Reinventing the African University: From Epistemic Decolonization to the Co-Construction of Transformative Knowledge

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Article

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Abstract: This article explores the necessity of reinventing the African university to make it a genuine driver of the continent's societal transformation. It highlights the dynamics of symbolic, material, and epistemic violence that have long hindered the development of these institutions, often confining them to the reproduction of disconnected Western academic models. To overcome this problematic legacy, the article proposes to draw on two complementary theoretical frameworks: Mode 4 of knowledge production and the Decuple Helix model. Mode 4 invites universities to adopt a transdisciplinary and engaged approach, co-constructing knowledge with a diversity of actors to address concrete issues. The Decuple Helix, on the other hand, advocates the development of multisectoral partnerships within open innovation ecosystems, where the university plays a role of orchestrator and facilitator. The article then presents several pioneering initiatives undertaken by African universities, such as Cheikh Anta Diop or Stellenbosch, which illustrate the ability of these institutions to reinvent themselves by valuing local knowledge, anchoring in community realities, and engaging in co-creation processes of innovative solutions. Finally, the article concludes on the need for African universities to position themselves as genuine catalysts of the continent's societal transformation, overcoming colonial legacies and becoming spaces for the production of knowledge rooted in African realities. This ambitious reinvention requires the development of new governance, organization, and evaluation modalities, promoting greater autonomy and increased engagement with local communities.

Keywords: University; Africa; African challenges; open innovation; epistemic decolonization; co-construction; transformative knowledge; multisectoral partnerships; epistemicide; Mode 1 of knowledge production; Mode 2 of knowledge production; Mode 3 of knowledge production; Mode 4 of knowledge production; Quadruple Helix; Decuple Helix; societal transformation

1. Introduction: Rethinking the Role of the African University in the Face of the Continent's Challenges

African universities find themselves at a crossroads, facing a double challenge. On the one hand, they still bear the stigma of their colonial past, characterized by a deep-seated symbolic, material, and epistemic violence embedded in their structures and practices (Pérez, 2029 ; M'batika, 2015; Heleta, 2016). This violence manifests itself, for example, through the extractive methods of data collection in Africa, where local populations have often been reduced to mere objects of academic experimentation (Nachet, Beckett & MacNeil, 2022 ; Ndlovu-Gatsheni, 2013; Pels, 2008). On the other hand, these institutions are faced with the imperative need to reinvent themselves to play a central role in the societal transformation of the continent, addressing the economic, social, environmental, and political challenges facing African communities (Sall & Ndiaye, 2007; Zeleza, 2005). However, it is often the case that African universities focus more on producing theoretical frameworks disconnected from realities on the ground than on solving the genuine problems faced by these communities (Higgs & van Wyk, 2007; Okebukola, 2015). They struggle to anchor themselves in local sociocultural realities and to engage in processes of co-constructing transformative knowledge at the

service of the common good. How can these institutions overcome this problematic legacy and become genuine drivers of social, economic, cultural, and environmental change? This is the question that this article attempts to answer, adopting a transdisciplinary approach to propose a renewed vision of the role of the African university, drawing on the theoretical frameworks of Mode 4 of knowledge production (Moleka, 2024a; 2024b; 2024c; 2024d; 2024e; Gibbons et al., 1994; Nowotny et al., 2001) and the Decuple Helix (Moleka, 2024a; 2024b; 2024c; Carayannis & Campbell, 2009; Carayannis et al., 2012). It begins by deeply analyzing the manifestations of symbolic, material, colonial, and epistemic violence within African university systems, including the dynamics of knowledge hierarchization and the dissociation between theory and practice.

