

# From Basic Needs to Futuristic Technologies: Reconciling Transhumanism with Africa's Developmental Priorities

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## Abstract

## Original Research Article

This paper takes a keen look at the challenge of reconciling transhumanism with Africa's immediate developmental priorities, particularly in the context of addressing fundamental human needs such as healthcare, education and poverty alleviation. The paper observes that while transhumanism advocates for the enhancement of human capacities through advanced technologies, including genetic modification, artificial intelligence and life extension, its idea seems disconnected from the pressing issues faced by many African nations. The paper therefore critically examines how transhumanist ideals can be integrated into Africa's socio-economic realities, where survival and basic welfare often remain dominant concerns. By assessing both the potentials and the ethical predicaments posed by transhumanism, the paper proposes a framework that balances technological innovation with Africa's urgent need for sustainable development, equity and social justice.

**Keywords:** Transhumanism, Africa, Developmental Priorities, Technological Innovation, Ethical Dilemmas.

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## INTRODUCTION

In the 21st century, transhumanism has emerged as a fundamental ideology, championing the aspiration that humanity can surpass its biological limits through the use of cutting-edge technologies, including genetic engineering, artificial intelligence and life extension. While these aspirations may look visionary and compelling, they are largely conceived within a Western philosophical viewpoint that stresses individualism, technological progress and the quest for perfection. However, in regions such as Africa, where the priority remains the fulfillment of basic human needs such as access to healthcare, education, and economic security the pursuit of transhumanist ideals may seem disconnected from the immediate realities of daily life. Africa's struggle with poverty, disease, and social inequality places a significant challenge before the transhumanist movement: how can its lofty goals be reconciled with the continent's urgent developmental priorities?

As the global South and particularly Africa, continues to wrestle with the legacies of colonialism, resource scarcity and developmental deficits, the notion of pursuing technological

advancements that focus on the enhancement of human abilities might appear to some as a luxury or an abstract concept that is unconnected to the continent's needs. Scholars like Amartya Sen have long maintained that development should prioritize human well-being and the alleviation of poverty, rather than focusing on technological innovation that does not address the fundamental struggles faced by the majority.<sup>1</sup> Yet, the potential of transhumanism to address challenges such as disease, disability and restricted human potential cannot be dismissed outright, especially in light of Africa's burgeoning technological sector and the increasing prevalence of digital innovations.

This paper examines the tension between Africa's developmental needs and the futuristic promises of transhumanism. It seeks to understand whether the goals of transhumanism can be adapted to serve Africa's development agenda or whether they represent a form of technological imperialism that ignores the continent's unique socio-economic and cultural contexts. In doing so, it will explore the ethical, cultural and practical considerations that must be addressed in order to harmonize transhumanist aspirations with Africa's

<sup>1</sup> Sen, Amartya. (1999). *Development as Freedom*. Alfred A. Knopf, p. 45.



immediate priorities, such as poverty alleviation, universal healthcare and sustainable development.

## Technological Innovation and Economic Development in Africa

Technological innovation has become a crucial driver of economic development across the globe, offering transformative solutions to complex challenges in health, education, agriculture, and infrastructure. In Africa, a continent home to over 1.3 billion people, the potential for technology to drive inclusive and sustainable economic growth is immense. However, the gap between Africa's current technological capacity and the advanced innovations of the global North presents both an opportunity and a challenge. One of the most significant impacts of technological innovation in Africa has been in the realm of mobile technology. The rise of mobile phones has radically transformed how people access information, communicate, and manage financial transactions. According to the International Telecommunication Union, mobile phone penetration in Africa has outpaced the global average, with millions of people using mobile phones for everyday activities like banking, agriculture, and health management.<sup>2</sup> Innovations such as mobile money platforms like M-Pesa in Kenya have provided unbanked populations with access to financial services, allowing for greater economic inclusion. This technological leap has enabled small-scale businesses to flourish, provided a lifeline during times of economic hardship, and improved access to resources in remote and underserved areas.

