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AI Ethics for the Global South: Perspectives, Practicalities, and India's role

Anupama Vijayakumar*

Abstract: The world is currently witnessing an AI ethics boom marked by a massive demand for ethical guidance and regulation with respect to deploying the technology. Governments and private entities alike have been clamouring to join the conversation on what ethical principles should guide the deployment of AI. However, the evolving global discourse on AI ethics has been dominated by entities hailing from the Global North. This has resulted in AI ethics reflecting politico-cultural values and concerns unique to the Global North. Consequently, the concerns of the Global South have been largely absent from the discourse.

This paper has made a modest attempt at filling this gap. It firstly analyses the scholarly discourse detailing the Global South's perspectives on AI while distinguishing them from that of the Global North. It critically examines the same to derive the four 'E's denoting the Global South's threat perception on AI development namely: Extractivism, Exclusion, Ethnocentrism and Enforcement. The paper then undertakes a scoping review of AI policies formulated by nine nation-states in the Global South namely: Argentina, Brazil, Chile, India, Indonesia, Malaysia, Mauritius, Thailand and Qatar- to identify the ethical convergences. The nuances within their country-specific interpretations have also been highlighted. The paper finally delves into India's quest to lead the Global South in crucial matters pertaining to the evolving global digital order. It argues that the interests of the Global South may be best served by backing an India-led development-centric model of AI governance.

Introduction

The advent of artificial intelligence (AI) is rapidly transforming the landscape of humanity in the 21st Century. From critical areas, such as national security or health, to mundane, such as in day-to-day human interactions, AI is fundamentally transforming the practice of decision-making, while redefining the extant modes of political and economic activity in the society. As such, AI has been termed a sociotechnical

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system which entails a unique combination of social as well as technical components (Johnson & Verdicchio, 2024; Akbarighatar, Pappas, & Vassilakopoulou, 2023; Sartori & Theodorou, 2022). In this regard, AI has been envisaged as a tool to help human beings attain higher levels of efficiency in the implementation of complex, largescale or mundane tasks. On the other hand, the diffusion of AI has occurred so rapidly and profusely that algorithms have intricately, yet tangibly woven themselves deeply into the physical sphere.

While AI holds tremendous potential to render efficiency to any process it is applied to, its diffusion has disrupted the status quo. The end goal and use of the technology itself is markedly different from any disruptive innovations of the past. This is because efficiency in the context of AI is measured against its capacity to match up to the human brain. AI is envisaged to perform the function of solving complex problems through learning and thereafter applying its analytical abilities. AI herein is expected to be better than human brains at arriving at better or more accurate decisions as well as identify patterns or aspects that human brains might have missed altogether. It may assist human beings make better decisions or at a higher stage of evolution surpass human intelligence to attain superintelligence.

In this background, concerns have been growing globally around the general trajectory of evolution of AI and the risky implications of its widespread deployment. Patterns of algorithmic decision-making for instance are noted to have been motivated by various forms of bias existing in the society. In this background, governments and private actors alike are carefully deliberating upon instituting mechanisms to ensure that AI does not diffuse and evolve to the detriment of communities and societies. This scenario has led to a so-called global “AI ethics boom”, which has been marked by “an unprecedented demand for regulation and normative guidance” with respect to the development and deployment of AI (Corrêa, et al., 2023, p. 2). This in turn has translated to a number of ethical sub-discourses coming up around notions of responsibility, humaneness and trustworthiness. Essentially representing a certain goal that the development and deployment of the technology should achieve,

these sub-discourses seek to frame the narrative around select concerns, values and rights. Moreover, each of these sub-discourses imbibe certain expectations and concerns of risks regarding the technology in question. In doing so, they seek to engage various stakeholders from government or the private sectors relevant for regulation.

The Council of Europe's tracker on AI initiatives lists over 450 documents that discuss AI ethics principles (Council of Europe, 2024). These instruments originate from various sources including governments, international organisations, private actors, universities and research institutions (Council of Europe, 2024; Corrêa, et al., 2023). However, a number of scholars have pointed to a near absence of perspectives from the Global South within these approaches (Timcke & Schültken, 2023; Astobiza, et al., 2022; Roche, Wall, & Lewis, 2022; Arun, 2019). Countries from Europe and North America have dominated the production of policies concerning AI ethics. In other words, there remains an over representation of voices from the Global North in the evolving discourse on AI ethics. This over representation is reflective of the relatively superior capabilities these countries possess in terms of resources to develop AI. Moreover, this overrepresentation has resulted in AI ethics predominantly reflecting the morals, values and prevailing power structures within the Global North.

The dominance of the Global North over the evolving discourse on AI ethics is problematic as AI gets integrated increasingly into high-stakes decision-making. This is because values emanating from the Global North need not essentially be universal. Moreover, the seeming dearth of multidimensional ethical perspectives may result in the marginalisation and exploitation of disadvantaged communities and geographies from the Global South. This may eventually run contrary to key notions commonly featured within AI ethics such as fairness and transparency. This in turn would result in the fourth industrial revolution widening existing inequalities between the Global North and the Global South. Cognisant of such concerns, select governments in the Global South have formulated ethical principles that shall guide their development and utilisation of AI. These principles, while largely drawing from

the ethical templates put forth by the Organisation for Economic Co-operation and Development (OECD) and United Nations Educational, Scientific and Cultural Organization (UNESCO) have made room from concerns emanating from each country's unique context and perceptions on the geopolitics of technology. Meanwhile, there has parallelly been a rapidly growing scholarly discourse highlighting the need to include Global South's perspectives to render AI ethics comprehensive in nature.

In this regard, this paper seeks to present an assessment on a view of AI ethics from the perspective of the Global South. The first part of the paper critically examines the evolving global discourse on AI ethics, while contextualising the Global South and its unique concerns within the same. The study then presents a scoping review of national strategies and policies pertinent to AI ethics from ten countries namely: Argentina, Brazil, Chile, Egypt, India, Indonesia, Mauritius, Malaysia, Thailand and Qatar to identify the convergences and divergences in their perspectives. The paper finally elucidates India's quest to lead the Global South in crucial matters pertaining to the evolving global digital order. It argues that the interests of the Global South may be best served by collectively supporting an India-led development-centric model of AI governance.

Contextualising the Global South Within the Evolving Discourse on AI Ethics

Ethics has been viewed as a prominent means to address risks emanating from AI to humanity, albeit there are also a few scholars who argue that AI ethics are "useless" (Munn, 2023). The notion of ethics as such is abstract in nature while its meaning and implications are ambiguous. Ethics is inherently non-disciplinary in nature and can be expressed in numerous ways. The EU-funded project on Global Ethics in Science and Technology defines ethics as "a common platform for deliberation and discussion of values in society that is based on perceptions of right and wrong, is influenced by cultural norms and aims at informing policy making" (Ladikas, Chaturvedi, Zhao, & Stemerding, 2015, p. 3). The goal of ethics in the context of technology governance is to permit or prohibit certain activities. Ethics further serve as a basis for formulating policy measures to address challenges thrown open by technological disruption.

Viewed from the top level, instruments to govern technology are instituted at the global level and thereafter implemented by nation-states. Legally binding treaty mechanisms in this way have been instituted to permit or prevent activities pertaining to areas including nuclear technology, space technology and clean technologies. However, in case of innovations intended for easy diffusion, such as vaccines meant for use by public health systems, technology development and deployment, may be guided by locally rooted ideas of ethics. This is because notions of right and wrong are often shaped by cultural or historical experiences. They flow from the values that a society holds dear at the time during which technological disruption occurs.

Particularly in the case of algorithms, which arguably form the very lens through which individuals view the world today, the room to include various forms of diversity is of paramount importance. A society which is increasingly running on algorithms can be seen from an architectural point of view for the sake of conceptualising context-specific governance frameworks. In his essay titled *A place in the sun*, Indian architect Charles Correa elaborates upon why European architectural designs may not be suitable for warm, tropical climates (Correa, 1983). Correa emphasises upon placing the history, culture and economic context of a place at the centre of an architectural design (Arun, 2019). If designed out of context, technology might disregard social and cultural norms and may negatively impact security across the spectrum. As such, the three industrial revolutions of the past are said to have “shaped today’s economic gaps among countries” (Ndzendze & Marwala, 2023, p. 105). The fourth industrial revolution may result in the same kind of effects with respect to the widening of gaps in capabilities between the Global North and the Global South.

The absence of perspectives from the Global South may result in the issues relevant to the Global North gaining a disproportionate amount of attention. More importantly, this would lead to the exclusion of important concerns out of the mainstream discourse on AI governance (Ormond, 2023). In this regard, there are significant differences found within the respective perceptions of the Global North and the Global South on AI

ethics. The discourse on AI ethics within the Global North has largely revolved around issues such as privacy and the building of trustworthy systems designed for use in sectors such as healthcare. Meanwhile, in the Global South, AI is viewed prominently from the lens of social cost. Parallely, there has also been a discussion on how AI, through its civilian applications can be a tool for improving overall social well-being.

