African Mind, Culture, and Technology

Philosophical Perspectives

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Preface

As a scholar and philosopher from Africa, I have long been fascinated by the relationship among African knowledge systems, cultural traditions, and the rapid pace of technological change sweeping across our continent. This book, *African Mind, Culture, and Technology: Philosophical Perspectives*, represents the culmination of my intellectual journey to interrogate these issues and to articulate a distinctly African vision for shaping more inclusive, culturally resonant, and ethically grounded technological futures.

My motivation for writing this book comes from a sense of responsibility to contribute to the growing discourse on the role of African philosophy in guiding innovation and development on the continent. Throughout my academic career, I have been struck by the relative paucity of African voices and perspectives in global debates around science, technology, and society. I have often encountered narratives portraying Africa as a passive recipient of imported technological solutions rather than a vibrant source of indigenous creativity and knowledge production. This book is my attempt to challenge these stereotypes and to foreground the rich tapestry of African thought that has long grappled with questions of epistemic justice, cultural identity, and ecological sustainability in the face of modernity's transformative forces.

I am particularly inspired by the humanistic values and communitarian ethics that underpin many African worldviews. The concept of Ubuntu, which emphasises the intrinsic dignity and interconnectedness of all beings, has been a guiding light for my intellectual journey. In a world increasingly dominated by individualistic and instrumentalist logic, I

believe that Ubuntu offers a powerful framework for re-imagining the relationship between technology and society in more holistic, compassionate, and life-affirming ways. Throughout this book, I draw on Ubuntu and other African philosophical traditions to propose alternative paradigms of innovation that prioritise collective well-being, social solidarity, and environmental stewardship over mere economic growth or efficiency as the essence of technology.

My inspiration for this project also stems from my own lived experiences as an African researcher navigating the terrain of knowledge production in a globalised academy. As a scholar of philosophy of technology, I have had the opportunity to immerse myself in debates around the social and ethical implications of emerging technologies. However, I often found myself grappling with the limitations of Western philosophical frameworks in capturing the nuances and complexities of African realities. This book is my attempt to bridge this gap by bringing African epistemologies, ontologies, and axiologies into dialogue with global discourses on technology and society.

Throughout my research career, I have been fortunate to collaborate with a diverse network of scholars and practitioners across Africa and beyond who share my commitment to decolonising knowledge production and amplifying marginalised voices in the academy. I have also been inspired by African communities' resilience, creativity, and wisdom in navigating the challenges and opportunities of technological change. This book is a testament to these communities' collective insights and aspirations and the need for more inclusive and participatory approaches to innovation that centre their agency.

I hope this book will catalyse further research, dialogue, and action on the intersections of African philosophy, culture, and technology. I believe that by taking the insights and provocations of African thinkers seriously, we can chart alternative pathways of innovation that are more attuned to African communities' needs, values, and aspirations. This is not a call for isolation or exceptionalism but rather an invitation to engage in more authentic and reciprocal forms of knowledge exchange across cultural and disciplinary boundaries. As we grapple with the existential challenges of our time, from climate change to rising inequality to the unchecked power of technology, I believe that African wisdom offers vital resources for re-imagining the future in more holistic, relational, and regenerative ways.

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CHAPTER 1

Why African Philosophy of Technology?

1.1 Introduction

Technology is advancing at lightning speed across our beloved continent of Africa, bringing immense possibility and risk. From artificial intelligence to biotechnology to blockchain, we are seeing all kinds of gadgets and systems taking hold in our economies and societies, influencing all aspects of life. This accelerating wave of techno-social change requires us to think carefully about how these technologies align with time-honoured African values and ways of thinking. But so much of the conversation about technology these days reflects assumptions that come out of the Western worldview—assumptions about progress, efficiency, and individualism that often leave marginalised communities out in the cold. And the business models driving innovation seem laser-focused on profits and shareholders rather than addressing real African problems. Even technologies designed for Western consumer markets sometimes fail to meet local African communities' real needs and priorities. These impacts reflect definite biases that empower connected urban elites while excluding rural villages and informal settlements. We consistently see women, youth, elders, and people with disabilities facing barriers to accessing and helping to design technologies. At the same time, automation threatens the livelihoods of the masses without any social safety net to fall back on. As such, Africa stands at a crossroads with all this tech change happening; we have huge opportunities but also huge risks to navigate.

