

Navigating AI, Digital Cultures and Sovereignty in South Asia

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Abstract

Artificial intelligence (AI) is rapidly transforming different aspects of media and communications in South Asia. While many studies on the impacts of emerging technologies in media and communications often overlook different concepts that inform communications, this study analyzes recent scholarly works and media and communications projects (2020-2025) to conceptualize South Asian algorithmic sovereignty. The projects analyzed different national and regional information ecologies facilitated by WhatsApp, multilingual AI, and emerging national AI strategies in South Asia. This study offers the South Asian Algorithmic Sovereignty Framework (SAASF) to understand the region's capability to shape the algorithms that define the region's future in the fields of digital economy, computing and data. The SAASF is grounded in the region's linguistic, cultural and social capital and represents regulatory, data, and community frameworks, as well as suggests architecture and design approaches to digital systems. The study identified a preference amongst South Asian countries for platform dominance over localization of technologies. Furthermore, the study identified that countries in South Asia are actively engaging with Information and Communications Technologies (ICTs) to shape their digital future; thus demonstrating a growing focus on algorithms, although infrastructure control remains crucial

Keywords: Artificial Intelligence, South Asia, Digital Sovereignty, Cultural Shifts, Media & Communication

1. Introduction

Artificial Intelligence (AI) shapes the news across the globe. However, AI does not act uniformly in different regions. South Asia is a good region to evaluate AI's effects on the news, communication, and other areas, especially with multilingual publics, various informal economies and uneven infrastructural development. Additionally, South Asia's colonial and postcolonial history differentiates it from other world regions. Therefore, when evaluating the impacts of AI and other digital innovations on South Asia, the question is not only how successful or how fast AI is. The more important questions are, whose knowledge is prioritized, who is producing the content, and what other knowledge infrastructures are privileged (Mohamed et al., 2020; Adams, 2021)? Studies show that digital innovations can reinforce unequal, predatory relationships (Thorat, 2021). This paper also focuses on different relationships. It explores South Asia's relationships with dominant global digital systems and how those systems mediate different relationships between states and citizens. This paper analyzes potential uses of contextual AI to

enhance South Asia's media and information sovereignty. Finally, the paper explores where and how South Asia's citizens and institutions have asserted counter control over digital media. This paper does not use traditional empirical methods. Instead, it synthesizes and compares theories. It also uses a variety of published and publicly available documents including reports and policy briefs from international organizations (2020-2025). South Asian digital cultures are comprised of various algorithms that shape social and economic interactions. WhatsApp group communications are one important example of how platform rules and social practices shape information exchange. However, these cultures and algorithms create spaces to share information and organize help, e.g. during emergencies (Kanthawala & Maddox, Deshbandhu & Sahni, 2023). New biometric systems can improve governments' ability to manage ;2022 their citizens, but they also alter the ways and means through which citizens interact with the state and create new dependences (Hasan, 2022; Mishra, 2021). With respect to the development and use of AI and other digital technologies, the focus should be on the relations and tensions that shape control and .sovereignty, as opposed to the absolute and absolute reliance on/independence from digital technologies

2. AI, Digital Culture and Western-centric Thought

With respect to theories of platformization, the focus is on the North American and European regions. These theories explore the relationships between privacy, competition, and regulations of digital platforms. There are bodies of literature that analyze digital platforms and other technologies through the lenses of colonial and post-colonial studies and challenge the dominant approaches that treat technology as a value-free construct (Mohamed et al., 2020; Adams, 2021). Reiko Siapera (2022), for example, wrote about racism and automation. Related critiques of automated moderation identify the social consequences of ostensibly neutral design (Siapera, 2022). South Asian examples show that no single platform, including TikTok, adequately represents the region's digital ecosystem. There is emerging state-sponsored competition in digital space, and private actors have a near-monopoly in other areas like recommendation and advertisement systems, cloud services, application and programming interfaces, and foundational models. Ultimately, control over these various infrastructure elements creates a true national sovereignty. The ability to make localized determination over technology is better described as technological sovereignty (Woods, 2023). In this study, the term focuses on state and civil society control over systems that govern communications, representation, and other digital governance architecture. This construct does not glorify the 'local.' State and civil society control over algorithms .remains unfeasible in the absence of control over processing units, other hardware, and related systems. Accordingly, the framework is not predicated on TikTok or any single platform. It draws on WhatsApp-mediated information exchange, Aadhaar-based digital identification, multilingual AI, and public digital infrastructure as distinct illustrations of platform dependence, state authority, and community agency. TikTok serves, at most, as a comparative example of algorithmic content distribution; it is not the .empirical foundation or a necessary condition of the framework

