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Navigating Digital Colonialism: A Postcolonial Approach to AI and Global Justice

Abstract

The rapid growth of digital technologies and AI has intensified inequality, especially for marginalized communities and nations with limited infrastructure and vulnerable conditions—a phenomenon known as "Digital Colonialism." Biased AI systems often reproduce colonial ideologies, threatening justice, dignity, and the integrity of life. This study employs a postcolonial lens to uncover the ideological roots of AI development and explores how postcolonial ethics can foster discernment and resistance against the harmful impacts of digital colonialism.

Introduction

The rapid advancement of digital technologies and artificial intelligence (AI) is reshaping the global landscape, unlocking vast potential for innovation, economic growth, and social transformation. From breakthroughs in healthcare and education to industrial optimization and new forms of communication, AI technologies are often heralded as the key to a progressive and interconnected future.

However, behind such optimistic narratives lie several critical and often overlooked realities. Among the various risks, this study specifically seeks to highlight the danger that technological advancement may further exacerbate existing inequalities, particularly by disproportionately disadvantaging resource-scarce nations and marginalized communities. This phenomenon, often referred to as *Digital Colonialism*, highlights that technological progress is neither neutral nor universally beneficial.[1] On the contrary, it often operates in ways that reproduce and reinforce historical patterns of colonial domination, dependency, and exclusion.

Digital colonialism refers to a system in which powerful nations and multinational corporations monopolize the creation, ownership, and control of digital infrastructure and AI technologies, thereby relegating developing countries to the peripheries of the global digital economy. Marginalized nations are often forced into dependency on foreign technologies, entrapped in exploitative structures that undermine their sovereignty and autonomy. Countries across Africa and the Global South face significant barriers to access, control, and innovation,[2] perpetuating digital divides and systemic inequalities. Moreover, the labor of low-wage workers is increasingly exploited to sustain data-driven economies, deepening economic disparities under the guise of technological progress.

[1] Michael Kwet, "Digital Colonialism: The Evolution of US Empire," *TNI,* March 4, 2021, https://longreads.tni.org/digital-colonialism-the-evolution-of-us-empire.

[2] Danielle Coleman, "Digital Colonialism: The 21st Century Scramble for Africa through the Extraction and control of User Data and the Limitations of Data Protection Laws," *Michigan Journal of Race and Law* 24 (2019): 423.

Moreover, AI technologies are increasingly being appropriated as instruments of power, already employed for military purposes and surveillance systems. The resulting risks pose significant threats to human rights, particularly for marginalized communities that are most vulnerable to such abuses.[3] Autonomous weapon systems and expansive surveillance networks raise profound ethical dilemmas, threatening human dignity and fundamental rights. Algorithms trained on biased datasets do more than replicate social prejudices, they amplify them, embedding discriminatory practices and ideologies into decision-making processes across sectors such as finance, policing, healthcare, and immigration.[4] In this context, AI is not merely a tool of progress but a mechanism that reinforces existing power structures, silences diverse worldviews, and marginalizes dissenting voices. Left unchecked, these biased technologies risk transforming digital infrastructure into a tool that serves the interests of dominant powers while deepening global inequalities and divisions.

Addressing the challenges posed by digital colonialism requires more than mere technical regulations or superficial reforms. It demands a deep critical examination of the ideologies and power structures that shape the development and deployment of technology. In response to this urgent need, this study proposes a postcolonial approach to AI and digital justice. In particular, postcolonial theory is expected to offer a powerful tool for dismantling the colonial ideologies embedded within contemporary technological systems. This theoretical approach resists limiting the relationship between technology and society to structures of domination and exploitation, and instead calls for the reconstruction of ethical and social networks grounded in solidarity, mutual dependence, and reciprocal respect.

From the perspective of postcolonial theology, technological development offers a critical lens through which we can reflect on ethical responsibility, human dignity, and justice. This perspective challenges the profit-driven and domination-based motives underpinning the AI industry, instead emphasizing biblical principles of love, community, and care for the marginalized. In other words, it provides the possibility to redefine the purpose of technology, from a means of economic efficiency and corporate gain to one that promotes the common good and the pursuit of equitable human flourishing.

Accordingly, this study will explore three primary objectives in response to the realities of digital colonialism. First, it will critically examine the colonial perspectives embedded in the development and application of AI, analyzing how these technologies reinforce and reproduce global inequalities. Second, it will reflect on how the framework of postcolonial theory can offer insights for reimagining technological systems in more ethical and justice-oriented directions. Finally, it will investigate the concrete initiatives undertaken by non-dominant countries, particularly in Africa and the Global South, to build a fair and cooperative global digital ecosystem. By highlighting their efforts to reclaim technological agency and strengthen digital sovereignty, this study seeks to contribute to a broader discourse on ethical discernment in the age of AI and to propose pathways toward global justice in an increasingly interconnected world.