2. Symbolic, Material, and Epistemic Violence Within African Universities

2.1. Symbolic Violence: The Legacy of a Colonial Academic Model

African universities still bear the scars of an academic model deeply rooted in the Western colonial tradition. These university institutions are imbued with a "symbolic violence" that manifests itself through the valorization of certain forms of knowledge, practices, and cultural norms, to the detriment of others. In contrast to physical violence, symbolic violence remains invisible. This concept is to be situated in symbolic phenomena, particularly symbolic power and symbolic domination (Bourdieu 1979; 1984). This violence is particularly reflected in the predominance of epistemologies, languages, theoretical frameworks, and methodologies of European origin, which dominate teaching programs, research activities, and academic evaluation criteria. This hegemony of Western paradigms contributes to the marginalization of African knowledge, epistemologies, and cosmovisions, often relegating them to the status of "inferior" or "unscientific" knowledge (Hoppers, 2002; Wiredu, 1980). Students and researchers are thus trained to reproduce models of thought and action rooted in cultural and socio-political realities foreign to them, hindering their ability to take root in local contexts and respond to the specific challenges of the continent (Higgs, 2012; Masolo, 2010).

2.2. Material Violence: The Subordination of Universities to the Interests of Elites

Beyond this symbolic violence, African universities also suffer from a form of material violence, insofar as they are often subject to the interests and priorities of economic, political, and social elites, inherited from the colonial period (Mamdani, 2016; Zeleza, 2016). Indeed, many university institutions on the continent are heavily dependent on funding allocated by governments, international donors, or private companies. This financial dependence translates into a form of subordination of universities to the agendas and imperatives of these powerful actors, who can orient the research programs, training, and activities of these institutions according to their own interests (Meulemeester, 2011; Lulat, 2003; Sall & Ndiaye, 2007). Thus, African universities are often forced to conform to short-term profitability logics, quantitative productivity, and alignment with the priorities of the dominant elites, to the detriment of a broader mission of societal transformation (Obamba, 2013; Tebeje, 2020). This material violence contributes to weakening their autonomy, their capacity for innovation, and their anchoring in local sociocultural realities.

2.3. Epistemic Violence: The Extraction and Exploitation of African Knowledge

Beyond the dynamics of symbolic and material violence inherited from the colonial era, African universities also bear the stigma of a more insidious form of violence, linked to the extractive practices of information collection and exploitation of local knowledge (Giladi, 2022 ; Sultana, 2024). For decades, Western researchers have conducted expeditions and surveys in Africa, often reducing local populations to mere objects of study, without their informed consent or active participation (Mudimbe, 1988; Kamuzinzi & Kambanda, 2020; Pels, 2008). In the fields of anthropology, medicine, pharmacology, and many others, these methods have enabled the massive extraction of knowledge, resources, and data, for the benefit of the production of decontextualized academic knowledge oriented towards the concerns of Western societies. This epistemic violence has been accompanied

by a systematic disdain and rejection of African epistemologies, cosmovisions, and practices, judged "irrational" or "unscientific" in the light of the dominant positivist paradigms (Ndlovu-Gatsheni, 2013; Santos, 2014). Local knowledge has thus been marginalized or even completely eradicated, in favor of the hegemony of Western theoretical and methodological frameworks. This dynamic of extraction and exploitation of African knowledge has profoundly shaped the continent's universities, often positioning them as relays of colonial domination and intellectual neocolonialism (Cissé, 2018). It has contributed to weakening the ability of these institutions to take root in local sociocultural realities and to play a leading role in the processes of societal transformation (Higgs, 2016; Nkomo, 2000).

3. Disembodied Universities: Prioritizing Abstract Theory over Problem-Solving

Beyond the symbolic, material, and epistemic violence, African universities also face a form of alienation and disconnection from the societal realities that surround them (Caillet, 2014). Too often, these institutions have withdrawn into themselves, privileging the production of abstract theoretical frameworks rather than tackling the concrete problems faced by local communities (Bambara, 2018; Higgs & van Wyk, 2007; Okebukola, 2015). This dynamic of disembodiment of African universities translates into a deep dissociation between theory and practice. The research conducted in these establishments is frequently perceived as disconnected from field realities, unable to propose innovative and transformative solutions to address the social, economic, environmental, and political challenges of the continent (Bamba, 2023; Jewsiewicki, 1992; Tshikala, 2013). Students are thus trained in the mastery of concepts and theoretical models, rather than in the acquisition of practical skills and engagement in problem-solving initiatives (McCormick, Clark & Raines, 2015). This priority given to the production of abstract knowledge, to the detriment of its concrete application, contributes to weakening the relevance and societal impact of African universities.

