Stellenbosch Theological Journal 2022, Vol 8, No 1, 1–28 DOI: http://dx.doi.org/10.17570/stj.2022.v8n1.a8 Online ISSN 2226-2385 | Print ISSN 0028-2006 2022 © The Author(s)

Sustainable eco-theology for African churches: Imagining a home-grown hermeneutics of sustainability

Kivatsi Jonathan Kavusa

University of Pretoria, South Africa Alexander von Humboldt Researcher, Humboldt University Berlin, Germany jokakiv@yahoo.fr https://orcid.org/0000-0001-8887-8843

Abstract

The article reflects on how African Christianity can attempt home-grown solutions for sustainable life in Africa. John Mbiti alleged that missionaries established a Christianity that befits European worldviews and despised African traditional values. Missions, though they brought the Gospel together with literacy and medicine, made westernization the way of human "advancement." Locals came to believe that "progress" consists not in being themselves, but in imitating foreign ways. It impaired the hermeneutical abilities of Africans to understand the world through their own cultural systems. Today this impairment prevents the concept of connectedness of life to unfold in African life, churches, and politics. Just as their evangelisers, the converted African Christians relate with the earth in the mood of *subject* (humans) versus *objects* (nature). This article construes African moral dimension of nature, the sense of community (Ubuntu) and the cosmological role of kingship as vehicle for Christian hermeneutics of sustainability in Africa and African churches.

Key words

Hermeneutics of sustainability; eco-theology; African worldviews; African Churches

1. Introduction

John Mbiti alleged that missionaries established a Christianity that befits the interests of Europeans (Mbiti 1985:234). Intermingled with the colonisation project and the dualistic conception of the world in terms of spirit and matter, Christianity preached that the earth is a foreign land full of trials and temptations for the divine human soul, which is its moral antipode (Hiebert 1996:16). Consequently, Africans believed that they are lonely exiles living in a strange and hostile world, alien to their physical environment and their own bodies, both of which they are told to conquer (Maluleke 2020:14).

The dichotomised worldview seriously undermined the impact of Christianity in Africa. The practical result is that African Christians continue to act as if faith and life issues must be kept in two unrelated compartments. In this way, Christianity is fast growing in Africa simultaneously with issues of poverty and unethical behaviours. For instance, the Democratic Republic of the Congo is one of the most corrupt nations (Fessy 2021) in the world even though its population is 95.8% Christian, and its leaders are fervent members of Roman Catholic, protestant, and revival churches (Office of International Religious Freedom 2021:2).

The separation of the world between spiritual and secular hinders the quality of Christian life and involvement against issues that affect the society. Ernst Conradie remarked that, "in many contexts Christians are not environmental activists and environmental activists are not Christians" (Conradie 2011:158). Thus, early voices about ecological crisis came not from churches or religious bodies but from scientists who have played the role of *prophets* in the face of dormant churches. An example is the historian Lynn White alleging that Western Christianity has "made it possible to exploit nature in a mood of indifference to the feelings of natural objects" (White 1967:1205).

At the time of Lynn White, Christians were still busy with an emotional and spiritualistic Christianity. Heaven became more important than the earth and personal salvation in Christ more important than the redemption of God's creation (Conradie 2011:159). However, individual salvation is foreign from African worldviews in which humans are saved through the salvation of the whole community. The Nguni maxim "Umuntu Ngumuntu Ngabantu" (a person is a person through others) construes personal identity as wrapped up in his/her community and relationships with others (Mbiti 1985:108).

In informal meeting in Kinande (my mother tongue), people greet with the interrogative "kuthi!" (is there anything!) or "nina buholo!" (are you at peace!). Greeting is not first about the individual, but the community. The reply would be "iyehe" (no problem) or "nibuholo" (we are at peace!) or "sibuholo" (we are not at peace). Then we would spend time analysing the content of the response "nibuholo" or "sibuholo" by talking about the issues of the community. This means talking about our families, our neighbours, our lands, our animals, our crops, our sources of water, our seasons, etc. Note the possessive pronoun "our", which denotes "community belongingness". Then, after talking about these, we would introduce ourselves.