Unveiling Colonial Ideologies Embedded in AI Development and Deployment

The Myth of Technological Neutrality

One of the most persistent and dangerous myths surrounding AI and digital technologies is the belief in their neutrality. Dominant narratives often portray AI as objective, fair, and

[3] Paul Scharre, "Military Applications of Artificial Intelligence: Potential Risks to International Peace and Security," *The Militarization of Artificial Intelligence* (August 2019): 13-14.

[4] Abeba Birhane, "Algorithmic Injustice: A Relational Ethics Approach," *Patterns* 2 (February 2021): 5.

value-free—products of pure technological innovation, independent of human intentions or agendas. However, such assumptions obscure the political and ideological forces embedded in the development, deployment, and governance of AI. These systems do not emerge in a vacuum; they are shaped by human decisions, cultural assumptions, historical inequalities, and economic interests.[5]

The belief that technologies, including AI, are neutral overlooks the fact that every stage of technological development, from dataset selection to design standards and algorithmic applications, is influenced by human biases.[6] These biases often reflect the dominant values of those with economic, political, and cultural power. For instance, training data frequently reproduces historical injustices and discrimination, embedding biases related to race, gender, and class within the systems themselves. As a result, tools perceived as "objective" risk not correcting social inequalities but rather reinforcing and amplifying them.

Dominant narratives of technological "progress" further obscure these power dynamics. AI development is often portrayed as an inevitable evolution toward universal good or a better future, with stories of innovation focusing solely on gains in efficiency, economic growth, and scientific breakthroughs. Conversely, little attention is given to how these technologies exacerbate global inequalities. The language of "progress" assumes a singular, homogenized vision of the future – one centered on the experiences and priorities of powerful nations and multinational corporations – marginalizing diverse worldviews, knowledge systems, and alternative models of technological development.[7]

The myth of AI's neutrality reinforces its skewed role in society and depoliticizes critical discussions surrounding it. In other words, it numbs inquiry into who controls the technology, who benefits from it, and who suffers labor exploitation to sustain the advantages of the few. By treating technology as neutral, stakeholders can evade responsibility for the social and ethical consequences their creations produce, dismissing inequality and harm as mere unfortunate side effects.

A postcolonial analysis deconstructs this myth, revealing that AI development and deployment are deeply intertwined with historically persistent patterns of domination and exclusion. The postcolonial approach emphasizes that AI technologies can never be truly neutral; instead, they contribute to maintaining or reinforcing existing hierarchies. Therefore, adopting a critical perspective on the myth of technological neutrality is an essential first step toward advancing justice, respecting human dignity, and building AI systems that serve the common good rather than the interests of the powerful.

Defining Digital Colonialism: Mechanisms of Domination

Digital colonialism refers to a contemporary form of colonial domination in a world centered on data and digital technologies, where powerful nations and multinational tech corporations monopolize and control digital resources and infrastructure.[8] Similar to how historical colonialism exploited and controlled territories and natural resources, digital colonialism operates through intangible assets such as information, networks, and algorithms.[9] To better understand the nature of digital colonialism, it is necessary to examine the following to dimensions.

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[5] Birhane, "Algorithmic Injustice: A Relational Ethics Approach," 1-2.

[6] Birhane, "Algorithmic Injustice: A Relational Ethics Approach," 2.

[7] Aishat Oyenike Salami, "Artificial Intelligence, Digital Colonialism, and the Implications for Africa's Future Development," *Data and Policy* 6 (2024): e67-5.

[8] Kwet, "Digital Colonialism: The Evolution of US Empire."

[9] Pali Lehohla, "Opinion: Digital Colonialism on the African Continent," IOL, accessed June 4, 2025, https://iol.co.za/business-report/economy/2018-10-29-opinion-digital-colonialism-on-the-african-continent/.

Firstly, the monopolization of data and technological infrastructure by powerful corporations and states represents a central mechanism of digital colonialism. Major technology firms such as Google, Meta, Microsoft, and Amazon amass and monopolize vast amounts of global data, leveraging it to develop proprietary artificial intelligence and cloud-based systems. Within this asymmetric structure, many developing nations face significant barriers to exercising digital sovereignty, often becoming dependent on external technologies.[10] This dependency is particularly acute in African and Global South countries, where the lack of domestic infrastructure leads to structural reliance on foreign systems, resulting in the erosion of digital autonomy and technological agency.[11]

Secondly, digital colonialism is also manifested through the exploitation of marginalized labor within the AI supply chain. Training artificial intelligence systems requires vast amounts of data, and the tasks of data collection and labeling are often outsourced to low-wage workers in developing countries. These workers, operating under poor conditions, are assigned repetitive and emotionally taxing tasks such as content moderation and image classification, yet they are frequently denied fair compensation or basic labor rights.[12] This reality reveals that digital technological advancement does not benefit all equally. Rather, digital colonialism exposes the hidden structures of domination and exploitation behind the façade of innovation, urging a fundamental ethical reflection on how technologies are developed and deployed.