Despite all these technological changes, Africa has yet to truly tap into the holistic wisdom and resources within our rich cultural traditions— from the Ubuntu philosophy of our interconnectedness to long-standing practices of spirited innovation grounded in community. Our African value systems that emphasise social ethics, communal ties, and living in balance with nature contain vital guidance that could steer technology towards advancing society as a whole rather than feeding individualistic greed. Centuries before contact with Europe and the tragedy of colonisation, great African civilisations had already innovated sophisticated tools ranging from architecture to medicine to metallurgy (Hasenöhrl, 2021). Tools that demonstrated advanced technical capabilities were later systematically erased from mainstream histories. Truly realising the emancipatory potential of technology requires us to invest deeply in African-centred scholarship that illustrates our own perspectives on technology and society. As I will show, tapping into the holistic wisdom of our ancestors and traditions remains vital if we want technology to uplift our communities rather than divide them.

Sadly, the African philosophy of technology currently constitutes a significant knowledge-production gap. The field remains minimally developed, with few scholars explicitly engaging technology through African epistemic frameworks. Reasons include the dominance of Eurocentric paradigms that long dismissed African philosophy outright. When African philosophy finally gained recognition, the focus emphasised recapturing past belief systems rather than tackling contemporary problems. With philosophy marginalised in many African universities, specialised subdisciplines like the philosophy of technology have had little chance to take root. Scholars have just begun examining fields like indigenous innovation and applying Ubuntu to emerging technologies. However, such contributions remain highly fragmented and limited in scope.

As I will show in this chapter, this book will act as an inspiration for growing the African philosophy of technology into a thriving field. Advancing Africa's technical heritage with the hope of overturning dominant assumptions of pre-colonial stagnation is vital and arguably the way to push the African agenda on technology forward. Further, social constructivism demonstrates technology's embeddedness in cultural values and social power dynamics rather than following universal technical dictates. This critiques diffusion patterns that pronounce biases of concentrated expertise and benefits among elites. In contrast, principles of Ubuntu ethics are applied to guide technology in humanistic directions to benefit communities. This book contributes to the conceptual

foundations and pragmatic pathways to grow the African philosophy of technology into a vibrant field capable of steering science, engineering, and innovation towards just, empowering, and sustainable futures across the world's most demographically dynamic continent.

The chapter is structured as follows. The first section reviews factors explaining the field's minimal development, including the marginalisation of African philosophy, holistic traditional worldviews, lack of focus on contemporary issues, and deficient institutions and networks. Then, I explore how Ubuntu and communal values offer guidance, though contributions are currently limited in scale and fragmented. The following section argues for countering mainstream discourse biases, foregrounding marginalised voices, resisting universalisms, and grounding technology in African communalism. Then, I provide vital new insights, further guide research developing African philosophy of technology, warn against homogenising diverse African cultures under singular notions of 'African philosophy', and instead advocate contextual plural philosophising. Finally, I summarise the book's expansive examination of technology through historical, ethical, cultural, policy and innovation lenses to articulate humanistic visions guided by African thought systems.

1.2   Lack of Scholarship in African Philosophy of Technology

The scholarship on African philosophy of technology is still minimal, representing a significant knowledge gap in this field. Despite some valuable contributions, the literature remains small and fragmented. Several factors help explain this lack of development. First, the field of African philosophy itself struggled for recognition until recently. Western philosophers long discounted the idea that African philosophy existed, claiming that rationality and abstraction were foreign to African cultures (Hallen, 2002). It was not until the mid-twentieth century that philosophers like Placide Tempels, Kwame Gyekye, and Kwame Nkrumah rigorously articulated the metaphysical frameworks, epistemologies, and value systems within African worldviews. They demonstrated that rigorous philosophical discourse was present in Africa. With African philosophy only now growing into a mainstream discipline, subfields like the philosophy of technology have had little chance to take root.

