfilment of the hopes and aspirations of Oriya people" (Mohanty, 1979/1968, p. 81) becomes a key site "for the expression of various levels of identity and affiliation" (Tomlinson. 2002, p. 44), and an important element to imagine a nation. In the same vein, Boria Majumdar and Nalin Mehta (2009) record the growth of sport during the early years of Independence as "deeply tied to the ideals, hopes, and aspirations of Nehruvian India" (p. 109). Mohanty's description of Jaga's triumph as being shared, felt, and communicated with people of varying backgrounds and class illustrates a sporting site where diverse elements of the society come together and are culturally and politically emboldened to act out their rights in the context of the new political policies of postcolonial India.

Mask of Democracy

Mohanty structures the story of Jaga through two images; the first image is of Jaga as a wrestler and the second image being that of a poor labourer. The story of the poor labourer discredits the earlier story of the march of a nation towards democratic progress and equality, and draws the reader's attention to the socialist democratic policies of Nehru as being more a narrative of exclusion. In the description of the interviews undertaken by the local correspondents, Mohanty brings out the discomfiture of Jaga as he attempts to wrestle his way out of the commoditised, mass-mediated representation of the sport of wrestling. The banal questions like "which party do you support?" "what do you think of the recent changes in the country?" (Mohanty, 1979/1968, p. 88) thrown by the newspaper correspondents at Jaga, at first glance, lead to a false impression of the success of the developmental policies of the nation-state of Nehru. But the fact that Jaga Palei felt suffocated, by the insistent questioning of the media, and the fact that he "ran through the crowd and still afraid that they [the journalists] might follow him" (1979/1968, p. 89), locates a subversive response to these new forms of mass, commercial social identity. It is interesting to note, that Jaga runs to his guru (teacher) for his blessings. The guru, *Khalipha's* praise, "you have preserved my name," (p. 89) is the only one which Jaga appreciates amongst the ratification of his prowess by the

public and the media. Alter describes "the institution of guruship" "as a guiding principle in the world of wrestling" (1992, p. 53) and as central to wrestling's celebration as a complete ethico-political system. Jaga's humility and deference depicted in the relationship between him and the *Khalipha,* as well as in the still image of Jaga folding hands to acknowledge the applause of the public, all serve as a stark contrast to the throng of journalists (Mohanty, 1979/1968 p. 89) "jostling and pushing about" for Jaga's "photograph" to "flash it in cinema slides" (1979/1968, p. 88).

If the concept of public sphere, elaborated by Jürgen Habermas, presupposes a space of debate, discussion, and rational exchanges, in Mohanty's story, I argue, the circulation of Jaga's larger-than-life portrait nullifies this idiom of equal participation as one based on reason and critical acumen. Instead, Jaga's hypermediated spectacle only outlines an abject dehumanisation and commodification, where "[t]he spectacle corresponds to the historical moment at which the commodity completes its colonization of social life. . . the world we see is the world of the commodity" (Debord, 1967/1994, p. 29). Though the public sphere in Mohanty's story is supposedly inclusive of even the socially disadvantaged sections of the society, but this pluralism, as Srirupa Roy (2007) observes, is merely a "selective inclusion and transformation of group identities into a particular state-supporting matrix of diversity in which only certain kinds of group identities were recognized" (p. 7).

This selectivity becomes apparent when Jaga's win is placed alongside the more political news of the Panchayat elections and the Congo elections. The mention of President Lumumba, the first legally elected Prime Minister of the Democratic Republic of Congo who was assassinated on 17th Jan, 1961—operates as a "stumbling block to the ideals of national unity, economic independence and pan-African solidarity" (Georges Nzongola-Ntalaja, 2011, n.p). If Lumumba's death connotes the death of democratic values, likewise, I argue, the juxtaposition of Jaga's win in print media with international political news represents a tragedy enforced by the corruption that lay underneath the façade of development of postcolonial India. The so-called rendition of democratic values falls flat as Jaga is read as more as a sign that is manipulated at will by the ruling classes and media.