In this paper, four main themes pertaining to ethical concerns in AI governance have been identified within the evolving scholarly discourse on AI ethics in the Global South. These themes can be referred to as the four 'E's representing the views of the Global South on AI Ethics. The first 'E', Extractivism refers to a strong anti-colonial theme that runs through how the Global South views new technologies in general and AI in particular. Fears are rife that patterns of exploitation would continue with respect to extraction of data and resources that would fuel the advances in AI, while increasing the Global South's dependency on the Global North. The second 'E' focuses on concerns surrounding Ethnocentrism, that would result in the domination of AI-enabled systems based on a dominant socio-cultural lens, to the detriment of other cultures, languages, religions etc. A third 'E' refers to Exclusion, a byproduct of algorithms and their impact on society. This theme is reflective of the fears surrounding the economic and social effects of widespread AI deployment such as unemployment and discrimination against the weaker sections of the society. The fourth 'E' denotes Enforcement and discusses questions surrounding the nature of instruments implementing AI governance frameworks. Concerns remain that the explosion in soft law instruments professing lofty ethical principles to be incorporated into AI systems are toothless in practical terms. This would leave the Global South with little means to hold the big tech companies and their governments accountable for unethical practices. The four 'E's have broadly been elaborated upon below:

Table 1: Views of the Global South on AI Ethics: The Four ‘E’s

Theme	Concern	Potential solutions
Extractivism	Unwarranted exploitation of natural resources and individuals Environmental costs	Prioritisation of equity in global human rights and environmental governance mechanisms
Exclusion	Widening of inequalities both within and between countries. Exploitation of vulnerabilities and economic asymmetries	Capacity building for skills necessary for AI adoption. Awareness building on risks emanating from AI
Ethnocentrism	Domination of continental ethics Disregard for cultural diversity	Pluriversality and accommodation of multiple worldviews
Enforcement	Proliferation of soft law instruments and lack of measures to ensure transparency and accountability	Stronger ethical guidance Delineating liability and responsibility for the use of AI systems

Source: Compilation by author from various sources.

Extractivism

The ambit of the term colonialism which initially referred to the economic exploitation of one society by another through territorial occupation has now been expanded to include, technology, data and algorithms. Scholarly views emanating from the Global South often view AI itself as an extension of colonial power. They further note that knowledge production with respect to AI is concentrated within “oppressive structures” (Timcke & Schültken, 2023, p. 5). In this regard, terminology such as data colonialism and technological imperialism refer to “the exploitation and dispossession of the Global South in the emerging technological, data and AI-driven order” (Roche, Wall, & Lewis, 2022, p. 1099). Such

coinage understands AI as inherently extractive and exploitative. Data colonialism can be characterised as an “emerging order for appropriating and extracting social resources for profit through data, practiced via data relations” (Obia & Mejias, 2019) and this colonialism is taking place in the setting of the interlocked history of colonialism and capitalism.

The evolution of AI is directly dependent on continued access to data as well as natural resources. This fact is of particular importance to understand the logic of “new extractivism” (Astobiza, et al., 2022, p. 3), a key facet of data colonialism. This firstly entails the extraction of data from populations residing in the Global South. Secondly, it has to do with the mining and processing of rare earth elements (REE). REEs such as neodymium are used in the manufacturing of advanced computing and electronics components which essentially power the evolution of AI. While found abundantly across the world, the processing of REEs causes long term harm to the environment and releases toxic waste. It needs to be underlined that the rare earth mines are located in African countries such as Congo, where strong environmental regulation is lacking. This inequitable dynamic results in a situation in which the Global North disproportionately benefits from AI development as the Global South pays the environmental and social costs of the same (Gestoso, 2022). The logic of exploitation reminiscent of colonialism also extends to labour. It is the underpaid workers in the Global South who often develop and train algorithms. Intellectual Property regimes hold up high barriers against the companies in the Global South who seek to create a similar product.

The process of datafication itself is vaguely similar to colonial era practices which have historically “devalued” knowledge from the Global South. Moreover, the commodification of attributes intimately tied to people, their inclinations and social interactions is in itself a variant of data colonialism (Ricaurte, 2022). Often, a lack of institutions or laws to regulate companies’ efforts to commodify data further aggravates the vulnerabilities experienced by countries in the Global South.

The fourth industrial revolution may further render the world’s fight against climate change difficult. Energy consumption is expected to rise simultaneously along with the multiplication of computing power.

For instance, a single bitcoin transaction is estimated to consume about as much energy as a single household consumes over a month in the Global North. Proposed sociotechnical iterations such as the metaverse is also expected to consume substantial energy (Acosta, Riordan, & Jarrin, 2023). As energy demand skyrockets due to AI and its demand for computational power, obstacles in turn come up in the world's efforts to transition to green technology. This in turn would have the effect of widening the inequalities between the Global North and the Global South

Ethnocentrism

The common ethical principles found within the plethora of documents reflect dominant cultural values shared across the Global North. This points to a prevailing risk of ethnocentrism, a view within which a single culture is presented as superior to others. This forces the cultural values and practices of the latter to be measured against the culture presented as dominant. An underrepresentation of countries from Africa, Central America and Latin America in the AI ethics discourse brings to the fore questions about neglect of local knowledge, pluralism and diversity and demands for global fairness (Jobin, Ienca, & Vayena, 2019). Moreover, algorithms prone to bias can further cultural and racial stereotypes. This is particularly true in areas including language processing and facial recognition. In this regard, building AI systems that accurately capture the intricacies of cultural diversity are important to ensure inclusivity (Jeevanandam, 2024).

AI ethics, as dominated by countries from the USA and Europe are currently based on virtue ethics based mostly on deontological ethics propounded by Immanuel Kant. Deontology essentially focuses on the intention behind an action and the means used to implement it. These ideas as applied to AI ethics have been criticised for reducing it to “a low-cost ethics program with a top-down set of rules” (Goffi, 2021). In contrast, various quarters within the Global South have called for ethical plurality and thereby accommodate multiple worldviews. The African notion of Ubuntu,¹ as well as Buddhist and Islamic notions of ethics have all been suggested as alternative ethical approaches to consider in the context of AI governance (Roche, Wall, & Lewis, 2022).

It is only through the incorporation of multiple worldviews that “key ethical issues in design such as transparency and intelligibility” can be addressed (Harrell, 2023). Emerging economies including India and China have advocated for AI governance practices to be based on values emanating from a specific cultural context rather than on universal standards. These countries essentially view the universal implementation of standards as detrimental to their efforts to grow as global leaders in AI (Guillén & Reddy, 2018). Moreover, moving away from ethnocentrism with respect to AI ethics can help build a stronger and more comprehensive AI governance architecture at the global level.

Exclusion

Countries in the Global South fear that the impact of AI diffusion would leave them in a relatively worse off position. In addition to the prevailing inequalities that define North-South relations, differences in industrial capacity and skill levels is a major reason for this concern. The extent to which a country can benefit from technological diffusion is dependent on the skills possessed by its population (Yokota & Tomohara, 2010). While countries inhabited by a majority of unskilled labour can only make use of transfers in low-tech sectors, high technology transfers cannot materialise without education in computing software development, etc. Demand for infrastructure such as electricity further acts as a major entry barrier (Ndzendze & Marwala, 2023).

AI is further expected to aggravate unemployment in the Global South. In this regard, there has been a growing trend within companies to automate low-level mundane tasks, which are often outsourced to countries in the Global South. A number of establishments such as call centres would simply shut down as AI becomes a more cost effective option to improve productivity (Tsekov, 2023; Arun, 2019). In the absence of concerted efforts made towards reskilling, a sizeable amount of workforce from the Global South may be excluded from an AI-driven economy. Such worries of AI-driven exclusion, occurring amid conditions defined by extractivism and lack of proper enforcement is compounded by the inadequacy of existing human rights instruments. As the report

of the UN high level panel on digital cooperation notes, the existing international law on human rights was codified in the “pre-digital age” (UN, 2020, p. 14). This means that there is no larger framework within which human rights violations perpetrated by AI can be assessed.

Technological progress, while paving the way for an interconnected and equitable world, has been noted to perpetuate as well as intensify “long-standing systems of oppression”. Exclusion in the case of AI becomes a key facet of oppression. Such exclusion on the basis of race and gender has practically become visible in the case of facial recognition systems. This was affirmed by a study² conducted by researchers from Massachusetts Institute of Technology (MIT) and Stanford University in 2018. Owing to the data being used to train facial recognition systems being predominantly white and male, the three facial recognition systems studied were observed to have an extremely high error rate with respect to identifying darker skinned or female individuals (Hardesty, 2018). Meanwhile, a number of studies based on data from the US public healthcare system have also noted AI systems to show “unconscious bias” against African-American individuals and disabled persons. This has resulted in instances wherein hundreds of people were excluded from systems designed for medical assistance (Vijayakumar, 2023).

The extent of exclusion with respect to AI further makes it difficult for entities hailing from the Global South to participate in conversations on AI ethics in particular and governance in general. Heteropatriarchal exclusions and discriminations have been termed as a characteristic features of AI systems (Tacheva & Ramasubramanian, 2023). Meanwhile, the language in which AI is talked about has been termed “dominantly, Western, white, male and wealthy” (AI Decolonial Manifesto, n.d.). This has translated into such views being instilled into predictive models who perpetrate such exclusion. The way AI ethics is presented itself is rather technical in nature. Conversations on AI ethics are limited to a closed circle of individuals or entities who are familiar with the technical aspects within the private sector, academia and government. This excludes affected individuals from any opportunity to weigh in.