4. Hierarchy of Knowledge: The Supremacy of "Hard" Sciences and Western Epistemologies

This dynamic of disembodiment of African universities is also accompanied by a deep hierarchization of the various disciplinary and epistemological fields. Within these institutions, "hard" sciences such as engineering are often valorized and considered superior to the humanities and social sciences (Owusu, 1978; Wiredu, 1980). This hierarchy, inherited from the Western academic tradition, marginalizes knowledge derived from African epistemologies, deemed "less rational" or "rigorous" than the dominant positivist paradigms. Technical, practical, and experiential knowledge is also relegated to the background, in favor of a predominance of theoretical and conceptual expertise (Khelfaoui, 2009; Olukoshi & Zeleza, 2004). This compartmentalized and elitist vision of knowledge directly impacts the training of students, research programs, and academic evaluation criteria. It contributes to perpetuating the hegemony of Western epistemologies and hinders the ability of African universities to open up to a diversity of perspectives, methods, and local knowledge. To reinvent themselves, the continent's university institutions must imperatively challenge this hierarchy of disciplines and epistemologies. They are called upon to promote a holistic and transdisciplinary approach to knowledge, where different forms of knowledge - theoretical, practical, technical, experiential, etc. - are considered complementary and equally legitimate (Boelen, 2020; Hoppers, 2002; Wiredu, 1996). 5. Towards a Reinvention of the African University: Mode 4 of Knowledge Production and the Decuple Helix Faced with these dynamics of symbolic, material, colonial, and epistemic violence, as well as the priority given to theory over the resolution of concrete problems, African universities must reinvent themselves profoundly to become genuine drivers of societal change. To this end, two theoretical frameworks offer stimulating perspectives: Mode 4 of knowledge production and the Decuple Helix model. 5.1. Mode 4 of Knowledge Production: From the "Ivory Tower" to Societal Engagement Developed by Pitshou Moleka, building on the work of Gibbons et al. (1994), Nowotny et al. (2001), and Carayannis and Campbell (2009), the concept of "Mode 4" of knowledge production proposes a renewed vision of the role of universities in society. It moves away from the traditional "ivory tower" model, where academic institutions conceive of themselves as places of decontextualized knowledge production, to adopt a more open, transdisciplinary, and socially engaged approach (Moleka, 2024f; 2024g; 2024h). In this new