Technological Dependency and the Loss of Digital Sovereignty

Digital colonialism goes beyond mere technological exploitation to reinforce structural dependencies that hinder nations from achieving technological self-reliance. This phenomenon is especially pronounced in many African countries and other regions of the Global South, where such dependencies pose a serious threat to digital sovereignty.[13] Due to limited domestic capabilities, such as the absence of data centers, cloud infrastructure, search engines, and AI development resources, these nations are often compelled to rely on foreign technologies and service providers. For instance, public sector data is frequently hosted on cloud platforms owned by corporations based in the United States or Europe, effectively rendering the digital footprints of citizens as assets controlled by external entities.[14]

When ownership and control over critical technologies reside outside national borders, it becomes exceedingly difficult for governments to protect citizens' privacy, assert informational sovereignty, or develop public policies from an autonomous position. Moreover, as multinational tech corporations expand into African markets, they often enter into asymmetrical agreements with governments or sidestep fair competition with local businesses, thereby undermining the growth of regional technology ecosystems. These practices not only reinforce external dependence but also systematically obstruct local innovation and long-term technological self-determination.[15]

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[10] Michael Kwet, "Digital Colonialism is Threatening the Global South," Al Jazeera, last modified March 13, 2019, https://www.aljazeera.com/opinions/2019/3/13/digital-colonialism-is-threatening-the-global-south.

[11] Seydina Moussa Ndiaye, "Empowering Africa in the Age of AI," apolitical, last modified June 17, 2024, https://apolitical.co/solution-articles/en/empowering-africa-in-the-age-of-ai.

[12] Kwet, "Digital Colonialism: The Evolution of US Empire."

[13] Abubakar Isah, "The Silicon Shackles: How Africa's Digital Dependency Reinforces Neo-Colonial Control," Modern Ghana, last modified June 3, 2025, https://www.modernghana.com/news/1405498/the-silicon-shackles-how-africas-digital-depende.html?utm.

[14] Folashadé Soulé, "Digital Sovereignty in Africa: Moving beyond Local Data Ownership," *Centre for International Governance Innovation* 185 (June 2024): 2-3.

[15] Soulé, "Digital Sovereignty in Africa: Moving beyond Local Data Ownership," 3-4.

Moreover, international technological norms and standards are predominantly shaped by Western institutions and interests, leaving countries in the Global South with limited agency in influencing global regulatory frameworks. This imbalance illustrates how digital power is increasingly concentrated in the hands of dominant actors and reveals the extent to which technology functions not only as a tool of economic control but also as an instrument of political influence. Thus, technological dependency is not merely a matter of digital disparity, it is fundamentally an issue of 'autonomy' and 'self-determination.' It raises urgent concerns about who has the right to shape a just society and future. Addressing this challenge requires urgent investment in local technological capacities, the development of regionally anchored digital infrastructures, and the establishment of more equitable frameworks for global technological cooperation.

Militarization and Surveillance

As AI technologies continue to advance rapidly, their use in military enhancement and surveillance systems reveals yet another dimension of digital colonialism. Technologies such as Autonomous Weapon Systems, facial recognition, and large-scale surveillance networks are often presented as signs of technological progress. However, in practice, they risk becoming tools that justify oppression and violate human rights.[16] Powerful nations are increasingly leveraging AI to secure military dominance, frequently at the expense of ethical considerations. For instance, Autonomous Weapon Systems are designed to identify and eliminate targets without human intervention, raising fundamental questions about the norms of warfare and the boundaries of moral responsibility. The potential for civilian casualties, the lack of clear accountability, and the erosion of respect for human dignity highlight the urgent need for critical reflection on AI's militarized applications, as well as for the establishment of meaningful ethical and legal safeguards.

Moreover, AI-powered surveillance technologies are increasingly employed by authoritarian regimes or occupying powers as tools of population control. Systems such as facial recognition, geolocation tracking, and emotion analysis are being deployed to identify protest participants, monitor ethnic minorities, and suppress political dissent, resulting in serious violations of fundamental rights.[17] In many cases, Global South nations either import these technologies or become sites for their experimental deployment by foreign companies, placing local populations in the dual position of both surveillance subjects and test subjects.

The militarization and securitization of these technologies go beyond conventional law enforcement or national security measures, they represent a modern reincarnation of colonial logics of control. In this context, AI functions as an intangible "digital weapon," enabling psychological and societal domination in addition to physical control. Consequently, already marginalized communities and nations face heightened forms of oppression and inequality.