Enforcement

Central stakeholders including private actors are actively pushing for soft law instruments such as ethical guidelines, which are often referred to in the making of hard law (Jobin, Ienca, & Vayena, 2019). This has been mentioned as a means to avoid regulation through legislative instruments. While not enforceable, soft law instruments such as AI ethics guidelines have persuasive value and often have an overarching effect on how hard law is framed. Clear differences have been noted in ethical breadth between documents originating from government or private actors. The actual value of AI ethics itself has been called into question by select scholars. Ethical guidelines originating from the industry are in part meant to establish the notion that “internal self governance” is sufficient to address risks and manage unsavoury scenarios. While demands have been made toward concrete laws, they have generally been ambiguous and “superficial” (Hagendorff, 2020, p. 100). Moreover, the industry is said to have been employing ethics as a distraction of sorts to calm down AI skeptics while allowing for the continuation of such practices within organisations.

The vague nature of AI ethics and the inability to enforce them would prevent the communities and countries of the Global South from holding companies accountable for their extractive, exploitative tactics. Accountability and responsibility in the truest sense may be achieved by distilling from abstract notions of ethics, practical means to implement them in real-life situations. Even the usage of AI as a term,³ found within AI ethics documents need to be detailed out from abstract to specific (Morley, Floridi, Kinsey, & Elhalal, 2019). Countries in the Global South may also benefit from improving their institutional readiness to check on AI industry’s activities through implementing data protection regulations and data sharing stipulations. It is imperative for the nature of liability as well as the nature of harm caused to be clearly delineated.

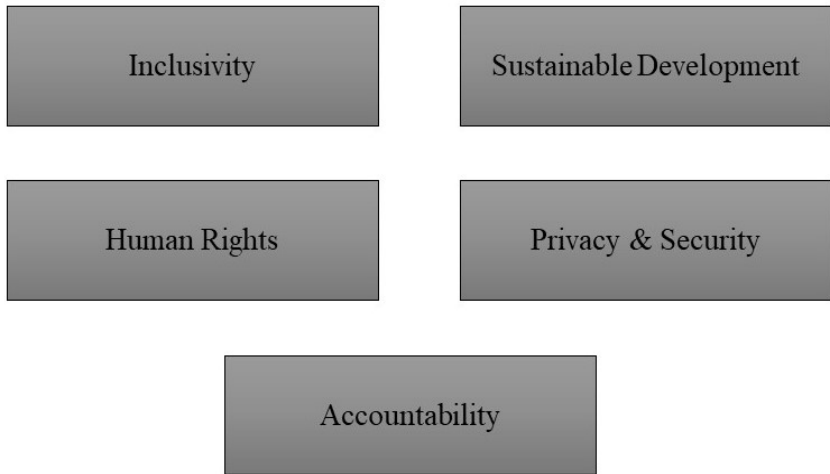
At the same time, enforcement of regulation at the global levels should also leave room for countries in the Global South to benefit and grow from the technology. It would hence be in the interest of the Global South to keep the design aspects of AI development friendly

to innovation (Agarwal R., 2024). The Global South may also remain wary of a strategically advantageous breakthrough in AI occurring in the Global North, resulting in the institution of global technology denial regimes.⁴ In this regard, a handful of nation-states in the Global South have put out policies or strategies that refer to AI ethics. These policies have seemingly tried to address their respective national concerns on AI, while accommodating the same within the global frameworks of OECD or UNESCO. The policies have been examined in the context of their respective national interest in the next section.

Emerging Perspectives on AI Ethics from the Global South: Convergences and Divergences

The perceptions of the Global South on AI Ethics have been shaped by a looming collective memory of colonialism and often, the experience of facing developmental challenges as post-colonial nations. At least ten major countries from the Global South have published their national AI policies. This paper examines the AI policies promulgated by nine aspiring technology leaders namely, Argentina, Brazil, Chile, Egypt, India, Indonesia, Mauritius, Malaysia, Thailand and Qatar. These policies allude to their respective national priorities guiding AI development and deployment while often signaling their intent to actively partake in global deliberations on AI governance. Ethical principles that shall guide the development and utilisation of the technology also find mention with these policies. They also often identify priority areas for development while allocating a budget and setting timebound goals. Efforts to shape the global conversation around AI are visible from the articulations of middle powers in West Asia, Southeast Asia and Latin America. Meanwhile, India as a rising power has assumed a leadership role beyond its neighbourhood to shape the global agenda on AI governance. The Association of Southeast Asian Nations (ASEAN), a regional organisation which operates based on consensus-based decisions has also published ethical standards to guide policymaking in the region. However, the geographical regions of Africa, the Pacific and the Caribbean, along with several sub-regions within Asia, such as Central Asia are nearly absent from the policy discourse.

Figure 1: Common Goals Featured Within AI Policies from the Global South



Source: Compilation by author from various sources.

Figure 2.1. represents the themes across which there are cross-cutting convergences across the AI strategies examined in this study. The convergences flow partly from the fact that all the countries studied are signatories to both the OECD and UNESCO guidelines on AI ethics. Moreover, the ideas enshrined as ethics within these principles are heavily influenced by prevailing cultural or legal notions of security, development and prosperity. Some strategies assessed in this paper entail verbose descriptions on the interpretation of specific ethical principles. Indonesia, for instance, has linked AI ethics to abstract ethos or morals that serve as benchmarks against which right or wrong in legal action is measured against. On the other hand, a country like Qatar has restricted AI ethics to attaining transparency and accountability through designing explainable AI systems (Ministry of Communications and Information Technology, 2019).

Majority of the countries discussed in the study (except for Qatar and Indonesia) have associated the term “responsible AI” in their policies. This stands in contrast to trustworthy AI used in the EU’s documents,

safe and secure AI employed in US policy parlance and the abstract term, “ethical AI” generally used in the tech industry. The idea of responsible AI strives to ensure that the technology would evolve to be human-centric while supporting the best interests of humanity. Responsibility vouches for a “rigorous adherence to ethical guidelines”. Adherence to the principles of transparency and accountability are innate within the idea of responsibility (Chatterjee, 2024).

While attributes such as trustworthy or safe seem oriented toward an outcome, the usage of the term responsibility signifies the primacy of ethics from the design stages itself. In the Global South’s context, it is responsibility as implemented throughout input (training data), processing (learning) and output (decision) which produces trustworthy outcomes. For the Global South, responsibility becomes the means to improve trustworthiness, allay the concerns of the public and thereby encourage the adoption of AI. This allows the governments in the Global South to economically benefit from AI. The discussion below highlights the nuances within how countries of the Global South interpret the five ethical principles shown in Figure 2.1.

Inclusivity

Inclusivity has been most prominently featured as a common ethics principle within the AI strategies of the countries assessed in this study. Albeit, the exact meaning of inclusivity has been vastly elaborated upon in the AI policies of India, Egypt, Malaysia and Chile. Inclusivity features at times both as a means and an end when it comes to its overall wellbeing and standing in the world order for these countries studied in this assessment. The notion of inclusivity is tied closely to the idea and practice of non-discrimination and overall well-being. The Responsible AI principles published by India’s NITI Aayog, for instance, contains the “principle of inclusivity and non-discrimination”, which draws from the Right to Equality enshrined in Article 14 of the Indian Constitution (NITI Aayog, 2021, p. 41). Also an important part of the notion of inclusivity is the prevention of exclusion from benefits or services within an AI-enabled society.

For Chile, inclusive AI is to be achieved through ensuring data integrity and data quality, thereby avoiding bias. It further urges for special measures to ensure that AI development takes into account gender, sexual and cultural diversities. A unique idea found within Chile's notion of inclusive AI is also the idea of fostering interdisciplinary and open dialogue to assess how the technology is affecting society as a whole. Chile, by virtue of its unique longitudinal geography, is also presented with the challenge of addressing developmental strategies to fit the requirements of its differing climatic zones (Ministerio de Ciencia Tecnologia Conocimiento e Innovacion, 2019). Hence, its policy draws attention to the need for developing tailor-made AI strategies that account for the requirements emanating from each of these macrozones, rather than merely looking at a state or regional or global level as a whole.

Meanwhile, Egypt's AI Policy urges the country "to capitalise on AI as an opportunity to include marginalised people for safety net programs" (The National Council for Artificial Intelligence, 2019, p. 24). Malaysia on the other hand interprets inclusiveness at multiple levels: At the top, the largescale deployment of AI itself should be guided through informed deliberations including various sectors within the "quadruple helix", i.e. government, academia, industry and the society (Ministry of Science, Technology and Innovation, 2021, p. V). At implementation level, inclusiveness has been equated to an absence of the digital divide. Also, at the core of Malaysia's view of inclusivity is to build into AI systems the ability to cater to a range of human needs and experiences including those of the physically or cognitively disabled. Like Egypt, Malaysia also looks to AI as a means to allow marginalised groups to access previously unavailable opportunities in areas including healthcare, public services and education. Inclusivity in this way becomes the path to achieve overall well-being (Ministry of Science, Technology and Innovation, 2021, p. 30).

