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Integrating science on indigenous arts, culture, and law: A sine qua non for Africa's true independence from colonialism and eurocentrism

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Abstract: Africa has been fighting against colonialism and Eurocentrism for a long time in an attempt to reverse the regime of oppression and socio-economic marginalization and exploitation, and take back control of its cultural identity and right to self-determination. This adventure requires the recognition and revitalisation of indigenous arts, culture, and law—all of which have been subjugated and ignored during colonial rule. Ironically, the situation has not improved much by the dominating presence of post-independent neo-colonial structures and perpetuated Eurocentric phenomenon that have been ingrained into the socio-cultural and economic fabrics of the African state. This research explores the critical need for integrating science on African indigenous arts, culture, and legal systems, as a way of globalizing as well as revitalizing these elements, towards the ultimate emancipation of the continent from the vestiges of colonialism and Eurocentricism. Relying on the postcolonial, and indigenous knowledge systems theoretical frameworks, the study engages the ethnographic, collaborative and interdisciplinary research approaches, subjecting data obtained to thematic analysis. Underscoring the profound interconnectedness of science, indigenous arts, and cultural heritage, the study argues that combining scientific methods with indigenous African epistemology provides a powerful framework for advancing Africa's true independence from the protracted legacies of colonialism and Eurocentrism. The research concludes that a holistic integration of these elements therefore, is indispensable for fostering a decolonized and inclusive approach to knowledge production, self-determination and sustainable development, against the background of the rich insights and sustainable practices embedded within the African cultural traditions. Ultimately, the research recommends that embracing and integrating science on indigenous epistemologies can propel Africa towards an emancipated, truly independent, and culturally affirming future, transcending the enduring legacies of colonialism and Eurocentrism.

Keywords: indigenous knowledge; science; arts; culture; law; Africa; decolonization; integration; colonialism; eurocentricism

1. Introduction

Africa has been engaged in a continuous effort to rid itself of colonialism and Eurocentrism, attempting to undo the effects of oppression and reclaim control over their cultural identity and self-determination. The acknowledgement and revitalisation of indigenous arts, culture, and law, which have been ignored and subjugated under

colonial control, is essential to this journey. This research examines the critical role that science must play in the recognition and revitalisation of indigenous knowledge systems to be able to contribute constructively to Africa's long-drawn agenda of true independence, and be freed from colonial and Eurocentric influences. The enormous effects of colonialism on Africa's legal, artistic, and cultural traditions have caused a decline in customs and beliefs (Gyekye-Jandoh, 2018). In addition to undermining indigenous knowledge, the imposition of Eurocentric ideologies and institutions has also sustained the predominance of external narratives and views. This study contends that by integrating indigenous arts, culture, and law with science, Africa can refute these claims, restore its true identity, and promote sustainable development.

A strong framework for comprehending and conserving indigenous arts, culture, and the legal system is provided by fusing scientific approaches with conventional knowledge systems. The medicinal and ecological linkages woven into traditional artistic forms are better understood through ethnobotanical techniques (Schulze, 2020). The cultural symbolism and narratives hidden in indigenous languages are revealed through linguistic study. The socio-cultural conditions and practices influencing indigenous artistic manifestations are illuminated by anthropological study methodologies (Kombo and Jan, 2021). By applying these scientific tools, scholars can unveil the intricate connections between indigenous knowledge and artistic practices, promoting a deeper understanding of Africa's historical, social, and ecological contexts.

Colonialism in Africa, which began in the 15th century with the Portuguese exploration of the continent, had far-reaching consequences for the arts, culture, and legal systems of African societies. African communities were subjected to the cultural and social standards of European colonial powers because of their perceived racial superiority and desire for economic exploitation (Mazrui, 1986). These colonial activities had significant effects that are still influencing Africa's current independence and decolonization struggles.

The colonial endeavour in Africa was greatly impacted by Eurocentric ideology. The notion that Western values, knowledge systems, and lifestyles are superior was spread by European conquerors (Thiong'O, 1986). The suppression and erasure of indigenous arts, cultures, and legal systems were justified by this Eurocentric worldview, which was based on the idea that European civilization was universal and better. In comparison to their own artistic traditions, colonial powers dismissed African arts and culture as being primitive or exotic. Traditional African art forms were often looted and taken to Europe as mere curiosities, displayed in museums without regard for their cultural significance (Phillips, 2018). Eurocentric influences seeped into African artistic expressions as artists attempted to mimic Western styles to gain recognition and validation (Mbembe, 2002). Consequently, a sense of cultural inferiority and loss of identity permeated African societies.

African judicial systems were also shaped by Eurocentrism. Indigenous legal traditions were marginalized by the establishment of colonial laws and judicial systems since they were viewed as barbaric or archaic (Decolonial Atlas, 2021). With legal systems created to advance the interests of the invaders, African populations were systematically deprived of their land, resources, and independence (Fanon, 1963). African sovereignty and self-governance were further weakened by these legal systems' disregard for and undermining of indigenous customary laws and practices.

Africa is still affected by colonialism and Eurocentrism in a variety of ways, which keeps the balance of power unbalanced and prevents full independence. It is crucial for regaining African agency and fostering a revitalized sense of identity and self-determination to decolonize the arts, culture, and legal institutions.

Furthermore, there are significant legal and policy ramifications from a fusion of science and indigenous wisdom. Ineffective colonial laws and discriminatory practices are being challenged by the production of empirical evidence and quantitative data (Kombo and Jan, 2021). It gives African communities the power to stand up for their rights, promote cultural revitalization initiatives, and defend traditional knowledge against theft (Mudyawabikwa, 2017). In light of the foregoing, this study investigates the potentialities in applying science to traditional African arts, culture, and law. The research aims to support Africa's true independence and decolonization efforts by adopting an interdisciplinary and inclusive approach, promoting a future that cherishes variety, sustainability, and self-determination.

2. Literature review

2.1. Impact of colonialism on indigenous arts, culture, and law

The marginalization and suppression of traditional practices and beliefs were consequences of colonialism in Africa, which had a significant impact on indigenous arts, cultures, and legal systems (Gyekye-Jandoh, 2018). According to Mudyawabikwa (2017), the establishment of Eurocentric ideologies and institutions degraded indigenous knowledge and continued the predominance of external narratives and views. African indigenous art, culture, and law were all deeply impacted by colonialism, which also changed the course of these interrelated fields. A profound change in the artistic landscape resulted from the disruption of long-standing cultural practices brought about by the installation of European colonial rule. Renowned African artists like Ben Enwonwu and El Anatsui, whose oeuvres represent both resistance to and integration of colonial influences, have produced works that clearly demonstrate this upheaval (Oguibe, 2005). Colonialism caused cultural deterioration that affected traditional cultures' very fabric in addition to the arts. Native American languages, cultures, and belief systems were purposefully suppressed in order to impose Eurocentric standards. In his groundbreaking book "Things Fall Apart," Chinua Achebe portrays the devastating effects of colonialism on society, emphasizing the loss of Igbo customs, and the resultant identity crisis (Achebe, 1958).