paradigm, universities are called upon to co-construct knowledge in close collaboration with a diversity of actors - companies, civil society organizations, public authorities, local communities, etc. - in order to address concrete issues and contribute to societal transformation (Moleka, 2024f; Gibbons, 1999; Nowotny et al., 2003). They must thus go beyond the traditional boundaries between theory and practice, between expert and layman, to become spaces of hybridization and cross-fertilization of knowledge. This approach notably implies: - Valuing a diversity of forms of knowledge (theoretical, practical, technical, experiential, etc.) and epistemologies (Western, African, indigenous, etc.) in a holistic and transdisciplinary perspective. - Actively involving local communities in defining research issues, co-designing projects, and implementing solutions. - Promoting learning and knowledge production modalities anchored in field realities, such as action research, experiential learning, or living labs. - Developing mechanisms for evaluating and valorizing the societal impact of university activities, beyond traditional academic indicators. 5.2. The Decuple Helix Model: Towards Open and Collaborative Innovation Ecosystems Within the framework of Mode 4 of knowledge production, the same researcher has developed the Decuple Helix model (Moleka, 2024g) which offers a stimulating perspective for rethinking the role of the African university in open and collaborative innovation ecosystems. This theoretical framework expands the traditional "Quadruple Helix" model (university-industry-government-civil society) by integrating six other key actors: funding and international organizations, the media, religious communities, social movements, philanthropic organizations, and the natural environment. It emphasizes the need to develop multi-stakeholder and multi-sectoral partnerships to address the social, economic, and environmental challenges facing African societies. From this perspective, universities are no longer just knowledge-producing institutions, but become catalysts of open innovation, co-creating transformative solutions with a diversity of actors (Moleka, 2024g). They are called upon to play a role of facilitator, mediator, and orchestrator within these complex ecosystems, mobilizing their resources (human, material, financial, intellectual, etc.) for the common good (Carayannis & Rakhmatullin, 2014; Farinha & Ferreira, 2013). African universities, by engaging in this Decuple Helix approach, are called upon to profoundly rethink their modes of interaction with the socio-economic environment that surrounds them. Rather than conceiving of themselves as autonomous and self-sufficient institutions, they must open up to diversified and mutually beneficial partnerships with a plurality of actors (Carayannis & Rakhmatullin, 2014; Etzkowitz & Leydesdorff, 2000). This dynamic of openness and collaboration at the local, national, and regional levels allows universities to better understand the realities, needs, and aspirations of African communities. It fosters the emergence of research, innovation, and training projects rooted in the concrete problems faced by these communities, while mobilizing a diversity of resources, perspectives, and knowledge (Carayannis et al., 2012; Farinha & Ferreira, 2013). From this perspective, African universities are called upon to play a role of facilitator, catalyst, and orchestrator within these open innovation ecosystems. They can mobilize their skills, infrastructure, and networks to: - Identify and articulate the needs and priorities of different actors (companies, associations, public authorities, etc.) in terms of socio-economic development, innovation, and societal transformation. - Co-design, with these actors, research, teaching, and community engagement programs aimed at addressing these challenges in a collaborative manner. - Facilitate interactions, knowledge exchanges, and synergies between the various stakeholders, acting as a broker and facilitator between the academic, economic, political, and social spheres. - Promote the mobilization and pooling of resources (financial, material, human, intellectual, etc.) in the service of open innovation and societal impact projects. - Evaluate the effectiveness and impact of the initiatives undertaken, based on indicators that go beyond traditional academic measures. This orchestrator posture within multi-stakeholder innovation ecosystems allows African universities to go beyond their traditional role as producers of disconnected knowledge, to become genuine catalysts of the continent's societal transformation. 5.3. Articulating Mode 4 and the Decuple Helix: Towards a Reinvented University By combining the principles of Mode 4 of knowledge production and the Decuple Helix model, African universities have a powerful conceptual and methodological framework to reinvent themselves profoundly. This articulation offers them the possibility to: 1) Adopt a transdisciplinary and holistic approach to knowledge,