While local organisations seek to share and profit from Jaga's monumental

effort—whether by issuing press notes, publishing newspaper interviews with Jaga, or through private entrepreneurial ventures that use his name to sell "songbooks"—there is, on the other hand, an obvious lack of ethical care in the 1960s discourse on political governance. The fact that Jaga, a daily-wage earner, deprived of even basic necessities as clothing, clean water, and sanitation (*Red Tape,* 2012, p. 3) is b brushed aside defines how the postcolonial Indian nation-state, what Akhil Gupta (2012) described, as illuminates "cruelties of endemic hunger and malnutrition." Jaga's socio-economical condition functions as an empty signifier, serving no purpose but merely providing bare information. Mohanty writes, "[n]ewspapers gave out the fact that he was a labourer" (1979/1968, p. 89). Jaga and his family's tragedy outline a society where the underprivileged are simply pawns in a larger game.

The wrestler who wins is celebrated but the wrestler who is surviving against dire poverty is consigned to a single sentence.[ix] A wrestler's diet is a fundamental part of his existence and the fact that Jaga saw "mutton" only "when walking down the tired streets" and where "milk was only a dream" (1979, p. 90) exposes the failure of Nehruvian economic policies to relieve the masses from the dire condition of poverty. What it echoes is the incongruence between an ideal nation-state which benevolently looks after its citizens[x] and an ineffective state intervention to relieve the sufferings of poor citizens like Jaga, even to the point of securing the basic necessities of life.

While the victory of Jaga becomes the talking point of the whole region, the celebrity wrestler is shown to persist with his 'traditional' mode of life as a daily wage earner carrying gunny bags to and from the 'maalgodown' (warehouse). This is a profession he has continued with since the death of his father, Uddhab Palei. Mohanty describes Udhhab's futile attempt to recover his health by approaching several quacks and ayurvedic physicians. At the dawn of independence, Nehru stressed on the importance of science as being the only means to solve "the problems of hunger and poverty, of insanitation and illiteracy, of superstition and the deadening custom and tradition, of vast resources running to waste, of a rich country inhabited by starving people" (cited in Arnold, 2000, p. 210). But, Udhabb Palei's death due to pneumonia, as Mohanty noted, "without discovering whether mankind had discovered a cure" for it (1979/1968, p. 83) confirms the violence implicit in the postcolonial policies of the nation-state. Here, the death of a poor citizen is widely accepted

as a normal affair and chronic poverty is no more a tragedy but an everyday affair.

If akharas represent a space of cosmic equality; in Mohanty's story, the utopian picture of an akhara contrasts strongly with that of Jaga's home. Mohanty depicts Jaga's home as surrounded by dirty drains and located at the backside of the local moneylender (1979/1968, p. 84). This reflects the polarisation and the differentiation between the rich and the poor implicit in the growth of urbanisation engendered by the new economic policies of Nehru. Within the fabric of democratic mobilisation and participation that enables individuals like Jaga to enter the domain of sports lies the image of poor and disempowered individuals or groups, depicted as mere waste—no better than trash.

James H Mills (2005) described sports itself as a domain that "invites subalternity." Mills observed that with "skills, prowess, concentration and guile," which allows a sportsperson to triumph are not necessarily governed by the logic of "wealth, social status or political manipulation" (p. 1). Sport facilitates even the utterly dispossessed to oppose the dominant agenda imposed by the elites. But in Mohanty's story, sport only reifies the powerful and people like Jaga have to fight it out with other disadvantaged sections of the society—merely to survive. His mother's sweet-shop loses its appeal amongst the masses because of the variety of food items and better seating arrangements provided by migrant labourers coming to live in Jaga's locality (1979/1968, p. 84).

Jaga's physical strength can only be utilised, as Mohanty writes, in the role of domestic servant, as an apprentice in driving bullock carts (1979/1968, p. 84) or far worse, "as a Kichaka; in modern terminology, goondaism" (p. 87). This last role is significant as it is, what Akhil Gupta (2012) claimed, the manifestation of the state in the lives of the poor citizens through various representational modes and everyday practices. Studying various discursive domains such as newspapers, Gupta insisted that the poor are simply interpellated by the hegemonic classes (2012, pp. 19-20), and are, in due course of time, summarily silenced. Mohanty's story represents Jaga as a consumable entity, who is accorded meanings at will by the hegemonic classes. Moreover, Jaga's story exposes the idealistic strain in wrestling discourse as always being corrupted, defiled and used up in the services of the rich and landed elites.

While the sporting spectacle and the media orchestrate the public into being

manipulated by the images, Jaga's response is unique, different, and can be understood within the parameters of *Bhartiya Kushti*. The suggestions of well-wishers to sell his property, the offer of various menial jobs, and the proposal of marriage are all functions to locate him in a role of subservience —devoid of dignity and self-respect—is comparable to that of the condition of slavery. Nonetheless,, Jaga's response to all these offers is negative. His refusal of all these societal propositions encapsulates the ethico-somatic framework distinctive to the ethos of wrestling, and which tragically finds no other takers.