Cultural disruption was made worse by colonial legal regimes. Existing indigenous legal systems were frequently ignored or subjugated by the legal frameworks imposed by European powers. The argument of Mahmood Mamdani in "Citizen and Subject" delves into the ways in which colonial control reinterpreted legal frameworks, hence fostering the development of parallel legal systems that sustained inequality (Mamdani, 1996). African art, culture, and law have all been shaped by colonialism in a complex way, characterized by both resistance and adaptation. The necessity for a comprehensive knowledge of the long-lasting effects of colonial interference is highlighted by the complicated interplay that the continent is currently experiencing between traditional roots and post-colonial realities.

Due to resource exploitation by the colonial powers, colonialism had an impact on African indigenous art, culture, and law that also extended to the economic sphere.

In addition to upending established economic structures, this exploitation encouraged the commercialization of culture. The theft and appropriation of African artifacts throughout the colonial period, represented as the pillaging of Benin's royal riches, indicate how art became a casualty of colonial power dynamics (Nevadomsky, 1993). African postcolonial states had to rebuild their cultural identities in the process of gaining independence. The examination of language in "Decolonising the Mind" by Ngũgĩ wa Thiong'o highlights the influence of linguistic imperialism that was sustained under colonial control on cultural expression and highlights the necessity of linguistic and cultural reclaiming (Thiong'o, 1986).

There are continuous initiatives to revive indigenous law, art, and culture in the post-colonial period. Institutions like the African Union and UNESCO are sponsoring cultural preservation and revival programmes. Wangechi Mutu and other contemporary artists interact with their past through their work, which challenges colonial narratives and advances the continuing conversation about cultural restitution (Mutu, 2010). In all, there is a complex story of disruption, resiliency, and adaptation about the effects of colonialism on indigenous African art, culture, and law. Creating inclusive narratives that acknowledge the complexity of post-colonial African identity requires an understanding of this past.

In light of this, revitalising indigenous epistemologies and practices is essential to protecting the varied African societies' intricate web of knowledge, wisdom, and cultural identity. Indigenous knowledge systems incorporate a holistic understanding of the environment, traditional medicine, and communal interactions, constituting the underpinning of sustainable and peaceful existence (Berkes, 2012). Revitalizing and sustaining indigenous epistemologies become a form of resistance against cultural homogenization in the face of globalization and the invasion of hegemonic cultures. In order to achieve self-determination and empowerment, scholars such as Linda Tuhiwai Smith have emphasized in their writings the importance of reclaiming and preserving indigenous knowledge from erasure (Smith, 2012).

Beyond cultural legacy, indigenous practices are preserved for the purpose of sustainable environmental management. Indigenous groups frequently demonstrate a deep ecological awareness, as evidenced by their in-depth understanding of regional ecosystems and sustainable resource management (Berkes, 2018). It may be possible to promote more environmentally conscious and sustainable methods by incorporating indigenous ecological knowledge into modern environmental activities. Moreover, the revival of endangered languages is entwined with the preservation of indigenous epistemologies. Indigenous knowledge's linguistic components are essential to the oral traditions and cultural activities that are passed down. The purpose of preserving indigenous knowledge is furthered by initiatives to preserve and revitalize indigenous languages, as supported by linguists such as Leanne Hinton (Hinton, 2001).

In summary, maintaining indigenous epistemologies and practices is a strategy for sustainable living as well as a way to protect cultural diversity and resilience in the face of external pressures. Acknowledging the intrinsic worth of native wisdom is crucial to promoting a more just and inclusive international community. The preservation of indigenous epistemologies and practices is crucial for confronting and challenging Eurocentrism, a worldview that has long dominated institutional, cultural, and academic domains. Indigenous knowledge is recognized and validated, upending the dominance of Eurocentric viewpoints and promoting a more inclusive and

pluralistic global narrative.

Realizing that different methods of knowing are equally valid and legitimate is one of the main challenges to Eurocentrism. Indigenous knowledge is a counterbalance to the sometimes reductionist and abstract methods of Eurocentric thought since it is grounded on real experiences and strong ties to the environment (Tuhiwai, 2012). Indigenous epistemologies have the potential to close the gap between various knowledge systems and promote cooperation and respect by being preserved and promoted. In the legal and governance spheres, maintaining local customs can also pose a challenge to Eurocentric norms. The idea of a global legal order is challenged by scholars such as Mahmood Mamdani (1996) who urge for the integration of indigenous legal systems within national frameworks. In addition to preserving the autonomy of indigenous groups, its acknowledgment advances a more varied and just legal system.

The revitalisation and preservation of indigenous epistemologies opposes Eurocentric preconceptions and tropes that have marginalized and subdued indigenous cultures, hence challenging them in terms of cultural representation. When given due weight and respect, indigenous voices upend the homogenous narratives that Eurocentrism perpetuates and promote a more complex understanding of cultural variety (Smith, 2012). The influence on Eurocentrism extends beyond academic circles to include larger socioeconomic institutions. There is a chance that the integration of indigenous knowledge into policy-making and educational systems will lead to a more decentralized, locally informed approach. This opposes the Eurocentric propensity to impose uniform solutions without taking into account the subtle differences in context between other societies. To sum up, the retention of native ways of knowing and doing acts as a spark for rethinking and opposing Eurocentrism. It helps to create a more respectful, equitable, and inclusive global conversation where different points of view are recognized, valued, and woven into the fabric of modern communities.

2.2. The intercession of science and indigenous arts, culture, and law

By offering tools, procedures, and frameworks for inquiry, analysis, and recording, science plays a key role in understanding indigenous arts, culture, and law. However, sensitivity, respect, and a dedication to decolonial and collaborative techniques are required while studying indigenous cultural practices and legal systems. By using techniques like ethnographic study, visual analysis, and cultural anthropology, science can aid in the understanding of indigenous arts. Researchers can explore the relevance, symbolism, and meaning of indigenous artistic forms through scientific investigation, revealing the historical and cultural settings in which they are rooted (Turin, 2007). This knowledge can aid in the documentation and preservation of indigenous artistic traditions while dispelling myths and stereotypes that may have been supported by colonial narratives.

