Perspectives on African Indigenous Religion and the Natural Environment: Beings, Interconnectedness, Communities and Knowledge Systems

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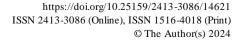University of Johannesburg
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Abstract

This article explored the intricate relationship between African Indigenous Religion (AIR) and the natural environment. It uncovered diverse perspectives on how African communities historically engage with and conserve their natural surroundings and underscored the contemporary relevance of these insights in addressing global environmental challenges. The article covered a wide range of online and offline materials, including books, book chapters, and journal articles, offering a comprehensive understanding of the connections between indigenous belief systems and environmental conservation in Africa. By analysing key recurring themes and concepts within the literature, including African ontology, belief in God, ancestral roles, deities, community values, moral status, and Indigenous Knowledge Systems (IKS), the article synthesised insights from previous research and identified important areas for future research.

Introduction

Religion has featured prominently in environmental crisis debates for one major reason: the argument that the global environmental crisis is a crisis of values, and religion, being a significant source of values, is therefore implicated in the decisions humans make regarding the environment (Nasr 1967; White 1967). This position implies that since religion is at the root of the crisis, it holds the solution (Posas 2007). This is buttressed by the fact that the numerous science-based mitigating efforts and the international

climate change conferences have not yielded much result (Storrow 2018; Nche 2020). However, of all religions, the African indigenous religion (AIR), alongside other indigenous religions of many people across the world (see Taylor 2010), has been arguably adjudged the most nature-friendly by many scholars (Ignacimuthu 2010; Oborji, 2005; Eneji et al., 2012; Ikeke, 2015; Jimoh et al., 2017). This is mainly due to its evident reliance on and expression through nature (see Nche 2014). Some scholars have, however, argued otherwise (Horsthemke 2015; Callicott 1994; Bujo 2009). Hence, the intricate connections between AIR and the natural environment have given rise to a rich scholarly exploration and understanding. This article delved into the existing literature that probes these connections. Through a comprehensive examination of key recurrent themes and concepts in the literature, including AIR, African ontology, belief in God, ancestral roles, deities, community values, moral status, and Indigenous Knowledge Systems (IKS), this article aimed to synthesise and distil the profound insights generated by previous research.

By surveying the landscape of existing scholarship, the article sought to uncover the diverse perspectives and findings that collectively contribute to our understanding of the intricate relationships between indigenous belief systems and the natural environment in Africa. This article highlights the nuanced ways in which African communities have historically engaged with and conserved their natural surroundings and sheds light on the contemporary relevance of these insights in the face of global environmental challenges. Through an analysis of past studies, this article paves the way for a deeper exploration of the subject matter. It underscores the importance of considering indigenous religious perspectives within the broader discourse on environmental conservation.

The reviewed materials included both online and offline studies. These studies were in the form of books, book chapters, and journal articles. The decision to focus on online and offline materials was informed by the fact that some important materials on AIR still exist offline in hardcopies. In addition to the materials that examined the connections between nature/environmental crisis/sustainability and key largely interchangeable concepts such as African Traditional Religion, African Religion, African philosophy, African ontology, African metaphysics, and African worldview, the researchers reviewed materials on African environmental ethics. The decision to include materials on African environmental ethics was informed not only by the fact that the question of the connection between AIR and the environment falls almost squarely within the environmental, ethical framework or area of inquiry but also by the belief that African environmental ethics has its root in AIR (see Chemhuru 2016). Also, the decision to include materials on indigenous knowledge systems in this article was informed not only by the fact that some of these local knowledge systems that are employed in managing the environment have their roots in the age-long religious rituals of rural communities in Africa (see Falola 2022), but also by the fact that in many traditional African communities, it is often difficult to separate the daily socio-economic and agricultural activities of the people from their religion (see Mbiti 1969; Tarusarira

2017). It should be noted that AIR is conceptualised in a singular form because, amidst the apparent diversity in African indigenous religiosity, the commonalities across different religions of many communities in the continent are sufficient enough to refer to their religion in the singular form, suggesting a potential unity (Oborji 2019).

What is AIR?

In contemporary discourse, the prevalent use of the term "indigenous religion" for analytical purposes and its classification within the sphere of religious studies is intertwined with narratives centred around "indigenous peoples" (Tafjord 2013, 221). Indigenous religions are defined as belief systems that originated within or are distinctive to groups referred to as "indigenous peoples." Furthermore, Tafjord contends that this term is employed in a context that contradicts the notion of a "foreign religion" (Tafjord 2013, 221).

Cox (2017, 366) categorises "Indigenous Religions as localised and kinship-dominated". Despite their spatial confines and limited outreach due to the constraints imposed by kinship norms, which circumscribe membership within their collectives, Cox asserts that Indigenous religions are not merely passive recipients of global and contemporary influences. On the contrary, these belief systems consistently influence transnational and missionary faiths, underscoring the inherent potency of indigenous traditions over external interventions. Increasingly, Indigenous religions are gaining recognition as distinct entities intertwined with a unified indigenous identity rather than representing a multitude of diverse indigenous identities dispersed worldwide (Christensen, 2017). This paradigm shift is significant in acknowledging the interconnectedness of indigenous spiritual and cultural affiliations with their environment, a bond that fundamentally underpins their existence, beliefs, rituals, and traditions (Kraft, 2017). In this context, Jenkins and Chapple (2011) acknowledge that the construct of indigenous religion underscores the inseparability of religion and spirituality from existence itself, best comprehended within the intricate web of environmental and social interconnections.

This is true of AIR. AIR is the religion of Africans[1] whose origin is lost in antiquity. However, it is believed to have been practised by African forebears, who handed it down from one generation to another (Nche 2014; Awolalu 1976). Conceptualised in the plural form, van Beek (2020) notes that there is not one AIR; instead, there are many that diverge widely. This is also the sentiments of a couple of scholars such as Mbiti (1969) (even though Mbiti eventually acknowledged the commonalities and potential

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1   Africans as used in this context refer to people who are native to the continent of Africa or have ancestral ties to Africa and adhere to African Indigenous Religions (AIR). Among these are the Hausa, Yoruba, and Igbo of West Africa; the Zulu, Xhosa, and Sotho of Southern Africa; and the Amhara, Oromo, and Somali of East Africa, among numerous other ethnic groups.

unity within African spirituality in the revised edition of his book in 1989) and Jacob Olupona (cited in Chiorazzi 2015). This article, however, conceptualises AIR in the singular form alongside scholars like Aderibigbe (2015), Idowu (1962), Shorter (1975) (cited in Adamo 2011), and Adamo (2011).

Van Beek (2020) notes that AIR differs significantly from mainstream scriptural religions. Unlike the familiar belief-based faiths, AIR prioritises rituals over faith. According to van Beek (2020) and Aderibigbe (2015), this religion lacks holy texts and is experiential, learned through participation. Although the religion lacks holy texts, it is, according to Awolalu (1976: 275), "'written' everywhere for those who care to see and read. It is largely written in the peoples' myths and folktales, songs and dances, liturgies and shrines, proverbs and pithy sayings". Rooted in local cultures, AIR, according to van Beek (2020), integrates with forager, pastoralist, and horticulturalist ways of life. This living religion addresses everyday challenges—sickness, mourning—and celebrates life, fertility, and unity, even in death. The celebration of death is borne out of the belief that the "dead are never gone" (Ezechi, 2011: iii). Africans believe that people continue to live through their spirits after death. These spirits are often referred to as ancestral spirits. It is believed that the spirits of the ancestors[2] remain very interested in what happens in their families and communities. Hence, they protect against misfortune, drought, disaster, and disease, heal illness, and provide children with protection for livestock, rain, and the fertility of crops (Nche 2014). AIR bridges the living and the dead, featuring diverse spirits, both nurturing and malevolent. Communication with the unseen occurs through prayer, trance, dreams, and divination, unveiling deeper realities. These religions are rich in stories about the other world, interwoven with folktales (van Beek 2020).

African ontology: Eco-centric or Anthropocentric

Some scholars have explored the concept of African ontology, which is deemed fundamental to understanding the worldview of AIR about the natural environment. Ontology, as a philosophical discipline, explores the inherent characteristics of objects based on their fundamental essence. It investigates the nature and meaning of all realities, encompassing material and nonmaterial entities (Guarino, Oberle, and Staab, 2009; Ekeh, 2020; Aso and Saladin, 2018). Ontology deals with questions about the nature of existence, reality, and being, and in the context of African thought, it encompasses the fundamental beliefs and metaphysical understandings of the nature of reality. African ontology is rooted in the interconnectedness of beings within the cosmos, emphasising a holistic and harmonious perspective. It is based on values that

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2   It should noted that, in African cosmology and in the context of this article, the terms "ancestors" and "ancestral spirits" are used interchangeably to refer to deceased individuals who were once living members of a specific community, family, or lineage and play a significant role in the lives of their descendants.

define all entities' essence and authentic features, including humans and their diverse worldviews. African ontology posits that each created being is inseparable from its creator, and their existence and sustenance stem from the creator's will (Aso and Saladin 2018).