In addition to mobile technology, innovations in the field of agriculture have become increasingly important for Africa's economic development. Agriculture remains the backbone of many African economies, yet it faces numerous challenges, including low productivity, climate change, and limited access to markets. Technological innovations, such as precision farming, mobile-based agricultural advisory services, and the development of drought-resistant crops, offer potential solutions to these challenges. For example, platforms like FarmCrowdy and Twiga Foods connect farmers with buyers, providing them with access to larger markets and better prices for their products.<sup>3</sup> Furthermore, the adoption of agricultural technologies, such as drones and IoT-based monitoring systems, enables farmers to optimize resources, improve yields, and reduce waste. These technologies not only contribute to food security but also provide a significant boost to Africa's agricultural sector, which employs a substantial portion of the population.

However, while technological innovation offers transformative potential, there are significant barriers to its widespread

adoption across the continent. A major challenge is the digital divide, which refers to the gap between those who have access to technology and those who do not. According to a report by the African Development Bank, about 1.1 billion people in Africa are still without access to the internet, which limits their ability to participate fully in the digital economy.<sup>4</sup> This divide is particularly pronounced in rural areas, where infrastructure and connectivity are often lacking. Bridging this gap will require significant investments in broadband infrastructure, education, and digital literacy, as well as a concerted effort to ensure that marginalized groups, including women and rural populations, are not left behind in the technological revolution.

Another barrier to the widespread adoption of technology in Africa is the lack of local innovation ecosystems. While global tech companies have made significant investments in Africa, there is still a need for homegrown innovation that addresses the specific needs of African communities. According to the World Bank, fostering a strong innovation ecosystem involves nurturing local talent, providing access to capital, and creating an environment that encourages entrepreneurship and risk-taking.<sup>5</sup> Countries like Kenya, Nigeria and South Africa have begun to establish thriving tech hubs, but the continent as a whole still lacks the necessary infrastructure to support a robust and sustainable innovation ecosystem.

To maximize the potential of technological innovation for economic development, African governments must play a central role in creating policies that support the digital economy. This includes investing in education and digital literacy to prepare the workforce for future job markets, encouraging public-private partnerships to fund infrastructure projects, and creating regulatory frameworks that foster innovation while safeguarding against potential risks. Additionally, collaboration with international organizations and technology companies is vital to bring resources, expertise, and capital to the continent. For example, partnerships between African countries and tech giants such as Google and Microsoft have led to the development of digital skills training programs, which are equipping young Africans with the skills needed to participate in the global digital economy.<sup>6</sup>

There is no doubt that technological innovation holds significant promise for advancing economic development in Africa. While challenges such as the digital divide, limited access to infrastructure, and the need for local innovation ecosystems persist, there are clear signs of progress. By focusing on mobile technologies, agriculture, and fostering innovation ecosystems, Africa can harness the power of technology to address its unique developmental challenges. To unlock the full potential of these technologies, African governments, businesses, and international partners must work collaboratively to bridge gaps in access, education, and

<sup>2</sup> International Telecommunication Union (ITU). (2021). *ICT Facts and Figures 2021*. ITU, p. 13.

<sup>3</sup> Onyema, Kingsley. "Mobile Technology and Economic Empowerment in Africa: A Case Study of M-Pesa". *International Journal of Innovation*, 2020, p. 9.

<sup>4</sup> African Development Bank. (2020). *The Digital Transformation of Africa: Opportunities and Challenges*. African Development Bank, p. 2.

<sup>5</sup> World Bank. (2021). *Fostering Innovation Ecosystems in Africa*. World Bank Group, p. 3.

<sup>6</sup> Sutherland, Sam. (2022). "Tech Hubs in Africa: The Rise of the Digital Economy." *Business Insider Africa*, p.12.



infrastructure, ensuring that technological innovations contribute to inclusive, sustainable growth.

## Cultural Perspectives and Resistance to Transhumanism in African Societies

Transhumanism, with its focus on enhancing human capabilities through advanced technologies such as genetic engineering, artificial intelligence, and life extension, has gained significant attention in the global discourse on the future of humanity. However, in many African societies, the ideals of transhumanism face substantial resistance due to cultural, spiritual, and ethical concerns. African worldviews, often grounded in communal values, spirituality, and a deep connection to ancestral traditions, present significant challenges to the acceptance of transhumanist ideas.