This reality underscores the urgent need for a fundamental reconfiguration of technological ethics. Without critical reflection on who uses AI, for what purposes, and with what consequences, technology risks becoming not a tool of liberation but a means of entrenching new forms of domination. Ethical resistance to the militarization and surveillance

[16] Leslie Alen Horvitz, "The Rise of AI Warfare and Digital Colonialism: How Autonomous Weapons and Cognitive Warfare Are Reshaping Global Military Strategy," Lankaweb, last modified May 18, 2025, https://www.lankaweb.com/news/items/2025/05/18/the-rise-of-ai-warfare-and-digital-colonialism-how-autonomous-weapons-and-cognitive-warfare-are-reshaping-global-military-strategy/?utm.

[17] Matthew Tokson, "The Authoritarian Risks of AI Surveillance," Lawfare, last modified May 1, 2025, https://www.lawfaremedia.org/article/the-authoritarian-risks-of-ai-surveillance?utm.

uses of AI, along with global solidarity, must therefore be seen as essential components of any movement toward digital justice.

Toward a Decolonial and Ethical Reconstruction of Technology

Decolonial Theory as a Lens for Digital Justice

As examined above, AI and digital technologies have become deeply embedded across the globe, exerting profound influences on our daily lives. However, in the face of realities where such technological advancements are exploited as new forms of inequality and domination, it is imperative to seek fundamental transformations beyond mere technical progress. In particular, a decolonial perspective may offer a valuable way to move beyond entrenched structures of domination and opens up possibilities for exploring new pathways of connection and healing through 'relationality and solidarity.' This is because, in a world where technology and data are increasingly monopolized and controlled by a handful of powerful corporations and states, marginalized communities and less powerful nations are at high risk of being silenced and excluded. Such a structure becomes a typical mechanism of domination, one that separates and disconnects people. As long as the norms established by a few dominant actors continue to be upheld as the structural and cognitive standards of society, the majority of weaker or marginalized nations remain subject to systems of control and dependency.

This dynamic reflects what decolonial theologians have described as a form of "*Othering*." Othering is an ideological foundation of binary thinking that divides the self from the non-self and sustains a "logic of domination," which ranks superiority over inferiority. It ultimately serves to justify the subjugation of the dominated.[18] The logic of domination operates on the premise that everything must either belong to category A or not, a binary that determines normative standards. More specifically, what falls within category A becomes the normative benchmark of society, while anything outside of it is rendered as the Other. Within this binary ideology of othering, those deemed outside the dominant group – whether as non-mainstream, people of color, or the colonized – are defined in opposition to the norm and subjected to structures of subordination and control. Frantz Fanon, a key figure in postcolonial thought, argued that colonialism is a systematic negation of the Other. It denies the colonized any claim to humanity and compels them to repeatedly ask, "Who am I?"[19] Fanon's analysis of the systematic negation of colonized peoples extends beyond political domination; it exposes how Western-centered epistemologies continue to govern and subordinate so-called Third World nations through knowledge production itself.

Furthermore, Albert Memmi analyzes the dynamics of othering by identifying three key characteristics. First, the Other is consistently regarded as negative, lacking, deficient, or insufficient. Second, the Other is defined as inherently inferior, marked by a diminished sense of humanity. Third, the Other is perceived not as an individual with unique characteristics and agency, but as part of an anonymous collective. In other words, the Other is generalized and understood through the lens of group identity, stripped of personal distinction and nuance.[20] This process of conceptualizing the Other becomes entrenched within systems of

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[18] Karen Warren, "The Power and Promise of Ecological Feminism," *Environmental Ethics* 12/3 (Summer 1990): 132.

[19] Frantz Fanon, *Les Damnés de la Terre* [*The Wretched of the Earth*], trans. Nam Kyung-tae (Seoul: Greenbee, 2010), 201.

[20] Catherine Keller, Michael Nausner, and Mayra Rivera, eds., *Postcolonial Theologies: Divinity and Empire* (St. Louis: Chalice Press, 2004), 13.

knowledge, ultimately taking on the status of both objective and normative truth. As such, it carries the dangerous potential to serve as a tool for reproducing structures of domination and subjugation.

Another important concept in postcolonial theology is "hybridity," as introduced by Homi H. Bhabha. Bhabha emphasizes that in colonial contexts, both the colonizer and the colonized experience a crisis of identity. He argues that "postcolonial hybridity is produced by empire: by direct invasion, violation, and rape, or by the indirect subjection that stimulates survivalist strategies of mimicry and appropriation."[21] In this sense, hybridity makes full assimilation of the colonized into the identity of the colonizer impossible, giving rise instead to a complex, layered identity that transcends simple integration. At the same time, the colonizer imposes a demand on the colonized to resemble the dominant power, ultimately producing a hybrid subject shaped by both resistance and imposed resemblance.[22]

In this context, hybridity rejects the notion of a "pure and homogeneous" identity. That is, no culture exists as completely independent and pure prior to domination or invasion, nor is its identity entirely defined by colonial power afterward.[23] In other words, culture is always in a process of mixing, transformation, and fluidity. Therefore, hybridity creates a "Third Space" within a world full of binary ideologies. This space holds the potential to transcend fixed identities and binaries, embracing diversity and fluidity.