Conclusion

The transformative potential of wrestling, dramatised in Jaga Palei's struggle to maintain his sanity and to survive amidst poverty and death emerges as a subversive response to the political and cultural power of the state. However, the cyclical repetition of the narrative, embodied in the alternative success and defeat of one wrestler against the other, becomes an occasion to strip the idiom of wrestling with any moral, political legitimacy, and casts Indian wrestling only as an empty signifier in the hands of the nation-state.

At the beginning of the story, Jaga defeats a wrestler, Ramlawan Pande of Bihar, and at the end of the story, with the defeat of Jaga, we see the emergence of a new hero, Dilip Singh of Punjab. The very nature of sports imbricated in a paradigm of success and defeat is transformed in Mohanty's story to foreclose any resistance on the part of the individual subscribing to the ethos of wrestling and eventually discredits the democratic policies inaugurated in the aftermath of colonialism.

Where Mohanty's title of 'somersault' renders the ineffectuality of wrestling to transform the state into a political ideal in the postcolonial times, it also undercuts the universality implicit in the rhetoric of citizenship. In Gopinath Mohanty's earlier short story, 'Ants' (1995/1954), ants are described as, "everywhere hungry ants carrying mouthful of rice to live, to survive" (p. 27). We see an echo of this image where individual life and the whole history of wrestling embodied in the figure of Jaga becomes a matter of survival against the privations and hardships caused by the miscarriage of mobilisation programs (panchayats and zilla parishads) during the Nehruvian era.

Unlike, Alter's description of Jaga's plight as a narrative of individual suffering,

in this essay, the tragedy of Jaga thus, verbalises a broader commentary on the anomalies and the irregularities that inform the postcolonial nation-state. Here, the rights of the poor citizen are nullified to the extent of being reduced as a numerical data, and the democratic practices are exposed to reveal the seedy violence of power and the loss of a whole way of life.

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i *Bhartiya Kushti's* references abound in classical Hindu epics—The Ramayana and The *Mahabharata*—with characters such as Jarasandh, Bheema, Duryodhana, Balaram—being trained wrestlers.

ii After the First War of Independence (1857), within both colonial and postcolonial politics, the 'body' emerged as the definitive site of power and authority while simultaneously resisting the dominant discourse (See James H Mills & Satadru Sen [2014]; Hargreaves [2007]; David Arnold [1993])

iii The original Oriya title of this short story was 'Nanmane Nahin,' published by Sathi Prakashan in Cuttack.

iv Mohanty has not mentioned the date of its setting but it can be interpreted through the mention of the assassination of Lumumba and Congo elections within the narrative (1979/1968, p. 82).

v As an administrative officer posted in the Koraput region of Orissa, a district with a predominantly tribal population, Gopinath Mohanty is mostly known for his tribal narratives that reflect his personal experience as well as his deep-seated sympathies for these tribes. He won the Sahitya Akademi Award in 1955 for his fiction, *Amarutara Santana*.

vi Alter also mentions Ruskin Bond's short story, 'The Garland on his Brow' as another example of fictional representation of wrestling (1992, p. 140).

vii 'To make a spectacle of oneself', is an adage which has been exploited to its maximum potential in Renaissance literature depiction of fools (See Burningham 2007).

viii The notion of public sphere became a popular vocabulary across the world during the early 1990s and has emerged as a key term in political economy with the publication of Jürgen Habermas's *The structural transformation*

of the public sphere. This book was originally published in German in 1962 and its translation in English became available only in 1989. Habermas' contention that during the eighteenth century with the establishment of coffee-houses and the periodical press, a democratic public sphere inaugurated where all could participate and discuss and debate on matters political gained massive momentum during the rise of Eastern European Democratic societies of the 1980s (Stanford encyclopedia of philosophy, 2023)

ix Individuals being simply rendered as statistic was outlined previously in Chinua Achebe's cult classic novel, *Things Fall Apart* (1958).

x Joseph S. Alter's article 'Subaltern bodies and nationalist physiques: Gama the great and the heroics of Indian wrestling,' draws up a utopian world of wrestling where the state looked after every need of its citizen ((2000, p. 51).

xi Kichaka, was the army commander of the Matsya Kingdom, and a legendary wrestler in the classical Hindu epic, *Mahabharata*. He was killed by one of the Pandava sons, Bheema, because of his attempt to rape Draupadi.