One of the most significant sources of resistance to transhumanism in African societies is the deeply ingrained belief in the sanctity of life and the natural order. Many African cultures view life and death as part of a divine cycle that cannot or should not be altered by human intervention. The concept of *ubuntu*, a Southern African philosophy emphasizing interconnectedness and the collective good, reflects the communal nature of African societies. Ubuntu highlights the importance of human relationships and the spiritual connection between individuals and their communities. This perspective contrasts sharply with the individualistic focus of transhumanism, which often emphasizes personal enhancement and the pursuit of immortality. For many Africans, transhumanist technologies that promise individual longevity or enhancement may be seen as threatening the social fabric and undermining the communal focus on collective well-being.<sup>7</sup>

Moreover, traditional African belief systems often regard human existence as part of a broader spiritual reality, in which ancestral spirits play a central role. In many African cultures, death is not viewed as an end but as a transition to the spiritual realm, where the deceased remain active in the lives of the living through ancestral veneration. This spiritual connection to the deceased underscores the belief that life and death are part of a larger cosmic order that humans should not attempt to control or alter. The transhumanist goal of extending human life indefinitely through technological means could be perceived as an attempt to “defy nature” or “play God,” which many African spiritual and religious traditions find problematic.<sup>8</sup> For example, in some African communities, the belief that humans should not tamper with the divine order is deeply embedded in religious and cultural norms, leading to significant resistance to practices such as genetic modification or artificial intelligence.

Additionally, resistance to transhumanism can also be attributed to the historical experiences of colonization and the legacy of Western imperialism. Africa’s colonial history has

shaped its collective consciousness, leading to a cautious approach to external ideologies and technologies. Many Africans view transhumanism as a product of Western modernity, associated with the global North’s technological dominance and imperialistic tendencies. This historical context often fuels suspicion and skepticism towards technologies that originate outside the continent. Scholars like Kwame Nkrumah and Ngũgĩ wa Thiong’o have emphasized the need for Africa to reclaim its own cultural and technological autonomy in the face of foreign impositions.<sup>9</sup> In this light, transhumanism’s association with Western ideals of progress and individualism may be perceived as another form of cultural imposition, undermining African identities and values.

Religious opposition is another critical factor contributing to resistance to transhumanism in African societies. Christianity, Islam, and indigenous African religions all play prominent roles in shaping ethical perspectives across the continent. Many African Christians and Muslims view transhumanist goals, such as the modification of human genetics or the creation of artificial intelligence, through the lens of religious teachings about the sanctity of life and divine authority. In Christianity, for example, the Bible speaks of humans being created in God’s image, and any attempt to alter or enhance human beings may be perceived as an affront to divine will (Genesis 1:26). Similarly, in Islam, the concept of *fitrah*, the natural state of humanity created by Allah, emphasizes the importance of accepting human limitations and trusting in God’s design (Quran 30:30).<sup>10</sup> These religious frameworks often clash with the transhumanist aspiration to transcend human limitations through technological means, leading to moral and theological objections.

Ethical concerns related to inequality and access also contribute to resistance to transhumanism in Africa. While transhumanism envisions a future in which technological advancements enhance human capacities, it is unclear how such advancements would be distributed globally. In Africa, where vast disparities in wealth and access to technology persist, the promise of transhumanism may appear to exacerbate existing inequalities rather than solve fundamental problems. The digital divide, limited access to healthcare, and lack of infrastructure in many African countries mean that transhumanist innovations may remain out of reach for the majority of the population. This disparity raises ethical concerns about who benefits from technological advancements and whether these technologies will only serve the elite, deepening social divisions.<sup>11</sup>

## Equity and Access to Transhumanist Technologies in Africa

<sup>7</sup> Gyekye, Kwame. (2003). *African Cultural Values: An Introduction*. Sankofa Publishing, p. 145.

<sup>8</sup> Mbiti, John S. (1990). *African Religions and Philosophy*. Heinemann, p. 34.