Bhabha emphasizes the existence of the 'in-between' space – situated between fixed points where identity is rigidly defined – and argues that this interstitial passage opens up the possibility of cultural hybridity that transcends fixed identifications.[24] This hybridity enables cultural practices that embrace difference without presupposing or imposing hierarchical structures. Thus, the 'in-between' space is not merely a middle ground but a site where hybridity is enacted, carrying the potential for creativity, hospitality, and inclusion. In other words, hybridity holds significant theoretical implications as it subverts the discourse of racial and cultural "purity" on which colonial power has relied, while simultaneously embodying the potential for political resistance. In this context, hybridity is closely linked to the concept of the "Third Space."

The Third Space as a Space of Inclusion, Hospitality, and Creativity

The Third Space, as a space of hybridity, "creates a space recognizing a partial culture as having its own integrity and wholeness … [and] reflects a reality of inevitable encounters between different cultures and mixed realities as a result."[25] Although difference and hybridity may be situated under conditions where they cannot simply be celebrated due to the invasion and violence of colonial domination, such a space of hybridity can serve as a Third Space that resists existing 'rules of recognition' and generates new visions and possibilities.[26]

The Third Space is not a fixed or static location but can be understood as an indeterminate space where cultural hybridity emerges. Namsoon Kang highlights that the concept of hybridity, which traverses boundaries and refers to an in-between space, creates a new area of negotiation of meaning and representation, making it a highly useful tool for marginalized countries and communities.[27] From this perspective, the Third Space is understood as an

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[21] Keller, Mausner, and Rivera, eds., *Postcolonial Theologies*, 13.

[22] Homi H. Bhabha, *The Location of Culture* (London and NY: Routledge, 1994), 86.

[23] Edward Said, *Out of Place: A Memoir* (NY: Alfred Knopf, 1999), 6.

[24] Bhabha, *The Location of Culture*, 4.

[25] HyeRan Kim-Cragg, *Story and Song: A Postcolonial Interplay Between Christian Education and Worship* (NY: Peter Lang, 2012), 37-8.

[26] Bhabha*, The Location of Culture,* 110.

[27] Namsoon Kang, "Who/What Is Asian?" in *Postcolonial Theologies,* eds., Keller, Nausner, and Rivera, 115.

expanded concept of hybridity and a consciously chosen marginality, serving as a space of 'resistance' and 'possibility' that illuminates other cultures adjacent to past cultures.[28] Therefore, to transform the Third Space into a fertile and creative space where new cultures can flourish, it is essential first to recognize that "all cultures are involved in one another; none is single and pure, all are hybrid, heterogeneous, extraordinarily differentiated, and unmonolithic."[29] Subsequently, we must decide whether to cultivate this space as one of new creation and hospitality or to leave it as a space marked by exclusion, discrimination, hatred, or even domination, oppression, and control.

In sum, underlying the development of AI technologies and the ideologies that enable the monopolization and control of data is the "logic of domination," which systematically others non-dominant cultures and nations. However, the insight offered by postcolonial theology suggests that true liberation and transformation can only be realized within relational contexts – spaces of mutual recognition and respect grounded in solidarity. As discussed earlier, such a space can be understood through the lens of what postcolonial theologians call the "Third Space." This is not merely a physical or symbolic gap between the dominant and the dominated, but rather a transformative space in which new forms of relationality and meaning can be reimagined, even amid power asymmetries. Particularly in the context of the vast power disparities between global corporations and nations that monopolize and control AI technologies and the marginalized nations that are structurally dependent on them, the Third Space emerges as a site of possibility, resistance, and ethical imagination for the just use of technology.

This decolonial critique, which reveals that the digital ecosystem is not merely a product of technological innovation but rather a manifestation of historical and structural power, offers important insights for the path ahead. A decolonial perspective not only exposes and dismantles the remnants of colonialism but also opens the possibility of transforming the Third Space into a site for reclaiming relationality and restoring just agency over technology. This calls us toward a shared practice of imagining and shaping an alternative future, not grounded in logics of domination and disconnection, but in interconnection and solidarity.

In the digital age, solidarity means ensuring that people from diverse cultural backgrounds and marginalized communities are actively involved in the development, application, and policymaking of technology. This involves expanding technological agency and creating inclusive spaces where the excluded can become both producers and beneficiaries of technology. From a decolonial perspective, the shift from domination to "relationality and solidarity" reframes issues of technology and power as matters of human dignity and justice. It is not merely about changing technological systems, but about reclaiming an ethical and spiritual awareness that we are interconnected and must honor each other's differences and diversity. Such a shift offers a vital turning point that can help preserve our humanity and sense of community in an increasingly mechanized and efficiency-driven digital world.