Sustainable Development

For aspiring technology leaders in the Global South, AI is a tool to tackle their various social and economic challenges and accelerate development. This has been emphasised upon heavily in the AI strategies of Argentina,

Brazil, Chile, Egypt, India, Mauritius and Thailand. The idea of employing AI to facilitate inclusive growth and development is implicit within India's strategy. For Mauritius, the only country in Africa which has published an AI-focused strategy, the technology itself constitutes "a new pillar to sustain growth and development" and revive its traditional sectors of the economy (Working Group on Artificial Intelligence, 2018, p. 3). Meanwhile, Thailand reads sustainable development together with competitiveness and views AI as a means to create benefits and welfare. Adopting AI to enhance the competitiveness of its research and business ecosystem is a key means of facilitating this. Egypt on the other hand sees AI to be deeply integrated into its national strategy to implement Sustainable Development Goals and promote the overall well-being of Egyptian citizens.⁵ Meanwhile, Argentina views AI as a tool to boost its economic development through enhancing its human capacities. The idea that AI needs to be used for the benefit of the environment and the planet is highlighted in the policies of Chile, Brazil and Thailand.

Respect for Human Rights

The idea that the use of AI should be meant to enhance overall human as well as societal well-being is a common ethical theme found within AI strategies originating from the Global South. However, there are considerable nuances with respect to how the realization of well-being has been envisaged. Human well-being as propounded by Malaysia and Egypt are rather abstract in nature. While Egypt identifies human-centric AI as a key dimension to work towards, Malaysia identifies the "pursuit of human benefits and happiness" through solving problems as one of the principles of responsible AI (Ministry of Science, Technology and Innovation, 2021, p. 30). Chile's National AI policy places "respect for human rights" at the top of its list of AI ethic principles (Ministerio de Ciencia Tecnología Conocimiento e Innovación, 2019, p. 18).

Meanwhile, India and Indonesia have sought to safeguard human well-being through directly linking it to citizens' rights enshrined in their respective constitutions. For Indonesia, the implementation of AI shall be guided by the Pancasila⁶ (Herbert Smith Freehills, 2024),

Mentioned in the Preamble of the Indonesian Constitution, the five Pancasila principles define the country's national character and constitute the moral foundation of the state. By committing to these principles in the framing and implementation of laws, Indonesia shall strive to achieve goals including pluralistic society, just and civilized humanity, democracy and social justice (Oxford Reference, 2024). In the same vein, India's responsible AI principles are based on the underlying principle of "ensuring AI systems are designed in a manner that enables fundamental rights" (NITI Aayog, 2021, p. 40). India's perception on responsible AI further derives from the idea of constitutional morality. India's Supreme Court has interpreted constitutional morality "to extend beyond the mere text of the Constitution to encompass the values of a diverse and inclusive society, while also remaining faithful to other constitutional principles" (NITI Aayog, 2021, p. 39).

Perhaps due to a strong heritage of socialist movements in Latin America, the AI policies of both Chile and Argentina lay emphasis on labour rights. Reskilling of workers as well as minimizing tangible and intangible losses due to job losses from automation is regarded as a top priority by these countries. The strategies of India, Malaysia, Thailand, mention privacy as an AI ethics principle, within the larger human rights umbrella. Meanwhile, privacy is regarded as a priority for governance for Egypt, Chile, Argentina, Mauritius. Further privacy has been equated across the board with protection of personal data and against harm from malicious actors gaining access to such data.

Privacy & Security

Security is another central theme identified within the AI policies assessed in this study. Countries such as India, Malaysia and Thailand read security as a principle together with privacy. This reflects a view that security at the individual level is a key component of national security itself. This further signifies an evolving approach within cybersecurity wherein, individuals are regarded as relevant actors when it comes to protection of cyber critical infrastructure (World Economic Forum, 2017). In this regard, Thailand seemingly considers the full-spectrum threats while

considering security as an ethics principle. The Digital Thailand roadmap urges the government to consider aspects including data protection, threat to life and the external environment including from Lethal Autonomous Weapon Systems (LAWS). Monitoring and mechanisms for human intervention are to be maintained throughout the lifecycle of the system rather than restricting it to the design stage by ensuring data integrity (Ministry of Digital Economy and Society, 2018). India's strategy draws attention to security risks that occur during the learning stages of an AI system such as data poisoning as having potentially detrimental real-world consequences. Meanwhile, Chile identifies the adherence to data integrity standards as of paramount importance when it comes to cyber defence and cyber security.

Within the Global South, Egypt and Indonesia have enacted data protection laws in 2020 and 2022 respectively. Meanwhile, Brazil's data protection legislation, the LGPD went into force in 2021. In this regard, Brazil and Indonesia have acknowledged their legislations to have been modelled after the EU's General Data Protection Act (DLA Piper, 2024; DLA Piper, 2024). These laws seek to address security threats from the misuse of personal data. India's Personal Data Protection Bill, 2019 proposes to safeguard against threats to privacy through means such as codes of practice and regulation. These essentially allow regulatory bodies to supervise over the practices carried out by an entity and make them accountable. Brazil additionally views the establishment of supervisory bodies and technical standards as pivotal to preventing the misuse of technologies such as facial recognition in the public security sphere.

Accountability

With respect to privacy and data security, Egypt has put forth a strategy of Data Classification. Data classification is a tactic found commonly within military and intelligence organisations. Governments or private players following a data classification strategy may proceed to categorise information as per its sensitivity and institute adequate security measures. While sensitive personal data such as medical records may be classified in a higher risk category, information related to marketing may be classified

as lower risk (The National Council for Artificial Intelligence, 2019). Such classification tactics allow for maximum benefit to be derived out of data, while also improving transparency and accountability.

Ethically backed development and deployment of AI may only be achieved to its truest sense by ensuring accountability. In this regard, accountability and various synonymous terms that signify accountability such as robustness or transparency have featured within the AI strategies originating from the Global South. For India, accountability shall be one of the core ethical principles guiding the responsible management of AI. In India's view of accountability, "all stakeholders involved in the design, development and deployment of the AI system must be responsible for their actions" (NITI Aayog, 2021, p. 41). Malaysia also uses transparency and accountability rather synonymously. It views transparency with respect to overhandling of data, and the risks involved as the road to building trust with the public. Malaysia also holds the position that the accountability for the implications of AI systems lies with the individuals who design and deploy them.

However, in practice, holding a system or the individuals who contributed to various stages of building it is challenging. This is further compounded by the explainability problem wherein programmers are unable to decipher how or why AI arrived at a particular decision. The actual purpose of instilling accountability is to enhance human beings' ability to predict AI-enabled decision making, while allowing regulatory bodies to audit the decisions. The Digital Thailand AI Roadmap, for instance, breaks down accountability into traceability and diagnosability of actions. In the absence of attributing responsibility, public trust in AI is purported to diminish. Meanwhile, Qatar views transparency as something that can be achieved through explainability and accountability (Ministry of Communications and Information Technology, 2019).

Notably, there are clear convergences within the Global South's perceptions on AI ethics. In most cases, the perceptions on AI ethics have been shaped by the UNESCO and OECD AI ethics principles.⁷ Countries such as Brazil, India, Indonesia and Malaysia have also drawn from AI ethics guidelines published by the European Union and Singapore and

combined the same with local ideas on ethics (Herbert Smith Freehills, 2024; Ministry of Science, Technology and Innovation, 2021; Ministry of Science, Technology and Innovations, 2021; NITI Aayog, 2021). Nuanced divergences exist in practical terms within these larger convergences in areas such as inclusivity, sustainable development and security. The countries assessed in this study are currently deliberating upon laws and regulatory changes required to translate ethics into practices. Moreover, on aspects such as protection of personal data, auditing AI systems' decisions and ascertaining liability for harm, there is scope for the Global South to present a united front at multilateral forums. This would also help them shape the global conversation on AI ethics, while preventing ongoing practices akin to data extractivism.

The Global South has historically negotiated as a collective in issue-areas ranging from sustainable development, climate change, trade and intellectual property rights. Blocs such as the Group of 77 have successfully pooled bargaining power to reflect the Global South's interests. In doing so, they have instilled into existing global governance regimes ethical principles pertaining to equity and Common But Differentiated Responsibilities and Respective Capabilities. Various ethical principles featured across the AI policies of the Global South feature within India's strategy on responsible AI. The next part of this discussion shall look into whether India can potentially champion the Global South's voices on AI governance.

AI Ethics: Can India Lead the Global South?

The Global AI governance architecture in its current form possesses two distinct characteristics: Firstly, the architecture is fragmented in nature. Each of the fragments constituting the global digital order reflect the distinct approaches adopted by the USA, EU and China. The USA's approach has been termed "market driven", with limited government interference. Meanwhile, the approaches adopted by the EU and China have been termed "rights-driven" and "state driven" respectively (Klein & Patrick, 2024, p. 2). At least in the case of the USA and China, strategic rivalry is arguably the primary rationale driving their distinct approaches.

