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Colonising The Cloud: A Review of Digital Hegemony and Technology Inequality in the Global South

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ABSTRACT:

The rapid expansion of artificial intelligence, platform ecosystems and cloud infrastructures are reshaping global power relations in ways that deepen historical asymmetries. While they are framed as vehicles of progress and inclusion, they form a new form of dependency, which positions many regions of the Global South as recipients rather than architects of digital futures. This paper will highlight how digital infrastructures operate as instruments of political and economic control rather than neutral tools, and examine how platform power, data extraction and algorithmic governance together reproduce systemic inequalities.

With a synthesis of existing literature and sectoral evidence, the paper demonstrates that platform monopolies and externally imposed algorithm models have reconfigured advertising markets, humanitarian systems and welfare technologies. These cases reveal accountability gaps where local actors lack meaningful participation in design and oversight, but also economic consequences.

The analysis underscores diverse responses and regulatory experiments, reflecting varied capacities and civic engagement rather than treating the Global South as a homogeneous category. This review identifies critical gaps in current research, including limited integration of the local knowledge system, underrepresentation of grassroots innovation and the absence of frameworks that move beyond technical fixes. It calls for a decolonial agenda which reimagines technology as a site of co-creation, placing plural and encouraging context-specific perspectives at the centre of global governance.

Keywords: digital inequality, platform power, data colonialism, algorithmic governance, digital sovereignty, Global South, decolonial technology, participatory design, technological dependency, cloud infrastructures.

INTRODUCTION:

The world's global power relations have drastically changed with the rapid proliferation of digital technologies, including artificial intelligence, platforms, and cloud infrastructure. These innovations are widely promoted as tools for inclusive innovation, governance, and development, but a new form of asymmetry and dependency is emerging, disproportionately affecting the Global South. We can see a growing concern among scholars regarding the rapid growth of digital infrastructures, which anchors the political and economic dominance of the Global North. We can understand this better with emerging concepts such as platform imperialism (Jin, 2013), data colonialism (Couldry & Mejias, 2019), and digital hegemony. These global technology firms do not merely offer digital services; they export governance models, cultural standards and economic structures. Often, they operate without giving proper accountability to those communities from whom they extract data or whose markets they penetrate.

This dynamic increasingly mirrors the logic of classical imperialism, albeit through digital rather than territorial means. Building on Edward Said's (1978) foundational work, Orientalism, will provide a valuable lens to understand this phenomenon called Digital Orientalism. It conceptualises how the West continues to intervene through algorithms, platforms and surveillance architectures to portray the Global South as technologically deficient and administratively immature. This transition from physical domination to digital domination does not erase the colonial hierarchies; rather, it reconfigures them in more opaque and algorithmic terms. This reflects a form of digital colonialism where the Global South often lacks meaningful input in shaping the digital standards and platform regulation.

While existing literature explores these dynamics from multiple angles, such as platform power, data extractivism, AI moderation and algorithm bias, much of the research treats them in isolation. While there are works done to synthesise these threads, there are only limited works that focus on a unified critique of digital domination rooted in postcolonial theory. Specifically, few attempts have been made to understand platform governance, data infrastructure and AI systems, which collectively reproduce colonial hierarchies through the lens of Orientalism. There is a notable gap when integrating indigenous, feminist or Global South epistemologies, such as relational sovereignty (D'Arcangelis, 2010) or grassroots data justice movements, into mainstream digital governance discourse. The literature also disproportionately focuses on the Global North, treating the Global South either as a passive recipient of the technology. (Yu, Rosenfeld, & Gupta, 2023)

This paper will address these critical gaps and will draw a connection between platform imperialism, AI governance and technological inequality in the Global South by reviewing and synthesising academic and policy literature to illustrate how they form an interlocking system of control that mirrors and extends Orientalist logic.

CONCEPTUAL FRAMEWORK:

- Key Terms and Theoretical Tools

To understand this paper, one should understand the digital asymmetries between the Global North and Global South. This paper draws four main concepts: platform imperialism, data colonialism, digital hegemony and digital Orientalism. They offer a distinct lens for analysing how digital infrastructure reproduces global inequalities, particularly in a postcolonial context.