3. Algorithmic Power and Digital Cultures of South Asia

South Asian engagement with social media cannot be extrapolated from observations of social media platforms that enable overt, public communication. The relationships formed on WhatsApp are used for both interpersonal and intergroup communication, including for work and for politics (Williams et al. Maddox and Kanthawala 2023). WhatsApp's communicative hierarchy is not determined by ;2022

public, overt communication. Kanthawala and Maddox (2022) argue that in closed communication systems, like WhatsApp, individuals can and do devise methods to determine the credibility of messages. Individuals are also agents in devising remedies to manipulate the systems of communication and social control to serve their own interests. In closed communications, individuals can also devise methods to manipulate communication and social control. These observations align with analyses of private messaging and lived democratic participation (Maddox & Kanthawala, 2023). During the second wave of COVID-19 in India, one WhatsApp group, which was the focus of Deshbandhu and Sahni, organized activities to provide support and services to group members. Misinformation can, (2023) circulate on WhatsApp as easily as organized communication to provide support. Communication on WhatsApp can facilitate social cohesion and contribute to social and economic wellbeing of a community, particularly during an emergency. Thorat's (2021) study on hashtag publics of South Asia provides relevant insights: people can engage with culturally heterogeneous digital networks to shape their own conditions of social and economic life. This makes intuitive sense; if we are able to creatively manipulate technology for our purposes, we need not control it. Humans are quite adept at utilizing technology over which they have little or no control. Of course, people can make creative use of a technology and be quite powerless vis-à-vis the logic and architecture of the technology. Think of autonomous use of Uber and related platforms by taxi drivers. Through such platforms, drivers become, to a large extent, powerless agents of the technology; they are unable to alter its purposes, redirect its flows or affect the economic and social conditions of their activities.

4. AI, Digital Governance, and the Datafied State

The case of Aadhaar exemplifies the ambiguous nature of datafied governance. Seamless online service delivery can become elusive in the presence of authentication failures or data dependency. The case of the informal workers of Tripura illustrates the inadequacies and discontinuities of biometric governance. Like Mishra (2021), Hasan (2022) also demonstrates that the introduction of biometric governance can intensify the existing inequalities and social exclusions, including in the access to and utilization of health care services. Related scholarship situates digital identification within questions of informal work, legitimacy and state capacity (Krishna, 2020; Martin, 2021; Singh, 2024). The case of Aadhaar also illustrates that when one of the main priorities of a state is control and coercion, digital public infrastructure is more likely to be authoritarian and dystopian in nature. This, however, need not always be the case. If participatory and deliberative rights are enabled, authoritarian Digital Public Infrastructure can be ameliorated. Inclusive safeguards and accountable digital public infrastructure are central concerns in the relevant policy literature (Desai & Manoharan, 2024; United Nations Development Programme, 2023; World Bank, 2023). South Asian countries are including AI in their strategic plans. Bangladesh's 2020 plan and India's 2024 plan include AI. Other countries in the region have also begun to develop their AI strategies. For example, Nepal adopted their first AI policy in 2024 and Sri Lanka initiated theirs in the same year. Pakistan passed their National AI Policy in 2025. India's AI plan includes creating a safe and robust AI system and incorporating regional AI applications. The other countries in the region also have similar focuses, particularly in regard to developing their AI systems and infrastructure, and creating strategies to enhance AI capabilities in various fields. These country-level developments are documented in national policy statements and public announcements (Information and Communication Technology Division, 2020; Government of India, Press Information)