However, the dualistic worldview that came with European Christianity impaired this view of life. Missionaries' churches preached and still preach forests, rivers and animals are not part of human community, but are mere *objects*. The Christian religion was presented as the conqueror of the so-called African *paganism* and *primitive* beliefs (Tempels 1959:19). In Rwanda, for instance, the colonial literature shows how Cardinal Lavigerie repeated to Missionary societies the necessity of Christianity triumphing over traditional systems, otherwise the "Negroes would not understand the civilization which is its offspring" (Administration-Rapport 1972:48). However, although about 96.3% Rwandans were Christians (Sousa 2017), the 1994 genocide of the Tutsi showed the necessity to re-think Christianity in Rwanda (Gatwa 2000).

Paul Ricœur argued that the survival of any society depends on its regular re-affirmation in its traditions at the same time as it learns from other worldviews (Ricoeur 1961:452). In this way, to get rid of the *alienation* of the Middle Age, the Renaissance area in Europe (14-17 centuries) critically promoted the *re-discovery* of European classical (traditional) philosophy, literature, and art to trigger modern European cultural, artistic, scientific, political, and economic *re-birth* (History.com Editors 2018). Europe critically *learnt* from its *traditions* to pave the way for the Enlightenment movement of the 18th century and the contemporary development of Europe (Diop 1989:24).

Likewise, Ancient Israel always re-read and re-interpreted its traditions to cope with multiple challenges of the community (de Pury 2009:103). This endeavour consists not of being fanatical about the traditions or romanticising them, but critically re-discovering, re-inventing as well as retrieving their wisdom for today without being anachronistic. Africa needs to learn from the approach of ancient Israel and European Renaissance to trigger its proper sustainable ways of growth in all sectors of life, including churches.

Hillman provided a notable analysis about the source of African struggles to develop its hermeneutics that would sustainably address African issues, including the ecological crisis on the African soil:

... the colonial processes invariably undermined the systems, values, and views of entire cultural worlds. Stripped naked and taught, in schools and churches, to be ashamed of themselves, their "primitive" and "pagan" way, the people were coerced, morally as well as physically, into clothing themselves with the ways of the invading culture. The colonial incursions, although they brought literacy and antibiotics, made westernization the way of human "advancement." *Many people came to believe the "progress" consists not in being themselves, but in imitating foreign ways*¹ (Hillman 1993:5).

Imitation without *contextualisation* is one of the issues hindering the development of the continent. Thus, until now, many Christians and church leaders still fail to articulate how our faith should affect people's daily life. Many African institutes of theology merely reproduce Western *ways* of reading the Bible and fail to invent hermeneutics that fit with African contexts. It is as if hermeneutics is a certain *pre-defined* way of reading and interpreting the Bible. African churches still experience what John Mbiti called "theological impotence" or "carbon-copy theology" consisting of the difficulty of conveying adequately theology in the African cultural and contextual realities (Mbiti 1972:57).

There is a great need to de-colonize African churches' hermeneutics in order to address sustainably socio-ecological issues of the continent. This article attempts an ecological hermeneutics that is both African and biblical. The question is to what extent African churches can benefit from hermeneutics that make use of traditional African knowledge (cultural, social, ecological, and political wisdom) as a medium for Christian ecological witness in Africa. I first focus on the challenges posed by existing hermeneutics before proposing what I deem would serve better African churches in their ecological witness in Africa.

¹ The italic is the author's emphasis

2. Early eco-theological initiatives

Early eco-African voices were mere imitation of Western hermeneutics. African scholars adopted either a reading of recovery (or apologetic reading), a resisting hermeneutics of the Earth Bible project and eco-feminists, denial hermeneutics of anti-ecologists or the revisionist hermeneutics. For details about these reading approaches, see my 2019 article (Kavusa 2019). I will try to summarise them in a few paragraphs.

In his recovery reading, the South African scholar James Loader defended the Bible that "it is wrong to blame biblical faith for this [ecological crisis] ... neither Christian faith itself nor biblical faith, but the interpretations and emphases of modern Christianity, are to blame" (Loader 1987:9). Put differently, the problems lie, not in the texts themselves, but in the traditions of their later interpretation. The reading intention focuses on defending the Bible rather than connecting the Bible with people's realities. Thus, in their over-eagerness to find something positive in the Bible about nature, many eco-theologians have resorted sorts of cherry picking to accommodate their apologetic ideal (van Dyk 2017:835).