The lack of engagement also stems from the nature of traditional African knowledge systems. African worldviews tended to integrate spirituality, ethics, and an emphasis on communal relationships rather than

divide domains into specialised subdisciplines. With knowledge more incorporated into everyday life, there was less impetus to develop systematic philosophical study of narrow subject areas. The Western analytic tradition, in contrast, prized precise, logical analysis of narrowly defined problems (Hallen, 2002). So, the specialised abstract style of philosophy of technology did not organically emerge in Africa before extensive Western contact.

Further, scholarship on African philosophy has primarily focused on recapturing traditional thought, particularly pre-colonial traditions that were marginalised by colonialism (Serequeberhan, 1994). While this is an important project, the emphasis on past perspectives has overshadowed the examination of how African philosophy could critically engage with contemporary techno-social issues. This focus on reclaiming traditional belief systems has come at the expense of applying African philosophical frameworks to pressing modern challenges, such as the rapid proliferation of technology across the continent. By concentrating efforts on recuperating ancient wisdom, African philosophers have had limited engagement with the ethical, social, and existential implications of emerging technologies like artificial intelligence, biotechnology, and digital platforms.

The lack of institutional support further compounds the gaps in African philosophical engagement with contemporary techno-social issues. The text highlights that the humanities, in general, and philosophy specifically, remain under-prioritised in many African universities. This marginalisation of philosophical inquiry within academic institutions has limited the development of specialised subfields, such as the philosophy of technology. The absence of robust institutional structures and resources dedicated to nurturing philosophical research has inhibited the advancement of scholarship in these areas. Without strong departmental support, funding, and intellectual communities focused on exploring the intersections of technology, society, and African thought, philosophers have found it challenging to pursue sustained and impactful work in this domain.

That said, some valuable contributions to the African philosophy of technology have emerged. Scholars like Lauer (2017) have suggested that African knowledge systems contain rich resources for ontological and epistemological insights about the nature of technology and its relationship to society. For example, Afrocentric understandings of Ubuntu could inform philosophical debates about the ethical implications of advanced AI and robotics (Gwagwa et al., 2022; Jecker et al., 2022). Additionally, communal values in African cultures could ground philosophical perspectives on

directing technology towards collective needs rather than individualistic greed (Verharen et al., 2014). Kaschula and Mostert (2011) have also discussed the impacts of communication technologies on African oral traditions and knowledge-sharing practices. They have explored issues like digitisation, changing media ecosystems, and the movement of folklore into digital spaces and their cultural implications. Others have examined overlaps between artistic, spiritual, and technical dimensions in African material cultures for insights into the philosophy of techno-social systems (Oladumiye, 2014).

While these contributions provide initial foundations, this body of literature remains highly limited in scope, scale, and coherence. This entails a lack of systematic philosophical analysis of technology's core epistemic, metaphysical, ethical, and socio-political facets within African knowledge frameworks. Very few thinkers have taken up that challenge. In a continent with over a billion people, the small scholarly community explicitly engaged with the African philosophy of technology severely limits perspective diversity, critical discourse, and knowledge accumulation. In addition, the literature lacks robust region-wide exchanges, with most work emerging within narrow academic circles in South Africa, Nigeria, and a few other centres. Yet, technology offers an urgent concern for the African mind and culture, requiring pan-African philosophical discussions.

The emergent field of African philosophy of technology currently constitutes a substantial knowledge gap in need of scholarly engagement. Given the growing role of technology across Africa, developing rigorous philosophical perspectives rooted in African worldviews, values, and epistemologies can provide essential local and global insights. However, realising this potential will require investing more resources and expanding capacity to nurture a broader community of thinkers and exchanges across the continent. The current marginal state of scholarship represents a missed opportunity in global philosophical discourse. Filling this gap will be essential for bringing African perspectives to the fore in ethics, policy, and practice regarding technological change across Africa in an era of digitisation.