<sup>9</sup> Nkrumah, Kwame. (1965). *Neocolonialism: The Last Stage of Imperialism*. Panaf Publishing, p. 60

<sup>10</sup> Quran (2004). *The Holy Quran*, translated by M. A. S. Abdel Haleem, Oxford University Press.

<sup>11</sup> Sambuli, Njiru. (2020). “Technology, Inequality, and Global Access: Challenges for Transhumanism in Africa.” *African Studies Review*, vol. 63, no. 1, pp. 21-22



The rise of transhumanism promises a future where human limitations are transcended through genetic modification, artificial intelligence, and life extension. While transhumanist technologies hold transformative potential for human society, their application in Africa presents significant challenges, primarily concerning issues of equity and access. In a continent where socioeconomic disparities are vast, ensuring that these technologies benefit all members of society, not just the elite, is a critical consideration. This paper explores the ethical and practical issues surrounding equity and access to transhumanist technologies in Africa, examining how the continent's existing inequalities in infrastructure, healthcare, education, and wealth might impede widespread adoption of these advancements.

First and foremost, Africa faces significant challenges related to basic infrastructure and access to technology. According to the International Telecommunication Union (ITU), despite significant progress in mobile phone penetration, a large portion of the population remains without reliable access to the internet or modern technologies.<sup>12</sup> This digital divide creates a clear barrier to the adoption of advanced technologies that transhumanism relies on, such as genetic engineering or neural interfaces. In rural areas, where infrastructure is lacking, and digital literacy is low, even basic access to information technology remains a challenge. The rapid development of transhumanist technologies in the global North risks deepening the gap between developed and developing nations, as these technologies may remain inaccessible to those who need them most.

One of the primary concerns surrounding equity in transhumanism is the potential for these technologies to exacerbate existing social inequalities. In Africa, poverty rates are high, with a significant portion of the population living on less than \$2 a day. For many Africans, the immediate concern is access to basic necessities such as clean water, food, healthcare, and education. The promise of life extension or cognitive enhancement might seem distant or irrelevant when faced with the daily struggles of survival. For instance, the focus of transhumanist technologies on enhancing human abilities could be viewed as a luxury for those who cannot even afford essential healthcare services. These disparities raise questions about who will have access to life-enhancing technologies and whether they will be reserved for wealthy individuals or nations, thus perpetuating or worsening global inequality.<sup>13</sup>

In addition to the economic divide, there is a significant gap in healthcare infrastructure in Africa that could prevent the widespread application of medical transhumanist technologies. The continent struggles with a high burden of disease, including HIV/AIDS, malaria, tuberculosis, and more recently, non-communicable diseases such as diabetes and hypertension. Access to quality healthcare is often limited to urban areas or wealthier individuals, leaving rural populations without

essential medical services. While transhumanist technologies, such as gene editing or the use of artificial intelligence in medical diagnostics, have the potential to revolutionize healthcare, the benefits of these technologies will likely be restricted to those in urban centers or affluent communities unless significant efforts are made to ensure equitable distribution.<sup>14</sup>

Furthermore, the lack of educational resources and skills development in Africa poses another barrier to equitable access to transhumanist technologies. As the global digital economy becomes increasingly reliant on advanced technological skills, there is a growing need for education in fields such as biotechnology, artificial intelligence, and robotics. However, in many African countries, the education systems are underfunded and often fail to equip young people with the skills needed to participate in the global digital economy. According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), sub-Saharan Africa has the world's highest rates of out-of-school children, and millions of young Africans are deprived of the opportunity to acquire the skills needed to engage with emerging technologies.<sup>15</sup> Without a strong educational foundation in STEM (science, technology, engineering, and mathematics) fields, many Africans will be excluded from the development and application of transhumanist technologies, perpetuating the cycle of inequality.