Central to African ontology is the belief in a hierarchy of beings, with God at the apex, followed by spirits, humans, animals, plants, and non-biological entities (Kanu 2014; Taringer 2006). This hierarchy is reflective of the interplay and harmony of natural life forces. It is important to note that African ontology does not separate 'object' and 'subject'; everything is interconnected and known subjectively (Ikuenobe 2014). This ontological hierarchy informs Africans' understanding of reality, with God as the source and sustainer of all, spirits guiding human fate, and humans holding a pivotal position (Mbiti 1990). This hierarchy extends to animals, plants, and the natural environment, all essential components of the interconnected whole (Ekeh, 2020; John and Enang, 2022). Different African cultures might have variations in their ontological hierarchies, but a common thread of interconnectedness and harmonious coexistence can be observed.

The ideas of this harmonious coexistence are expressed in the concept of *ubuntu*, the communitarian way of life, and the use of wisdom in taboos, proverbs, myths and folktales, among others. According to Tangwa (2004), this African ontological outlook is called "*eco-bio-communitarianism.*" This sense of harmonious coexistence is responsible for why traditional Africans were more cautious in their attitude to plants, animals, inanimate things and the various invisible forces of the world (Tangwa, 2004: 389). Making comparisons between Western and African environmental thinking, Tangwa asserts the view that "the Western world view can be described as predominantly anthropocentric and individualistic, and contrasted with its African counterpart which [is] described as *eco-bio-communitarian*" (Tangwa 2004, 392). Traditional Africans were more disposed towards the 'live and let live' attitude. Within this traditional African ontological outlook, the dichotomy between "plants, animals, and inanimate things, between the sacred and the profane, matter and spirit, the communal and the individual, is a slim and flexible one". It is mainly on this basis that African ontology and ethics have been adjudged eco-centric, bio-centric and nature-friendly (see Behren, 2010; Ignacimuthu, 2010; Oborji, 2005; Eneji et al., 2012; Ikeke, 2015; Jimoh et al., 2017; Kelbessa, 2005; Le Grange, 2012; Murove, 2009; Metz, 2017; Galgut, 2017).

On the contrary, however, African ontology is believed to be characterised by its anthropocentrism, viewing humanity as central to existence (Mbiti 1990). Hence, Horsthemke (2015) and Callicott (1994) have insisted that African ontology is "still decidedly anthropocentric" (Horsthemke 2015, 93). For instance, Callicott (1994) argues that "African thought orbits, seemingly, around human interests. Hence, one might expect to distil from it no more than a weak and indirect environmental ethic, similar to the type of ecologically enlightened utilitarianism, focused on long-range

human welfare" (p.158). Concerning the practice of totemism (alongside its taboos and rituals), which many scholars (e.g., Mandillah and Ekosse, 2018; Dagba et al., 2013) have argued is one of the veritable evidence of the nature-friendly nature of African ontology, Horsthemke argues that since "one's clan's totem animal is another clan's favourite *bush meat*" (2015: 74), African ontology still smacks of anthropocentric tendencies. The same applies to Horsthemke's (n.d.) view of the concept of ubuntu, which he demised as anthropocentric given its focus on human relations only. Taringa (2006) also, while relying on the insights from the Shona indigenous religion, argues that African ontology is not necessarily eco-centric as often argued in other climes. According to Taringa, this is because "the ecological attitude of traditional African religion is more based on fear or respect of ancestral spirits than on respect for nature itself" (p. 191). Other scholars who have expressed views that support the anthropocentric nature of African ontology include Bujo (2009), Onah (n.d), and Bhengu (1996).

Whether African ontology is anthropocentric mainly, as the likes of Horsthemke and Callicott claim, or non-anthropocentric, as the likes of Tangwa (2004) and Ikuenobe (2014) would claim, can only be sufficiently ascertained through a thorough understanding of African ontology. Future research could, therefore, delve into nuanced examinations of different African cultures and their ontological hierarchies, scrutinising the role of spirituality, cultural practices, and traditional wisdom in shaping attitudes towards the environment. Exploring the concept of ubuntu and the practical applications of totemism, taboos, and rituals can provide insights into the relationship between African ontology and sustainable environmental practices. Furthermore, in-depth comparative analyses with Western environmental thinking could offer a broader perspective on African ontology's eco-centric or anthropocentric nature. Addressing these complexities could contribute to a deeper understanding of how indigenous African worldviews influence environmental perceptions and behaviours, offering valuable insights for addressing contemporary ecological challenges.

The Notion of God and its Impact on African Environmental Ethics

In Africa, faith in God forms the cornerstone of religious practices and ceremonies, constituting a pivotal element of African ontology and spirituality (Mbiti 1969). Africans believe in a supreme, original deity recognised as the Lord of the Universe, serving as the omnipotent source who created and stands as the forebear of all divine entities (Kanu 2014; Kanu and Dubisi 2021; Mbiti 1990). Within the context of AIR, the concept of God assumes the role of the Supreme Being, serving as the ultimate source from which the entirety of existence within the cosmos emanates (Odozor 2019; Ekeke and Ekeopara 2010; Ushe 2017). This perception of God in traditional African belief systems is characterised by a dual nature, both immanent and transcendent (Aso and Saladin 2018). Central to the convictions of adherents is the notion of the Supreme Being's inherent oneness (that is, one God), a foundational belief that inherently precludes the existence of atheistic perspectives within their conventional understanding

of God's nature (Islam and Islam 2015). Paralleling this assertion, Oguntola-Laguda (2014) similarly asserts that African religious paradigms are firmly grounded in the fundamental belief in a Supreme Being responsible for creating all entities and maintaining vigilant oversight over their respective activities.

While not explicitly outlining the role of God in shaping African environmental ethics, Bourdillon (1976), Oladipo (2004), Taringa (2006), and Asiedu-Amoako (2013) concur on the interconnectedness of the African notion of God and the natural environment. In line with this, Chemhuru (2016) contends that the presence and significance of God within African ontology form the cornerstone of African environmental ethics. Chemhuru asserts that the African conception of God should be understood as establishing a spiritual link between humans and nature. This spiritual bond underpins ethical reflections on the environment, necessitating harmonious relationships among all physical and non-physical entities, including God. Such relationships, as Chemhuru suggests, sustain the flourishing of this spiritual connection for the betterment of all life (p. 148).

Africans believe that the cosmos was brought into existence by the divine agency of God, who not only initiated the universe but also endowed it with the requisite components for its perpetual sustenance (Ekeke 2011; Islam and Islam 2015). In African cosmological frameworks, the divine appellation attributed to God underscores His role as the Provider of every essential requirement for His creation's well-being. The collective ethos prevalent across African societies maintains a consensus that God's beneficence extends to providing vital elements such as life, health, rainfall, and other essential requisites (Islam and Islam 2015). The narrative of African myths illustrates God's imaginative ingenuity as the Creator and His profound ability to perpetuate, shield, and guide His handiwork (Ekeke 2011). This intrinsic attribute of safeguarding and nurturing the entirety of His creatures encompasses every facet of the environmental spectrum. A manifestation of these theological tenets materialises within the domain of traditional African cultures, where the observance of environmental ethics serves to regulate human interactions with the natural environment. Such practices have been identified as instrumental endeavours to preserve forests and other invaluable natural resources, propelled by the steadfast conviction in God's status as the cosmic architect (Eneji et al. 2012).