1.3   NEED FOR AN AFRICAN PHILOSOPHY
OF TECHNOLOGY

The exponential growth of technology across Africa demands philosophical engagement grounded in African knowledge frameworks. However, most technology designs and policies rest on individualistic assumptions that conflict with traditional African values centred on communal interdependence. Mainstream Western philosophy of technology often promotes values of efficiency, productivity, hyper-individualism, and technological solutionism in ways misaligned with African cultures. For example, technology designed within a capitalist framework can undermine social solidarity and reciprocity. A philosophy of technology grounded in African communal thinking provides an alternative foundation to guide technology's trajectory in more humane directions.

African communalism emphasises that individual identity and flourishing depend on harmonious social relationships (Mbiti, 1970; Menkiti, 1984). This differs from the individualism prevalent in Western liberal thought that often informs technological design and economics. Philosophy centred on African communalism would critique technical systems that disrupt social cohesion or undermine people's duties to their communities. An African philosophical perspective grounded in communal values would highlight the need to structure such technologies to foster unity and conciliation instead. Likewise, automation that destroys livelihoods and communities in the name of efficiency would face moral condemnation. The goal for Africa and Africa's philosophy of technology would be to apply technology to nourish social solidarity. This communal orientation aligns with the African ethical concept of Ubuntu, which recognises that our humanity is bound up with the humanity of others (Tutu, 1999). An African philosophy of technology informed by Ubuntu would ask: Does this technology affirm our shared dignity and interdependence? Or does it isolate people and erode communal ties? Tools that undermine Ubuntu would face deep scepticism. An African communal philosophy of technology would also emphasise collective benefit over individual profit. Technological design often caters to those with purchasing power rather than considering marginalised populations. In contrast, a philosophy prioritising community would develop technologies tailored to affordability, accessibility, and social inclusion. It would value traditional knowledge and indigenous innovation as much as Western tech.

For us to realise such a communally grounded African philosophy of technology, we would require expanding scholarship and engaging African knowledge systems to address contemporary techno-social dilemmas. It would mean building new Afrocentric frameworks and analysing how tools interface with culture and society. It necessitates technology research, development, and policymaking that cuts against profit-driven individualism with people-centred communal thinking. However, articulating a holistic African communal philosophy of technology requires far more scholars engaging in this discourse across disciplines and institutions continent-wide. It means drawing on epistemic resources from traditional knowledge systems and modern African philosophy. Moreover, it requires technology practitioners to be open to alternative visions that break with Western individualistic assumptions.

1.4   Utilising Afrocentric, Postcolonial, and African Philosophical Frameworks

Mainstream discourses around technology and society overwhelmingly stem from Western epistemological foundations. These paradigms have been accused of being rooted in coloniality and capitalism. Technology designed within this paradigm tends to reflect and exacerbate inequities already ingrained in social structures and institutions. Mainstream technology discourses have often ignored indigenous perspectives and non-Western systems of thought that could provide vital ethical insights and alternative visions. Centring African and decolonised philosophical frameworks helps counterbalance deficient mainstream views in several essential ways. First, it foregrounds marginalised voices and knowledge excluded from technology debates. Philosophy grounded in the lived experiences of African and postcolonial peoples surfaces urgent critical concerns otherwise dismissed by privileged Western thinkers. It demands reckoning with inequality and justice issues elided in conventional tech discourse. Second, African and postcolonial thought provides metaphysical, ethical, and epistemological insights with immense significance for technology not found in Western philosophy. These concepts offer visions of collective dignity, while Afrocentric ideas of harmony with nature contrast technology's tendencies towards exploitation and domination (Verharen et al., 2014).