Productivity as Common Sense: Power, Knowledge, and the Social Construction of Value

Srijana Sidharth

Abstract

This paper challenges the assumption that common sense is neutral, self-evident, or devoid of power by situating it within relations of ideology and hegemony. Drawing on a 'Sociology of Knowledge' perspective, and building on insights from Antonio Gramsci and Satish Deshpande, it argues that common sense derives its power precisely from its ability to obscure its own conditions of production. Rather than being natural or universal, common sense is historically constructed and shaped by dominant social groups. The paper develops this argument through an analysis of productivity as a contemporary form of ideological common sense. It examines how media and digital discourses associated with hustle culture, circulate and normalize specific valuations of time, labour, and selfhood. In doing so, productivity emerges not merely as a descriptive category but as a normative framework that naturalizes and legitimizes hierarchies of labour. By foregrounding the discursive construction of productivity, the paper demonstrates how common sense operates as a site of power that structures both perception and practice in contemporary neoliberal contexts.

Keywords: *Common Sense, Productivity, Ideology, Hegemony, Hustle Culture, Neoliberalism, Labour Hierarchies*

Introduction

The term common sense is often introduced to our vocabulary via another individual's expression of immense frustration or surprise over something not unfolding in a manner that they saw as natural and obvious; something that was supposed to be common sense. While presenting a defense for Sociology and delinking its subject matter from common sense, Beteille observed "Common sense is not only localized…; it is also unreflective since it does not question its own origins and presuppositions, or at least does not do so deliberately and methodically"(1996, p. 2362). This unreflective characteristic of commonsense is the foundational premise of the power relations implicated in construction of common sense. There emerges the idea of an authority which is almost sacrosanct when presumptions are clubbed under the umbrella of common sense, consequently evading reflection.

Given how the disciplinary authority of Sociology is constantly questioned by equating it to common sense, Beteille happens to be only one among several sociologists who have tried to problematize common sense in order to present a defense for the scientific knowledge of their discipline. However, these endeavors have often limited themselves to only differentiating common sense from Sociology and not really dwelling deep into the power implications of common sense. This task is thus best understood via a specialized 'Sociology of Knowledge' perspective. On the same lines, one can identify pioneer endeavors problematizing common sense in key Marxist texts which would be apt to elaborate on in this discussion.

The Marxist Questions on Ideology and Hegemony

While arguing in their *German Ideology* (1846/1976) that historical change is a matter of changing ideas or consciousness, Marx and Engels provided an early insight into problematizing common sense. "The ideas of the ruling class are in every epoch the ruling ideas" (p. 64) implies clearly that ideas interact with social activity and are active in social and political relationships. Marx and Engels thus further proceed to demonstrate how the dominant material relations are in fact ideally expressed at the ruling ideas of a time, and therefore, the ideas become sources of one's class dominance in practice. Ownership of means of material production thus translates to ownership of means of mental production as well. Further, the lack of the same implies individuals as mere subjects to the same

ideas that are produced by the ruling class which is constituted by those who have the distinction to 'think' or have consciousness by virtue of their material ownership of means of mental production.

The foundational critique set by *German Ideology* echoes in works of Marxist scholars who have explored questions of ideology and hegemony further. A Gramscian Sociology of knowledge in fact is rooted in a theory of ideology itself (Salamini, 1974). While bridging the gap between economic and political processes, Gramsci (1971) highlights the role of human consciousness which governs and alters the relations of production. This is Gramsci's interpretation of the western capitalist societies where the bourgeoisie retained their domination in forms of a hegemony erected upon secured and maintained consent of the masses. The unconscious transformation of human consciousness then, according to Gramsci, is the most efficient means of retaining bourgeoisie domination. The Bourgeois *Weltanschauung*[i] therefore becomes common sense knowledge as it is diffused, popularized, and absorbed by the masses.

Having placed cultural and political hegemony at the center of power relations dictating social stratification, Gramsci then invokes the "philosophy of praxis"[ii] as a path of counter hegemony. In summating Gramsci's arguments, Salamini opines that if one must develop a critical consciousness of the world that is new, an awareness of historicity in the context becomes imperative. With such a consciousness of historicity, one may then begin to question and problematize what we otherwise readily accept as common sense.