- Platform Imperialism

Coined by Dal Yong Jin (2013), refers to the imposition of external standards and economic models which reduce the space for local alternatives and subordinate the regional digital culture to Western norms. It is the dominance of Western tech giants, such as Google, Meta and Amazon, which impose the Western economy, culture and political standards over the digital infrastructure of the Global South. Jin argues that this form of imperialism is "asymmetrical and nonreciprocal," where the flow of data, technology predominantly moves from the West to the rest of the world (Jin, 2013).

- Data Colonialism

It emphasises the extractive logic behind digital capitalism. Nick Couldry and Ulises Mejias (2019) define digital colonialism as a new form of colonialism which caters to capitalistic interests by extracting data from human life. It operates through consented or invisible mechanisms of surveillance, turning individuals into data-producing subjects, unlike traditional colonialism, which was based on land and labour. This process mirrors the historical resources extraction; now, it's digital resources mining, with the Global South once again serving as a frontier (Couldry & Mejias, 2019).

- Digital Hegemony

Digital Hegemony refers to socio-political dominance which is exercised by a small group, mainly comprising the large tech corporations and Western states over digital norms, standards and infrastructure. It is drawn from Antonio Gramsci's idea of hegemony as an ideological leadership which exercises through consent and coercion. This digital hegemony is demonstrated in various fields: the dominance of English language content, universalisation of Western privacy norms or the deployment of AI systems that are primarily trained on the Global North (Alonso, Kothari, & Rehman, 2020). This order marginalises alternative languages, legal regimes, and epistemologies, while enforcing a global digital architecture which operates in the interest of the No

- Digital Orientalism

Building upon Edward Said's (1978) original notion of Orientalism, applying the same critique but on contemporary digital systems. Said argued that the West historically constructed the East as an exotic, backwards world which requires governance, thus legitimising their colonial control. Similarly, through digital Orientalism, the Global South is framed as technologically underdeveloped, lacking capacity and in need of digital salvation through Western tools, governance model and platforms (Mayer, 2018; Kwet, 2019). This reinforces a paternalistic relationship; technology is not co-developed with the Global South, rather, they are exported to 'fix' them, often without local consultation or adaptation.

- Interlinkages and Postcolonial Relevance

All these concepts stem from different scholarly domains, such as media studies, political economy, and postcolonial they are deeply interconnected. Platform imperialism provides infrastructure for data colonialism, they are legitimised through digital hegemony, which shapes global narratives about progress and innovation. Digital Orientalism ties them together, justifying the asymmetry by constructing a space of digital deficiency and risk rather than agency and innovation for the South.

PLATFORM POWER AND THE POLITICAL ECONOMY OF THE CLOUD:

A new layer of economic dependency has been introduced in the Global South with the rise of platform capitalism. The contemporary digital economy is characterised by the dominance of a few transnational platforms, such as Google, Meta, Amazon, and Apple, unlike earlier ones, which were dependent on an industrial or trade-based economy. The digital economy not only controls the content distribution and communication but also controls cloud infrastructure, software ecosystems and AI pipelines. This centralisation of digital infrastructure is a defining feature of platform imperialism, which embeds the political and economic logics of the Global North onto the South (Jin, 2013).

Vast amounts of user data are extracted from these platforms, often without transparent consent mechanisms or meaningful returns to the local communities. As Couldry and Mejias (2019) argue, human lives are continuously mined for behavioural data, representing a new 'colonial' mode of accumulation, reproducing the data colonialism dynamic. As the infrastructure and rules of participation are externally determined, this model limits technological sovereignty for countries in the Global South.

Digital hegemony further deepens this economic asymmetry, enabling corporations and Western governments to define the global terms of participation. Sara Bannerman's (2021) work on relational sovereignty highlights how the Global South nations are often excluded from shaping data governance frameworks. Even when cloud-based services are localised, the terms of service, encryption standards and content moderation systems reflect the policy interest of host countries, the North, rather than local realities.