valuing a diversity of epistemologies, methods, and forms of knowledge (theoretical, practical, technical, experiential, etc.) within their teaching and research activities. 2) Engage in processes of knowledge co-construction and co-design of innovative solutions, in close collaboration with a plurality of actors from different sectors (companies, civil society, public authorities, local communities, etc.). 3) Develop multisectoral and multi-stakeholder partnerships within open innovation ecosystems, playing a role of orchestrator, facilitator, and catalyst of societal transformation. 4) Renew the modalities of learning and student engagement, involving them in concrete problem-solving initiatives rooted in field realities. 5) Define new criteria for evaluating and valorizing the societal impact of their activities, beyond traditional academic indicators. This reinvention of the African university in light of Mode 4 and the Decuple Helix allows it to overcome the dynamics of symbolic, material, and epistemic violence that have long hindered its development. It paves the way for the emergence of university institutions resolutely oriented towards transformative action, rooted in local sociocultural realities and concerned with making a significant contribution to addressing the challenges facing the African continent. 6. Pioneering Initiatives: Towards a Reinvented African University Many pioneering initiatives undertaken on the African continent illustrate the ability of universities to reinvent themselves by drawing on the principles of Mode 4 of knowledge production and the Decuple Helix. These innovative experiences pave the way for an African university resolutely oriented towards transformative action, anchored in social realities, and concerned with the societal impact of its activities. 6.1. Co-creation of Knowledge and Solving Concrete Problems: The Example of the University of Cheikh Anta Diop The University of Cheikh Anta Diop in Dakar, Senegal, has embarked on an ambitious process of co-creating knowledge, in close collaboration with local communities (Diagne, 2016; Ndiaye, 2012). Rather than focusing on the production of disconnected theoretical frameworks, this institution has chosen to open up to its societal environment and co-design research and training programs aimed at solving concrete challenges faced by these communities. Thus, the university has developed partnerships with civil society organizations, community groups, and local authorities to carry out action research projects in areas such as food security, sustainable natural resource management, or access to drinking water. Students and researchers work hand-in-hand with local actors, exchanging their knowledge, experiences, and skills to co-design innovative and transformative solutions. This approach allows the University of Cheikh Anta Diop to take root in field realities, while training a new generation of engaged academics concerned with the societal impact of their work. It illustrates the ability of African university institutions to go beyond the traditional cleavage between "ivory tower" and "social relevance", to become genuine catalysts of societal transformation. 6.2. Multisectoral Partnerships and Social Innovation: The Example of the University of Lagos The University of Lagos, Nigeria, has engaged in a dynamic of innovative multisectoral partnerships, inspired by the Decuple Helix framework (Lawanson & Yadua, 2011; Owolabi & Okon, 2020). The university has developed close collaborations with companies, civil society organizations, government institutions, the media, religious groups, and social movements. These diversified partnerships allow the University of Lagos to co-design research, innovation, and community engagement projects rooted in the realities and needs of the different actors. For example, in collaboration with local businesses, it has set up vocational training programs aimed at developing the skills of young people in key sectors such as entrepreneurship, green technology, or the circular economy. In parallel, the university has strengthened its ties with civil society organizations to conduct action research initiatives on issues such as the fight against inequalities, the promotion of gender equality, or environmental protection. These projects actively involve local communities in defining issues, collecting data, and implementing innovative solutions. This dynamic of openness and multisectoral collaboration has allowed the University of Lagos to develop recognized expertise in social innovation and impact entrepreneurship. It illustrates the ability of these institutions to assert themselves as central actors in societal transformation, mobilizing a plurality of resources, knowledge, and perspectives for the common good. 6.3. Local Anchoring and Community Engagement: The Example of the University of Cape Verde The University of Cape Verde has chosen to place local anchoring and community engagement at the heart of its institutional project (Évora,