The fragmented architecture further consists of minilateral groupings such as the United Kingdom-led Digital 5, which represent a common ethical ideology. These minilaterals are primarily brought together by common interests and the prospect of deriving incentives. At the same time, they also represent a pooling of bargaining power which shall be wielded to assert a common position at larger multilateral negotiations (Filer & Weiss, 2020). A weighty representation from the Global South as mentioned before in this paper has been largely absent within this fragmented architecture.

However, India as a leading technology leader in the Global South stands out as an exception in this scenario. Unlike any other country in the Global South, India holds a widely acclaimed reputation as a responsible power. The substance of this reputation derives from its impeccable nuclear non-proliferation record and successful legacy for using outer space for peaceful purposes. It is further bolstered by the success of its domestic digitisation programme which successfully delivers public services to millions of citizens. Ever since it was a newly independent nation emerging out of the grips of colonialism, India has vouched for the interests of the Global South. In doing so, it has defended the developing world's right to access technologies and benefit from them. In today's context, India holds an important place at the high table of global technology governance. With at least half a billion internet users, India is a thriving digital market and a vast repository of data. The rapid growth of its digital economy further makes it a valuable player at the global stage (McKinsey Digital, 2019). In the context of global AI governance, these resources render India's hand powerful at the global AI governance negotiating table. Key norms on the same would be ineffective without India's consent or compliance. India, therefore, is well-positioned to lead the Global South with respect to voicing its concerns on AI governance.

India's position as a normative leader with respect to pivotal matters concerning the fourth industrial revolution is evident both from its domestic and foreign policies. In other words, India leads by example and practices its philosophy of employing technology for global good. India's national AI strategy goes by the tagline "AI for all". To further

these interests, India through its minilateral and multilateral diplomacy has been attempting to voice the views of the Global South. This is evidenced by India's effective use of its 2023 G20 Presidency to shape the international agenda on AI governance. The conference on Crime and Security in the Age of Non-Fungible Tokens, AI and the Metaverse held ahead of the G20 summit 2023 sought to address concerns on AI and threats to cybersecurity. The conference outcome called for "transparent and accountable governance frameworks" to ensure the responsible use of AI. It further emphasised upon for the need to evolve a comprehensive and balanced approach to ICT development within which security, public interest and individual privacy could be protected (Indiaai, 2023).

India in this regard placed digital governance as a "centrepiece of its G20 Presidency" (Jagtiani & Hageböling, 2023). The theme of the presidency in 2023 was based on the Indian philosophical concept of Vasudhaiva Kutumbakam which translates to "The World is One Family". Implicit within the notion is the idea of sustainable and inclusive and development for the benefit of humanity as well as the planet. Technology herein serves as a facilitator of interconnectivity between various stakeholders. The essence of Vasudhaiva Kutumbakam is synonymous to the African idea of Ubuntu and the Latin American notion of Sumak Kawsay.⁸ It, therefore, serves as a philosophical foundation for reflecting and articulating common views emanating from the Global South. It further "promotes consultative outcome-oriented, demand driven development partnerships that respect the sovereignty of partner countries" while "amplifying the voices of the Global South (Kumar, 2024, p. 2; Ministry of External Affairs, 2023).

The India-led consensus reflected in the G20 New Delhi declaration highlights AI ethics as relevant to the Global South. These include (Ministry of External Affairs, 2023):

- Use of AI as a tool for solving challenges, achieving Sustainable Development Goals achieving overall public good.
- Attributes of the AI system as responsible, safe, inclusive and human-centric.

- Responsible AI to be ensured through transparency, accountability, explainability and respect for human rights including privacy.
- Adoption of a pro-innovation approach that encourages equitable sharing of benefits while mitigating risks.

In this regard, this India-led approach to AI can be termed a development-centric model to AI governance. Ethics as imbibed within this model is geared toward the end goal of inclusive development for the whole world. It is further informed by the need to counter data colonialism, while boosting data sovereignty (Jagtiani & Hagebölling, 2023). A central pillar of practicing this approach is the use of a basket of digital technologies, including AI as public goods to build inclusive and resilient digital ecosystems. It is in relation to this pursuit that India has been spearheading the evolving idea of Digital Public Infrastructure (DPI).⁹ As a rising power, this is reflective of India's intent to "help and reshape the distribution of global public goods" (Tourangbam, 2024). In doing so, it bolsters the credibility of its development-centric model while representing the entire constituency of Global South.

India's conceptualisation of DPI has three fundamental characteristics (Kapoor & Watson, 2023). Firstly, it is open and interoperable in nature so as to ensure resiliency and adaptability to stay up-to-date with changing market currents. Secondly, for India, DPI needs to be governed by "robust mechanisms" which can build in privacy through adherence "to design, inclusivity and security". DPI thirdly entails a delicate balance between boosting private sector innovation, while also keeping innovation accountable to the civil society. It approaches AI ethics as a systematic normative reflection, based on a holistic and evolving framework of interdependent values, principles and actions that can guide societies in dealing responsibly with the known and unknown impacts of AI technologies on human beings, societies, and the environment and ecosystems, and offers them a basis to accept or reject AI technologies. Rather than equating ethics to law, human rights, or a normative add-on to technologies, it considers ethics as a dynamic basis for the normative evaluation and guidance of AI technologies, referring

to human dignity, well-being and the prevention of harm as a compass and rooted in the ethics of science and technology.

India is in fact the first nation to develop and deploy at a large scale all the functional components of DPI together. Data sharing systems based on informed consent and respect for privacy are at the core of its conceptualisation. In today's context, India's DPI model "has emerged as a key Indian offering to the world, and is being considered, adopted, or adapted by nations at very different stages of development" (Sarma, 2023). In order to facilitate global access to DPI, India has offered its successful DPI as an open source and interoperable basket of digital components and services known as India Stack for use by the rest of the world. The model has drawn praise from around the world including from bodies such as the UN and leading economies in the Global North.

India Stack has been termed a particularly attractive option for Low- and Middle-Income Countries to achieve inclusive digital growth in a short duration at lower costs (Singal, 2023). India Stack is being adopted by an increasing number of countries from the Global South signifying India's ability to lead. A total of eight countries, namely Trinidad and Tobago, Armenia, Suriname, Papua New Guinea, Antigua, Barbados, Sierra Leone, Mauritius and Colombia, have signed Memoranda of Understanding with the Government of India to gain open source access to India Stack (Ministry of Electronics & IT, 2024; The Hindu Business Line Bureau, 2023). Countries including Sri Lanka, Ethiopia and Togo are further reported to have either tested or used India's DPI (Sinha, 2024). India's motion to accept DPI as the right way forward for digital technology development was also adopted unanimously by the member-states of the Shanghai Cooperation Organization (SCO) during its May 2023 summit (Aryan, 2023). In this way, India has been leading a fourth way through showcasing and gaining wide acceptance for its development-centric model for governance of AI and digital technologies.

The Global Partnership on Artificial Intelligence (GPAI) is another governance forum through which India has been championing the voices of the Global South. The GPAI in recent times has come up as

a central cog in the global AI governance machinery alongside various intergovernmental and non-governmental bodies. India as President of the GPAI (from November 2022) has tactfully utilised the opportunity to rally its development-centric model of AI governance at global platforms. In reflecting the ethical notions emanating from the Global South into AI governance, India is well-positioned to vouch for using AI to bring about sustainable and inclusive development. More specifically, India at global forums such as GPAI can voice the concerns of the Global South while spearheading efforts to address all the four Es.

- With respect to addressing extractivism, India can build consensus among multiple stakeholders on the equitable sharing of benefits from the deployment of AI and institute measures to counter data colonialism. Important insights guiding engagements between entities hailing from the Global North and South may be drawn from the Indian model of South-South Cooperation. In other words, while translating AI ethics into actionable policies, India may seek to advocate for non-negotiables including mutual benefit, rejection of unequal dependent relationships, consultative processes and creation of economic opportunities (Chaturvedi, 2016). India had already urged GPAI member-states to build consensus on a common framework on data governance to ensure safety of the user at the Tokyo summit, 2022 (Press Trust of India, 2022).
- India can work towards reducing exclusion on multiple levels. The representation of the Global South within the GPAI itself is currently miniscule with merely four members: Brazil, Argentina, Senegal and India. India led successful efforts to steer GPAI to include more members from the Global South during the GPAI sixth ministerial council meeting held in New Delhi during July 2024. The GPAI consisted of 29 members at the time India took on the role. In a bid to bring in more representation from the Global South, India has proposed to expand the membership to 44, and later on to 65 by February 2025 (Agarwal, 2024). Furthermore, the GPAI at the

time of its inception was intended to be integrated under the OECD Working Party on Artificial Intelligence Governance. India along with Japan reportedly opposed the coming into being of such an arrangement, while negotiating to realise an integrated partnership with the OECD to place GPAI countries and OECD on an equal footing. As GPAI moves on to potentially become the apex body for global AI governance, India's intervention has served to ensure that the GPAI did not crystallise as a body under the OECD to bring the Global North and the Global South on an equal footing (Barik, 2024).

India can look to reduce exclusion due to digital divide by promoting DPI and encouraging their adoption in the Global South. Inclusivity may also be pursued through carrying forward the One Future Alliance (OFA) which India had proposed at the G20 New Delhi summit, 2023. The OFA was envisaged as a multilateral mechanism to help developing countries adopt DPI through capacity building and technical assistance programmes (Singal, 2023).