Other scholars adopted Habel and the Earth Bible Series' hermeneutics consisting of resisting biblical texts, which are deemed ecologically grey, devaluing the earth and its members (Habel 2009). The readers identify the values of the earth, which the anthropocentric texts and readers always obscured or ignored. This geo-centric approach gives prominence to a contemporary crisis over the crisis of the text and ends up condemning or justifying one worldview over and against the other. Van Heerden was very critical about this way of doing eco-theology, which does not do equal justice to ancient texts (the Bible) and modern issues (van Heerden 2005:391).

In his criticism, Van Dyk condemned the geo-centric perspectives of Habel calling it a kind of neo-paganism giving voice to the earth and its inhabitants as if they are endowed with spirits. For this South African theologian, the Bible "has very little (if anything) to say on ecological and conservation matters" (van Dyk 2017:835)

Other interpreters, mainly the fundamentalist evangelicals, operate in a denial approach basing their positions on various biblical texts announcing

the future cosmic destruction, which will occur on the coming day of God's judgement. Thus, working to preserve the earth implies working against God's plans. This belief also reinforces Christian hope on the rescuing of the elect from a hostile earth towards a new heaven and a new earth (Rev 13) (Horrell 2010a:16).

Although this position is not well represented in academics, it is well established among African Christians, especially those who received the Gospels from the Fundamentalists. One day after Sunday service, I talked with a born-again fellow Church member about the ecological responsibility of the church and he replied in Kiswahili: "*mchungaji, kwetu ni mbinguni, dunia hii itagunjwa kama mukeka mbele Kristo arudi*" (pastor, our home is in heaven; this earth will be rolled up like a carpet before the return of Christ). His response shares the ideal of the well-known six denial "Biblicist eschatological principles" (Horrell 2010a:18) below:

- 1. The principle of imminent cataclysm: Earth is headed for disaster which will happen sooner rather than later.
- 2. The principle of disconnectedness: we humans do not have to share or feel responsible for Earth's fate. Salvation is for humans, not for Earth.
- 3. The principle of inevitability: there is nothing we (humans or Earth) can do about it.
- 4. The principle of transcendence: what really matters is the next world. This world is ephemeral and ultimately unimportant compared to the better future existence.
- 5. The principle of sovereignty: God is in ultimate (even direct) control of all this.
- 6. The principle of self-interest: God will rapture 'believers' out of this mess at the End.

With this belief in mind, Christians would passively accept ecological disasters knowing that it is God's plan. From then, I realised the urgency of African churches to imagine ecological hermeneutics that would sustainably awake African Christians on ecological matters. Ademiluka tried to retrieve the Leviticus traditions of clean and unclean as ways to address modern environmental sanitation aspects of infectious diseases

(Ademiluka 2009:529). His reading is too over-simplistic trying to fit the Bible with African traditions. This kind of approach might "end up seeing things in the text that we want (and need) to see, but things which are not really there" (Meyer 2011:144).

Therefore, the South African theologian Van Heerden suggested a textcentric approach in which the Bible, not interpretative constructs, is the main locus (van Heerden 2017:129). For him, the act of textual interpretation must involve three relationships to a text, namely 1) a situational problem moves the reader to consult the Bible; 2) the reader experiences the text itself as problematic; 3) the text itself offers a response to a problem situation. Van Heerden said many readers limit themselves to the first two, and that is why they end up in defending (e.g. readings of recovery) or resisting (e.g. The Earth Bible series) the text (van Heerden 2014:563).

Still, a sole text-oriented approach would offer no clues on how the cultural worldview of the contemporary reader could help him interacting with text. In this way, Masenya proposed an eco-bosadi reading consisting of ecological reading of the Bible from an African woman reality (Masenya 2001:110). *Mosadi* means woman or Motherhood in the northern Sotho language. The implication of *mosadi* is different from pure feminism from the West, which cannot successfully address issues of women in African context.

Using an eco-*bosadi* hermeneutics to interpret the patriarchal text of Psalm 127:3-5, Masenya ambitioned the liberation of African women from cultural views considering African women as reproduction machines of children. Assessing Psalm 127:5 (*Blessed is the man whose house is full of children*), Masenya argues that both African Mothers and nature suffer a common abuse/exploitation from patriarchal drive for reproduction (Masenya 2001:222).

Masenya's analysis is very inspiring for doing eco-theology in Africa, even though Psalm 127 has no textual clues about nature. In this way, this article is convinced that an ecological hermeneutics can be fruitful by way of a cosmological appraisal of the Bible within the broader context of Gadamer's idea of the *fusion of horizons (Horizontverschmelzung)*: the horizon *behind* the text, the horizon *in* the text and the horizon *in front of* the text (Gadamer 2004:305).