2011; Lopes, 2014). Rather than conceiving of itself as an "ivory tower", this institution has resolutely turned towards the social, economic, and environmental realities of the Cape Verdean archipelago. Thus, the university has developed numerous partnerships with local authorities, civil society organizations, and communities on the different islands. These collaborations have resulted in the implementation of training, research, and community engagement programs aimed at addressing concrete challenges, such as improving food security, sustainable water management, the ecological transition, or the development of sustainable tourism. Students are closely involved in these initiatives, thus acquiring practical skills and a deep understanding of the issues facing local populations. They work in close collaboration with inhabitants, associations, and businesses, in a logic of co-construction of innovative solutions. This approach has allowed the University of Cape Verde to position itself as a central actor in the socio-economic and environmental development of the archipelago. It has also contributed to forging a university identity rooted in Cape Verdean realities, breaking with the traditional patterns of reproducing Western academic models. 6.4. Integration of Local Knowledge and Intercultural Dialogue: The Example of Stellenbosch University Stellenbosch University in South Africa has embarked on an ambitious process of epistemic decolonization, aimed at valorizing African knowledge, epistemologies, and cosmovisions within its activities (Higgs, 2012; Le Grange, 2016). Thus, the institution has implemented research and teaching programs that substantially integrate knowledge and perspectives from indigenous communities and African traditions. Students are notably trained in ethnobotany, agroecology, or traditional medicine, with a view to intercultural dialogue and co-creation of knowledge. Furthermore, the university has developed close partnerships with community organizations and leaders to co-design projects aimed at solving concrete problems at the local level. These initiatives, rooted in sociocultural realities, make it possible to mobilize a diversity of resources and perspectives, in a logic of transdisciplinarity and complementarity of knowledge. This process of epistemic decolonization has allowed Stellenbosch University to reinvent itself profoundly, by challenging the traditional hierarchies between Western and African knowledge. It illustrates the ability of university institutions to become spaces of intercultural dialogue and co-construction of transformative knowledge, serving the well-being of local communities. 7. Issues of Inclusion and Equity in the Transformation of African Universities The imperative to reinvent African universities cannot bypass the crucial issues of inclusion and equity. Indeed, these institutions have often perpetuated the dynamics of exclusion and marginalization inherited from the colonial period, particularly towards women, rural populations, or vulnerable communities (Zeleza, 2016; Le Grange, 2016). The transformation of the university must therefore frontally tackle these structural inequalities. This involves implementing proactive policies in terms of equitable representation, valuing the diversity of profiles and experiences, in a break with the elitist and discriminatory logics of the colonial past (Assie-Lumumba, 2006; Tamale & Odiyo, 2019). Similarly, targeted support programs must be developed to remove the economic, social, and cultural barriers faced by historically marginalized groups (Maïga, 2017; Mama & Barnes, 2007). Beyond access, the reinvention of African universities must also challenge the norms, values, and academic practices that perpetuate the domination of certain groups and the subordination of others, a direct legacy of colonization (Assie-Lumumba, 2006; Tamale & Odiyo, 2019). This involves a deep decolonization of curricula, research methodologies, and evaluation modes. 8. Employability and Alignment between Training and Employment The issue of employability and the alignment between university programs and labor market needs also reflects the scars of the colonial period. Indeed, academic curricula have often been designed to meet the interests and priorities of colonial powers, disconnected from local socio-economic realities (Langer, 2020; Subotzky, 1999). It is therefore necessary to thoroughly revise the programs, anchoring them more firmly in the problems and challenges of African communities. This involves developing more practical training, integrating internships and close partnerships with economic and social actors, beyond the traditional model of knowledge transmission (Lopes, 2014; Lawanson & Yadua, 2011). Moreover, universities must strive to develop in their students transversal skills such as creativity, critical thinking, or entrepreneurship, rather than confining themselves to a utilitarian logic of short-term employability (Bawa, 2012; Carayannis & Rakhmatullin, 2014). This makes it possible to train engaged citizens, capable of