The Marxist questions on common sense can further be explored via Althusser's work on the ideological state apparatuses. In summation, Althusser argues that seemingly apolitical institutions are efficient means of propagating the dominant ideology. To elaborate this, Althusser reiterates two pressing theses. First, "an ideology always exists in an apparatus and in the practice or practices of that apparatus. This existence is material," and second, "Ideology represents individuals' imaginary relation to their real conditions of existence" (2014, p. 162). While the first thesis is largely a reiteration of Marx and Engels' pioneering critique, the second thesis here is especially important to understand common sense and requires some discussion. While discussing how the individual imagines the conditions of his existence, the aspect of common sense being unreflective is pertinent. One often takes these "imaginations" for granted,

dwelling little upon whether it is truly their own imagination of the world around them or merely a prescribed set of ideas.

The Normal, the Pathological and the Universal

Having mentioned that common sense's extreme efficiency to prevail relies on it being unreflective, it becomes imperative to discuss what contributes to one being unreflective about it. What Althusser has called the imaginary relation of individuals to their real conditions of existence are seldom imaginations in the sense of them being original. The imaginations are most often tried to be aligned with 'norms' prevailing in society. One may understand common sense in this respect via Durkheim's distinction of normal and pathological social facts.

Common sense is a part of what we may understand as normal social facts in a society, that is, most integrating factors. Normal social facts denote a requisite of adherence to the status quo. On the other hand, anything suspicious of threatening disintegration in society can be understood as pathological social fact. Similarly, if one does not align their actions with what could have been common sense, they can be seen as committing something essentially pathological. However, while Durkheim being a sociologist has been careful to highlight the importance of the social type in contextualizing a social fact as normal or pathological, it is often not the case with common sense. By invoking the social type, Durkheim (2014) argues that the functionality of a normal social fact would be contextual and therefore limited to the society in which it exists. On the other hand, common sense is perceived with a certain universality.

This association with universality is what lends to the claim of common sense being "natural." This does not mean that common sense in actuality is universal, the majority of what we perceive as common sense is in fact particular to the cultural context and as Beteille has said, is "localized." However, the implicit claim of something being natural and hence universal plays extremely well in penetrating the dominant notions deep into an individual's way of seeing. The presumption that something is natural consequently constructs it as value neutral and not requiring reflection. An unfavorable value judgement is thus often made with reference to an individual who does not adhere to the seemingly common sense and in the process ends up committing the "pathological."

Hustle Culture and the Moral Economy of Productivity

Having located the roots of Common sense's critique in Marxist theory, proceeding to Berger and Luckmann's (1966) seminal work on knowledge would find common sense being problematized in a more contemporary sense. The arguments of Marx, Engels, Gramsci and Althusser have been summated by Berger and Luckman in terms of subjective meaning and objective facticity. Berger and Luckmann have combined Durkheim's emphasis on treating social facts as things with Weber's contesting focus on subjective meaning in sociology. In doing so, the sociologists found themselves grappling with the broad question of "How is it possible that subjective meanings become objective facticities?" (p. 18) The authors have explored this question over the course of their book by looking at what they have called "everyday reality." An analysis which deals with "language and knowledge in everyday life" is integral to this research. The discussion on language is especially important if one must trace the emerging common sense with reference to the idea of productivity.

With reference to Language, Berger and Luckmann summate:

> Human expressivity is capable of objectivation, that is, it manifests itself in products of human activity that are available both to their producers and to other men as elements of a common world. Such objectivations serve as more or less enduring indices of the subjective processes of their producers, allowing their availability to extend beyond the face-to-face situation in which they can be directly apprehended. (2011, p. 34)

This framework is particularly useful in examining the contemporary idea of productivity. Today, productivity is not merely an economic concept, but a pervasive moral imperative embedded in everyday discourse. It is widely understood, almost instinctively, as the efficient use of time, the completion of tasks, and the continuous pursuit of self-improvement. To be productive is to be disciplined, responsible, and worthy; conversely, to be unproductive is to be wasteful or lacking. These associations appear self-evident, requiring little justification, thereby exemplifying the unreflective character of common sense.

The proliferation of what is often termed "hustle culture" demonstrates how productivity is continuously constructed and reinforced. Across digital platforms, particularly social media, one encounters an unending stream

of messages valorizing constant activity: waking early, optimizing routines, monetizing hobbies, and transforming leisure into self-investment. Phrases such as "rise and grind," "no days off," or "make every minute count" circulate widely, functioning as linguistic vehicles through which particular valuations of time and labour are normalized. These expressions are not neutral; they encode and reproduce a specific ideological orientation aligned with neoliberal capitalism, where the individual is held solely responsible for maximizing their own value.