Digital infrastructure is adapted, scaled and piloted under the guise of 'development,' reinforcing the assumption that the Global South requires digital intervention. Michael Kwet (2019) and Payal Arora (2016) show how the Global South is not a passive recipient but rather serves as a testing ground. This logic of the South being technologically deficient and politically unstable aligns with digital Orientalism, justifying surveillance-heavy, externally governed platforms.

This control over the cloud infrastructure directly translates to control over the labour, knowledge production and digital future. For instance, Vaidhyanathan (2007) argues that dependency has extended into education, media and governance systems because of the Googlisation of everyday life. These dependencies are rarely reciprocal. Local actors often lack negotiating power and regulatory leverage while tech firms enjoy the market access, tax benefits, and user data from the South.

An example of this is South Africa's experience with platform monopolies in the media ecosystem. It is documented by Harber (2017) how Facebook and Google disrupted the advertising market for local news outlets, eroding revenues and diminishing journalistic independence. This demonstrates how the platform imperialism is not merely an abstract term, but rather, it has a concrete economic effect on an important part of the democratic system. Countries like South Africa have explored taxation and content quotas to reclaim some sovereignty over their digital economies rather than a uniform 'Global South' response. Reflecting the diversity of approaches in the region.

In summary, the consolidation of platform power and cloud infrastructure reinforces existing geopolitical hierarchies. The South remains on the periphery not just in physical or economic terms but also in its ability to define the architecture and ethics of its digital future. This highlights how platform imperialism, data colonialism and digital Orientalism function together to enclose and govern the cloud, transforming it into a new site of extractive domination.

AI GOVERNANCE, ALGORITHMIC BIAS AND THE GLOBAL SOUTH:

Artificial Intelligence is often promoted as neutral and efficient and is increasingly integrated into governance systems, public service delivery and platform moderation. These are shaped by the socio-political values embedded in the Global North, which raises serious implications for the Global South.

One of the central issues lies in training data; these data sets are made out of automated moderation tools and predictive analysis, which do not represent the language, socio-political dynamics and dialects of the Global South. When these systems are deployed in regions for which they have not been optimised, they misclassify local expression as 'harmful', 'illegible', or 'deviant' (Greenwald, 2017; ACM, 2022). For example, Greenwald (2017) reports on Facebook's moderation policies, which were shaped by U.S. and Israeli state directives, disproportionately affecting Palestinian users. This clearly illustrates how moderation is not merely technical; instead, it's deeply political.

In a systematic review of Explainable AI (XAI), ACM (2022), it was found that only a small fraction of AI project engages with local communities of the Global South; they are mostly focused on technical solutions. Very few systems have any real-world user participation; this highlights a consistent neglect of contextual relevance. AI systems are not tested for their usability, fairness or cultural fit before deployment, despite their rapid growth in use, especially in sectors like healthcare, agriculture, and education.

Payal Arora highlights this disparity through the concept of the 'bottom of the data pyramid' (Arora, 2016), clearly showcasing how the users of the Global South are increasingly subjected to surveillance but are invisible to the architecture and governance processes. This contributes to asymmetrical innovation; the benefits of AI are concentrated in core regions, while the social and ethical burdens are disproportionately borne by the marginalised section.

In terms of accountability, Vecchione, Levy and Barocas (2021) argue that algorithm auditing still remains underdeveloped in the Global South; most auditing practices and accountability mechanisms are created with the North primarily in context. This leads to a compliance gap, which causes communities to be subjected to algorithmic decision-making, lacking a clear mechanism to challenge or contest outcomes.

Moreover, under the guise of low-cost innovation, AI is often first tested in the Global South. Countries like India or Kenya demonstrate how marginalised populations frequently become experimental grounds for controversial technologies such as predictive policing, facial recognition or AI-based welfare distribution. These are technologies that would likely face resistance in the Global North.

