Cultural Intelligence in AI Governance:
Beyond Technical Auditing

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ABSTRACT

This article examines the critical need for cultural intelligence in artificial intelligence governance frameworks, particularly from the perspective of the Global South. While technical auditing has dominated AI governance discussions, this article argues for a fundamental shift toward culturally informed approaches that recognize diverse worldviews, value systems, and social structures. Drawing on experiences from developing nations and marginalized communities, the authors explore how current AI governance models perpetuate technological colonialism and propose alternative frameworks that center cultural competency, community participation, and contextual understanding. The article presents practical solutions for integrating cultural intelligence into AI development, deployment, and regulation, while highlighting future research directions that can bridge the gap between technical excellence and cultural responsiveness.

INTRODUCTION

The rapid spread of artificial intelligence technologies across diverse global contexts has revealed a clear gap between technical capability and cultural understanding. While the Global North continues to dominate AI development and governance frameworks, billions of people in the Global South experience AI systems designed without consideration for their cultural contexts, linguistic diversity, or social structures (Mohamed et al., 2020). This technological divide represents more than an innovation gap; it constitutes a form of digital colonialism that perpetuates existing power imbalances and marginalizes non-Western ways of knowing and being.

Traditional approaches to AI governance have prioritized technical auditing, focusing on algorithmic transparency, fairness metrics, and computational efficiency (Barocas et al., 2019). However, these frameworks often operate within narrow cultural assumptions, treating Western liberal democratic values as universal standards while overlooking the rich diversity of human experience (Birhane, 2021). The concept

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of fairness, for instance, varies significantly across cultures, with some societies prioritizing collective harmony over individual rights, while others emphasize relational obligations over procedural equality.

Cultural intelligence in AI governance emerges as a necessary paradigm shift that recognizes technology as inherently cultural rather than neutral. This approach acknowledges that AI systems embed the values, assumptions, and biases of their creators, and that effective governance must account for the cultural contexts in which these systems operate (Benjamin, 2019). From this perspective, technical auditing becomes insufficient without corresponding cultural competency that can identify, understand, and address the complex ways AI intersects with diverse human experiences (Costanza-Chock, 2020).

The stakes of this cultural turn in AI governance extend beyond academic discourse to real-world consequences for marginalized communities. AI systems deployed without cultural intelligence can perpetuate discrimination, undermine traditional knowledge systems, and disrupt social cohesion (Noble, 2018; Eubanks, 2018). Conversely, culturally intelligent AI governance can foster technological sovereignty, preserve cultural heritage, and ensure that AI development serves diverse human flourishing rather than narrow technological objectives (Kukutai & Taylor, 2016).

This chapter contributes to emerging scholarship on decolonizing AI by centering perspectives from the Global South and proposing concrete frameworks for integrating cultural intelligence into AI governance (Adams, 2021). We argue that effective AI governance requires moving beyond technical auditing toward comprehensive approaches that embed cultural competency throughout the AI lifecycle, from conception and design to deployment and evaluation.

BACKGROUND

Historical Context of AI Development

The historical trajectory of AI development reveals patterns of exclusion and marginalization that persist in contemporary governance frameworks. Early AI research emerged from military-academic complexes in wealthy nations, particularly the United States and Western Europe, creating foundational assumptions about intelligence, rationality, and problem-solving that reflected these specific cultural contexts (Pasquale, 2015). The dominance of English-language datasets, Western philosophical traditions, and individualistic social models became embedded in AI architectures, creating systems that often fail to recognize or accommodate alternative ways of understanding the world (D'Ignazio & Klein, 2020).

This historical concentration of AI development has produced what scholars term "algorithmic colonialism" – the imposition of technological solutions developed in one cultural context onto diverse global populations without adequate consideration of local needs, values, or knowledge systems (Mohamed et al., 2020). The consequences of this approach are evident in numerous cases where AI systems have failed spectacularly when deployed in non-Western contexts, from facial recognition systems that cannot accurately identify people with darker skin tones to translation algorithms that erase gender-neutral languages or cultural concepts that lack direct Western equivalents (Gebru, 2020).

The entrenchment of these historical patterns continues to shape contemporary AI development in profound ways. Venture capital funding predominantly flows to teams and institutions in major metropolitan centers of wealthy nations, reinforcing geographic and cultural concentrations of AI expertise. Educational pathways into AI research remain heavily concentrated in elite institutions that have historically excluded diverse perspectives, creating self-perpetuating cycles of cultural homogeneity in AI development.