Mgaya (2023) asserts that Africans' reverence for the environment is grounded in the mystical interconnections between the realm of the living and the realm of spirits. From this premise, ecological spirituality emerges as an immediate realisation and encounter with the divine (p. 11). The notion that God created all things strongly permeates African perspectives on the environment (Ekpenyong 2021). Drawing on the context of the Shona religion, Taringa (2006) observed that the traditional African environment is intricately interwoven with the fabric of traditional religious beliefs, a characteristic shared with other aspects of Shona society. The community's creative God and ancestral figures actively endorse the cause of environmental preservation (p. 191). This implies

that God primarily orchestrates safeguarding the environment by allocating responsibilities to subordinate entities (deities and ancestors) (Ekeke and Ekeopara 2010), with humanity occupying a central role in this complex framework. For instance, the inhabitants of Ngombe, as delineated by Islam and Islam (2015, 3), encapsulate this facet of God's divine essence within the encompassing sanctuary of the forest. This reverence is encapsulated in their appellation for God as the "everlasting One of the forest." The eternality of God's existence predates the advent of His creation and transcends the confines of human comprehension, defying the parameters of human knowledge. In African theological paradigms, the expanse of the sky remains beyond the grasp of human endeavour, serving as a symbol of God's elevated domain, far removed from terrestrial existence.

This set of literature underscores how the presence of God within African ontological frameworks influences traditional practices and cultural norms that prioritise the preservation of natural resources, emphasising the divine mandate to safeguard and nurture the environment. Future studies may need to empirically delve further into how the African notion of God as the Creator and Sustainer of the universe shapes specific ethical principles (such as stewardship, respect for nature, and the interdependence of all beings) related to the environment. How these beliefs and principles can motivate adaptive strategies and sustainable solutions (either in traditional rural communities or through conservation policies and initiatives at local, national, and regional levels) to contemporary environmental challenges, such as climate change and biodiversity loss, could also be explored. Future studies may also need to examine how the notion of God in AIR aligns with and complements indigenous knowledge systems (IKS) related to nature, plants, animals, and ecological patterns in African communities.

Ancestral Influence on African Spirituality and Environmental Conservation

African spirituality teems with diverse spiritual entities (Ezenweke, 2008), encompassing original spirits and former humans. Ancestor veneration, an essential facet of African tradition, falls within the latter category (Ige 2006, 26). Africans revere a Supreme Being as the world's ultimate creator, alongside various specialised spirits. Ancestral reverence is one such belief (Ezenweke, 2008). Having fulfilled their earthly purpose, Ancestors transit to the spiritual realm (Pobee 1976, 7). Ugwu (2004) emphasises their dynamic involvement in family fate, upholding traditions and punishing violators (p. 48–49).

Ugwu (2004) outlines prerequisites for ancestral status, including proper funerary rites, honourable death, longevity, marriage, and exemplary ethics (p. 174). Mbiti (1990, p. 25) labels them the "living dead," existing in memory and the spirit world, taking on an immortal existence. Taringa (2006) classifies ancestral spirits as family (medium) and territorial (montero) types aligned with ecological beliefs (p. 198). Family spirits ensure family harmony (p. 199), while territorial spirits safeguard land and fertility. Rituals

sustain this balance (p. 198). Taringa notes that ancestral spirits play a vital ecological role (p. 191) and warns against resource misuse (p. 208).

Tanyanyiwa and Chikwanha (2011) highlighted how Zimbabwe's Shona and Ndebele cultures maintain norms for utilising forest products driven by their cultural heritage (p. 139). Certain plants like Burkea Africana and sclerorya are considered sacred by these tribes due to their role in ancestral communication. Disturbing these plants severs the connection with ancestors, jeopardising the tribe (p. 139). Similarly, Ayaa and Waswa (2016) noted the Teso community's spiritual beliefs, influencing rituals for the living and dead that intersect with environmental conservation (p. 471). Exhuming ancestral remains in ceremonies like Ekutet preserves the connection with ancestors and maintains sacred areas, fostering dense forests as vital habitats (p. 471). Rivers and wetlands are also valued for biodiversity, safeguarded by local laws (p. 471). Springs and aquatic creatures are protected due to their significance in maintaining water sources (p. 417).

Nkama, Okoro, and Egbule (2022) highlighted Ekwema Hill as the dwelling of Owerri's founder's ancestral spirit, where "oru Owerri" celebrations continue continuity (p. 7). They also emphasised the reverence for sacred trees within Imo State, like Iroko, Ogirishi, and Uha, all considered ancestral abodes (p. 7). Iroko trees, especially near shrines, are protected as ancestral residences (p. 7). Adu-Gyamfi (2011) discussed Akan sacred groves, noting their ecological significance alongside religious importance (p. 148). Protected by customary laws and taboos, these groves have become havens for biodiversity (p. 148). Adu-Gyamfi praised Akan ancestors' use of fear and awe to ensure adherence to traditions (p. 147). Taboos also guarded the environment; land, a gift from ancestors and God, could not be entirely sold but only rented, with ancestral notification (p. 148). Adu-Gyamfi highlighted Akan's foresight in separating water sources for different uses to prevent contamination (p. 149). Communities were far from rivers to preserve clean drinking water and deter waterborne diseases (p. 149).

According to Shoko (2022), the Karanga tribe in Zimbabwe dedicates Wednesdays as chisi (holiday) to honour ancestors, failure of which can bring disasters (p. 25–26). Disregarding these taboos results in penalties, like goat offerings to the chief (p. 25–26). The connection between land, chiefs, and ancestors is crucial in Zimbabwe (p. 26). Totemic animals symbolise Karanga ancestry, especially aquatic ones, influencing climate management (p. 27). Adibe, Onyeneke, and Elom (2020) support this, stating that consuming certain animals is prohibited in Igbo communities due to their ancestral significance (p. 111–112).

Soko-de Jong and Maseko (2022) observe how forests serve as more than ecosystems; they are seen as ancestral havens, driving their protection (p. 7–8). This spiritual connection shapes the presence of sacred forests near historic sites or graves (p. 9). The Tonga people of Zambia are environmentally attuned, viewing land and cattle as integral to identity (Siwila 2015, 141). In times of crisis, the community seeks ancestral guidance

(p. 141). Siwila notes the Tonga's reluctance to adopt new seeds due to a lack of ancestral blessing (p. 142). Displacement caused by the Kariba dam led to conflicts due to ancestral ties and sacred locations (p. 141). These sites house the Mizimo ancestors, representing the earth's significance (p. 145).

This body of literature underscores the implications of ancestral influence on African spirituality for research on AIR and nature conservation. The analysis reveals the intricate ways African indigenous religious beliefs, centred on ancestral spirits, guide human conduct and foster a harmonious coexistence with the environment, emphasising the need to consider these spiritual dimensions when addressing nature conservation challenges. Further research could delve deeper into the specific rituals, taboos, and practices stemming from ancestral reverence and their direct environmental impact. Comparative studies across African communities could provide insights into common themes and variations in how ancestral beliefs inform conservation efforts. Additionally, investigating the role of traditional ecological knowledge in these contexts could shed light on innovative approaches to conservation rooted in ancestral wisdom.

Sacred Deities and Environmental Preservation in African Traditional Beliefs

Deities, viewed as supernatural beings with power over human expectations, are revered in various cultures (Benson 2021, 22). AIR embraces polytheism, unlike monotheistic Abrahamic religions (Benson 2021, 22). These deities reflect humanity's origins and desires with a sense of protection and significance. Deities in Africa are perceived through mythological and historical lenses, offering diverse perspectives (Nwachukwu, Alala, and Olua, 2019, 86). These deities also manifest in diverse forms, intricately linked with various objects within disparate communities across the African continent. Predominantly, these entities find their associations with natural elements, a prevailing trend that holds significant implications for environmental preservation on the continent.

For instance, in Ghana, natural elements like mountains and rivers are revered as deities, such as Mount Afajato by Ewes (Benson 2021, 22). Specific activities near these sites are restricted, with violators facing physical and spiritual consequences (Benson 2021, 22). Rivers and lakes are revered as river gods, and these sites are conserved through cultural practices (Benson 2021, 22-23). These practices also contribute to natural resource preservation and species protection (Benson 2021, 23). According to Nkama, Okoro, and Egbule (2022), the "agbondiekweli" woodland in Ozubulu, Nigeria, is revered as the dwelling of the deity Ndiekweli, with monkeys protected within its bounds (p. 6). The "Ala Owerri" temple in Imo State, Nigeria, is surrounded by large trees (p. 6–7). For the Igbo, the four market days are connected to deities, with market square shrines hosting various trees believed to house these deities (p. 7). Fish and alligators in the "dimugo" river are not killed because they are seen as reincarnations

linked to the deity "dimugo" (p. 7). Ogunade (2004) explains that Igbo rituals for yam celebrate gratitude to the earth for its sustenance (p. 182).