Additionally, African values counter hyper-individualism prevalent in Western thought and technology design. African humanism helps

re-centre technology debates on humanistic goals rather than profits. Engaging African philosophy can help shift technology's trajectory towards more collective, responsible, sustainable futures. Furthermore, African and Afrocentric thought resist the imposed universalisms that erase pluralism and ignore local contexts. We have seen technologies that are designed as a one-size-fits-all solution within a monolithic paradigm generally fail communities in the Global South. African philosophy insists on foregrounding plural perspectives and situated nuanced technology applications. Likewise, traditions of African critical theory illustrate issues of power, inequality, and ideological hegemony intertwined with technology in ways Western philosophy frequently ignores. Moreover, Afrocentric frameworks emphasise centring marginalised peoples as subjects, not just objects, in technology discourses. This book will show that this orientation is vital for ethical, inclusive tech debates and policies.

Examining technology via African cosmologies highlights metaphysical dimensions severed in Western technoscientific worldviews. Reconnecting technology and spirituality counters unreflective rationalism and instrumentalism. African insights also question notions of technology as neutral or deterministic, showing how tools interact dynamically with social forces and human values. Some existing works demonstrate how African and Afrocentric philosophical frameworks can productively analyse technology. For example, accounts of African indigenous innovation systems highlight how tools were historically developed to promote communal welfare, in contrast to capitalistic systems (Dei, 2020).

With advanced technologies increasingly mediating broad aspects of African economic, political, social, and cultural life, developing philosophical frameworks grounded in African epistemic traditions is needed. Only philosophical discourse rooted in Africa's knowledge heritage can help guide technology's further diffusion throughout the region in ethically and socially just directions. We should offer an African technology philosophy grounded in communal values. Decolonised thought is essential for humanising technological change and steering practitioners and policymakers away from exploitative paradigms. Realising such a field requires platforms and programmes dedicated to enhancing Afrocentric, postcolonial, and African philosophical engagements with technology throughout educational institutions and public spheres across the continent.

1.5 The Problem of Generalisation in African Philosophy

Now, let us turn our discussion to African philosophy. I will systematically discuss its tenets in Chap. 5. For now, I want us to consider the debate on the breadth of African philosophy vis-à-vis the African people and continent. The field of African philosophy has often struggled with homogenising diverse African cultures and knowledge systems under a singular umbrella. Any attempts to articulate an essentialist 'African philosophy' risk erasing differences in values, beliefs, and worldviews across the vast continent. The impulse to homogenise stems from the marginalisation of African philosophy within Eurocentric paradigms that dismissed the possibility of advanced abstract thought outside the West. Early African philosophers thus sought to prove the existence of coherent philosophical systems codified within African cultures to counter Western biases. This produced overly broad generalisations about 'African thought'. However, lived philosophies in Africa varied widely between specific ethnic groups, regions, and historical eras. No universal archetypal African worldview exists. For example, the humanist values underpinning Ubuntu among Nguni Bantu peoples of Southern Africa differ from the vitalism and divine kingship beliefs that shaped the Akan of West Africa. Diversity ranges from Islamic philosophies in North Africa to the spiritualities of the San hunter-gatherers in Southern Africa.

Essentialising these multiplicities into a singular 'African philosophy' risks projecting particular localised customs or decontextualised principles as universally representative of all Africans, universalism which this book seeks to dispel. This elides differences in how diverse African peoples produced meaning, truth, and value from their distinct historical and material contexts. This tendency towards homogenisation also commonly privileged educated male perspectives, silencing women's voices and non-elite modes of knowledge production. Additionally, essentialist discourse about 'African philosophy' has often focused excessively on recapturing pre-colonial belief systems in the past rather than engaging contemporary problems. These issues have led many thinkers to critique appeals to a monolithic African philosophy as empirically dubious and politically problematic. Joseph Omoregbe (1998) argued that philosophical systems within Africa are plural, not uniform. Tsenay Serequeberhan (1994) similarly concluded that seeking an 'essential African mind' is untenable.