- India can counter the solidification of ethnocentric ethics in global AI governance by calling for innovative mechanisms such as data cooperatives which can help algorithms evolve locally grounded solutions to address local problems. India can also take the charge to initiate deliberations on how linguistic, ethnic and cultural diversity to be considered within inclusivity. As Prime Minister Narendra Modi also noted during the GPAI Summit, December 2023, digital services can be made available in local languages with the help of AI to expand digital inclusion. Through initiatives such as the Bharatgen,¹⁰ India has already been attempting to pioneer efficient governance models in this regard.
- At the level of enforcement, India can work towards building consensus within the GPAI members (both from the Global North and the Global South) towards instituting a binding agreement which delineates compliance standards for developing safe and responsible AI. This is where the collaborative AI paradigm that India has been pioneering through GPAI attains relevance. The

paradigm lays impetus on collaborative frameworks which allow for multiple stakeholders to work together to chart a course forward for drawing equitable benefits from AI (INDIAai, 2023). In doing so, India can also champion regulation that encourages innovation. As a vast demographic pool for AI development, India can also work towards calling for new labour standards to prevent exploitation and extraction of human resources.

Through professing and practicing a development-centric and inclusive model, India has arguably shown the world a fourth way to follow in terms of governing AI and digital technologies. India's development-centric model of AI governance can accommodate diverse perspectives and is arguably an ideal way forward for the Global South in the fourth industrial revolution. India is a benevolent leader and an able negotiator capable of articulating the views of the Global South on AI governance. As Vishwaguru, India is keen and able to champion matters concerning the welfare and happiness of humanity (Express News Service, 2023). Pluralism is central to India's self-professed role as Vishwaguru (Pai, 2023). India's growing power profile and diplomatic clout allows it to negotiate with the Global North from a position of strength and moral superiority over concerns that matter to the Global South as a whole.

Way Forward

The global discourse on AI ethics is currently dominated by the governments and private entities from the Global North. This has resulted in a multiplicity of regulatory frameworks that reflect the politico-cultural values that pertain to the Global North. Conversely put, this has resulted in the ethical values and concerns springing from the Global South getting subsumed. Moreover, this one-sided conversation has allowed entities from the Global North to perpetrate practices reminiscent of colonialism on the communities of the Global South. The continuation of this scenario could have detrimental implications for the Global South, just as the widening of inequalities subsequent to the three industrial revolutions of the past. The countries of the Global South may safeguard their interests

by collectively navigating the fragmented AI regime complex to capitalise on the opportunities presented by the fourth industrial revolution.

In this regard, India has been keenly advocating for the interests of the Global South on AI governance. In recent times, India has effectively showcased the credibility and viability of its domestic digital governance model. Meanwhile, its idea of AI ethics rooted in the concept of responsible AI has at its core, the ideas of inclusivity, respect for human integrity and dignity, sustainable development and accountability. Alongside the market-centric, rights-centric and state-centric models followed by the USA, EU and China respectively, India has been championing a development-centric model to AI governance. This model is arguably the ideal umbrella that the Global South can collectively pursue, in order to address their unique challenges.

India as the current President of the GPAI can carry forward this development-centric model of AI governance with the support of the Global South. India in this regard can champion inclusive and sustainable use of AI for development. India can further seek to build consensus on prevention of extractive and exploitative practices perpetrated against countries of the Global South. As a collective, the Global South may draw best practices from international negotiations in areas including climate change and trade-related aspects of intellectual property rights. In this way, the Global South with India in the pole position can narrow the digital divide and leap ahead in the fourth industrial revolution.

Endnotes

- ¹ Ubuntu is an ancient African word meaning ‘humanity to others’. It is often described as reminding us that ‘I am what I am because of who we all are’. The concept is informed by cultural nationalism and colonial experience (Roche, Wall, & Lewis, 2022).
- ² The study was conducted jointly by researchers from MIT and Stanford University. It assessed three facial recognition systems and found among other things, a high error rate with respect to identifying darker skinned females. While one of the systems studied was found to have over 20 per cent, the other two systems had over 34% error rate (Hardesty, 2018).
- ³ While a broad consensus exists with respect to what exactly AI is, it has been defined in multiple ways. These definitions lay emphasis on various aspects. One

understanding for instance, defines AI as “an umbrella term for a range of technologies and approaches that often attempt to mimic human thought to solve complex tasks. Things that humans have traditionally done by thinking and reasoning are increasingly being done by, or with the help of, AI” (Society for Computers and Law, 2020). Meanwhile, John McCarthy, the Stanford scientist who has been widely credited to have coined the term AI defines the same as “the science and engineering of making intelligent machines” (Stanford University Human-Centred Artificial Intelligence, 2020). A more comprehensive definition has been provided by the OECD’s AI Experts Group (AIGO): as “a machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations or decisions influencing real or virtual environments”. AI uses machine and/or human-based inputs to perceive real and/or virtual environments; abstract such perceptions into models (in an automated manner e.g. with ML or manually); and use model inference to formulate options for information or actions (Russell, Perset, & Grobelnik, 2023).

- ⁴ Technology denial regimes is a term utilised by scholars from the Global South to refer to multilateral export control regimes, prominently the Nuclear Suppliers’ Group, the Missile Technology Control Regime, the Wassenaar Arrangement and the Australia Group. These regimes, which came into being during the last few decades of the 20th Century, operate as global technology cartels that seek to ‘deny’ dual-use technologies to rising powers to prevent them from accessing the same for strategic reasons (Siddhartha, 2019; Mallik, 2004).
- ⁵ Egypt seeks to progress with respect to SDGs 4 (gender equality), 5 (inclusive and sustainable growth and decent work opportunities), 8 (decent work and economic growth), 9 (fostering innovation via inclusive and sustainable infrastructure), 10 (reduce inequalities within and among countries).
- ⁶ The Pancasila principles were formulated by Indonesian President Sukarno in 1945. They consist of five silas or principles which English interpreters have termed ambiguous in nature. The first principle stating “belief in one supreme being” or one true god signifies Indonesia’s unique variant of secularism. The second principle has been equated both to internationalism as well as just and civilised humanitarianism. The third sila speaks of the unity of Indonesia. The fourth sila imbibes the idea that policies are to be formulated through consensus and consultation. The fifth sila is regarding commitment to social justice (Morfit, 1981).
- ⁷ The AI ethics principles formulated by the OECD and UNESCO have been referred to in the AI policies published by Brazil, Chile, Egypt, India, Indonesia and Thailand (Herbert Smith Freehills, 2024; Ministry of Science, Technology and Innovation, 2021; NITI Aayog, 2021; Ministerio de Ciencia Tecnología Conocimiento e Innovación, 2019; The National Council for Artificial Intelligence, 2019; Ministry of Digital Economy and Society, 2018).
- ⁸ Originating from indigenous philosophies native to the Andean region and the Amazon rainforest, Sumak Kawsay is a term in the Quechua language. It translates to “life in harmony” and emphasises upon respect for nature as the foundation of a community’s wellbeing (Pachamama Alliance, 2024).

- ⁹ India's DPI consists of three elements: Unique identity, Unified Payments Interface (UPI) and Data Empowerment and Protection Architecture (DEPA) (Watson, 2024).
- ¹⁰ Launched on 1 October 2024, Bharatgen has been termed "the world's first government-funded Multimodal Large Language Model project focused on creating efficient and inclusive AI in Indian languages". Led by IIT Bombay under the National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS), Department of Science and Technology (DST), the project is expected to be completed by 2026 (Department of Science and Technology, 2024).

References

- Corrêa, K. N., Galvão, C., Santos, J. W., Del Pino, C., Pinto, E. P., Barbosa, C., . . . de Oliveira, N. 2023. Worldwide AI ethics: A review of 200 guidelines and recommendations for AI governance. *Patterns*, 4(10). doi:<https://doi.org/10.1016/j.patter.2023.100857>
- Acosta, A. G., Riordan, S., & Jarrin, M. T. 2023, July. *The environmental and ethical challenges of artificial intelligence*. Retrieved from T20 India: https://t20ind.org/wp-content/uploads/2023/07/T20_PolicyBrief_TF7_Environmental-Ethical-AI.pdf
- Agarwal, R. 2024, January 3. *AI governance in the Global South might require additional guardrails*. Retrieved from The Yuan: <https://www.the-yuan.com/774/AI-governance-in-the-Global-South-might-require-additional-guardrails.html>
- Agarwal, S. 2024, July 3. *India's bid to make GPAI as global regulator gets global support*. Retrieved from The Economic Times: <https://economictimes.indiatimes.com/tech/technology/indias-bid-to-make-gpai-as-ai-regulator-gets-global-support/articleshow/111439030.cms?from=mdr>
- AI Decolonial Manifesto. n.d.. *AI Decolonial Manifesto*. Retrieved from <https://manifesto.ai/>
- Akbarighatar, P., Pappas, I., & Vassilakopoulou, P. 2023. A sociotechnical perspective for responsible AI maturity models: Findings from a mixed-method literature review. *International Journal of Information Management Data Insights*, 3(2), 1-19. doi:<https://doi.org/10.1016/j.patter.2023.100857>
- Arun, C. 2019, July 20. *AI and the global south: Designing for other worlds*. Retrieved from SSRN: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3403010
- Aryan, A. 2023, May 13. *SCO members vote unanimously to adopt India's proposal on DPI*. Retrieved from The Economic Times: <https://economictimes.indiatimes.com/tech/technology/sco-members-vote-unanimously-to-adopt-indias-proposal-on-dpi/articleshow/100213651.cms?from=mdr>
- Astobiza, A. M., Ausín, T., Liedo, B., Toboso, M., Aparicio, M., & López, D. 2022. Ethical governance of AI in the global south: A human rights approach to responsible use of AI. *Proceedings*, 81(136), 1-5.
- Barik, S. 2024, July 4. In *'integrated partnership' of global AI group with OECD, some tradeoffs for India*. Retrieved from The Indian Express: <https://>

indianexpress.com/article/business/in-integrated-partnership-of-global-ai-group-with-oecd-some-trade-offs-for-india-9431432/#:~:text=But%2C%20there%20have%20been%20trade,outside%20of%20the%20OECD%27s%20purview.