In this light, the Global South is not merely underserved by AI, because it is being actively reshaped by it, and it also reinforces governance from afar. This calls for urgent attention to the need for participatory design, local oversight and a fundamental shift in who gets to define AI ethics and effectiveness.

GAPS IN LITERATURE AND NEED FOR A DECOLONIAL TECH AGENDA:

Despite a growing body of scholarship on digital inequality, there are many critical gaps when it comes to understanding how platform power, AI governance and digital Orientalism narratives intersect to shape technological dependency in the global South. Most of the studies tend to focus on these components but, they are done in isolation, examining, for instance, the algorithm bias, platform imperialism or surveillance as standalone concerns, because of this, we miss an integrated analytical framework which explores how these systems interact and also reinforces reproducing colonial hierarchies in digital form (Cloudy & Mejias, 2019; Jin, 2013).

The second major gap is visible in the mainstream digital governance discourse, where there is a clear underrepresentation of feminist and decolonial epistemologies. Scholars such as Payal Arora (2016) and D'Arcangelis (2010) offer critical insight into how surveillance, digital labour, and platform dependency have disproportionately affected women, indigenous people and marginalised communities. But their work remains in the periphery when it comes to dominant policy and scholarly conversations that continue to prioritise techno-centric, Western paradigms. Relational sovereignty, community participation, local knowledge systems, and the evaluation of digital technologies should be the central concerns when it comes to a decolonial approach.

We can see existing scholarship analysing these dynamics through legal and economic lenses, but the feminist and indigenous perspectives remain underrepresented. A framework of relational sovereignty is provided by D'Arcangelis (2010), emphasising how indigenous epistemologies can reshape digital governance to prioritise community consent and reciprocity. It is essential to integrate these approaches with critical media studies (Bannerman, 2021) and anthropological insights, as they expose power structures that technical analysis often overlooks.

There are only a few studies which examine co-designed solutions emerging from the South itself; most scholarship focuses on critiques of algorithm harms. Arora (2016) highlights the experience of low-income users interacting with digital infrastructures, providing detailed insights that question universal solutions. By incorporating these varied disciplinary perspectives, we can enhance our comprehension of how governance frameworks can develop from the margins instead of merely being imposed on them.

Moreover, the EU's General Data Protection Regulation (GDPR) and the U.S.-centric AI ethics framework are regulatory models which are promoted by the Global North and considered to be applicable globally. This ignores the distinct legal, social and infrastructural realities of the postcolonial states, many of which lack the institutional capacity to enforce these standards (Bannerman, 2021). This results in weak implementation and limited accountability between multinational tech firms and Global South governments, because these frameworks fail to account for the power asymmetries.

Recent literature acknowledges these limitations, but norm-setting in global tech governance remains elite-driven; it often excludes the voices of the Global South in the deliberative process (Couldry & Mejias, 2025). However, we can see efforts being made for alternative models grounded in digital sovereignty, cultural plurality and context-specific ethics emerging at the grassroots level and in scholarly writings. This highlights the growing advocacy for frameworks that are not only inclusive but are also generated by communities in the Global South. This can be accomplished through a participatory algorithm design, localised data governance or open-source technological alternatives (ACM, 2022; Arora, 2016)

It is important to notice that the Global South is not a monolith. While India has embraced large-scale AI deployments in welfare distribution, countries such as Brazil and South Africa have developed strong debates around data protection dn platform accountability, showing varied levels of regulatory capacity and civic engagement. (Cohen, 2017; Alonso, Kothari, & Rehman, 2020). Overgeneralization prevents these differences, allowing for more accurate mapping of digital inequalities

In essence, while existing literature provides valuable entry points, it remains fragmented, hierarchical, and Western-centric. A comprehensive decolonial tech agenda is essential to bridge these gaps, one that foregrounds the Global South as an active producer of the digital future, rather than a passive recipient of external innovation. It is crucial to build an equitable, plural and accountable digital system, not just for epistemic justice, but for a better future.