Among the Yoruba, worship focuses on deities like "Eleda," "Ifá," "Orisa Ibeji," "Oya," "Osanyin," "Osun," and "Sango" (Babalola 2011, 126). Shrines exist in towns and woodlands, often off-limits to non-adherents and women during specific festivals (p. 127). Babalola emphasises the religious importance of plants like Adansonia digitata and Newbouldia laevis, necessitating protection in their natural habitat (p. 127). The Osun Grove in Osogbo is an example of environmental stewardship due to its sacred status (p. 127). According to Ogunade (2004), Yoruba deities symbolise various aspects of life, including nature, underscoring respect for creation (p. 182). Ogunade also highlights sacred spots like Oke-Ibadan and Olumo Rock, where local beliefs tie these places to deity assistance in historical conflicts (p. 181). Digging the earth in Yoruba culture requires soil approval, as the soil is perceived to have its own life, shaping practices like in Ijebu-Ode (p. 182). Traditional African religion within Yoruba culture, as per Ogunade, is ecologically conscious, promoting reforestation and preservation (p. 182).

Machoko (2013) discusses mermaids in Zimbabwe's rivers, representing a feminine ecological force (p. 289). Like Mwari priests, water spirit mediators learned environmental conservation from mermaids, and these spirits were believed to influence rain and fertility (p. 289). Tsungumi spirits, resembling mermaids, inhabited rivers, offering predictions and seeking offerings for peace and fertility (p. 286). Water spirit mediums had roles in rain-making and ecosystem preservation (p. 286). Mermaid diviners were believed to nurture society and its environment (p. 289). Machoko (2013) noted that mermaids are causing issues in water pipelines and dam construction in Zimbabwe, leading to debates on water spirits' role in environmental conservation. Water Resources Minister Sam Sipepa Nkomo acknowledged mermaid disturbances during dam construction in Osborne Dam and Gokwe, prompting traditional rituals to appease them. This cultural connection to water spirits, according to Machoko, encourages Zimbabweans to care for the environment as they do for humans (2023, 286). Muyambo and Maposa (2014) emphasised that major water projects require tribal chief approval according to Ndau's beliefs. Kubiri, a well under Musikavanhu's leadership among the Ndau, is considered sacred, guarded by a snake, and protected from metal and charcoal clay pots. Following these traditions, safe water is preserved, highlighting Ndau practices for environmental sustainability (2014, 26).

This section underscores the significant intersection between sacred deities and environmental preservation in African traditional beliefs, offering valuable insights for future research on African indigenous religion and nature conservation. The reverence for deities connected to natural elements and sites in various African cultures highlights the role of spiritual beliefs in shaping attitudes towards the environment. Future research could delve into how these sacred beliefs inform local conservation practices, contributing to preserving natural resources and biodiversity. Comparative studies

across different African communities could shed light on the commonalities and variations in how deities are associated with specific ecological features and how these associations influence conservation efforts. Additionally, investigating the role of rituals, taboos, and cultural norms tied to deity worship in promoting sustainable practices could provide a deeper understanding of the links between spirituality and environmental stewardship. Such research could pave the way for more culturally sensitive and effective approaches to nature conservation in African contexts.

Community, Ubuntu and Ecological Harmony

Africans have a strong sense of community and are predominantly communal in orientation, even though some scholars have argued that the sense of communalism is not exclusive to Africans and can be found in various cultures globally during specific historical periods (see Táíwò 2016; Emedo 2023). Most Africans, according to Asante (2014), think of the community as composed of a large number of people, many of whom have died, a few who are living, and an infinite number who are yet to be born. It also includes vertical connections with the divine (Turaki, 2006). Community, to Africans, is manifest through bloodlines, marriages, land, tribes, rituals, and shared experiences (Turaki, 2006). Tarus and Lowery (2017, 321) note that African existence revolves around "community" with a deep sense of belonging (Venter 2004, 149). The concept of ubuntu reinforces this deep sense of belonging. Its origin is traced to the Ngunu languages (e.g., Zulu and Xhosa) and its cognates are found in other languages of the region, such as botho and huhnu (which are from Sotho and Zimbabwe languages, respectively) (Behrens 2010, 467), ubuntu has evolved to become a critical symbol or aspect of African thought and morality. Ubuntu reflects humanness, interdependence, communalism, and concern for others (Mnyaka and Motlhabi, 2005; Venter, 2004). It embodies a state of being that fosters connections and well-being within the community (Mnyaka and Motlhabi, 2005). Ubuntu is best captured in this dictum, "a person is a person through other persons" (Mbiti, 1969; Shutte, 1993; Ramose, 1999; Tutu, 1999; Eze, 2008).

In light of this value placed on human communal relationships, some scholars (e.g., Horsthemke, n.d.; Enslin and Horsthemke, 2004) have argued that African thought and moral orientation are anthropocentric. Behrens (2010, 467) notes that "since the dictum 'a person is a person through other persons' is often used to encapsulate the essence of African morality, at face value, it is easy to understand why this leads to the presumption that African thought is fundamentally anthropocentric". Horsthemke (n.d., pp. 5–6) argues that suggestions that Ubuntu requires respect for the environment are fundamentally flawed since Ubuntu is anthropocentric. Any attempt to expand Ubuntu to embrace respect for the environment would have to ground concern for nature regarding its usefulness to humans. This position is also reinforced by Enslin and Horsthemke (2004), who argue that ubuntu is, by definition, speciesist and, therefore, cannot contribute positively towards addressing environmental problems.

In response, however, Le Grange (2012a) argues that "ubuntu needs to be understood as a microcosm of (or concrete expression of) a broader concept ukama, which means relatedness-relatedness to the entire cosmos" (p.338). For Le Grange, nurturing the self or caring for other human beings is not antagonistic towards caring for non-human nature—ubuntu cannot simply be reduced to a category of anthropocentric (p.335). This position was reiterated by Le Grange (2012b) in another study. Chibvongodze (2016) also asserts that ubuntu is not only about humans but emphasises an intimate relationship between humans and the natural environment. Other scholars (e.g., Bujo, 1998; Murove, 2004; Tangwa, 2004) further argue that African thought in general and ubuntu in particular does not exclude non-human beings in its coverage. Instead, ubuntu recognises the interconnectedness and interdependency of all beings, including non-human beings.

According to certain scholars, this sense of interdependence and interconnectedness necessitates a non-instrumental regard for nature and non-human entities, considering their utility to humans (Behrens, 2010). For instance, Murove (2004) articulates the concept of an indissoluble solidarity between human beings and the natural environment. Similarly, Opoku (1993) advocates maintaining a harmonious relationship with nature, rejecting isolationist tendencies and reducing nature to a mere resource for human satisfaction. This perspective underscores the need for nature preservation. Kelbessa (2005) argues that harmonious coexistence between humans and all other creatures in the natural environment is imperative, emphasising a positive interrelation between individuals, humans, and the natural world. Metz (2010) further elucidates how the intrinsic value of harmonious and communal relationships, including nature, is esteemed for its own sake, transcending utilitarian pursuits and encompassing fundamental moral values.

Mbiti's insights emphasise this interconnection between humans, animals, and plants. For instance, the Akamba and Zulu view cattle, sheep, goats, and humans as originating from the same source, and the Herero of Namibia revere cattle similarly to humans (Mbiti 1969 in Chibvongodze 2016, p. 158). The Dinka people of Southern Sudan even equate cattle to divine blessings, akin to children (Mbiti 1969 in Chibvongodze 2016, p. 158). This interconnectedness extends to snakes, dogs, and cats, which are considered sacred in specific communities (Mbiti, 1969 in Chibvongodze, 2016; Ufearoh and Onebunne, 2020). Galaty (2014) argues that animals symbolise human identity and community, forming a complex web of affinity and contrast (p. 30–31). The study questions why we seek non-human symbols for ourselves (p. 31). Galaty explains this using "totemism," where clans are linked to animals or plants (p. 32–33). Chibvongodze (2016, p. 159) notes that animal clan names in Zimbabwe foster a sense of kinship between humans and animals, protecting species like Eland, Elephant, Leopard, Lion, and more. Zimbabwe's Shona ethnic group, for example, believes in safeguarding animals tied to their clan names (p. 159). Macgonagle (2007) adds support, stating that totems associated with sacred animals forbid their consumption, highlighting a profound

connection between people and animals (p. 55). However, Horsthemke argues, "one's clan's totem animal is another clan's favourite *bush meat*" (2015: 74).