- Chatterjee, S. 2024, February 28. *Responsible AI: Top 9 aspects of building ethical AI systems*. Retrieved from Emeritus: <https://emeritus.org/in/learn/responsible-ai/>
- Chaturvedi, S. 2016. *The logic of sharing: Indian approach to south-south cooperation*. New Delhi: Thomson Press.
- Correa, C. 1983. A place in the sun. *Places*, 1(1), 40-49.
- Council of Europe. 2024. *AI initiatives*. Retrieved from Council of Europe: <https://www.coe.int/en/web/artificial-intelligence/national-initiatives>
- Department of Science and Technology. 2024, October 1. *Launch of BharatGen: The first Government supported Multimodal Large Language Model Initiative*. Retrieved from Department of Science and Technology: <https://dst.gov.in/launch-bharatgen-first-government-supported-multimodal-large-language-model-initiative>
- DLA Piper. 2024, January 28. *Brazil*. Retrieved from DLA Piper: <https://www.dlapipeperdataprotection.com/index.html?t=law&c=BR#:~:text=The%20LGPD%20is%20Brazil%27s%20first,enforceable%20on%20August%201%2C%202021.>
- DLA Piper. 2024, January 2. *Indonesia*. Retrieved from DLA Piper: [https://www.dlapipeperdataprotection.com/index.html?t=law&c=ID#:~:text=Specific%20regulations,%22\)%20since%2017%20October%202022.](https://www.dlapipeperdataprotection.com/index.html?t=law&c=ID#:~:text=Specific%20regulations,%22)%20since%2017%20October%202022.)
- Express News Service. 2023, September 17. *India as 'Vishwa Guru': As G20 Summit ends, PM Modi's vision of India's place in the world in sharper focus*. Retrieved from The Indian Express: <https://indianexpress.com/article/political-pulse/india-vishwa-guru-g20-summit-pm-modi-vision-world-8933278/>
- Filer, T., & Weiss, A. 2020, October 16. *Digital minilaterals are the future of international cooperation*. Retrieved from Brookings: <https://www.brookings.edu/articles/digital-minilaterals-are-the-future-of-international-cooperation/>
- Gestoso, P. 2022, September 24. *How artificial intelligence is recolonising the Global South*. Retrieved from The Mint Magazine: <https://www.themintmagazine.com/how-artificial-intelligence-is-recolonising-the-global-south/>
- Goffi, E. R. 2021, January 26. *The importance of cultural diversity in AI ethics*. Retrieved from Beyond the Horizon: <https://behorizon.org/the-importance-of-cultural-diversity-in-ai-ethics/>
- Guillén, M. F., & Reddy, S. 2018, July 26. *We know ethics should inform AI. But which ethics?* Retrieved from World Economic Forum: <https://www.weforum.org/agenda/2018/07/we-know-ethics-should-inform-ai-but-which-ethics-robotics/>

- Hagendorff, T. 2020. The ethics of AI ethics: An evaluation of guidelines. *Minds and Machines*, 30, 99-120. doi: <https://doi.org/10.1007/s11023-020-09517-8>
- Hardesty, L. 2018, February 11. *Study finds gender and skin-type bias in commercial artificial-intelligence systems*. Retrieved from MIT News: <https://news.mit.edu/2018/study-finds-gender-skin-type-bias-artificial-intelligence-systems-0212>
- Harrell, D. F. 2023, August 18. *AI can help shape society for the better – but humans and machines must work together*. Retrieved from The Guardian: <https://www.theguardian.com/commentisfree/2023/aug/18/ai-society-humans-machines-culture-ethics>
- Herbert Smith Freehills. 2024, February 12. *Ethical guidelines on use of AI in Indonesia*. Retrieved from Herbert Smith Freehills: <https://hsfnotes.com/tmt/2024/02/12/ethical-guidelines-on-use-of-artificial-intelligence-ai-in-indonesia/>
- INDIAai. 2023, December 12. *GPAI Summit 2023 - Collaborative AI for Global Partnership (CAIGP) - Global Cooperation for Equitable AI (Public)*. Retrieved from INDIAai: <https://indiaai.gov.in/article/collaborative-ai-for-global-partnership-caigp-global-cooperation-for-equitable-ai-public>
- Indiaai. 2023, July 24. *India promulgates responsible use of AI at the G20 meeting*. Retrieved from Indiaai: <https://indiaai.gov.in/news/india-promulgates-responsible-use-of-ai-at-the-g20-meeting>
- Jagtiani, S. L., & Hagebölling, D. 2023, January 30. *India's G20 presidency: Decoding the digital technology agenda*. Retrieved from The Diplomat: <https://thediplomat.com/2023/01/indias-g20-presidency-decoding-the-digital-technology-agenda/>
- Jeevanandam, N. 2024, February 15. *Cultural insights unveiled: Exploring World Anthropology Day through AI perspectives*. Retrieved from India AI: <https://indiaai.gov.in/article/cultural-insights-unveiled-exploring-world-anthropology-day-through-ai-perspectives>
- Jobin, A., Ienca, M., & Vayena, E. 2019. The global landscape of AI ethics guidelines. *Nature Machine Intelligence*, 1, 389-399.
- Johnson, D. G., & Verdicchio, M. 2024. The sociotechnical entanglement of AI and values. *AI & Society*. doi://doi.org/10.1007/s00146-023-01852-5
- Kapoor, A., & Watson, E. 2023. *Defining the digital public infrastructure approach*. Retrieved from T20 India 2023: <https://t20ind.org/research/defining-the-digital-public-infrastructure-approach/>
- Klein, E., & Patrick, S. 2024, March. *Envisioning a global regime complex to govern artificial intelligence*. Retrieved from Carnegie Endowment for International Peace: <https://carnegieendowment.org/2024/03/21/envisioning-global-regime-complex-to-govern-artificial-intelligence-pub-92022>
- Kumar, S. 2024. *India's G20 presidency as a voice of global south*. RIS Discussion Paper #291, RIS, New Delhi <https://www.ris.org.in/sites/default/files/Publication/DP%20291%20Sushil%20Kumar.pdf>

- Ladikas, M., Chaturvedi, S., Zhao, Y., & Stermerding, D. 2015. Introduction: Embedding ethics in science and technology policy- A global perspective. In M. Ladikas, S. Chaturvedi, Y. Zhao, & D. Stermerding, *Science and technology governance and ethics: A global perspective from Europe, India and China* (pp. 1-8). Cham: Springer Open.
- Mallik, A. 2004. *Technology and security in the 21st century: A demand-side perspective*. Retrieved from Stockholm International Peace Research Institute: <https://www.sipri.org/sites/default/files/files/RR/SIPRIRR20.pdf>
- McKinsey Digital. 2019, March 27. *Digital India: Technology to transform a connected nation*. Retrieved from McKinsey Digital: <https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/digital-india-technology-to-transform-a-connected-nation>
- Ministerio de Ciencia Tecnología Conocimiento e Innovación. 2019. *Política nacional de inteligencia artificial*. Retrieved from Minciencia: https://www.minciencia.gob.cl/uploads/filer_public/bc/38/bc389daf-4514-4306-867c-760ae7686e2c/documento_politica_ia_digital_.pdf
- Ministry of Communications and Information Technology. 2019. *National Artificial Intelligence strategy for Qatar*. Retrieved from Ministry of Communications and Information Technology: https://www.mcit.gov.qa/sites/default/files/national_artificial_intelligence_strategy_for_qatar_0.pdf
- Ministry of Digital Economy and Society. 2018. *Digital Thailand AI ethics guideline*. Retrieved from ETDA: <https://www.eta.or.th/getattachment/9d370f25-f37a-4b7c-b661-48d2d730651d/Digital-Thailand-AI-Ethics-Principle-and-Guideline.pdf.aspx?lang=th-TH>
- Ministry of Electronics & IT. 2024, February 16. *India signs MoU with Colombia on sharing India's open-sourced DPIs*. Retrieved from Press Information Bureau: <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=2006634>
- Ministry of External Affairs. 2023, September 9-10. *G20 New Delhi leader's declaration*. Retrieved from Ministry of External Affairs: <https://www.mea.gov.in/Images/CPV/G20-New-Delhi-Leaders-Declaration.pdf>
- Ministry of External Affairs. 2023, January 12. *Prime Minister Shri Narendra Modi's Opening Remarks at the Inaugural Leaders' Session of Voice of Global South Summit 2023*. Retrieved from Ministry of External Affairs, Government of India: https://www.mea.gov.in/Speeches-Statements.htm?dtl/36109/Prime_Minister_Shri_
- Ministry of Science, Technology and Innovation. 2021. *Malaysia national artificial intelligence roadmap 2021-2025*. Retrieved from Malaysia AI roadmap: <https://airmap.my/wp-content/uploads/2022/08/AIR-Map-Playbook-final-s.pdf>
- Ministry of Science, Technology and Innovations. 2021. *Summary of the Brazilian Artificial Intelligence strategy*. Retrieved from Ministry of Science, Technology and Innovations: https://www.gov.br/mcti/pt-br/acompanhe-o-mcti/transformacaodigital/arquivosinteligenciaartificial/ebia-summary_brazilian_4-979_2021.pdf