Similar to this, science offers a framework for investigating traditional knowledge systems, customary practices, and spiritual beliefs in the context of indigenous cultural traditions. For instance, ethnobotany enables researchers to look at how plants are used medicinally by native cultures, underlining the importance of conventional medical practices (Johnston et al., 2015). Initiatives for collaborative research that are based on the ideas of reciprocity and consent can support the

recognition and validation of indigenous cultural practices by bridging the gap between indigenous knowledge and scientific inquiry. Science can aid in a more sophisticated knowledge of indigenous law, including customary legal systems and alternate dispute resolution procedures. For instance, the concepts, frameworks, and decision-making procedures ingrained in indigenous legal systems can be illuminated by legal anthropology (Griffiths, 1986). Researchers can aid in the documenting and revival of customary legal systems by looking at oral histories, storytelling customs, and indigenous legal conceptions. To be able to challenge legal systems that historically have excluded or ignored indigenous legal frameworks, it is imperative to acquire this awareness.

But it is essential to understand that the scientific study of indigenous arts, culture, and law must take place within a context of decolonization and partnership. Indigenous communities' participation and self-determination must be prioritized by researchers, who must also respect their intellectual property rights, cultural norms, and procedure (Tuhiwai, 2012). Scientists can collaborate with indigenous knowledge holders to co-create and share information in ways that encourage the empowerment of indigenous communities and ensure an equitable distribution of benefits. Researchers can contribute to a more complete and respectful understanding of indigenous arts, culture, and law by fusing scientific inquiry with indigenous knowledge systems. This cooperative approach promotes indigenous peoples' agency and sovereignty in the research process, facilitates the acknowledgment and protection of indigenous cultural heritage, and opposes colonial narratives.

2.3. Integration of science on indigenous epistemologies and legal frameworks

An original and insightful viewpoint on the relationship between scientific understanding and indigenous cultural manifestations is provided by the combination of science and indigenous arts. This examines the connection between these two fields and to emphasize their contributions to global understanding and cultural preservation. A wide range of artistic disciplines are included in the term "indigenous arts," including visual arts, music, dance, storytelling, and traditional crafts. The natural world, cosmology, spirituality, and cultural legacy of indigenous cultures are frequently deeply reflected in these forms of artistic expression (Gauding, 2018). Indigenous art serves as a vehicle for communicating complex narratives and worldviews since it is loaded with traditional knowledge, symbolism, and oral traditions (Borden and Bouchard, 2016).

On the other hand, methodical investigation, experimentation, and the quest of knowledge about the natural world through empirical methods are often linked with science. Indigenous knowledge systems may have different epistemological underpinnings, but they also include scientifically sound systematic observations, ecological insights, and practical applications (Kimmerer, 2010). An excellent opportunity for intercultural communication and the investigation of common worldviews is provided by the fusion of science and indigenous arts. Indigenous paintings frequently reflect ecological interactions, environmental changes, and how nature and humans are interdependent. Indigenous artworks can convey ecological knowledge, customs, and sustainability principles through their visual and symbolic representations (Gauding, 2018). These artistic expressions contribute to the

understanding and preservation of indigenous knowledge systems, serving as repositories of cultural memory and resilience (Borden and Bouchard, 2016).

The examination and interpretation of indigenous artworks can also benefit from the application of scientific methods. Examining the components, processes, and preservation of indigenous artworks using scientific methodology might reveal important details about cultural norms, historical settings, and creative development (Hickey et al., 2019). To ensure the survival and accessibility of indigenous art for future generations, scientific study can help with its identification, conservation, and restoration (Tavares and Van Driel-Murray, 2018). Between scientific and indigenous knowledge systems, integration of science and indigenous arts has the ability to promote respect, comprehension, and reconciliation. The preservation of cultural history, the promotion of cultural self-determination, and the challenges of dominant narratives that frequently exclude indigenous perspectives are all benefits of collaborative research programs that bring together scientists, indigenous artists, and cultural practitioners (Hickey et al., 2019).

The nexus of science and indigenous cultures is an important area of research that emphasizes the depth and variety of knowledge systems. The purpose of this discussion is to examine the connection between these two fields and their contributions to global understanding, the advancement of environmentally friendly behaviours, and the promotion of cultural preservation. Indigenous civilizations have created complex knowledge and understanding of the natural world based on years of observation, adaption, and wisdom passed down through the generations. According to Battiste (2003), indigenous knowledge systems include a comprehensive awareness of the environment that takes into account ecological linkages, resource management, the therapeutic powers of plants, weather patterns, and sustainable agriculture (Lawal, 2023). These knowledge systems have a strong foundation in oral histories, spirituality, and cultural traditions (Berkes, 2012).

Empirical techniques are used by science as a discipline to develop a methodical understanding of the world. However, as part of their knowledge systems, indigenous cultures also use systematic observations and empirical techniques (Kimmerer, 2010). Indigenous scientific knowledge frequently emphasizes the interconnectedness and complexity of ecosystems, highlighting the significance of preserving harmony and balance between people and the natural environment (Moller et al., 2004). Recognizing the complementary nature of these knowledge systems, the integration of science and indigenous cultures aims to close the gap between them. Researchers can acquire and evaluate indigenous knowledge by developing collaborations with indigenous groups, which advances our understanding of the world and informs the development of sustainable solutions.

Additionally, the merging of science and indigenous cultures recognizes the contributions of indigenous knowledge to resource management and sustainable practices. According to Moller et al. (2004), indigenous cultures have proven methods for preserving biodiversity, regenerating ecosystems, and adjusting to environmental changes. Innovative solutions can be created for urgent environmental concerns like climate change and biodiversity loss by fusing traditional ecological knowledge with scientific knowledge (Bohensky, 2008). Cultural preservation and self-determination are also aided by acknowledging and appreciating indigenous cultural practices and knowledge. Indigenous knowledge systems serve as archives for traditional beliefs,

languages, and cultural legacy. Researchers can support initiatives to revitalize languages, defend cultural rights, and encourage the transmission of cultures to future generations by working with indigenous communities (Kawagley, 2006).

The investigation of the connection between indigenous law and science gives light on the ways in which indigenous legal systems engage with and advance scientific knowledge. In order to advance justice, sustainability, and cultural preservation, these researchers also examine the relationships between these two fields and emphasize how they are mutually beneficial. Indigenous law describes the legal frameworks, guiding concepts, and forms of government created and utilized by indigenous societies. These legal frameworks, which include provisions for resource management, dispute resolution, land ownership, and community well-being, are firmly founded in cultural values, traditions, and customary practices (Langton et al., 2018). Indigenous law emphasizes the duties and connections between people, the environment, and other living things. It is holistic and linked.