In particular, the reclaiming of narrative functions as a central practice of decolonial critique. The knowledge systems of marginalized regions, feminist perspectives, and the lived experiences of Indigenous communities, long excluded from dominant technological discourses, must be repositioned not as mere alternatives, but as essential epistemological resources for reimagining digital justice. This calls for more than simply including diverse voices; it demands a decolonial transformation that reconfigures the very structure of technological imagination. Such a transformation involves the critical dismantling of dominant techno-narratives and the logic of technological determinism, opening the possibility for a 'theology of technological sharing,' a vision that centers restoration, healing,

[28] Kang, "Who/What is Asian?" 115.

[29] Edward Said, *Culture and Imperialism* (NY: Vintage Books, 1993), xxv.

and mutual flourishing of people and communities. Therefore, postcolonial theory shifts the very framework through which technology is interpreted, suggesting that true digital justice must be understood as an ethical and practical project, one that involves critical reflection on power and the construction of new relational paradigms. Furthermore, technology must no longer serve as a tool to maximize the interests of a privileged few, but rather become a just and reciprocal space of imagination for shaping a shared future.

Therefore, the following section will examine the development of Sovereign AI and various initiatives from the Global South as concrete efforts to reimagine the Third Space, not as a site of domination and subjugation, but as a field of mutual interdependence. Furthermore, it will explore the possibilities and challenges of practical and policy-driven interventions aimed at realizing an interdependent digital future.

Reclaiming Digital Futures: Efforts for Sovereignty and Justice

Recently, "Sovereign AI" has emerged as a key topic within the global IT industry. This concept refers to AI services developed based on large language models (LLMs) that utilize a country's own data and infrastructure, while reflecting local languages, cultures, and values. As concerns grow over value-dependence on U.S.-centered Big Tech corporations, governments and companies around the world are actively increasing their investments in related technologies and infrastructure.[30] For instance, France's Mistral AI, which has been recognized as a strong alternative to ChatGPT, is tailored for European users by specializing in languages such as Spanish, French, and German.[31] India's Krutrim supports over ten local languages including Hindi, Tamil, and Telugu.[32] Finland's Silo, which is based on Nordic languages, is another notable example.[33] These initiatives represent leading efforts to develop Sovereign AI models that challenge dominant global narratives in AI development.

The Global South is also making concerted efforts to harness the potential of AI technologies and to establish governance systems that align with local realities. Comprising regions such as Africa, the Caribbean, Southeast Asia, and Latin America, the Global South stands at a critical crossroads: on one hand, AI offers the possibility of strengthening digital sovereignty and advancing shared prosperity; on the other, it raises structural concerns about becoming a new vehicle for digital colonization and exploitation.

One significant response involves leveraging AI technologies to restore and preserve endangered languages. Currently, most AI chatbots are trained on only about 100 of the world's approximately 7,000 languages, with English forming the dominant foundation for most large language models. As a result, many languages are structurally excluded from the digital technological landscape.

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[30] Ryan Browne, "Tech Giants Are Investing in 'Sovereign AI' to help Europe Cut Its Dependence On the U.S.," *CNBC*, November 14, 2024, https://www.cnbc.com/2024/11/14/tech-firms-invest-in-sovereign-ai-to-cut-europe-dependence-on-us-tech.html#:~:text=%22Sovereign%20AI%20is%20about%20reflecting,your%20culture%2C%22%20Hogan%20said.

[31] Maria Webb, "Mistral AI: Exploring Europe's Latest Tech Unicorn," Techopedia, last modified January 2, 2024, https://www.techopedia.com/mistral-ai-exploring-europes-latest-tech-unicorn.

[32] Garima Arora, "Krutrim Launches India's First Frontier Research AI Lab to Democratize AI Innovation; Commits Investment of $1.2 Billion by Next Year," *businesswire*, February 4, 2025, https://www.businesswire.com/news/home/20250204723028/en/Krutrim-Launches-Indias-First-Frontier-Research-AI-Lab-to-Democratise-AI-Innovation-Commits-Investment-of-%241.2-Billion-by-Next-Year.

[33] Business Finland, "Business Finland Awards Veturi Funding to AMD Silo AI to Strengthen Finland's Position in the Global AI Market," *ArcticToday*, May 15, 2025, https://www.arctictoday.com/%F0%9F%87%AB%F0%9F%87%AE-business-finland-awards-veturi-funding-to-amd-silo-ai-to-strengthen-finlands-position-in-the-global-ai-market/.