- Morfit, M. 1981. Pancasila: The Indonesian state ideology according to the new order government. *Asian Survey*, 21(8), 838-851.
- Morley, J., Floridi, L., Kinsey, L., & Elhalal, A. 2019. From what to how: An overview of AI ethics tools, methods and research to translate principles into practices. *arXiv*, 1-21.
- Munn, L. 2023. The uselessness of AI ethics. *AI and Ethics*, 3, 869-877. doi:<https://doi.org/10.1007/s43681-022-00209-w>
- Ndzendze, B., & Marwala, T. 2023. *Artificial intelligence and international relations theories*. Singapore: Palgrave Macmillan.
- NITI Aayog. 2021, February. *Responsible AI #AIforall Approach Document for India Part 1- Principles for Responsible AI*. Retrieved from NITI Aayog: <https://www.niti.gov.in/sites/default/files/2021-02/Responsible-AI-22022021.pdf>
- Obia, V., & Mejias, U. A. 2019. *The costs of connection: how data is colonizing human life and appropriating it for capitalism*. Redwood City, CA: Stanford University Press.
- OECD. 2019. *Plan Nacional de Inteligencia Artificial*. Retrieved from OECD. AI Policy Observatory: <https://oecd.ai/en/dashboards/policy-initiatives/http:%2F%2Faiipo.oecd.org%2F2021-data-policyInitiatives-26935>
- Ormond, E. 2023, November. *Governance of AI ethics: Perspective from the global south (Africa)*. Retrieved from Southern African Conference for Artificial Intelligence Research: <https://2023.sacair.org.za/wp-content/uploads/2023/11/2-sacair23.pdf>
- Oxford Reference. 2024. *Pancasila*. Retrieved from Oxford Reference: <https://www.oxfordreference.com/display/10.1093/oi/authority.20110803100303397#:~:t=Indonesian.,%2C%20democracy%2C%20and%20social%20justice>.
- Pai, N. 2023, October 8. *Championing pluralism globally will make India a 'vishwaguru'*. Retrieved from Live Mint: <https://www.livemint.com/opinion/online-views/championing-pluralism-globally-will-make-india-a-vishwaguru-11696771193017.html>
- Press Trust of India. 2022, November 22. *India calls for global data governance framework to prevent harm from AI*. Retrieved from Business Standard: https://www.business-standard.com/article/current-affairs/india-calls-for-global-data-governance-framework-to-prevent-harm-from-ai-122112201353_1.html
- Ricaurte, P. 2022. Ethics for the majority world: AI and the question of violence at scale. *Media, Culture & Society*, 44(4), 726-745.
- Roche, C., Wall, P. J., & Lewis, D. 2022. Ethics and diversity in artificial intelligence policies, strategies. *AI Ethics*, 3, 1095-1115. doi:<https://doi.org/10.1007/s43681-022-00218-9>
- Russell, S., Perset, K., & Grobelnik, M. 2023, November 29. *Updates to the OECD's definition of an AI system explained*. Retrieved from OECD.AI Policy Observatory: <https://oecd.ai/en/wonk/ai-system-definition-update>
- Sarma, A. 2023, December 19. *Imagining 2024: Digital public infrastructure's global footprint*. Retrieved from Observer Research Foundation: <https://www.>

orfonline.org/expert-speak/imagining-2024-digital-public-infrastructure-s-global-footprint

- Sartori, L., & Theodorou, A. 2022. A sociotechnical perspective for the future of AI: narratives, inequalities, and human control. *Ethics and Information Technology*, 4(4), 1-11. doi:<https://doi.org/10.1007/s10676-022-09624-3>
- Sevea, I. S., Palit, A., & Rai, V. 2023. *India and the future of G20: Shaping policies for a better world*. New Delhi: Bloomsbury.
- Siddhartha, V. 2019, March. *A new lexicon of science diplomacy*. Retrieved from Forum for Indian Science Diplomacy: https://www.fisd.in/sites/default/files/Publication/FISD%20Case%20Study_Fnl-min.pdf
- Singal, N. 2023, November 12. *Here's how India's Digital Public Infrastructure is going global*. Retrieved from Business Today: <https://www.businesstoday.in/magazine/deep-dive/story/heres-how-indias-digital-public-infrastructure-is-going-global-405177-2023-11-09>
- Sinha, S. 2024, January 31. *Digital public infrastructure: Brahmastra of India's diplomacy*. Retrieved from News18: <https://www.news18.com/opinion/opinion-digital-public-infrastructure-brahmastra-of-indias-diplomacy-8760476.html>
- Society for Computers and Law. 2020, July 27. *ExplAIning Artificial Intelligence*. Retrieved from Society for Computers and Law: <https://www.scl.org/12007-explaining-artificial-intelligence/>
- Stanford University Human-Centred Artificial Intelligence. 2020, September. *Artificial intelligence definitions*. Retrieved from Stanford University Human-Centred Artificial Intelligence: <https://hai.stanford.edu/sites/default/files/2020-09/AI-Definitions-HAI.pdf>
- Tacheva, J., & Ramasubramanian, S. 2023. AI empire: Unraveling the interlocking systems of oppression in generative AI's global order. *Big Data & Society*, 1-13. doi: DOI: 10.1177/20539517231219241
- The Hindu Business Line Bureau. 2023, September 5. *India enters MoUs with 8 countries to offer them Digital Stack, DPI at no cost*. Retrieved from The Hindu Business Line: <https://www.thehindubusinessline.com/news/india-enters-mous-with-8-countries-to-offer-them-digital-stack-dpi-at-no-cost/article67273233.ece>
- The National Council for Artificial Intelligence. 2019. *Egypt National Artificial Intelligence Strategy*. Retrieved from Arab National Development Planning Portal: https://andp.unescwa.org/sites/default/files/2021-11/Publications_672021000_Egypt-National-AI-Strategy-English.pdf
- Timcke, S., & Schültken, T. 2023, October. *Towards a more comprehensive AI ethics: How global south perspectives can enrich current approaches to AI governance*. Retrieved from Research ICT Africa: https://researchictafrica.net/wp/wp-content/uploads/2023/12/AI-ethics-in-the-global-south_Oct23.pdf
- Tourangbam, M. 2024, March 21. *Reimagining India's South Asia playbook*. Retrieved from Institute of South Asian Studies, National University of

- Singapore: <https://www.isas.nus.edu.sg/papers/reimagining-indias-south-asia-playbook-while-batting-for-the-global-south/>
- Tsekov, P. 2023, September 7. *How AI Is influencing the IT outsourcing business*. Retrieved from Forbes: <https://www.forbes.com/sites/forbestechcouncil/2023/09/07/how-ai-is-influencing-the-it-outsourcing-business/?sh=222f5f6a524d>
- UN. 2020, June. *United Nations Secretary General's roadmap for digital cooperation*. Retrieved from United Nations: <https://www.un.org/en/sg-digital-cooperation-panel>
- Vijayakumar, A. 2023, May 10. *Why, machine, why? The explainability puzzle of artificial intelligence*. Retrieved from Stratechos: <https://www.stratechos.com/techonics/why%2C-machine%2C-why%3F-the-explainability-puzzle-of-artificial-intelligence>
- Watson, E. 2024, March 22. *The India Stack as a potential gateway to global economic integration*. Retrieved from Observer Research Foundation: <https://www.orfonline.org/research/the-india-stack-as-a-potential-gateway-to-global-economic-integration>
- Working Group on Artificial Intelligence. 2018, November. *Mauritius artificial intelligence strategy*. Retrieved from Government of Mauritius: <https://ncb.govmu.org/ncb/strategicplans/MauritiusAIStrategy2018.pdf>
- World Economic Forum. 2017, December 29. *Why we urgently need a Digital Geneva Convention*. Retrieved from World Economic Forum: <https://www.weforum.org/agenda/2017/12/why-we-urgently-need-a-digital-geneva-convention/>
- Yokota, K., & Tomohara, A. 2010. Modeling FDI-induced technology spillovers. *The International Trade Journal*, 24(1). doi:<https://www.tandfonline.com/doi/full/10.1080/08853900903442897>

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