adapting and innovating, in a break with the colonial vision of education as a simple tool for social reproduction. 9. Critical Analysis of the Adoption of the LMD System in African Universities The adoption of the License-Master-Doctorate (LMD) system in many African universities is part of a dynamic of alignment with international academic standards, strongly influenced by Western models inherited from the colonial period (Khelfaoui, 2009; Owusu, 1978). Although this harmonization process has allowed a certain standardization of curricula, facilitating student mobility, its often rapid and superficial adoption has led to a simple transposition of European frameworks, without real adaptation to the specificities and priorities of African contexts (Kamuzinzi & Kambanda, 2020; Samoff & Carrol, 2004). Moreover, the logic of formatting students according to a utilitarian and instrumental vision of education reinforces an approach disconnected from African sociocultural realities, inherited from colonization. This translates into the marginalization of endogenous knowledge and epistemologies, in favor of a reproduction of dominant academic paradigms (Seepe, 2004; Jewsiewicki, 1992). Therefore, the reinvention of African universities must be accompanied by a deep decolonization of university models, by developing hybrid approaches that organically articulate the contributions of the dominant academic frameworks with the epistemologies, knowledge, and needs of African societies (Seepe, 2004; Jewsiewicki, 1992). 10. Sustainable Financing and Strategic Allocation of Resources The lack of human, material, and financial resources is one of the main obstacles to the reinvention of African universities, a direct legacy of the colonial period marked by chronic underinvestment in higher education (M'batika, 2015; Khelfaoui, 2009). It is therefore necessary to profoundly rethink the governance and strategic partnerships of these institutions, in order to diversify their funding sources and free themselves from dependence on international donors, often carriers of external interests and logics (Meulemeester, 2011; Lulat, 2003). This involves, in particular, developing close collaborations with a variety of local actors - companies, local authorities, philanthropic organizations, etc. - in a logic of co-investment and co-creation of value. Furthermore, African universities must review their internal resource allocation modalities, favoring a more autonomous, transparent, and participatory governance, breaking with the bureaucratic and centralized practices inherited from the colonial period (Olukoshi & Zeleza, 2004; Owolabi & Okon, 2020). This approach must be accompanied by the development of monitoring, evaluation, and accountability mechanisms, taking into account the societal impact of university activities beyond traditional academic indicators (Jewsiewicki, 1992; Tshikala, 2013). 11. Valorization of Intellectual Property and Wealth Creation African universities must also strive to better valorize their intellectual property, by encouraging the production of patents, licenses, and innovations capable of generating concrete economic benefits for communities (Dzisah & Etzkowitz, 2008; Etzkowitz & Leydesdorff, 2000). This implies rethinking the regulatory frameworks and governance models inherited from the colonial period, often unfavorable to such valorization of knowledge and technologies developed in universities (Meulemeester, 2011; Lulat, 2003). This involves, in particular, setting up technology transfer offices, business incubators, and strengthened partnerships with the private sector, in a logic of co-creation of value. Concrete examples already exist, such as the University of Nairobi in Kenya, which has patented a low-cost wastewater treatment process, successfully commercialized by a start-up from its ranks (Bawa, 2012). Similarly, the University of Cheikh Anta Diop in Dakar has developed a yellow fever vaccine, in collaboration with local pharmaceutical companies (Farinha & Ferreira, 2013). These initiatives show the potential of African universities to become genuine drivers of innovation and economic development, provided they are equipped with the appropriate means and break free from the logics of dependence and subordination to external priorities inherited from colonization. 12. Sustainability and Durability of Reinvention Initiatives Finally, the reinvention of African universities raises the fundamental question of the sustainability and longevity of these transformations, faced with institutional inertia and external influences inherited from the colonial period. It is therefore necessary to develop participatory governance mechanisms, where the different actors - management, staff, students, communities, etc. - are involved in defining, implementing, and evaluating the reinvention initiatives (Olukoshi & Zeleza, 2004; Owolabi & Okon, 2020). This allows for collective appropriation and long-term commitment, breaking with the top-down and disconnected logics of the colonial past.