Bureau, 2024; Radio Nepal, 2024; Cabinet Office of Sri Lanka, 2024; Ministry of Information Technology & Telecommunication, 2025) Localization in South Asian AI should be understood as a sociotechnical process rather than translation alone. It includes interfaces, tokenization, localized corpora, model evaluation, intellectual-property arrangements, deployment choices, and access to computational resources. The theoretical issue is therefore not only whether a language is represented, but who defines categories, controls resources, and influences how a system is used. Indic language-generation research also underscores the need to evaluate model performance and training coverage rather than equating nominal language support with substantive inclusion (Dabre et al., 2022; Bhat et al., 2023). Localization is best treated as a relationship among linguistic representation, cultural context, and community agency. These dimensions are distinct. A system may be linguistically accurate and culturally appropriate while giving little agency to the people whose language and knowledge it uses. Community agency concerns participation in dataset governance, evaluation, deployment rules, contestation, and redress. Meaningful localization therefore links representation with practical influence over the system. Participatory governance must therefore extend beyond representational accuracy (UNESCO, 2021). AI4Bharat and similar initiatives demonstrate the value of localized language resources and models (Gala et al., 2023). Their relevance to media sovereignty, however, also depends on model governance, access, licensing, evaluation, deployment, and community participation. Localization is therefore an institutional question as well as a technical one. Work on low-resource language tagging, text generation and translation evaluation further illustrates these technical and institutional challenges (Kumar et al., 2024; Singh et al., 2024a, 2024b).

5. South Asian Algorithmic Sovereignty Framework

The South Asian Algorithmic Sovereignty Framework (SAASF) conceptualizes sovereignty as the capacity for self-determination across language, culture, infrastructure, governance, data, virtual spaces, and communities. It is a relational framework whose purpose is to identify where authority is located, how dependence is organized, and whether affected actors can participate in and contest digital systems. The framework treats linguistic, cultural, infrastructural, governmental, community, and data sovereignty as interdependent dimensions of one sociotechnical environment. Linguistic sovereignty concerns the capacity to represent local languages and meanings. Cultural sovereignty concerns authority over norms and interpretive contexts embedded in digital systems. Infrastructural sovereignty concerns access to compute, cloud services, standards, and digital rails. Governmental sovereignty concerns legitimate rule-making and oversight. Community sovereignty concerns participation, contestation, and redress, while data sovereignty concerns collection, access, reuse, and stewardship. External platform dependence can constrain each of these dimensions. Platform power is therefore understood as a relational condition shaped by control, dependence, institutional capacity, and the availability of meaningful alternatives. Dependence can be moderated where interoperable systems, alternative providers, public capacity, enforceable regulation, transparent governance, and meaningful remedies exist. The relevant distinction is therefore not simply between foreign and local technologies, but between relationships that remain contestable and those that remove practical alternatives.

Theoretical Principle 1: Platform Dependency

Greater external control over data, computation, ranking, and distribution can narrow media sovereignty when local institutional capacity does not develop alongside that dependence. External services are not

inherently undesirable; dependency becomes significant when switching, auditing, interoperability, negotiation, appeal, or other forms of contestability are unavailable or ineffective

Theoretical Principle 2: Localization and Agency

Meaningful localization requires more than translation or culturally recognizable content. It also requires opportunities for users and communities to influence data practices, evaluation criteria, moderation rules, deployment choices, and redress. A service can be technically localized yet externally governed; localization contributes to sovereignty when representation is joined by practical agency

Theoretical Principle 3: Countervailing Capacity

Countervailing capacity is the ability of civil society, public institutions, researchers, local technology communities, and users to scrutinize and respond to concentrated digital power. It includes expertise, organizational resources, regulatory authority, access to information, independent research, and channels for collective action. The relevant mix of capacities varies by country, sector, language, and institution