The implications of these perspectives for research are manifold. Firstly, they underscore the critical importance of understanding African cultural and philosophical perspectives on community and interconnectedness, mainly through the lens of Ubuntu. This theme presents a foundation for examining how such values influence human relationships and extend to the relationship between humans and the natural environment. The debate surrounding Ubuntu's potential anthropocentrism and capacity to address environmental concerns presents a fascinating avenue for further investigation, inviting scholars to explore and unpack the nuances of its applicability in modern ecological contexts. Moreover, the various scholars' viewpoints, from those advocating for Ubuntu's expanded understanding to those emphasising its inherent interconnection with non-human beings, provide rich terrain for comparative analysis across different African societies.

Moral Status of Nature in African Thought

The concept of the moral status of nature in African thought refers to the ethical and philosophical consideration of the value, rights, and inherent worth of the natural world, including non-human entities such as animals, plants, ecosystems, and the environment as a whole (see Chemhuru 2016; Molefe and Maraganedzha 2023). It involves examining the relationship between humans and nature and determining whether nature possesses intrinsic value and deserves moral consideration and respect. Some scholars have addressed these questions from different perspectives.

For instance, unlike the Western accounts of moral status, which are often either holist or individualist, with moral status being attributed to either individual beings' intrinsic properties or entire groups, Metz (2011) presents a third perspective, a relational theory of moral status, grounded in sub-Saharan ethical thought, which emphasises the importance of relationships between beings. This relational theory suggests that moral status determines how much a being can be part of a particular communal relationship. The author argues that this relational theory offers a promising alternative to the dominant individualist and holist accounts and can address longstanding philosophical questions about moral status, such as why animals and humans might have different degrees of moral status or why severely mentally incapacitated humans might have greater moral status than animals with similar internal abilities. However, Molefe (2015) rejects Metz's modal-relational theory based on its reliance on human relationships and welfare in determining moral status. Molefe's argument is based on fundamental intuitions in African thought, emphasising the interconnectedness and interdependence of all reality. The author contends that African metaphysics is typically holistic and spiritual, asserting that everything in the African worldview, including humans, animals, plants, and inanimate objects, is interconnected. The central argument is that secular humanism, as represented by scholars like Wiredu, Gyekye, and Metz, fails to

provide a plausible account of why certain actions, such as torturing animals for fun, are morally wrong. The author challenges these humanistic ethical theories, asserting that they do not adequately recognise the moral status of animals or aspects of nature for their own sake, thus not aligning with African metaphysical beliefs. The author ultimately calls for a theory of morality grounded in African metaphysics that grants moral status to animals and aspects of nature independently of their relationship to humans.

Mangena (2013), on the other hand, argues that African thought defines moral status through totemism and spiritualism, emphasising the interconnectedness and relationships between human beings and non-human entities in the environment. The author explores the concepts of totemism and spiritualism in African thought, where totemism signifies a relationship between clans or individuals and specific animals or objects, and spiritualism represents the belief in a material and spiritual world coexisting. The author suggests that these African concepts and the idea of "ukama" (relatedness) can confer moral status to non-human creatures in African societies. This perspective is contrasted with Western anthropocentric views that rely on reason to exclude non-human animals from the moral community. The author contends that totemism, spiritualism, and ukama can form the foundation for an Afro-centred environmental ethics that respects the moral status of non-human entities in Africa's ecological context. Chemhuru (2019) takes a pluralist view in which he argues that within the framework of African ontology-based environmental ethics, non-living beings, such as rocks, soil, water, and the air, possess moral status due to their vitality, aesthetic value, and vital role in sustaining life. Humans are posited to have direct moral duties towards these non-living entities, grounded in their teleological interconnectedness and significance as the habitat of higher spiritual forces. The author contends that recognising the moral status of non-living beings, alongside that of non-human living beings, establishes a solid ethical link between humans and the environment, emphasising the need to safeguard and respect these elements for the more excellent balance and well-being of all beings. This is a similar argument made elsewhere by Chemhuru (2016).

Other scholars argue that non-human living beings ought to be accorded moral status on the basis that they have the vitality or life force (Nnamani, 2005; Izibili, 2005; Bujo, 1998; Bikopo and van Borgaert, 2009) albeit not equal moral status with that of humans due humans' higher vital force (Chemhuru 2016; Molefe 2022); telos (i.e. the purpose of existence) (Ojomo, 2010); their interdependence with humans and their roles in human self-realisation (Bujo, 1998;), relatedness to humans (Murove 2004); their metaphysical connection, inclusion and indivisibility with human community (Tangwa 2004); etc.

These diverse perspectives within the realm of the moral status of nature in African philosophy offer rich avenues for future research. Scholars can delve deeper into the nuances of relational theories like Metz's and explore their applicability in various

cultural and ecological contexts across Africa. Investigating the interplay between totemism, spiritualism, and "ukama" as potential foundations for an Afro-centred environmental ethics can provide a comprehensive understanding of African thought on moral status. Furthermore, the pluralist view championed by Chemhuru opens up possibilities for exploring the moral significance of non-living entities, such as rocks and water, and how they fit into the broader ethical framework. Additionally, investigations into the practical applications of these philosophical perspectives in contemporary African societies and their potential to inform policies for sustainable environmental practices are warranted. Researchers can also delve into the ethical implications of according moral status to non-human entities like mountains and rocks, extending the discourse into uncharted territories within African philosophy.

The Concept of Indigenous Knowledge System

Various scholars have depicted the concept of Indigenous Knowledge Systems (IKS) from diverse angles in academic literature (Ayeni and Aborisade 2022, 156). Whyte (2013, 1) equates indigenous knowledge to traditional Ecological Knowledge, native science, or the legitimate knowledge system of indigenous people. Similarly, Grey (2014, 3229) aligns IKS with aboriginal knowledge, local knowledge, traditional ecological/environmental knowledge (TEK), traditional knowledge, and ethno-ecology. Eyong (2007, 121) defines IKS as the accumulated wisdom and practices of indigenous people over centuries, rooted in experimentation and adaptable to change. Ayaa and Waswa (2016, 468) view IKS as a complex fusion of knowledge and technology shaped by the specific context of indigenous communities in a given area.

For Grey (2014, 3230), IKS embodies expressions, practices, beliefs, and insights developed through extensive interaction between indigenous communities and their environment, enriched by a shared culture. Jenkins and Chapple (2011, 449) emphasise the spiritual and reciprocal bond between people and their surroundings as the core of IKS. Huntington (2000, 1270) sees IKS as insights gleaned from long-term observation, often transmitted through oral tradition or shared among resource users. Warren and Rajasekaran (1993, 9) recognise IKS as locally accumulated knowledge through experience, informal experimentation, and deep environmental awareness. Stevenson (1996, 281), citing the Dene Cultural Institute (1995), characterises IKS as orally transmitted information, including an ecological classification system, empirical observations of the local environment, and a self-regulating resource management mechanism.

IKS is dynamic, adapting to new challenges while drawing from past generations (The World Bank 1998, 5). Contrary to misconceptions, indigenous knowledge is not antiquated but innovative, blending external influences and internal progress (Eyong 2007, 121). While Western science seeks objectivity, indigenous knowledge embraces subjectivity, recognising humans as integral to the whole (World Bank 1998, 5). IKS is highly diverse among cultures, serving as a decision-making framework through

indigenous organisations and fostering local advancements (Warren and Rajasekaran 1993, 9).

Ayaa and Waswa (2016, 468) argue that IKS form the basis for local decision-making across education, human and animal welfare, food security, and especially natural resource management. This aligns with Ayeni and Aborisade (2022, 163), who assert that Indigenous Knowledge, whether African or from other regions, is deeply embedded in culture, making culture's role in indigenous knowledge crucial. IKS is passed down through social connections, oral traditions, rituals, and other practices, conveying knowledge about human history, cosmology, timekeeping, communication methods, agriculture, hunting, ecosystems, tools, and technology. While researchers sometimes overlook IKS due to its spiritual and cultural aspects, understanding it as an evolved ecological relationship requires serious consideration (Jenkins and Chapple 2011, 449).

The Role of Indigenous Knowledge Systems in African Environmental Conservation

Ayaa and Waswa (2016, 468) have observed that local African communities possess extensive knowledge about plants, animals, meteorology, astronomy, pharmacology, and more, often developing their categorisation systems. This understanding, deeply rooted in their traditions, leads to various conservation practices reflected in beliefs and management approaches. Traditions like sacred forests, groves, and ethno-forestry methods highlight their conservation techniques, spanning water, soil, flora, and wildlife. Eyong (2007, 127) also highlights indigenous agricultural practices like shifting cultivation, crop rotation, and mixed cropping, which contribute to wildlife survival. These practices are globally relevant but regrettably waning (Ayaa and Waswa 2016, 467). Like Ayaa and Waswa, Appiah-Opoku also noted that African leaders and lawmakers have privileged inappropriate foreign ideas and techniques over indigenous practices, disregarding centuries of knowledge, norms, and cultural practices (Appiah-Opoku 2006, 205). Facing the failure of Western scientific methods in addressing African environmental problems, Appiah-Opoku advocated for the Indigenous Knowledge System as a solution, encompassing practices rooted in beliefs, taboos, and experience, such as ancestral veneration and the land tenure system (Appiah-Opoku 2006, 210–213). Appiah-Opoku identifies three critical elements within IKS in Africa:

- Deep environmental understanding encompassing flora, fauna, and natural phenomena.