3. Gadamer's hermeneutical considerations

Hermeneutics is never static, but dynamic in the sense that it can change as methods of interpretation in relation to various cultural worldviews. If a hermeneutical framework is unrelated to a given context, it is unlikely to infuse genuine transformation of the audience. Hermeneutic is a matter of meaning creation. In this way, David Clines argued that that "in principle ... meaning does not reside in texts but that readers create meaning when they read texts" (Clines 1995:17).

However, a radical indeterminism or relativism that identifies meaning with the reader's response would stick with anachronism. In this way, Gadamer argued that sustainable hermeneutics would involve dealing with the tension between the horizons of the text and the horizons of the reader (Gadamer 2004:305)

The word "horizon" refers to "perspective" or "worldview". For Gadamer, hermeneutics should consist of the fusion of the perspective of the text with that of the reader (Dienstag 2016:3). In other words, meaning can only be constructed by first reconstructing the voice of the text and then by relating this to the voice of the contemporary reader. However, in Gadamer's conception, the horizons remain distinct from one another: he speaks of the *fusion of horizons* (die *Horizontverschmelzung*) and not simply the formation one horizon (Gadamer 2004:305).

Gadamer's insights are relevant in intercultural hermeneutics attempting to grasp the "understanding of others" as a dialectical (and thus dialogical) process between cultures, rather than fusing them into one culture (Höchsmann 2007:134). The final product would be a hermeneutic or a "fusion of horizons" made up of foreign and local people's horizon components. In this process, there would be the formation of modified positions of the view of the locals by the foreign and the perception of the foreign by locals (Höchsmann 2007:134)

This is what Kato fustigated about assimilating African religions with biblical theology and produces a kind of syncretism. Both horizons must remain distinct from one another. For Kato, African theologians need to formulate theological concepts in the language of each African cultural milieu, but theology itself in its essence must be left alone (Kato 1985:12).

The hermeneutic task consists not in a naïve assimilation of African and biblical horizons but maintaining alive the tension between them in order to create the meaning.

That is because interpreting is not about adapting the past to align with the present, but critical interaction. However, contrary to the Enlightenment's arguments for finding the so-called *objective* meaning, one must not think of an interpretation as being right or wrong, true, or false (Cooper 1993:14), but rather as a matter of perception. That is where Mkapa opposes the idea of "one-size-fits-all" democracy expecting African nations to literary plagiarize Western governance structures and processes (Mkapa 2019:187). The exciting hermeneutical revolution of Gadamer is that there is not an *absolute* meaning, but that meaning is always formed from within a lived human context, both individual and social (Höchsmann 2007:128).

We need African sustainability hermeneutics, which do justice to both Christianity and African worldviews. Gadamer has emphasized that the hermeneutical task takes place not from "some zero point" (*tabula rasa*), but in an existing (pre-exiting) tradition (Gadamer 1985:409). That means approaching a text requires us to be aware of our prejudices, which should not be confused with the text, but which facilitate the understanding. As for Africa, one can draw on aspects of African culture that might facilitate our understanding of the practical implications of the Bible. It posits that we read the Bible in its cosmological aspect in dialogue with the cosmological context of the African readers.

4. African horizons for an eco-theology for Africa

Despite of cultural diversity in Africa and in view of the insights provided by several scholars (Katongole 2011; Stenger 2001; Sundermeier 1998; Sindima 1990; Mudimbe 1988; Kagame 1985; Kato 1985; Mbiti 1985; Dickson 1984; Jahn 1961), I found that the sustainability of almost all traditional communities relied on a threefold worldview. This is namely 1) the moral/ethical dimension of nature; 2) Ubuntu-related community; 3) the cosmological role of chieftaincy (Governance). To develop a sustainable eco-theology in Africa, one needs to use this trilogy as the reader's horizon in contact with the horizons of the Bible.

4.1 Moral or spiritual dimension of nature

The natural world is a living ethos. This makes nature a multifaceted locus involving love, fears and sense of something mysterious (Dickson 1984:49). Non-human beings are seen as living subjects towards which a moral obligation is required. The Ndebele proverb "ihloka liyakhohlwa kodwa isihlahla asikhohlwa" (an axe forgets but the tree does not forget) implies this moral obligation. Though it is used to discourage hurting others (people), it distils the floral kingdom as a "living subject" (Chibvongodze 2016:160). That is why, prior to cultivating a forest, it was important to appease the spirit in charge of it (White 1967:1205).