Moreover, the implementation of monitoring, evaluation, and organizational learning systems is essential to identify good practices, capitalize on successful experiences, and adapt continuously to changing contexts, while taking into account the societal impact of university activities (Bawa, 2012; Lopes, 2014). Finally, the sustainability of these transformations requires long-term commitment from external actors - funders, public authorities, socio-economic partners, etc. - to accompany and support these reinvented universities in their role as catalysts of social, economic, and environmental change, breaking with the logics of dependence and interference inherited from colonization (Jewsiewicki, 1992; Zeleza, 2005). Conclusion: Towards an Engaged and Transformative African University Faced with the multidimensional challenges facing the African continent, the universities of these countries are called upon to play a central role in the processes of societal transformation. However, to achieve this, these institutions must imperatively reinvent themselves profoundly, in order to overcome the dynamics of symbolic, material, colonial, and epistemic violence that have long hindered their development. The theoretical frameworks of Mode 4 of knowledge production and the Decuple Helix offer stimulating perspectives for rethinking the role of the African university. They invite these institutions to engage in processes of knowledge co-creation, in close collaboration with a diversity of actors from civil society, the private sector, public authorities, and local communities. This posture of openness and societal engagement makes it possible to go beyond traditional disciplinary compartmentalization, to adopt a holistic and transdisciplinary approach to knowledge. The pioneering initiatives undertaken by universities such as Cheikh Anta Diop, Lagos, or Stellenbosch illustrate the ability of these institutions to reinvent themselves, by placing local anchoring, community engagement, and epistemic decolonization at the heart of their activities. They demonstrate that African universities can become genuine catalysts of societal transformation, provided they overcome the problematic legacies of the colonial past and assert themselves as spaces for co-constructing knowledge and innovative solutions. This reinvention of the African university notably involves: 1) Valuing a diversity of epistemologies, methods, and forms of knowledge (theoretical, practical, technical, experiential, etc.), in a holistic and transdisciplinary perspective. 2) Actively involving local communities in defining research issues, co-designing projects, and implementing solutions. 3) Developing multisectoral and multi-stakeholder partnerships within open innovation ecosystems, where the university plays a role of orchestrator, facilitator, and catalyst. 4) Renewing the modalities of student learning and engagement, by involving them in concrete problem-solving initiatives rooted in field realities. 5) Defining new criteria for evaluating and valorizing the societal impact of university activities, beyond traditional academic indicators. By engaging in this path of reinvention, African universities have the opportunity to become genuine drivers of the continent's societal transformation, addressing the economic, social, environmental, and political challenges faced by local communities. This involves their ability to assert themselves as spaces for the production of knowledge rooted in African realities, valuing local epistemologies and knowledge, while engaging in dialogue with dominant academic paradigms. University institutions must open up to a plurality of perspectives, methods, and actors, in a logic of co-creation of transformative knowledge. This posture of openness and societal engagement also requires that African universities thoroughly rethink their governance, organization, and evaluation models. They must develop mechanisms that promote greater autonomy from dominant economic and political actors, in order to preserve their capacity for innovation and their anchoring in local realities. Furthermore, the evaluation criteria of their activities must be rethought, emphasizing the societal impact of their initiatives, beyond traditional academic productivity indicators. This involves implementing indicators and evaluation processes that valorize community engagement, the resolution of concrete problems, the co-design of innovative solutions, and the contribution to improving the living conditions of populations. From this perspective, African universities are called upon to play a central role in the emergence of new development models, respectful of the continent's sociocultural and environmental specificities. They can notably contribute to: - Promoting alternative economic approaches, such as the social and solidarity economy, social entrepreneurship, or the circular economy, rooted in African realities. - Developing innovative technological solutions, co-designed with local communities, to address critical issues such as access to water, sustainable

agriculture, or renewable energy. - Fostering the emergence of new forms of governance and citizen participation, actively involving populations in decision-making and societal transformation processes.

- Contributing to the valorization and preservation of African cultural, linguistic, and environmental heritage, in a logic of sustainable and inclusive development. To achieve this, African universities must assert themselves as strategic actors in the definition and implementation of public development policies, playing a role of advisory, expertise, and advocacy with policymakers. This reinvention of the African university, in line with the social, economic, environmental, and cultural realities of the continent, is a major challenge for the future of African societies. It paves the way for the emergence of university institutions truly engaged in societal transformation, rooted in local communities, and concerned with contributing to the flourishing and well-being of all. To achieve this, African universities will have to overcome many challenges, among which: - Overcoming resistance to change and institutional inertia, inherited from their colonial past. - Mobilizing sufficient human, financial, and material resources to carry out their renewed missions. - Forging solid and lasting partnerships with a diversity of actors within complex innovation ecosystems. - Profoundly rethinking their governance, organization, and evaluation models, to gain in autonomy and flexibility. - Training a new generation of academics, engaged in transformative knowledge co-construction practices. But it is at this price that African universities will be able to fully assume their role as catalysts of the continent's societal transformation, contributing to the emergence of more just, sustainable, and prosperous societies. This ambitious and visionary reinvention of the African university is a fundamental challenge for the future of the continent's peoples.

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