- Adaptive resource utilisation methods, including biotic materials and conservation practices.

- Cultural beliefs, norms, and holistic perspectives complement ecological science (p. 206).

These understandings and practices provide tangible benefits like food and medicine and contribute to environmental services offered by natural ecosystems, with rural women holding valuable indigenous conservation knowledge (Ngara and Mangizvo 2013, 21). By the way, some scholars have particularly emphasised the critical roles African women play as people who possess extensive indigenous health knowledge, especially at the primary healthcare levels (Mji 2019; Phiri and Nadar 2009), indigenous environmental management knowledge relevant to climate change mitigation and adaption as they constitute 80% of the agricultural workforce and contribute 50%-80% of the work in the fields (Sithole and Lekorwe 2019), and indigenous agricultural knowledge relevant for food production and security (Ekobi et al. 2022). This calls for more recognition of the place of women in Africa.

Nevertheless, Ngara and Mangizvo (2013) note that traditional institutions play a crucial role in biodiversity conservation, guided by cultural practices that respect sacred areas and maintain ecological balance. African communities often believe that ancestral spirits reside in natural elements like lands, woods, trees, caves, and water sources (Osemeobo 2001; Kanu (2023). These areas are treated with reverence to prevent disrespect to the spirits and ensure their presence. Cutting trees in sacred locations is restricted and requires permission from the local head priest. Ngara and Mangizvo (2013) illustrated that traditional Ghanaians believe that harming the environment or breaking cultural norms could lead to punishment from their ancestors. Similar practices are observed in Ghana, Ethiopia, Nigeria and Zimbabwe, particularly among the Ashanti, Gedeo, Igbo and Shona, where traditional taboos are used to protect "sacred groves" and maintain cultural values, ultimately leading to better resource management (Chunhabunyatip et al. 2018; Maru et al. 2020). IKS in central Africa has also offered pest control methods, medicinal plants, and preservation techniques for wildlife species (Eyong 2007). Ngara and Mangizvo (2013) suggest integrating these practices into mainstream conservation efforts. Eyong (2007), on the other hand, specifically recommends documenting and promoting IKS through traditional leaders and local information dissemination to ensure its continuity.

Despite arguments favouring indigenous knowledge systems in African environmental conservation, another perspective places Western scientific and indigenous knowledge systems on equal footing. Maweu (2011) argues that diverse worldviews influence how different groups perceive and interact with the environment. Indigenous ecological knowledge, an aspect of broader Indigenous knowledge, contributes significantly to scientific advancements and globalisation. Maweu emphasises that both knowledge systems share intrinsic similarities and should not be judged solely based on opposing worldviews (p. 35-36).

This section underscores the multifaceted implications for research in indigenous knowledge systems and African environmental conservation. Firstly, it highlights the urgent need for further research to document and preserve the rich indigenous knowledge held by African communities, especially as these practices are facing a

decline. Additionally, the section emphasises the importance of recognising and integrating the roles of African women in conservation and healthcare, offering a valuable avenue for gender-focused research in the context of indigenous knowledge systems. Moreover, the role of traditional institutions and cultural beliefs in biodiversity conservation suggests opportunities for interdisciplinary research that combines anthropology, ecology, and cultural studies. Furthermore, the call to integrate indigenous practices into mainstream conservation efforts and promote these practices through traditional leaders and local information dissemination opens up avenues for action-oriented research and policy development. Finally, the perspective that places Western scientific and indigenous knowledge systems on equal footing encourages research that explores the complementary aspects of these knowledge systems, fostering a more inclusive and holistic approach to environmental research in Africa.

Conclusion

This article has delved into the multifaceted relationship between AIR and the natural environment, shedding light on the complex interplay of beliefs, values, and practices that shape this connection. AIR, conceptualised in singular form, encompasses various indigenous belief systems deeply rooted in African cultures and traditions. The article underscores the intrinsic connection between AIR and the environment, highlighting how religion is intertwined with the natural world through rituals, myths, songs, dances, and everyday practices. While often considered in contradistinction to foreign religions, this religion wields a profound influence on transnational and missionary faiths, challenging the notion of its passive existence. Instead, AIR is dynamic, exerting enduring influence over its adherents' lives, rituals, and traditions, firmly entwined with their environment and social fabric.

The article mainly showcases the evolving discourse surrounding AIR's ecological and environmental significance. At the same time, scholars have recognised the nature-friendly aspects of AIR and its potential contributions to environmental conservation, but debates persist, with some scholars challenging these claims. The interconnectedness of AIR with African ontology, metaphysics, and worldviews underscores the profound impact of the belief system on how communities in Africa perceive and interact with their environments. As global environmental challenges continue to mount, the insights provided by this article serve as a foundation for more profound research into the complex dynamics of AIR and its role in shaping ethical considerations, sustainable practices, and environmental stewardship in Africa.

References

Adamo, D. T. 2011. "Christianity and the African Traditional Religion(S): The Postcolonial Round of Engagement." *Verbum et Ecclesia*, 32 (1): 1–10. https://doi.org/10.4102/ve.v32i1.285

Aderibigbe, I. S. 2015. "Religious Traditions in Africa: An Overview of Origins, Basic Beliefs, and Practices." In: Aderibigbe, I.S., Medine, C.M.J. (eds) *Contemporary Perspectives on Religions in Africa and the African Diaspora*. New York: Palgrave Macmillan. https://doi.org/10.1057/9781137498052_2

Adibe, R. O. C. E., Onyeneke, R. D. A. A. and Elom, T. E. 2020. "Ecological Sustainability and the Decline of Religious Practice in Igbo Land (Atr in Focus)." *Sapientia Foundation Journal of Education, Sciences And Gender Studies*, *2* (3): 109–114.

Adu-Gyamfi, Y. 2011. "Indigenous beliefs and practices in ecosystem conservation: Response of the church: Church and environment." *Scriptura: Journal for Contextual Hermeneutics in Southern Africa*, 107 (1): 145–155. https://doi.org/10.7833/107-0-132

Asante, P. A. H. 2014. "The African Concept of Community and Individual in the Context of the Market" in Daniel Finn (ed.), *Distant Markets, Distant Harms: Economic Complicity and Christian Ethics*. New York: Oxford Academic. Online edition. https://doi.org/10.1093/acprof:oso/9780199370993.003.0008

Aso, W. O. and Saladin, U. 2018. "An Appraisal of the 'Why' and the 'How' of African Ontology." *Ekpoma Review*, *5* (1): 120–134.

Awolalu, J. O. 1976. "Sin and its Remissions in African Traditional Religion. Journal of the American Academy of Religion." *Orita: Ibadan Journal of Religious Studies,* 10 (1): 3–23.

Behren, K. 2010. "Exploring African Holism with Respect to the Environment." *Environmental Values*, 19: 465–484. https://doi.org/10.3197/096327110X531561

Benson, G. H. 2021. "African Traditional Religion and Natural Resource Management: The Role of Totems and Deity Worship in Ghana." *American Journal of Environment Studies*, 4 (1): 13–37. https://doi.org/10.47672/ajes.652

Bhengu, M. 1996. *Ubuntu: The Essence of Democracy*. Cape Town: Novalis Press.

Bikopo, B. and van Bogaert, L. 2009. "Reflection on Euthanasia: Western and African Ntomba Perspectives on the Death of a Chief." *Developing World Bioethics,* 10: 42–48. https://doi.org/10.1111/j.1471-8847.2009.00255.x

Bourdillon, M. 1976. *The Shona Peoples.* Gweru: Mambo Press.

Bujo, B. 1998. *The Ethical Dimension of Community: The African Model and the Dialogue between North and South. (Trans. Cecilia N. Nganda.)* Nairobi: Paulines Publishing Company.

Bujo, B. 2009. "Is There a Specific African Ethic? Towards a Discussion with Western Thought." In Munyaradzi. F. Murove (Ed.) *African Ethics: An Anthology of Comparative and Applied Ethics*. Pietermaritzburg: University of KwaZulu-Natal Press, 113–128.