Moreover, there is the issue of governance and regulatory frameworks. In many African countries, political instability, corruption, and weak governance systems have hindered the development of effective policies to manage technological advancements. In the absence of robust regulatory frameworks, the widespread implementation of transhumanist technologies could lead to misuse, inequality, and exploitation. Without proper oversight, the introduction of these technologies could benefit only the elite, leaving marginalized populations further behind. Therefore, it is critical that African governments take a proactive approach in developing policies that ensure the equitable distribution of these technologies, ensuring that they are accessible to all sectors of society.<sup>16</sup>

One potential solution to these challenges is the development of localized, context-specific innovations that address Africa's unique needs. Rather than simply importing transhumanist technologies from the global North, African nations could invest in creating technologies that are tailored to their specific socio-economic and cultural realities. This could include developing affordable health technologies, such as low-cost gene editing tools, or designing educational platforms that provide access to STEM training for young Africans. Partnerships between African governments, local innovators, and international organizations could help bridge the digital divide, promote access to education, and create an environment

<sup>12</sup> ITU, *op. cit.*, p. 3

<sup>13</sup> Sambuli, *op. cit.*, p. 24

<sup>14</sup> Gyekye, *op. cit.*, p. 150

<sup>15</sup> UNESCO (2020). *Education for Sustainable Development in Africa: Global Challenges and Opportunities*. UNESCO, p. 7

<sup>16</sup> Sambuli, *op. cit.*, p. 28





conducive to the responsible development and distribution of transhumanist technologies.

## Addressing Health Crises: From Basic Needs to Life Extension

In many parts of the world, particularly in Africa, health crises continue to pose significant challenges to development, governance, and individual well-being. The prevalence of infectious diseases, malnutrition, inadequate healthcare infrastructure, and limited access to medical technology has long been a source of concern. However, the future promises a new era in health, one in which life-extension technologies, such as gene therapy, artificial intelligence (AI), and biotechnology, could revolutionize healthcare. This paper explores how addressing Africa's health crises can shift from focusing on basic healthcare needs to incorporating life-extension technologies, while examining the ethical, cultural, and practical implications of this transition.

First, it is essential to recognize the scope of Africa's ongoing health crises. According to the World Health Organization (WHO), sub-Saharan Africa bears a disproportionate share of the global disease burden, with major public health challenges such as HIV/AIDS, tuberculosis, malaria, and maternal and child mortality.<sup>17</sup> These diseases continue to result in millions of deaths each year, and access to treatment and prevention remains limited in many regions, particularly in rural and underserved areas. Moreover, the infrastructure necessary to manage and deliver healthcare services is underdeveloped, with hospitals and clinics often lacking the necessary resources and trained personnel. In this context, addressing basic healthcare needs, including improving sanitation, vaccination coverage, and access to essential medicines, remains a priority for African governments and international health organizations.

However, as the global health landscape evolves, the conversation is gradually shifting toward advanced health technologies that could offer solutions not only to treat existing diseases but also to extend human life. Life-extension technologies, such as genetic engineering, stem cell therapy, and AI-driven diagnostics, have the potential to transform healthcare by addressing the root causes of aging and degenerative diseases. These technologies aim to enhance the quality of life by reducing the burden of chronic conditions like heart disease, cancer, and neurodegenerative diseases. The promise of life extension raises important questions about the future of healthcare in Africa: Should life-extension technologies be integrated into healthcare systems that are still grappling with more immediate challenges?

One of the key issues in the debate over life extension in Africa is the ethical and philosophical implications of such technologies. In African cultures, the value of life is deeply tied to communal and spiritual beliefs, and the natural course of life, including aging and death, is often seen as part of a divine or cosmic order. Many African communities adhere to the belief

that death is a natural and inevitable part of human existence, with spiritual significance.<sup>18</sup> This belief system may conflict with the transhumanist agenda of radically extending life or enhancing human capacities through technological means. In this regard, the integration of life-extension technologies into African healthcare systems could face cultural resistance, as some may view these technologies as unnatural or as attempts to interfere with the divine will.

Beyond ethical considerations, there are also practical challenges associated with incorporating life-extension technologies into healthcare systems in Africa. The lack of healthcare infrastructure, especially in rural areas, means that most African countries are still working to ensure that basic health needs are met before they can consider more advanced technologies. According to the World Bank, Africa needs substantial investments in health infrastructure, including hospitals, medical equipment, and healthcare personnel, before it can even begin to contemplate the widespread use of life-extension technologies.<sup>19</sup> Furthermore, the high cost of these technologies poses a significant barrier to their widespread adoption, particularly in resource-limited settings. Gene therapies and AI-driven medical technologies are often prohibitively expensive, and there are concerns about whether such technologies will be accessible to the broader population or limited to the wealthiest individuals or urban centers.