Indigenous law systems can be engaged with by science as a methodical and evidence-based knowledge-seeking endeavour to deepen understanding of complex environmental and social challenges. Indigenous legal systems take complex ecological knowledge into account, reflecting lifetime observations and generational learning. According to Webb et al. (2010), indigenous cultures have acquired sophisticated understandings of ecosystems, seasonal cycles, and resource management techniques. By offering important information and viewpoints on biodiversity, climate change, and sustainable land use, these traditional ecological views can support scientific research.

For the purpose of advancing justice and self-determination for indigenous communities, the fusion of science and indigenous law has transformative potential. Indigenous legal systems frequently place a high value on the concepts of equity, fairness, and group decision-making. According to Langton et al. (2018), when science collaborates with indigenous law, it can support evidence-based decision-making procedures that respect and incorporate indigenous perspectives and eventually provide more equitable and long-lasting results. Indigenous legal professionals and scientists have been working together on research projects that emphasize the value of intercultural communication and co-learning in tackling difficult socio-environmental problems (Austin, 2017).

In addition, the affirmation of indigenous legal ideas and their revival can aid in the preservation of indigenous cultures, self-government, and rights. According to Deloria and Lytle (2012), indigenous legal systems offer a framework for claiming control over ancestral territories, preserving cultural legacy, and preserving intergenerational continuity. By challenging the marginalization of indigenous voices and knowledge, integration with scientific approaches can increase the validity and visibility of indigenous legal systems (O'Brien and Sykes, 2018). The acceptance and use of indigenous legal systems within national and international legal frameworks can be strengthened by collaboration between scientists and indigenous legal specialists. In sum, the fusion of indigenous law and science offers a chance to appreciate the diversity of legal systems, advance justice, and advance sustainable practices. Scientific inquiry can become more inclusive and sensitive to cultural differences by interacting with traditional ecological knowledge and indigenous legal norms. Collaborations between researchers and indigenous legal experts are crucial

for advancing self-determination, increasing intercultural understanding, and assisting in the preservation of indigenous cultures.

3. Methodology

Exploring the many facets of this study was made possible in large part by the use of multidisciplinary qualitative research methodologies. Because of the nature of the study subject, a strategy that can traverse multiple domains and incorporate scientific, historical, social, and cultural viewpoints is required.

3.1. Research design

The ethnographical approach made it possible to conduct in-depth fieldwork in which everyday interactions, rituals, and life were observed and recorded. Comprehensive insights into the lived experiences of individuals within the community were obtained through interviews. In order to collect qualitative information on the experiences, viewpoints, and insights of key informants—which included members of the community, scholars, artists, and policymakers—focused group discussions and semi-structured interviews were carried out with them. This aided in expanding the researchers' comprehension of indigenous groups' traditional practices, values, and beliefs. Purposive sampling was engaged, to select participants representing diverse demographics, including different age groups, career groups, genders, and cultural backgrounds. The researchers ensured country representation from each of the targeted regions—West Africa, East Africa, and South Africa. The selected regional representative countries included Nigeria in West Africa, Nairobi in East Africa, and South Africa in Southern Africa.

The Collaborative and Participatory Research technique were also deployed. This involved establishing study questions and enlisting members of the indigenous community in data collecting and analysis. The methodology promoted teamwork and guaranteed that the research is pertinent and sensitive to cultural differences and involving the community in the research process to guarantee respect and benefit to both parties. It also aided discovering the colonial era's historical background and how it affected indigenous law, culture, and the arts. To follow the path of colonial influence and its effects, historical records, archives, and oral narratives were examined. The researchers were able to contextualize the current situation of indigenous knowledge systems with the aid of this methodology. Utilizing these multidisciplinary qualitative research methodologies guaranteed a full study of the research issue, capturing the complicated interplay between science, indigenous knowledge, and the repercussions of colonial legacies on Africa's desire of true independence.

3.2. Data collection

A number of in-depth one-on-one interviews with key stakeholders, including community leaders, artists, scientists, legal experts, and those actively involved in cultural preservation initiatives, nine in each of the three regional representative countries—Nigeria, Kenya, and South Africa—were held. To capture a range of viewpoints, two focused group discussions were held in two local communities each, from the selected countries in the three regions. The discussions involved community

members, scholars, legal experts, and cultural practitioners. Collaborative research approaches were also engaged, including participants in joint knowledge creation and group analysis of the results in communities across the selected regions. Purposively, participants were selected from the Yoruba community in Oyo State, and the Hausa-Fulani community in Kano State, both in Nigeria. These communities are renowned for their diverse cultural practices, which include traditional medicine and vivid artistic expressions, as well as their rich cultural traditions, which include art, music, and indigenous legal systems. The Maasai Community in Kajiado County and the Kikuyu Community in Kiambu County in Kenya were selected as participants for the various data collection methods. These communities are well-known for their agricultural practices, traditional music and ceremonies, unique beadwork, and pastoralist lifestyle. In South Africa, the Zulu Community in KwaZulu-Natal and the Xhosa Community in the Eastern Cape were the two communities used as research locations; they are known for their unique click languages, vibrant ceremonies, traditional music, artistic expressions, and clever beadwork. They are also historically rich in rock art, storytelling, and traditional knowledge. It should be noted that identifying specific local communities for this study involved careful consideration of cultural diversity, the active engagement of the community members, as well as the historical contexts of such communities especially in their earlier links with colonialism and Eurocentric indoctrinations from which true independence is sought.

3.3. Data analysis

Data obtained were subjected to thematic analysis. This helped in identifying recurring themes and patterns in qualitative data. It allowed for the exploration of key concepts related to the integration of science into indigenous domains, helping to categorize and interpret diverse perspectives. This included scrutinizing indigenous artworks, cultural practices, and legal frameworks to identify themes, symbols, and discourses. Thematic analysis aided in understanding the symbolic and practical aspects of integration analyzing cultural artifacts, texts, and legal documents to discern patterns and meanings.

3.4. Ethical considerations

Prior informed consents were obtained from all participants, ensuring that they understand the research's purpose, procedures, and potential implications. Special care was taken to respect cultural protocols surrounding consent. The researchers approached the study with cultural humility, respecting and valuing indigenous knowledge systems. Cultural protocols and norms were therefore strictly adhered to, and community members were active participants in shaping the research agenda. Anonymity and confidentiality of participants were also rigorously maintained, all data securely stored, and identified information removed, or coded, to protect the privacy of individuals and communities. The research also prioritized collaborative and participatory approaches, involving indigenous communities in the research process. Their insights guided the study, and efforts were made to ensure that the research benefits the community. Finally, the research was aimed towards contributing positively to the well-being of indigenous communities. Therefore, measures were taken to minimize any potential harm, and the findings were shared in a manner that respects and reflects the community's aspirations and concerns.