Callicott, J. B. (Ed.) 1999. *Beyond the Land Ethic: More Essays in Environmental Philosophy*. Albany, NY: State University of New York.

Chemhuru, M. 2019. "The Moral Status of Nature: An African Understanding." In: Chemhuru, M. (eds) "African Environmental Ethics." *The International Library of Environmental, Agricultural and Food Ethics,* 29. Springer, Cham. https://doi.org/10.1007/978-3-030-18807-8_3

Chibvongodze, D. T. 2016. "Ubuntu is Not Only about the Human! An Analysis of the Role of African Philosophy and Ethics in Environment Management." *Journal of Human Ecology*, 53:2, 157–166. https://doi.org/10.1080/09709274.2016.11906968

Chiorazzi, A. 2015. "The Spirituality of Africa." The Harvard Gazette. Accessed 27 August 2023. https://news.harvard.edu/gazette/story/2015/10/the-spirituality-of-africa/

Christensen, C. 2017. "Indigenous Feature Film: A Pathway for Indigenous Religion?" *Handbook of Indigenous Religion (s)*: 92–107. Brill. https://doi.org/10.1163/9789004346710_006

Cox, J. L. 2017. "Global Intentions and Local Conflicts: The Rise and Fall of Ambuya Juliana in Zimbabwe." *Handbook of Indigenous Religion (s):* 366–377. Brill. https://doi.org/10.1163/9789004346710_023

Dagba, B. I., Sambe, L. N, and Shomkegh S. A. 2013. "Totemic Beliefs and Biodiversity Conservation among the Tiv People of Benue State, Nigeria." *Journal of Natural Sciences Research*, 3 (8): 145–149.

Ekeh, G. 2020. "African Ontology as a Basis for African Existential Practices: Implications for African Education." *Journal of Education and Human Development*, 9 (3): 88–92. https://doi.org/10.15640/jehd.v9n3a9

Ekobi, G., Mboh, L., and Tanga, P. 2022. "Women's Contribution to Indigenous Knowledge Food Security in the Lokaleng village, North West Province, South Africa." *African Journal of Gender, Society and Development*, 11 (3), https://hdl.handle.net/10520/ejc-aa_jgida1_v11_n3_a7 https://doi.org/10.31920/2634-3622/2022/v11n3a7

Emedo, J. N. 2023. "A Critical Discourse on African Communalism Vis-A-Vis Western Individualism: The Existential Realities." SSRN. https://ssrn.com/abstract=4424478 or http://dx.doi.org/10.2139/ssrn.4424478 https://doi.org/10.2139/ssrn.4424478

Eneji, C. V. O., Ntamu, G. U., Unwanade, C. C., Godwin, A. B., Bassey, J. E., and Joseph, I. 2012. "Traditional African Religion in Natural Resources Conservation and Management in Cross River State, Nigeria." *Environment and National Resource Research*, 2 (4): 45–53. https://doi.org/10.5539/enrr.v2n4p45

Enslin, P., and Horsthemke, K. 2004. "Can Ubuntu Provide a Model for Citizenship Education in African Democracies?" *Comparative Education* 40 (4): 545–58. https://doi.org/10.1080/0305006042000284538

Eze, M. 2008. "What is African Communitarianism?" *South African Journal of Philosophy* 27: 386–399. https://doi.org/10.4314/sajpem.v27i4.31526

Ezechi, J. C. 2011. *The Dead Are Never Gone: Odo Masquerade and Contemporary Realities*. Enugu: Monrovia Street, New Haven

Falola, T. 2022. "African Traditional Religion and Indigenous Knowledge System." In: Aderibigbe, I.S., Falola, T. (eds) *The Palgrave Handbook of African Traditional Religion*. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-89500-6_39

Galgut, E. 2017. "Animal Rights and African Ethnics: Congruence or Conflict?" *Journal of Animal Ethics*, 7 (2): 175–182. https://doi.org/10.5406/janimalethics.7.2.0175

Guarino, N., Oberle, D. and Staab, S. 2009. "What is an Ontology?" *Handbook on Ontologies*: 1–17. https://doi.org/10.1007/978-3-540-92673-3_0

Horsthemke, K. 2015. *Animals and African Ethics*. New York: Palgrave-MacMillan. https://doi.org/10.1057/9781137504050

Horsthemke, K. n.d. *Animals, Ubuntu and environmental justice in South Africa*. Unpublished paper.

Idowu, B., 1962. *Olodumare God in Yoruba Belief*. Lagos: Longmans of Nigerian Ltd.

Ignacimuthu, S. 2010. *Environmental Spirituality*. Bombay: St. Paul Society.

Ikeke, M. O. 2015. "The Ecological Crisis and the Principle of Relationality in African Philosophy." *Philosophy Study*, 5 (4): 179–186. https://doi.org/10.17265/2159-5313/2015.04.001

Islam, S. and Islam, M. D. 2015. "African Traditional Concept of God: A Critical Analysis" *Green University Review of Social Sciences*, 2 (1): 1–18.

Izibili, M. A. 2005. "Environmental Ethics: An Urgent Imperative." In Pantaleon O. Iroegbu and Anthony O. Echekwube (Eds.) *Kpim of Morality. Ethics: General, Special and Professional*. Ibadan: Heinemann Educational Books: 383–390.

Jimoh, S. O., Ikyaagba, E. T., Alarape, A. A., Obioha, E. E., and Adeyemi, A. A. 2017. "The Role of Traditional Laws and Taboos in Wildlife Conservation in the Oban Hill Sector of Cross River National Park (CRNC), Nigeria." *Journal of Human Ecology*, 39 (3): 209–219. https://doi.org/10.1080/09709274.2012.11906513

Kanu, I. A. and Ndubis, E. J. O. 2021. "On The Concept of Creation in African Ontology." *Ogirisi: A New Journal of African Studies*, 17: 199–212.

Kebessa, W. 2005. "The Rehabilitation of Indigenous Environmental Ethics in Africa." *Diogenes*, 52 (3): 17–34. https://doi.org/10.1177/0392192105055167

Kelbessa, W. 2005. "The Rehabilitation of Indigenous Environmental Ethics in Africa." *Diogenes* 53: 17–34. https://doi.org/10.1177/0392192105055167

Kraft, S. E. 2017. "UN-Discourses on Indigenous Religion." *Handbook of indigenous religion (s)*: 80–91. Brill. https://doi.org/10.1163/9789004346710_005

Le Grange, L. 2012a. "Ubuntu, Ukama, Environment and Moral Education." *Journal of Moral Education*, 41: 3, 329–340. https://doi.org/10.1080/03057240.2012.691631

Le Grange, L. 2012b. "Ubuntu, Ukama and the Healing of Nature, Self and Society." *Educational Philosophy and Theory*, 44 (2): 56–67. https://doi.org/10.1111/j.1469-5812.2011.00795.x

Mandillah, K. L., and Ekosse, G.-I. 2018. "African Totems: Cultural Heritage for Sustainable Environmental Conservation." *Conservation Science in Cultural Heritage*, 18 (1): 201–218. https://doi.org/10.6092/issn.1973-9494/9235

Mangena, F. 2013. "Discerning Moral Status in the African Environment." *Phronimon*, 14 (2): 25–44.

Mbiti, J. S. 1969. *African Religion and Philosophy*. London: Heinemann Educational Publishers.

Mertz, T. 2017. "How to Ground Animal Rights on African Values: Reply to Horsthemke." *Journal of Animal Ethics*, 7 (2): 163–174. https://doi.org/10.5406/janimalethics.7.2.0163

Metz, T. 2012. "An African Theory of Moral Status: A Relational Alternative to Individualism and Holism." *Ethical Theory and Moral Practice*, 15 (3): 387–402. https://doi.org/10.1007/s10677-011-9302-y

Metz, T. 2010. "African and Western moral theories in a bioethical context." *Developing World Bioethics*, 10: 49–58. https://doi.org/10.1111/j.1471-8847.2009.00273.x

Mji, G. 2019. "Women as Healers and Indigenous Knowledge Systems and its Holders: An Intertwined Epistemological and Ontological Struggle for Recognition." In: Mji G, editor. "The Walk Without Limbs: Searching for Indigenous Health Knowledge in a Rural Context in South Africa [Internet]." Cape Town (ZA): AOSIS; Chapter 3. Available from: https://www.ncbi.nlm.nih.gov/books/NBK559870/ https://doi.org/10.4102/aosis.2019.BK98.03

Molefe, M. 2022. *Human Dignity in African Philosophy: A Very Short Introduction.* Cham: Springer. https://doi.org/10.1007/978-3-030-93217-6

Molefe, M. and Maraganedzha, M. 2023. "African Traditional Religion and Moral Philosophy." *Religious Studies*, 59: 355–370. https://doi.org/10.1017/S0034412522000543

Molefe, M. 2015. "A Rejection of Humanism in African Moral Tradition." *Theoria*, (issue 143) 62 (2): 59–77. https://doi.org/10.3167/th.2015.6214304

Murove, M. 2004. "An African Commitment to Ecological Conservation: The Shona Concepts of Ukama and Ubuntu." *Mankind Quarterly XLV*: 195–215. https://doi.org/10.46469/mq.2004.45.2.3

Murove, M. F. 2009. "An African Environmental Ethic Based on the Concepts of Ukama and Ubuntu." In M. F. Murove (Ed.), *African Ethics: An Anthology of Comparative and Applied Ethics*. Pietermaritzburg: University of Kwazulu-Natal Press.