Countervailing capacity is therefore context-dependent, and the framework does not assume a universal measure of sufficiency. Civil society may contribute through advocacy and independent scrutiny; regulators through enforceable standards and due process; universities and local technology communities through research, evaluation, and technical alternatives; and users through collective feedback and demands for accountability. The effectiveness of these forms of power depends on legal protections, public capacity, market concentration, literacy, access, and credible alternatives. The same technical resource can therefore have different political consequences in different settings. SAASF treats resistance and institutional response as situated processes rather than predetermined outcomes

Sovereignty should also be understood dynamically rather than as a permanent condition. Digital systems can move between dependence, adaptation, negotiation, partial autonomy, and renewed dependence as technologies, policies, infrastructures, and social practices change. This dynamic perspective directs attention to trajectories of institutional learning and bargaining. Local actors may begin with substantial external dependence while gradually building language resources, regulatory expertise, public digital capacity, interoperable standards, or community governance. The reverse is also possible when concentration and infrastructure lock-in increase. SAASF therefore evaluates changing relationships of control, agency, and contestability through qualitative and institutional analysis

6. Decolonizing Algorithmic Theory

A decolonial framework does not entail jettisoning foreign-born ideas. It means discarding ethno-centric assumptions about universality. South Asian Artificial Intelligence (SA-AI) needs to be analyzed in relation to South Asia's colonial history of enumeration and in the light of post-colonial development, language and communication in the sub-continent, inequitable connectivity, informal social norms based on mediation and participation, and South Asia's collective and distributed forms of digital engagement

Decolonizing South Asia means taking epistemological precautions as well. South Asia is not a homogenous region when it comes to digital culture. Automation in different countries of the sub-continent is context dependent. Analysis at the sub-national, sub-regional, and micro levels would be more adequate and productive than generalizations and comparisons at the macro and civilizational levels

7. Discussion and Conclusion

The SAASF identifies three crucial points. First, in the case of media, sovereignty requires multiple levels of control and capacity. The example of a country creating a local content production model to replace an imported one still leaves that country reliant on a foreign cloud computing service. When considering media policies, it is important to analyze access and control at the various levels of the .media value chain, including not only data, but also algorithms and infrastructure, as well as language .Second, public services and infrastructure should be designed with multiple levels of control and capacity. Not all reliance on intermediaries should be eliminated. Designs that rely on Artificial Intelligence (AI) should incorporate multiple levels of control, including human oversight and mediation. Third, to promote appropriate integration of language into AI, research should develop language resources and define standards and metrics for low-resource languages. Additionally, to promote appropriate integration of Indic NLP, research should develop resources and define standards, and incorporate community involvement for governance of datasets. The SAASF provides a mechanism to evaluate AI policy and identifies where the dependencies are. The framework focuses on positive activities, for example building the capacity and institutions of the public to ensure accountability. Where the framework is dependent on other scholars and researchers is in identifying and analyzing .asymmetrical relationships

South Asian AI follows neither the path of the direct transfer of AI from the Silicon Valley, nor of a resolute strategy of technological nationalism. Instead, it reflects a combination of multiple and intersecting factors that include global and local ICT infrastructures, multilingual and trans-national communities, and innovative combinations of various national and local policies, as well as informal .social rules and practices

With this understanding, the South Asian Algorithmic Sovereignty Framework seeks to conceptualize sovereignty as the potential and ability of South Asia to influence the terms under which algorithms carry out classification, ranking, trust and confidence evaluation, translation, and text-to-speech and speech-to-text synthesis generation. The Framework proposes and illustrates various pathways through which South Asia is likely to gain trust and confidence evaluation sovereignty faster than other regions .of the world

Based on the trust and confidence evaluation sovereignty approach, the aim of a decolonial frame should not be limited to South Asia's prospect of control and possession over advanced AI. It should also include South Asia's prospect of control and possession over other critical technologies, as well as the systems and infrastructures upon which such technologies are built. From the perspective of trust and confidence evaluation of South Asia's Media Sovereignty, reliance on core and critical technologies should be supplemented with efforts to build and institutionalize, or support, trust and confidence in .South Asia, in the areas of governance and rule of law

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