In response to this imbalance, Michael Running Wolf, a computer engineer from the Northern Cheyenne Nation, has proposed a "Boxed Language" device, a speech-based offline AI system designed to preserve Indigenous languages. His initiative underscores the critical importance of language and data sovereignty for Indigenous communities.[34]

Similar initiatives are currently underway in the Philippines. Anna Mae Yu Lamentillo, an AI researcher and politician, has developed an AI-based translation application known as NightOwlGPT to safeguard endangered languages within the country. Her work primarily focuses on nine major Philippine languages, with the overarching objective of securing a sustainable digital presence for minority languages. Lamentillo cautions that if AI technologies lack inclusivity, they may perpetuate oppressive dynamics akin to those experienced under historical colonial regimes. Although AI development marks a historically significant inflection point, the fact that 99% of the world's languages remain marginalized extends beyond purely linguistic concerns to broader issues of digital accessibility, cultural expression, and equity. Thus, while AI holds considerable potential as a tool for the preservation and revitalization of endangered languages, the locus of its development and control may also engender new modalities of digital colonialism.[35]

Another significant case is the African language data development project utilizing Mozilla's Common Voice platform. Amidst the ongoing marginalization of African languages by colonial linguistic frameworks within digital environments, the inclusion of Twi, a widely spoken language in Ghana and the broader West African region, represents a voluntary and agentive effort toward the reclamation of linguistic sovereignty and the advancement of AI development. Daniel Agyeman, a Ghanaian-British collaborator, engages closely with Twi speakers to collect sentences and contribute voice data to the platform, thereby enabling the potential construction of Twi-based speech recognition systems. These initiatives are supported by organizations such as the Gates Foundation and GIZ(German Corporation for International Cooperation), and through the expansion of one of the world's most multilingual open-source voice datasets, they constitute a practical approach to centering African languages and communities in AI development processes while addressing issues of digital exclusion and linguistic inequity.[36]

Alongside these developments, a range of initiatives aimed at AI talent cultivation and technological application are actively unfolding in South Africa. Notably, the Youth Employment Service (YES), a national program to promote youth employment, has partnered with Microsoft to launch a large-scale project that provides AI training to approximately 300,000 South African youth.[37] In addition, the establishment of the Defence Artificial Intelligence Research Unit (DAIRU) signals a growing interest in applying AI technologies within the defense sector.[38]

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[34] Michael Running Wolf, "Why First Languages AI Can Be a Reality," TEDx Talks, YouTube, June 28, 2023, video, 9:16, https://www.youtube.com/watch?v=Omp3X-FXdLs.

[35] EIN Presswire, "Filipino LSE Student Launches Night Owl GPT: A Platform for Language Preservation and Digital Inclusion," *KRON4*, April 22, 2024, https://www.kron4.com/business/press-releases/ein-presswire/705295167/filipino-lse-student-launches-night-owl-gpt-a-platform-for-language-preservation-and-digital-inclusion/.

[36] Mozilla, "Widely Spoken in Ghana and Other West African Countries, Twi is the Latest Addition to the Common Voice Open Source Language Dataset," moz://a, September 15, 2022, https://www.mozillafoundation.org/en/blog/mozillas-common-voice-dataset-reaches-100-languages/?utm_source=chatgpt.com.

[37] Microsoft News Center, "AI Training for 300,000 South African Youth, And Enabler for Future Career Advancement," Microsoft, October 31, 2023, https://news.microsoft.com/en-xm/2023/10/31/ai-training-for-300000-south-african-youth-an-enabler-for-future-career-advancement/#:~:text=/source/emea/-,AI%20training%20for%20300%2C000%20South%20African%20youth%2C%20an%20enabler%20for,world%20of%20AI%20is%20foreign.

[38] AI Media Group, "SA Opens Africa's First Military-Focused AI Hub," *Synapse: Africa's Only AI Trade &*

At the international level, institutions such as the United Nations (UN) and UNESCO play a critical role in promoting the participation of Global South countries in shaping AI governance. UNESCO has issued the *Recommendation on the Ethics of Artificial Intelligence*, which offers a comprehensive framework for the development of national ethical policies. Concurrently, the UN has launched a High-Level Advisory Body on AI, working to ensure that the voices of Global South nations are meaningfully integrated into global decision-making processes regarding AI.[39]

As the preceding cases illustrate, despite facing structural limitations and ongoing challenges, the Global South and countries such as South Africa are actively pursuing concrete and systematic efforts to reclaim technological sovereignty and foster inclusive AI ecosystems. Multilayered initiatives, including the preservation of local languages, youth-centered AI education, and policy-level interventions, demonstrate a firm commitment not merely to adaptation, but to the construction of autonomous technological infrastructures. These efforts represent meaningful advancements that warrant recognition and respect from the international community.

Simultaneously, the global technological powers and dominant regimes that currently hold the reins of AI development bear a responsibility to move beyond unilateral control and towards a more interdependent world order. Unilateral structures rooted in technological hegemony risk exacerbating global inequalities, whereas a sustainable digital future can only be realized through ecosystems that accommodate diverse cultures and values. Accordingly, it is imperative that these dominant actors actively engage in shaping a more equitable and collaborative technological order grounded in principles of coexistence and solidarity.