4. Theoretical frameworks

Postcolonial theory developed by Edward Said, and the Indigenous Knowledge Systems (IKS) framework, championed by Vine Deloria Jr., together offer a comprehensive approach to examining the complexities of integrating science with indigenous arts, culture, and law. While the postcolonial theory sheds light on the historical context and power dynamics, the Indigenous Knowledge Systems framework provides a culturally sensitive and holistic perspective to guide the research towards a more inclusive and emancipatory understanding.

According to Said (1978), the postcolonial theory critically examines the cultural, political, and social implications of colonialism. It challenges Eurocentric perspectives and exposes the power dynamics inherent in the representation of non-Western cultures. Situated in the context of this study, a postcolonial lens allows for a critical analysis of the historical impacts of colonialism on African indigenous arts, culture, and law. It provides a theoretical framework to understand how the imposition of Western ideologies and structures has influenced and shaped indigenous knowledge systems, emphasizing the need for decolonization and reclaiming agency.

On the other hand, Deloria Jr's Indigenous Knowledge Systems (IKS) framework, emphasizes the unique ways of knowing and understanding inherent in indigenous cultures (Deloria Jr., 1999). It recognizes the holistic nature of indigenous knowledge, encompassing spirituality, environment, and community. In the context of the research, IKS provides a lens through which to appreciate the interconnectedness of science, arts, culture, and law within indigenous contexts. Deloria's work inspires the exploration of how integrating indigenous knowledge can contribute to Africa's true independence by reinstating and valuing traditional epistemologies, thus challenging the dominance of Eurocentric paradigms.

5. Resisting the dominance of eurocentricism through African indigenous languages, culture and legal systems

In order to express cultural sovereignty and decolonize, it is imperative that African Indigenous languages, cultures, and legal systems be revitalized in order to resist the domination of Eurocentricism. African ideas have frequently been silenced by Eurocentrism, which has historically been widespread through colonialism and neocolonial frameworks. This resistance takes a comprehensive stance that includes the restoration of indigenous legal customs, cultural pride, and language. The linguistic resurgence is essential to the fight against Eurocentrism. African languages were suppressed as a result of the colonial era imposition of European languages and culture. Communities can oppose linguistic imperialism and sustain resistance against Eurocentric supremacy by reviving their indigenous languages and preserving their linguistic heritage (Mazrui, 1998).

Resurgence of culture is a potent weapon against Eurocentrism. In addition to fostering a feeling of identity, embracing and advancing ancient customs, rituals, and artistic expressions challenges the Eurocentric narrative that minimizes non-European cultures. The literary works of Chinua Achebe, including his "Things Fall Apart," demonstrate this resistance by illustrating the disarray brought about by European colonization and the rich cultural fabric of pre-colonial Igbo civilization (Achebe, 1958). Furthermore, reviving native legal systems is essential to opposing

Eurocentrism. During colonization, traditional African legal systems were frequently sidelined by the imposition of Western legal frameworks. Scholars such as Makau Mutua highlight in their writings the significance of recovering native legal customs in order to confront modern problems in a way that is consistent with African principles (Mutua, 2001).

Initiatives that support education with an African focus also add to this resistance. A more inclusive perspective of philosophy, science, and history is fostered by the incorporation of indigenous knowledge systems into formal education, which challenges Eurocentric curricula (Sefa Dei, 2000). This position contradicts the Eurocentric myth, which frequently presents African cultures as backward or inferior. Resistance of Eurocentrism by African Indigenous language, culture, and law is not only a nostalgic longing for the past; rather, it is a dynamic process that creates modern identity and government. As Ngũgĩ wa Thiong'o argues, language is a carrier of culture, and the decolonization of the mind demands a linguistic revolution (Thiong'o, 1986). African communities are fighting the lasting effects of Eurocentrism by asserting their autonomy in determining their present and future through resistance, and the accentuation of their indigenous language, culture and mores.

In addition, the fight against Eurocentrism is being waged in the area of economic empowerment by means of the revival of African Indigenous languages, cultures, and legal systems. Indigenous economic practices were marginalized as a result of the colonial era's economic systems, which frequently served the interests of Europeans. African societies contest the Eurocentric belief that Western economic frameworks are inherently superior by endorsing indigenous economic models based on sustainability and communalism (Rodney, 1972). The goal of this economic resistance is to construct a development strategy that is more culturally aware and balanced.

Women have played a significant role in this resistance because efforts to reclaim culture and gender relations interact. Meanwhile, acknowledging and appreciating conventional gender roles and their contributions contradicts the Eurocentric feminist narrative, which has occasionally disregarded African civilizations' agency and power structures (Oyěwùmí, 1997). Instead of imposing external feminist ideals, efforts to empower women within the framework of local traditions help to create a more nuanced and culturally sensitive opposition to Eurocentrism. Furthermore, a significant part of this opposition is played by the worldwide Diaspora. The historical legacy of colonialism and slavery have greatly influenced the African Diaspora, which actively seeks to reestablish ties to its African heritage. This entails accepting African languages and cultures as well as taking part in international discussions that aim to subvert Eurocentrism globally (Gilroy, 1993).

The process of revitalizing African Indigenous languages systems is a dynamic and continuous means of resistance against colonial hegemonies and Eurocentrism. It entails questioning not just cultural and language stereotypes but also economic systems, gender roles, and interactions with the African diaspora around the world. African communities actively develop their narratives by highlighting the significance of indigenous knowledge, traditions, and values. This helps to create a more inclusive and equitable global discourse.

So, for the African continent to achieve true independence and decolonization, science and indigenous knowledge must be integrated, and the continent must itself sustain the nationalization process of promoting everything that is indigenously

African such as its culture, its arts and autochthonous performances in music, songs, dance, drama, drumming, costumes customs, and legal system, and its entire indigenous epistemologies. The decolonization of Africa's knowledge systems can be aided by the incorporation of indigenous knowledge into research and development operations. Africa may regain its own cultural history and subvert the domination of Western knowledge paradigms by appreciating and respecting their indigenous knowledge (Mafu, 2019). Local communities gain agency and control over their own development through the integration of indigenous knowledge. African communities can promote true self-determination by actively participating in decision-making processes by drawing on traditional knowledge and customs (Nyawo et al., 2020).

6. Key findings

This section reveals key findings from interviews, focused group discussions, and collaborative research approaches from a cross-regional investigation of science integration on indigenous arts, law, and culture in communities from three African countries namely: Nigeria, Kenya, and South Africa representing three key African regions, towards enforcing Africa's true independence from colonialism and Eurocentricism.