This proverb also resonates with the Zulu proverb "isihlahla asinyelelwa" (a tree is not defecated upon). The proverb teaches contentment, but at the same time, it also invites to show dignity and respect for floral kingdom. Finally, another Ndebele Proverb says "inkomo kayisengwa ngokwehlisa" (Do not endlessly milk a cow until there is nothing to milk). Running dry the cow's milk is to disregard the fact that a calf survives on the same milk. The Proverb discourages selfish exploitative attitudes of consumerism, which care less about the sustainability of resources and other beings.

The African primarily interprets her/his world theologically rather than in materialistic terms. In this sense, every community abide by a number of taboos, which are unwritten norms regulating all aspects life. Sociologists distinguished six categories of taboos: *Segment taboos*, which regulate resource withdrawal, while *temporal taboos* restricted access to resources at specific time. *Method taboos* regulate ways of resource exploitation while *Life history taboos* are concerned with regulating the exploitation of vulnerable species. *Specific-species taboos* regulate the whole protection specific species, while *Habitat taboos* restrict access and use of resources in time and space (Colding & Folke 2001).

Because the African cosmos is supra rational, taboos conveyed a moral obligation in the community as a whole. Failure to realize and appreciate this led the missionaries to despise African beliefs and ignore them as a vehicle for a Christianity in service of the sustainability of the continent. Dr Emmanuel Anim sadly and interrogatively offered his observation about the unsustainability of Africa's ecosystem following Christianity:

The village in the North of Ghana where I grew up, was located close to a forest and a river. In the forest from ancient times onwards the ancestors live, therefore it was sacred. In the river there lived the spirit of the water, therefore it was sacred as well. Then people of my village became Christians. Now, according to the new Christian worldview, there were no ancestors any more in the forest and also there were no spirits any more in the river. The taboos were disintegrating and disappearing. Instead, the people started to make use and exploit both the forest and the water of the river for their own purposes. Today next to this village there is no forest left anymore and the river is now a cesspool. Who has done a major mistake here? And for what reason? (Werner 2020:52)

The French philosopher and sociologist Levy-Bruhl misinterprets this African mentality as *primitive, irrational* and *pre-logical,* which he opposed to *so-called* the *modern mind* of logic and rationality (Levy-Bruhl 1923:62). This presumption is based on the influence of the Enlightenment shift to *reason* as the absolute basis for understanding the world (Sindima 1989:539). According to Levy-Bruhl, the primitive mind does not differentiate the *supernatural* from *reality* but uses "mystical participation" to manipulate the world (Levy-Bruhl 1923:59). This is a misleading assumption. In this way, scholars prefer the expression *supra-scientific* or supra-rational for the moral views of the world with the prefix *supra* inferring "above" or "beyond" the rational thinking, but real for the community (Grünbaum 2000:3).

Sindima calls the opposite of "moral cosmos" as *too* physical or "mechanistic cosmos" in which people, nature and community are distinct and unrelated individuals ((Sindima 1989:540). It teaches that humans and nature are separate and dual entities. Nature is not another being to *bond with*, but something to own, subdue, harness, and manipulate as Descartes declared: "We can thus render ourselves the lords and possessors of nature" (Descartes 2000, pt. 6). All the thinkers of Descartes' time, such as Francis Bacon (1561-1626), defined science as consisting of "enlarging of the bounds of human empire, to the effecting of all things possible" (Bacon 1974, bk. 1). This assumption was central in the so-called civilisation project (colonialism) suggesting that civilisation is only possible with the uncoupling of humanity from nature. Humans were elevated above all. However, if one believes Genesis 2:1-4a, one will notice that creation ends not with humans, but with Sabbath. The lack of the refrain רקב ברע (evening and morning) for this day is probably not a scribal error but implies that this day is *set apart* to celebrate creation as a *sacred* place (Kavusa 2021a:17). At Sabbath, creation becomes a cosmic sanctuary (Brown 2010:40). Just as African cosmogonies, nature is not conceived as a materialistic and mechanic domain, but it is construed as a mystery connected with God. This refutes Descartes or even Hobbes for whom "all that really exists in the universe is *material*, or else they are nowhere and nothing" (Mintz 1962:63).