Another consideration is the issue of equity. Africa's healthcare systems are already strained by limited resources and a heavy disease burden, and the introduction of life-extension technologies may exacerbate existing health inequities. The risk of creating a "two-tiered" healthcare system, where only the wealthy or those living in urban areas can access cutting-edge treatments, is significant. This could lead to further disparities in life expectancy, quality of life, and overall health outcomes. If life-extension technologies are introduced in a manner that only benefits a select few, they could deepen the divide between the rich and poor, between urban and rural populations, and between African countries and the rest of the world. As such, a careful consideration of policies that ensure equitable access to these technologies is essential.

Despite these challenges, there is potential for life-extension technologies to be applied in Africa in a way that complements the continent's existing healthcare needs. For instance, the use of AI-driven diagnostics and telemedicine could help bridge the gap in healthcare access, particularly in rural and underserved regions. AI-powered systems could enable healthcare providers to offer more accurate diagnoses, recommend treatments, and monitor patient progress remotely, helping to address the shortage of healthcare workers and improving access to quality care.<sup>20</sup> Similarly, the development of affordable biotechnologies, such as vaccines or therapies for chronic diseases, could improve public health outcomes and address some of the more pressing health issues facing the continent.

<sup>17</sup> World Health Organization (WHO). (2020). *Global Health Estimates 2020: Disease Burden and Mortality*. WHO, p. 15

<sup>18</sup> Mbiti, *op. cit.*, p. 29

<sup>19</sup> World Bank, *op. cit.*, p. 12

<sup>20</sup> Sambuli, *op. cit.*, p. 19



Moreover, life-extension technologies could be utilized to address some of Africa's most prevalent health challenges, such as HIV/AIDS and malaria. For instance, advancements in gene editing technologies, like CRISPR, could potentially offer solutions for diseases that have long plagued the continent. The development of anti-aging and immune-boosting therapies could help improve the overall health and longevity of individuals living with chronic conditions, providing long-term benefits to both individuals and public health systems.

## CONCLUSION

Resistance to transhumanism in African societies is rooted in a complex interplay of cultural, spiritual, ethical, and historical factors. Traditional African beliefs about the sanctity of life, the communal nature of human existence, and the divine order present significant challenges to the acceptance of transhumanist ideas. Additionally, the legacy of colonization, religious opposition, and concerns about inequality and access further complicate the discourse surrounding transhumanism in Africa. Understanding these cultural perspectives is crucial for engaging with African societies in meaningful ways that respect their values and priorities while exploring the potential of technology to improve human life. Moving forward, transhumanist movements must consider the unique cultural contexts in which they operate, engaging in dialogue with African communities to ensure that technological progress aligns with local beliefs and aspirations.

As such the integration of life-extension technologies into Africa's healthcare landscape presents a complex and multifaceted challenge. While the potential benefits of these technologies are undeniable, including the possibility of improving health outcomes and extending life expectancy, the ethical, cultural, and practical challenges must be carefully considered. African nations must prioritize the improvement of basic healthcare infrastructure and the equitable distribution of healthcare resources before embarking on the adoption of advanced life-extension technologies. With thoughtful policy planning, investments in healthcare systems, and a focus on equity, it may be possible to incorporate these technologies in ways that benefit all sectors of society, improving health outcomes and quality of life for millions across the continent. Eventually, the adoption of transhumanist technologies in Africa is fraught with challenges related to equity and access. The continent's existing infrastructure gaps, high levels of poverty, inadequate healthcare, and lack of educational resources must be addressed before these technologies can be effectively integrated into African societies. For

transhumanism to be truly beneficial to Africa, it is essential that African governments, international partners, and local communities work together to ensure that the benefits of these advancements are distributed equitably. Without a commitment to reducing inequality and improving access, the promise of transhumanism may remain a distant reality for the majority of the population.

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