6.1. Nigeria

6.1.1. Interviews

a. Traditional Rulers and Elders: An emphasis on the preservation of traditional knowledge and its transmission to future generations was found in in-depth one-on-one interviews with traditional rulers and elders in Nigeria. They raised concerns about the possible extinction of indigenous customs and believed that science would effectively help in the preservation and transmission of these customs. Numerous indigenous Nigerian elders accepted that the environment was changing and that science would help in addressing these issues while upholding cultural norms. A few of them emphasized how crucial it is to include science into customary rites in order to make them more relevant and viable in the modern world.

b. Artists: Several artists who participated in one-on-one interviews talked fervently about how science has the power to modify and improve traditional art forms. They talked about efforts that created inventive and commercially viable products by fusing traditional artistic expressions with scientific ideas. It was believed that incorporating science into traditional arts could increase their adaptability to contemporary tastes without sacrificing their cultural identity. Additionally, they stressed the need of scientists and artists working together to develop sustainable art materials, which they believe promotes environmental awareness and cultural preservation.

c. Legal Experts: The legal experts stressed the necessity for creative legal frameworks that take into account scientific principles and indigenous laws. This was regarded as essential to preserving cultural sovereignty in the face of modern legal issues. Talks centered on continuous initiatives to ensure that modern legal frameworks coexist peacefully with indigenous legal conceptions by incorporating them into the national legal system. The legal specialists acknowledged that science

would help with legal documentation and adjudication procedures, which would lead to a more thorough comprehension of indigenous legal customs.

6.1.2. Focused group discussions

The impact of science on traditional farming techniques was a topic of intense discussion in the three focused group discussions that took place in Nigeria among community members, especially the youth. They viewed science as a tool to deal with how environmental changes were influencing conventional farming practices. The community members also expressed willingness to cooperation between traditional healers and contemporary healthcare experts during the discussions, which focused on the integration of science into traditional healing techniques. The community members connected science to cultural identity and pride, stressing its role in protecting and reviving indigenous languages. Additionally, they emphasized how science can be used to alleviate environmental issues and improve traditional farming techniques. There was general agreement throughout the discussions regarding the ability of science to close the knowledge gap between conventional medical systems and healing modalities.

6.1.3. Collaborative research sessions

a. Joint Projects with Traditional Rulers and Elders: Elders worked together in collaborative study sessions to record customary knowledge and practices, fusing scientific methods with oral history to improve preservation. In order to ensure that younger generations would receive traditional wisdom, elders actively participated in the co-creation of instructional materials that combined science. Scientific researchers and traditional leaders gained a deeper knowledge of one other through the collaborative research process.

b. Artistic Collaborations: The creation of sustainable art materials is an example of how scientists and artists may work together to make science useful in the field of cultural expression. Together, scientists and artists planned workshops and exhibitions that promoted cross-cultural contact and demonstrated the synthesis of traditional and scientific knowledge. Because the incorporation of scientific advances boosted the art's marketability, these collaborations acted as a catalyst for economic empowerment.

c. Legal Framework Development: Lawyers actively participated in cooperative research sessions to create frameworks that combine native laws with modern legal systems. Discussions with community members were held during the process to make sure that the legal frameworks reflected the customs and values of the area. The cooperative initiatives sought to solve contemporary legal issues and provide a legal framework that upholds and defends the rights of indigenous people.

In conclusion, Nigeria's investigation into the application of science to native arts, law, and culture exposed a dynamic interplay between scientific discoveries and conventional wisdom. Elders, artists, and legal professionals were key figures in this integration process, helping to preserve cultural legacy while negotiating the difficulties presented by modern transformations.

6.2. Kenya

6.2.1. Interview

a. Traditional Rulers and Community Members: The role of science was seen differently by traditional rulers. Some noted that it could help with problems, but

others stressed how crucial it is to preserve customs free from outside influences. On the other hand, community members were largely in favour of using science, particularly when it came to solving modern problems like healthcare and environmental difficulties. Indigenous members of the community and traditional rulers alike voiced their concerns about possible risks to cultural authenticity posed by the incorporation of science. There were concerns that customs and values might be lost in the process. The necessity for a careful balance between upholding traditions and welcoming change was emphasized by traditional leaders. They realized that science might be used to advance cultural identity without compromising it.

b. **Artists and Cultural Enthusiasts:** The artists discussed their successes and failures when incorporating scientific themes into their works of art. In addition to adding creativity to conventional forms, this integration made them more marketable and drew in a larger audience. Cultural aficionados were excited about modern takes on classic arts, seeing them as a means of involving the next generation and maintaining cultural traditions. A few artists talked about the difficulties of balancing new scientific aspects with classic aesthetics. It was determined that achieving the ideal synergy without losing the essence of cultural expressions was a difficult but worthwhile endeavor. Cultural enthusiasts and artists both stressed the value of community support. An important factor in the success and acceptance of such projects was the community's recognition and appreciation of the integration of science into traditional arts.

c. **Legal Experts:** The significance of acknowledging and incorporating indigenous legal notions into the national legal framework was recognized by legal authorities. They underlined the necessity of respecting both historic and contemporary legal systems through legal diversity. Legal professionals talked on the difficulties in integrating indigenous legal ideas, such as problems with documentation, interpretation, and cohabitation with contemporary legal frameworks. One possible way to address some of these issues is by the use of science to legal procedures, such as the use of technology in documentation. Regarding the possibility of cooperation between the ancient and modern legal systems, legal experts expressed optimism. They recognized that incorporating scientific methods into documentation and adjudication could improve legal practices.

6.2.2. Group discussions

a. **Youth Participants:** Youth participants expressed enthusiasm for the integration of science in cultural education, viewing it as a means to make heritage more relevant in contemporary society. Discussions with the selected youths centered around the potential of science to bridge generational gaps, fostering a sense of pride and identity among the youth. The participants highlighted the importance of incorporating scientific concepts into traditional education to prepare younger generations for the challenges of the modern world while preserving cultural roots.

b. **Language Revitalization:** Group discussions also focused on the potential of collaborative initiatives to revitalize fading indigenous languages through scientific approaches. Participants discussed language preservation projects that involved the use of technology and digital platforms, creating interactive and engaging ways for the youth to learn and embrace their native languages. The discussions highlighted the

dual role of science in both preserving linguistic diversity and fostering cultural identity.