The question is how this moral worldview would fit with contemporary world. African governments are indeed trying to attract foreign investors through private-public model of partnership. The problem is that investment implies *materialistic* alienation of the land they will utilise. That is where a contextualized leadership is needed in order to embed African conception of nature in the investment process and that compensation for the acquired land is paid to locals. Former Tanzanian president Mkapa argued that African nations must implement contextual trade court systems that consider African notions of the land as sacred and *Ubuntu*-related business to avoid the frustration of the locals (Mkapa 2019:224). I will explain the concept of Ubuntu in the next section.

Ubuntu (humanness or moral obligation), which I will explain later, construes human and nature exploitation in a more holistic worldview, where both humans and nature have intrinsic value. In contrast, Western business policy makers often view non-human beings as a commodity threatened by anthropogenic activities and call for individualised responsibility of nations. That is why climate statements call for investment into green industry and low carbon growth without radically diverging from the status quo (United Nations Environment Programme (UNEP) 2015).

Policy makers also generally favour technology as solution to the climate crisis, often at the expense of Ubuntu-related indigenous practices. Examples are genetically modified crops in Africa, which are deemed to use small portions of land (intensive farming). Although genetically modified crops are acclaimed to improve food security in theory, they

are practically ecologically harmful. Moreover, they hinder the power of African farmers who must abandon indigenous methods and buy seeds and agrochemicals from big corporations. In this way, the moral harmony between local people and their environment is destroyed to profit a small group of wealthy people.

4.2 Ubuntu-related community

African community can be construed in the concept of Ubuntu. *Ubuntu* (humanness) is commonly understood within anthropocentric framework of human relations in which one becomes a person solely through other persons (community) (Ramose 2002:230). A person thus cannot become fully human by abusing, deceiving, or acting against the community (Grange 2012:331). However, scholars revealed that Ubuntu implicates moral obligation towards the community as a whole, including the livings, the unborn, the departed, flora, fauna, and ancestors (Chibvongodze 2016:157).

In fact, Alexis Kagame defined African community in terms of four interconnected existences: Muntu – plural Bantu (human being), Kintu – plural Bintu – (non-human being: fauna, flora, mineral ...), Hantu (place, time) and Kantu (means, method, approach, relationship) (Kagame 1985:106). *Ntu* is what Muntu, Kintu, Hantu and Kantu are equally forces. The root *ntu* in the word Kuntu (means, method, relation), for instance, implies that even the way humans (Bantu) interact with other beings (Bantu, Hantu), must be informed by a vision of nature not as an "object" but as other Ntu-beings (Kavusa 2021b:7).

Thus, African community involves interdependence of people, animals, and environment (land), constantly exchanging their forces (Ntu) in mystical/moral relationship (Tödt 1976:251). A real muntu reflects, acts, and interacts with *Ubuntu*. *Ubuntu* as opposed to *Unyama* (animal like dominated with greed) invites a real *muntu* to participate in the improvement of his community (Gathogo 2008:7).

One of the most fundamental principles of Ubuntu is the moral obligation towards others including past (ancestors), present and future generations. Thus, Ubuntu envisages a sustainable life that does not impede the ability of others, including future generations, to live. That is why instead of Descartes's statement, "I think, therefore, I am" (*cogito ergo sum*), the African maxim would rather say: "I am because we are," or "I am related, therefore, I am" (Gathogo 2001:21). The maxim "Umuntu Ngumuntu Ngabantu" summarises the African way of life: "I am, because we are; and since we are, therefore I am" (Mbiti 1985:108)⁻

This recalls Martin Heidegger's revolutionary opposition to Descartes' conception of Being (*Sein*). In the book *Sein und Zeit*, Heidegger rejects the Cartesian view of the human being as a subjective observer of objects (Heidegger 1967:46). Although Heidegger still considers the terms subject/ objects or humans/things, the German Philosopher holds that both subject and object are inseparable. In presenting Being as inseparable, Heidegger introduced the term *Dasein* (literally: being there), intended to encompass a *living being* through their *activity* of *being there* and "being-in-the-world" (Heidegger 1967:53). In other words, Being is being through participation.

In his "Daseinsanalyse", an application of "Dasein" of Martin Heidegger in psychiatry, Ludwig Binswanger remarked that human existence should be understood as *Being-with* because:

Da-Sein oder In-der-Welt-Sein, eine klar umrissene, festgefügte *Struktur* zeigt, mit streng aufeinander angewiesenen *Strukturgliedern*, den Strukturgliedern des Wer des In-der-Welt-Seins, des In-Seins und der Weltlichkeit der Welt, sowie mit streng aufeinander angewiesenen Existenzialen wie Faktizität, Geworfenheit, Existenz im engeren Sinne und Verfallenheit² (Binswanger 1957:16).