Nasr, S. H. 1967. *Man and Nature: The Spiritual Crisis in Modern Man*. Kazi Publishers: 151.

Nche, G. C. 2014. "The Impact of Climate Change on African Traditional Religious Practices." *Journal of Earth Science and Climatic Change*, 5 (7): 1–5.

Nche, G. C. 2020. "Beyond Spiritual Focus: Climate Change Awareness, Role Perception and Action Among Church Leaders in Nigeria." *Weather Climate and Society*, 12 (1): 149–169. https://doi.org/10.1175/WCAS-D-19-0001.1

Nkama, C. L., Okoro K.N. and Egbule, E. 2022. "Eco-Preservation through the Lens of Igbo Beliefs and Practices: A Re-Imagination. Re-imagination." *Religions* 13: 1066. https://doi.org/10.3390/rel13111066

Nnamani, A. G. 2005. "Ethics of the Environment." In Pantaleon O. Iroegbu and Anthony O. Echekwube (Eds.) *Kpim of Morality. Ethics: General, Special and Professional*. Ibadan: Heinemann Educational Books: 391–400.

Nwachukwu, M. D., Alala, I. M. and Olua, N. E. 2019. "Alternative to Dispute Resolution: Ṣàngó and Amadioha and the Nigerian Criminal Justice System." *AFRREV IJAH: an International Journal of Arts and Humanities*, 8 (3): 84–95. https://doi.org/10.4314/ijah.v8i3.8

Oborji, F. A. 2005. *Towards a Christian Theology of African Religion: Issues of Interpretation and Mission*. Eldoret Amecea Garba Publication.

Oborji, F. A. 2019. "A Tribute to Mbiti, Father of Theology of African Religion." The Cable. Accessed 27 August 2023. https://www.thecable.ng/a-tribute-to-mbiti-father-of-theology-of-african-religion#:~:text=Consequently%2C%20in%20lectures%20and%20other,%E2%80%9D%20(xiii%2C%201989).

Odozor, P. I. 2019. "The Essence of African Traditional Religion." Church Life Journal. University of Notre Dame. Accessed 28 August 2023. https://churchlifejournal.nd.edu/articles/the-essence-of-african-traditional-religion/

Ogunade, R. 2004. "Environmental Issues in Yoruba Religion? Implications for Leadership and Society in Nigeria." UNILORIN Institutional Repository. Accessed 28 August 2023. https://uilspace.unilorin.edu.ng/handle/20.500.12484/3055?show=full

Oguntola-Laguda, D. 2014. *African Traditional Religion. Encyclopedia of Psychology and Religion Second Edition*. Spring New York Heidelberg Dordrecht London. https://doi.org/10.1007/978-1-4614-6086-2_9120

Ojomo, P. A. 2010. "An African Understanding of Environmental Ethics." *Thought and Practice: A Journal of the Philosophical Association of Kenya*, 2 (2): 49–63. https://doi.org/10.4314/tp.v2i2.64100

Oladipo, O. 2004. "Religion in African Culture: Some Conceptual Issues." In Kwasi Wiredu (Ed.) *A Companion to African Philosophy*. Malden: Blackwell: 355–363. https://doi.org/10.1111/b.9781405145671.2005.00029.x

Onah, G. n.d.. "The Meaning of Peace in African Traditional Religion and Culture." Afrika World. Accessed 25 August 2023. http://www.afrikaworld Jiet/afrel/goddionahJitm

Opoku, K. 1993. "African Traditional Religion: An Enduring Heritage." In J. Olupona and S. Nyang (eds.), *Religious Plurality in Africa*. Berlin: Mouton de Gruyter.

Phiri, I. A., and Nadar, S. 2009. "'Going through the Fire with Eyes Wide Open': African Women's Perspectives on Indigenous Knowledge, Patriarchy and Sexuality." *Journal for the Study of Religion*, 22 (2): 5–21. http://www.jstor.org/stable/24764316 https://doi.org/10.4314/jsr.v22i2.50581

Posas, P. J. 2007. "Roles of Religion and Ethics in Addressing Climate Change." *Ethics Sci. Environ. Polit.*, 9: 31–49. https://doi.org/ 10.3354/esep007031

Ramose, M. 1999. *African Philosophy through Ubuntu*. Harare: Mond Press.

Shoko, T. 2022. "African Traditional Religion and Climate Change: Perspectives from Zimbabwe." In *African Perspectives on Religion and Climate Change*. Routledge: 22–33. https://doi.org/10.4324/9781003147909-2

Shutte, A. 1993. *Philosophy for Africa*. Rondebosch: UCT Press.

Sithole, A., and Lekorwe, M. 2019. "Women's Use of Indigenous Knowledge Systems to Cope with Climate Change." *Advances in Social Sciences Research Journal*, 6 (6): 111–119. https://doi.org/10.14738/assrj.66.6470

Siwila, L.C. 2015. "An Encroachment of Ecological Sacred Sites and its Threat to the Interconnectedness of Sacred Rituals: A Case Study of the Tonga People in the Gwembe Valley." *Journal for the Study of Religion*, 28 (2): 138–153.

Soko-de Jong, T. and Maseko, X. 2022. "African Traditional Religion: Reclaiming the Sustainable Anthropocene." *ASEAN Journal of Religious and Cultural Research*, 5 (1): 6–10.

Storrow, B. 2018. "Global CO2 Emissions Rise After Paris Climate Agreement Signed." Scientific American. Accessed 7 August 2023. https://www.scientificamerican.com/article/global-co2-emissionsrise-after-paris-climate-agreement-signed/.

Tafjord, B. O. 2013. "Indigenous Religion(s) as an Analytical Category." *Method & Theory in the Study of Religion*, 25 (3): 221–243. https://doi.org/10.1163/15700682-12341258

Táíwò, O. 2016. "Against African Communalism." *Journal of French and Francophone Philosophy*, 24 (1): 81–100. https://doi.org/10.5195/jffp.2016.759

Tanyanyiwa, V. I. and Chikwanha, M. 2011. "The Role of Indigenous Knowledge Systems in the Management of Forest Resources in Mugabe Area, Masvingo, Zimbabwe." *Journal of Sustainable Development in Africa*, 13 (3): 132–149.

Taringa, N. 2006. "How Environmental is African Traditional Religion?" *Exchange,* 32 (2): 191–214. https://doi.org/10.1163/157254306776525672

Tarusarira, J. 2017. "African Religion, Climate Change, and Knowledge Systems." *The Ecumenical Review*, 69 (3): 398–410. https://doi.org/10.1111/erev.12302

Taylor, R. B. 2010. "Dark Green Religion: Nature Spirituality and the Planetary Future." *University of California Press*: 360. https://doi.org/10.1525/9780520944459

Tutu, D. 1999. *No Future Without Forgiveness*. New York: Random House. https://doi.org/10.1111/j.1540-5842.1999.tb00012.x

Ushe, U.M. 2017. "God, Divinities and Ancestors in African Traditional Religious Thought." *Igwebuike: An African Journal of Arts and Humanities*, 3 (4): 154–179.

van Beek, W. E. A. 2020. "AIRs. African History." Oxford University Press. Accessed 27 August 2023. https://oxfordre.com/africanhistory/display/10.1093/acrefore/9780190277734.001.0001/acrefore-9780190277734-e-661

White, L. 1967. "The Historical Roots of Our Ecologic Crisis." *Science*, 155 (3767): 1203–1207. https://doi.org/10.1126/science.155.3767.1203