6.2.3. Collaborative research sessions

a. Technology and Traditional Storytelling: Collaborative research sessions between scientists and cultural practitioners explored the integration of technology into traditional storytelling methods. The collaboration resulted in the creation of multimedia storytelling experiences that combined traditional narratives with modern interactive elements. The collaborative process itself became a platform for knowledge exchange, with scientists gaining insights into traditional cultural expressions, and cultural practitioners learning about the possibilities offered by modern technology.

b. Sustainable Cultural Practices: Interdisciplinary teams engaged in collaborative projects to develop sustainable cultural practices that integrated indigenous knowledge with scientific approaches. Collaborators explored the use of scientific methods in agriculture, traditional crafts, and ecological conservation, aiming for practices that were both culturally authentic and environmentally sustainable. The collaborative research sessions facilitated a deeper understanding of the interconnections between cultural practices and environmental stewardship.

In summary, Kenya's exploration of the integration of science in indigenous arts, law, and culture highlighted a dynamic synergy between traditional practices and scientific advancements. Key informants, youth participants, and collaborative research initiatives played crucial roles in fostering a deeper appreciation for cultural heritage while leveraging scientific principles to address contemporary challenges and bridge generational gaps. This of course all veered towards accentuating the integration of science on the African cultural and legal epistemologies toward the actualization of true independence for the African states from the vestiges of colonialism and eurocentrism.

6.3. South Africa

6.3.1. In-depth one-on-one interviews

a Traditional Leaders: Traditional leaders in South Africa emphasized the importance of science in addressing socio-economic challenges while preserving cultural values. They discussed the need for innovative solutions that integrate both indigenous wisdom and scientific advancements. The leaders recognized the role of science in sustainable development, contributing to economic empowerment while maintaining cultural integrity. Discussions highlighted the potential of science to address issues like environmental degradation and climate change, aligning with traditional practices that have long emphasized environmental stewardship.

b Legal Experts: Legal experts discussed ongoing efforts to incorporate indigenous legal concepts into the national legal framework. They emphasized the importance of recognizing and integrating traditional legal systems to achieve a more inclusive and culturally sensitive legal environment. The integration of science into legal frameworks was explored to enhance the documentation and understanding of indigenous laws, contributing to a more comprehensive legal system. The legal experts recognized the potential of science to support the

preservation and dissemination of legal traditions, ensuring their continued relevance in contemporary society.

6.3.2. Focused group discussions

- a Community Members: Community members engaged in discussions about the impact of science on traditional music, dance, and storytelling. Participants expressed a desire to see these cultural expressions evolve while preserving their authenticity through the integration of science. Discussions highlighted the potential for cultural revival through the integration of scientific principles in artistic practices, fostering innovation while maintaining cultural identity. Participants expressed a desire for collaboration between indigenous healers and medical professionals, combining traditional healing practices with modern healthcare systems.
- b Collaboration in Healthcare: Focused group discussions delved into the potential collaboration between indigenous healers and medical professionals. Community members recognized the value of integrating both traditional and modern healthcare practices to enhance overall well-being. The discussions emphasized the need for mutual respect and understanding between different healthcare systems, leveraging the strengths of each to provide comprehensive and culturally sensitive healthcare. Participants discussed collaborative projects that aimed to document and share indigenous healing practices, creating a bridge between traditional and scientific approaches to health.

6.3.3. Collaborative research sessions

- a Sustainable Materials in Traditional Crafts: Interdisciplinary teams engaged in collaborative research sessions to explore the integration of science in crafting sustainable materials for traditional crafts. The collaboration resulted in the development of eco-friendly materials that preserved the authenticity of traditional crafts while promoting environmental sustainability. Collaborators worked towards creating a balance between cultural preservation and modern ecological consciousness.
- b Cross-Regional Collaboration: Collaborative research initiatives extended beyond South Africa to involve researchers and practitioners from other regions. This cross-regional collaboration aimed to share best practices, fostering a sense of interconnectedness and shared cultural heritage. The collaborative sessions provided a platform for researchers and community members to exchange knowledge and experiences, contributing to a broader understanding of the integration of science in indigenous contexts across Africa.

In conclusion, a diverse approach was demonstrated by South Africa's investigation into the incorporation of science with indigenous arts, law, and culture. Traditional leaders, legal professionals, and community people actively participated in conversations and cooperative projects, highlighting how science may be used to address modern issues while protecting and reviving indigenous practices. Beyond national borders, the integration initiatives promoted knowledge sharing among regions and a sense of shared cultural heritage.

These findings from the three regions that were selected to represent the African State revealed the following common themes: the necessity of traditional communities and scientific practitioners working together to address environmental challenges; the

emphasis on how science can address these issues while preserving cultural practices; the investigation of creative legal frameworks that unite indigenous and scientific perspectives; and the enthusiasm of young people for the use of science in cultural education and heritage preservation. Together, the results from all the locations highlight the dynamic relationship that exists between science and indigenous cultures. They also demonstrate how cooperative efforts support cultural revival and the quest for true independence from colonialism and eurocentrism in a variety of African situations.

7. Discussions and analysis

Arising from the findings from each country representing the three selected African regions the following core themes arose for further discussions and analysis by these researchers:

7.1. Cultural resilience

In the framework of fusing science with Indigenous law, culture, and the arts for Africa's full independence from colonialism and Eurocentrism, especially arising from the above findings gathered from the three African regions, the research emphasizes the critical roles that resilience and identity play as important discoveries. In this context, identification refers to the maintenance and expression of a unique cultural character, whereas resilience refers to the cultural strength and adaptive capacity of communities to tolerate outside forces. The study emphasizes the critical role that cultural resilience plays in preventing the deletion or diluting of Indigenous customs, languages, and practices. Communities that exhibit resilience are defined by their capacity to effectively traverse and respond to external challenges, encompassing social, economic, and environmental domains, while maintaining their fundamental cultural values. Because of this endurance, a distinct identity that goes beyond superficial cultural manifestations can be preserved.

One important conclusion is that identity captures the deliberate efforts of communities to claim and celebrate their cultural uniqueness. This entails appreciating historical tales, conventional wisdom, and creative manifestations as essential elements of their identity. Communities contribute to a more diversified and inclusive narrative that questions colonial legacies and Eurocentric viewpoints by embracing and promoting their identity. Identity and resilience are related components that work together symbiotically. A community's resilience is bolstered by its ability to preserve its identity, and the community's resilience in turn increases its ability to establish and uphold its identity. This dynamic interaction promotes cultural pride, cohesiveness, and self-worth, all of which serve as catalysts for genuine independence and sustained growth.

7.2. Holistic approach to indigenous knowledge

The findings revealed a support of a holistic approach to knowledge as a necessary component of integrating science with Indigenous law, culture, and the arts for Africa's true freedom from colonialism and Eurocentrism. The research highlights an important critical conclusion. A holistic approach to knowledge emphasizes the interconnection of many knowledge systems, departing from fragmented or siloed

understandings of information. Within this framework, the holistic approach recognizes that both Indigenous knowledge systems and Western scientific approaches offer significant contributions to a worldview that is all-encompassing. It recognizes the complimentary nature of these seemingly diverse knowledge systems and calls for their unification. Rather than considering scientific and Indigenous knowledge to be mutually exclusive, the study emphasizes how bringing two disparate viewpoints together can potentially create synergy.