Conclusion

This study has illuminated both the potential benefits brought by advancements in AI technology and the risks of reproducing new forms of colonialism affecting marginalized communities, including those in the Global South. Through concrete case studies from Africa and other Global South regions concerning language data, digital sovereignty, and AI governance, the research underscores the urgent need for a more inclusive and just technological ecosystem. While the rapid development of digital AI opens innovative possibilities across various aspects of human life, it simultaneously harbors the risk of perpetuating colonial hierarchies and exclusions. Historically marginalized communities frequently face exclusion or objectification in AI development and deployment processes, experiencing new forms of dependency and loss of sovereignty through technology.

This reality has been explored through the postcolonial theoretical concept of "othering," highlighting that the liminal space shaped by AI should not be understood merely as a binary division between subject/object or dominator/dominated. Rather, it can be reconceptualized as a "Third Space" imbued with the potential for communication, creativity, and interdependence. This space serves as a critical testing ground for the ethics and justice of technology and represents a foundational starting point for a human-centered and mutually accountable AI ecosystem.

Efforts undertaken by various countries and regional communities within the Global South, as well as by international organizations, demonstrate the potential for such

Innovation Magazine 23, (2024): 15-7, https://issuu.com/aimediasynapse/docs/synapse_magazine_issue_23_240624_v2/19.

[39] UNESCO, "Leveraging UNESCO Normative Instruments for an Ethical Generative AI Use of Indigenous Data," November, 8, 2023, https://www.unesco.org/en/articles/leveraging-unesco-normative-instruments-ethical-generative-ai-use-indigenous-data.

transformative shifts. However, to ensure that these endeavors do not remain isolated experiments or externally driven projects, it is imperative to internalize decolonial thinking and establish systems that achieve substantive and structural transformations across the entire spectrum of technological governance. Consequently, the ultimate purpose of technological advancement must transcend mere efficiency and profit, focusing instead on the promotion of human dignity and the values of communal life. The AI ecosystem, in particular, should be designed within a framework of justice and ethics, where the voices of marginalized communities are meaningfully incorporated and respected. This constitutes genuine inclusion and paves the way toward a just, ethical, and decolonial technological future.

To this end, it is essential first to establish a human-centered and justice-oriented AI design framework. Such a framework should prioritize human well-being and the collective good, incorporating the voices of diverse social groups from the earliest stages of technology development, and embedding principles that safeguard socially vulnerable and marginalized populations. For instance, mechanisms must be implemented to correct biased samples during data collection and to continuously monitor algorithmic design to prevent discriminatory factors from influencing outcomes. Furthermore, AI should be leveraged beyond mere economic gain to promote social value, necessitating the establishment of structural measures that ensure technological accessibility, equitable distribution, and transparent decision-making processes.

Secondly, a critical discernment toward overcoming dominant narratives of technological progress is necessary. This entails cautioning against the uncritical acceptance of technology's societal impact and questioning the simplistic belief that technological advancement inherently drives social progress. Given that technology can function as a tool to reinforce particular group interests or exacerbate social inequalities, it is imperative to develop the capacity to critically analyze and identify the power relations, economic stakes, and cultural contexts surrounding technology. Recognizing technology not as an objective or neutral instrument but as a product shaped within social and political frameworks allows for clearer ethical and political accountability throughout its development and application. Such a perspective must be actively promoted across education and policy domains and serve as the foundation for cultivating citizens' technological imagination and agency.

Thirdly, the internalization of ethics is imperative. This internalization transcends mere legal and institutional regulations, ensuring that core values such as 'care,' 'mutuality,' and 'fairness' are deeply embedded throughout the entire process of technology development and operation. It calls for technology companies, developers, and policymakers alike to routinely reflect on the impact of technology on human and communal life and to assume responsible agency in addressing these effects. For example, AI ethics guidelines and regulations should move beyond formal compliance to function effectively through continuous review, feedback, and active dialogue with civil society. The ethic of 'care' protects the rights of the vulnerable and marginalized, guiding technology toward fostering human solidarity and community restoration. 'Mutuality' emphasizes collaborative processes where diverse stakeholders have equal voice, while 'fairness' mandates the elimination of inequalities in technological access and benefit distribution.

In conclusion, the structural reconfiguration of technology development must go beyond mere technical innovation to embrace a holistic transformation that integrates social and ethical renewal. Only through such comprehensive change can AI and digital technologies fulfill their potential as instruments that enhance the dignity and well-being of all people, rather than serving the interests of a select few. By grounding human-centered design within the framework of decolonial theological ethics, we lay a vital foundation for mitigating the inherent risks of technology while fostering a just, equitable, and mutually respectful digital society.

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