Yet, as with all forms of common sense, the idea of productivity obscures the processes through which certain activities come to be valued over others. An interesting phenomenon, as such, to look at productivity is housework. Housework, still, in common sensical understanding lies far away from being conceptualized as work. In fact, it was not until theorists like Ann Oakley (1974) studied housework that much was reflected upon regarding housework. The exclusion of housework from dominant definitions of productivity reflects not its lack of value, but its location outside regimes that recognize and reward labour through visibility and exchange.

Moreover, productivity does not operate as a simple binary between productive and unproductive activities. It eventually falls in the larger hierarchy which does not only differentiate productive from non-productive but also, the more productive from less productive. Looking at the hierarchy of productivity itself is especially important to notice how it is often invoked in households where multiple family members share a physical space while connecting digitally with their respective work spaces. One makes common sensical judgements when deciding whose work is productive enough to suspend all potential disturbances? For example, the work of the male (most likely primary) bread winner of the family is likely to seem more productive than the wife who maybe juggling between housework and work from home and in the process, ends up looking less involved in a more specialized (productive) task, or the child who is a university student and not bringing income to the family. Productivity, in this manner, helps us to locate the deep infestation of common sense with the capitalistic ideals of a neoliberal economy which benefits the dominant individuals and groups everywhere.

Borrowing from the above classical frameworks, recent scholarship has further

emphasized how the discourse on productivity must be read within the realm of digital capitalism and the ongoing restructuring of labour. Platform and gig economies as well as the emergent area of digital labour become sites for analyzing the restructuration of labour and the evolving idea of productivity. In these contemporary areas of work, studies observe the boundaries between leisure and labour becoming increasingly blurred (Srnicek, 2017; Wood et al., 2019) whereby one is consistently asked to optimize themselves even outside of formal work. Hustle culture is a key component in this cultural trend that is directly reflective of the neoliberal rationality. Individuals, then, end up internalizing the market logic by constantly holding themselves against evaluation in terms of efficiency, output and general productivity that ultimately lends to their idea of self-worth as well. Gershon (2011) reads this as neoliberalism reshaping subjectivity by compelling individuals to treat themselves as enterprises that must maximize their own values in competitive environments. In this sense, productivity becomes the thread weaving together personal conduct and broader structures of capitalist accumulation.

Social media further intensifies these hierarchies by creating aspirational standards of productivity that are detached from material realities. Influencers and entrepreneurial figures often present curated narratives of relentless efficiency, masking structural inequalities such as access to resources, time, and support systems. This produces an illusion of meritocracy, where productivity appears as an individual achievement rather than a socially conditioned possibility. The result is an emerging common sense that not only prescribes how one ought to live but also obscures the unequal conditions under which such prescriptions are made possible. In this way, productivity emerges as a key site where common sense and power intersect. What appears as a neutral and universally desirable trait is, in fact, a socially constructed category that reflects and reinforces existing hierarchies of class, gender, and labour. It's taken-for-granted status is precisely what enables it to function so effectively: by presenting itself as natural, it evades scrutiny, even as it organizes everyday life in profoundly unequal ways.

Conclusion

Productivity, when examined through a sociological lens, reveals itself not as a neutral measure of efficiency but as a form of ideological common sense that

structures how value is assigned to human activity. Its apparent universality and self-evidence are precisely what enable it to function effectively: by presenting itself as natural, it conceals the historical and social processes through which certain forms of labour come to be privileged over others. To problematize productivity as common sense is therefore to make visible the power relations it conceals. Such a move is not merely analytical but critical, as it opens up the possibility of questioning taken-for-granted hierarchies of value and recognizing alternative ways of organizing work, time, and social worth. In doing so, it reaffirms the central sociological insight that what appears most obvious often requires the most rigorous interrogation.

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i It is a fundamental concept of German philosophy, especially epistemology and refers to a wide world perception. Additionally, it refers to the framework of ideas and beliefs forming a global description through which an individual, group or culture watches and interprets the world and interacts with it.

ii The essence of Marxism according to Gramsci is the Weltanschauung of subaltern classes aspiring to and moving toward cultural and political hegemony.

iii According to Durkheim, social facts are relative in nature which means they vary from society to society. Social Facts considered normal in one society may be considered pathological in the other.