CONCLUSION:

The digital future is neither neutral nor evenly distributed; rather, it's a battleground. This review illuminated how cloud infrastructure, platform architecture and algorithm systems are not technological developments; rather, they are political instruments of the North that entrench asymmetries of power rooted in colonial and Orientalist legacies. It is not merely access to digital tools which is at stake, but the capacity of entire societies to define the architecture, ethics and future of their digital realities.

To move forward, scholars and policymakers need to resist the temptation to retrofit the Global South into a framework crafted by the Global North. This not only erases histories of dispossession but also sidelines epistemologies offering a more humane,

sustainable and pluralistic digital order. This calls for the transformation of systems themselves rather than inclusion into the existing system. This will be solidified through a politics of refusal, a praxis of relational sovereignty and a reimagining of technology as a site of co-creation rather than conquest.

A decolonial tech agenda must therefore build on, rather than just critiquing. It must inquire: If cloud infrastructures were designed by and for the margins, what would they look like? How can AI be made accountable not just to regulators but also to the communities it touches? And most importantly, we should understand and find out what knowledge, resistance and design logics already exist within the Global South.

In a moment where the future is increasingly mediated by invisible algorithms and unaccountable platforms, the Global South is not a lagging recipient; rather, it is on the frontline. Recognising this is not just reorienting academic inquiry, but rather it defines the moral and political horizon of global technological governance.

REFERENCES:

- Alonso, C., Kothari, S., & Rehman, S. (2020). How Artificial Intelligence could widen the gap between rich and poor nations. International Monetary Fund.
- Arora, P. (2016, March 14). Bottom of the data pyramid: big data and the global South. Arora | International Journal of Communication.
- Arora, P. (2016). The bottom of the data pyramid: Big data and the Global South. International Journal of Communication, 10, 1681–1699.
- Bannerman, S. (2021). Relational sovereignty: The future of data, platforms, and governance. Internet Policy Review, 10(4).
- Cohen, J. E. (2017). Law for the platform economy. University of California Davis Law Review, 51, 133–204.
- Couldry, N., & Mejias, U. A. (2019). Data colonialism: Rethinking big data's relation to the contemporary subject. Television & New Media, 20(4), 336–349.
- Couldry, N., & Mejias, U. A. (2021). The decolonial turn in data and technology research: What is at stake and where is it heading? Information, Communication & Society, 1–17.
- Couldry, N., & Mejias, U. A. (2025, February 20). Data colonialism comes home to the US: resistance must too. Tech Policy Press.
- D'Arcangelis, C. L. (2010). Exploring indigenous feminist relational sovereignty: Feminist conversations, non-colonizing solidarities, inclusive nations. Atlantis: Critical Studies in Gender, Culture & Social Justice, 34(2), 127–138.
- Greenwald, G. (2017, December 30). Facebook says it is deleting accounts at the direction of the U.S. and Israeli governments. The Intercept
- Harber, A. (2017, November 16). How Google and Facebook are the biggest threat to South African news media. Financial Mail.
- Jin, D. Y. (2013). The construction of platform imperialism in the globalization era. tripleC: Communication, Capitalism & Critique, 11(1), 145–172.
- Kwet, M. (2019, June 29). Break the hold of digital colonialism. Mail & Guardian.
- Mayer, M. (2018). China's authoritarian internet and digital orientalism. In The Global Politics of Internet Governance. ResearchGate.
- Nauta, M. (2022). From anecdotal evidence to quantitative evaluation methods: A systematic review on evaluating explainable AI. ACM Computing Surveys, 55(13s), 1–42.
- Said, E. (1978). Orientalism. New York: Pantheon Books.
- Vaidhyanathan, S. (2011). The Googlization of Everything (And Why We Should Worry). University of California Press.
- Vecchione, B., Levy, K., & Barocas, S. (2021). Algorithmic auditing and social justice: Lessons from the history of audit studies. Equity and Access in Algorithms, Mechanisms, and Optimization, 1–9.
- Yu, D., Rosenfeld, H., & Gupta, A. (2023, January 16). The 'AI divide' between the Global North and the Global South. World Economic Forum.