An integrated approach to knowledge is not only a theoretical ideal but also a practical requirement for resolving the intricately linked problems that African communities face. Societies can create more thorough, culturally aware, and locally relevant answers by adopting this strategy. Furthermore, a more equitable and inclusive approach to development is made possible by the holistic integration of multiple knowledge systems, which makes sure that the advantages of scientific discoveries are shared and adapted in ways that respect and strengthen Indigenous traditions and values. Essentially, a major finding that encourages a more integrated, balanced, and culturally aware route towards Africa's actual independence is the support for a holistic approach to knowledge.

7.3. Artistic expression as cultural narratives

One key finding in this research is the role of artistic expression as cultural narratives. The study highlights the transformative potential of art in the context of development and knowledge integration for the transmission, preservation, and reclamation of cultural identity. Cultural narratives are shared through the dynamic and diversified medium of artistic expression. It encompasses a variety of mediums, including visual arts, music, dance, literature, and storytelling, all of which are vital in forming and expressing a community's identity. These artistic creations are essential elements of a community's historical consciousness and collective memory, not just something to look at or enjoy.

Communities convey their distinct viewpoints on the world, encompassing customs, values, and personal encounters, through artistic expression. Through art, communities are able to express their cultural narratives, refute historical misrepresentations, and present alternate points of view. Art becomes a strong tool for storytelling. The reclamation of narratives that may have been repressed or suppressed during colonial control is aided by this process. Cultural narratives conveyed via art can also be used as a means of cultural revival. Communities actively participate in the preservation and rebirth of their cultural heritage through the practice of traditional arts. This transcends aesthetics since art becomes a live representation of cultural values and acts as a link between generations to preserve identity and knowledge.

7.4. Cultural sovereignty

In order to truly free Africa from colonialism and Eurocentrism, the research emphasizes cultural sovereignty as a crucial discovery in the investigation of fusing science with Indigenous law, culture, and the arts. In this setting, the idea of cultural sovereignty becomes crucial, emphasizing how important it is to give communities the freedom to direct and influence the cultural narratives, practices, and expressions that make them unique. Fundamentally, cultural sovereignty is about giving communities the freedom to choose their own cultural path free from outside intervention. It is an

expression of the notion of self-determination. This research highlights the significance of appreciating and honoring various cultural identities, realizing that every group has its own distinct set of beliefs, customs, and values.

Fundamentally, cultural autonomy is a way of opposing cultural uniformity and assimilation. The statement contests the efforts of external forces to enforce prevailing cultural standards, highlighting the inherent worth of cultural diversity as a vital facet of individual expression. Moreover, cultural sovereignty gains global relevance due to its acceptance as a human right on a global scale. Support for cultural sovereignty is consistent with larger movements that want to safeguard cultural variety globally and acknowledge the rights of indigenous peoples. As a major result that supports communities' autonomy in creating and sustaining their cultural identity, the research concludes by highlighting cultural sovereignty. It highlights the necessity of approaching cultural engagement with greater decency, inclusivity, and equity, in line with the larger objective of granting African people full freedom from the historical legacies of colonialism and Eurocentrism.

7.5. Sustainable development

The study reveals that for Africa to truly be free from colonialism and Eurocentrism, science must be integrated with Indigenous law, culture, and the arts in order to achieve sustainable development. This key finding points to a divergence from traditional development paradigms that would have given precedence to short-term advantages over long-term social and environmental sustainability. In this case, sustainable development entails acknowledging and utilizing Indigenous knowledge systems, which provide insightful perspectives into comprehensive and well-rounded methods of advancing society. It promotes a perspective that encompasses social justice, cultural resilience, and environmental preservation in addition to economic considerations.

Emphasis is placed on striking a balance between modern innovations and customs. According to the research, sustainable development entails utilizing both scientific methods and Indigenous knowledge to create solutions tailored to the local context and in line with cultural values while tackling current issues. Sustainable development is considered to require inclusive decision-making. By incorporating Indigenous knowledge, governance systems become more participatory and local people are given a stronger voice in determining their own development paths and self-determination. Indigenous cultural traditions and the arts are essential to preserving cultural identities, boosting self-esteem, a catalyst to sustainable development, and improving communities as a whole.

8. Conclusion

The study sufficiently demonstrates the need to engage a comprehensive approach in the efforts at moving Africa closer to true independence from the lingering effects of colonialism and Eurocentrism. The research draws attention to the historical and current effects of colonial rule, which have resulted in the marginalization and suppression of indigenous culture, creative traditions, legal systems, and autochthonous epistemologies. It offers clarification on the relationship between science and indigenous knowledge systems, cultural manifestations, and native-born

legal framework through a thorough analysis, highlighting how important it is to acknowledge and value these as the cornerstones of Africa's autonomy and self-determination. In order to overcome the underlying biases of Eurocentric paradigms and promote decolonized methods to knowledge creation and societal development, it has been noted that the inclusion of indigenous perspectives in scientific inquiry and policy-making processes is essential.

The study highlights the transformative power of placing indigenous culture, the arts, and the law at the heart of scientific discourse and education, as well as the significance that this has in creating inclusive and sustainable pathways that lead to Africa's liberation from colonial legacies. The study promotes the co-creation of knowledge that respects and incorporates many ways of knowing by highlighting the necessity of challenging Eurocentric hegemony in the fields of scientific study and working in real partnerships with indigenous populations. Furthermore, the research shows that combining science with indigenous arts, law, and culture is not just an abstract theoretical concept but also a necessary practical step toward solving urgent social, environmental, and economic issues. Through the utilization of the abundant wisdom present in native knowledge systems and legal customs, Africa can steer toward more just and sustainable development routes.

The foundation for a fully free and self-determined Africa indeed, is laid by this integrative approach, which opens the door to a future based on fair relationships, respect for multiple knowledge systems, and cultural affirmation. It becomes evident that the restoration of collective agency and self-determination as well as the amplification of voices that have long been silenced by colonialism are made possible by the integration of science with indigenous culture, arts, and law. The aforementioned integration serves to validate the inherent worth of the autochthonous knowledge systems, creative manifestations, and legal structures as legitimate and indispensable components of Africa's cultural and intellectual legacy. In sum, the study emphasizes how science, indigenous culture, arts, and law may be deeply integrated to help re-imagine and actualize Africa's journey toward true independence and sustainable development.

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