The society is mainly perceived as an interconnected system in the sense that existence is only possible within a healthy system. *Dasein* theory opposes dualism, as it proposes no gap between the human mind and measurable matter. The individual "existence" only has meaning in relation to the community. One of sound expression of interdependence in African worldviews is conveyed in the kikuyu proverb saying: *Gutiri gitatuirie kingi* (All things are interdependent), literally "there is no thing which does not

² Translation: Being-there or being-in-the-world shows a clearly defined, fixed structure, with structural members strictly dependent on one another, the structural members of who, of Being-in-the-world, of Being-in and worldliness of the world, as well as with Beings (Existences) that are strictly dependent on one another, such as factuality, thrown-ness, existence in the narrower sense, and decay.

cause another to exist" (African Manners 2012). The society is a network in which any existence is made possible by another one.

To conclude, *Ubuntu* is an African alternative to Western environmentalism advocating for altruism, cohesion and harmony between all humans and nature. This is distinct from our current path of continual economic expansion under capitalism in which nature is a utility that can be converted into capital and profits (Chibvongodze 2016:161).

4.3 Cosmological role of governance

All traditional African societies are imbued with the ancient Egyptian *Weltsanchauung*, its conception of chieftaincy and its principles for the sustainability of a society (Maat) (Karenga 2004). Some studies limit the notion of *Maat* only on the ancient Egypt, while others extend it beyond Egypt (Martin 2008:952).

This article believes the insights of *Maat* are in various traditional African worldviews. This is based on evidence that Ancient Egyptian civilisation evolved from a confluence of migrations and influences coming thousand years down the Nile from the Great Lakes of Africa (Finch III 1995:51) mainly Ishango³ and Katanda⁴ region (Yellen 1998:193). It is thus said that Ishango-Katanda region should be considered the cradle land of all African culture, and the dynasties and civilisation of Ancient Egypt (de Heinzelin 1962:109). That is why the old Egyptian tradition speaks of the Great Lakes region in inner-equatorial Africa as being the home of the ancient *Kemites* (Egyptians) (Hillard III 1995:141).

In its cosmological sense, *Maat* embodies principles of creation balance of which the maintenance was the responsibility of the king (Pharaoh). All Egyptians were expected to live by *Maat* in their daily actions toward family, community, nation, environment, and god (Martin 2008:957). In

³ Ishango is located on the current bank of the Semuliki River in the Rift Valley in eastern in Democratic Republic of the Congo. It is believed that the men who lived at this place more than 8,500 years ago may have created a number system. The renowned Ishango Bone, discovered in1950, is possibly the oldest mathematical artefact still in existence. It is dated back to the Upper Paleolithic period of human history and is approximately 20,000 years old (see: https://mathigon.org/timeline).

⁴ The Katanda Bone, about 7 km downstream from Ishango, is dated back to 90,000 years old, over four times older than the Ishango bone.

this way, traditional Africans always viewed chieftaincy within the context of the world of order and that of chaos/bush. The world of order (homestead) is not simply the place of habitation, but a world of balance and harmony (Packard 1981:29). The world of chaos edges and threatens the homestead. Thus, the homestead does not simply mean land as a source of livelihood, but an organized space separated from chaos (Sundermeier 1998:27).

The chief was the primary mediator between the two worlds since the fertility of the land, people and animals depended on the strict regulation of the relationship between the world of order and the forces of the bush. In this way, an impious king could bring about famine while blasphemy brings curse to an individual. Kings mediated the roles of the rainmakers, healers of the land, spirits of the earth and ensured that the ancestors are valued (Packard 1981:30). He was also responsible for separating the uncontrolled and dangerous forces of the bush from the world of the homestead.

Contrary to western caricature of African kingships, African king always consulted their community in order to ensure the sustainability and the community appropriation of the kings' project for the community. Building on this notion, Mkapa initiated Tanzania Social Action Fund (TASAF) to help villagers self-develop. The principle was that the villagers decide their priorities (e.g. a road to connect the village to a highway, a water supply) and how they would contribute (workers, money, or both) while the government supplements their effort (Mkapa 2019:160).

Other African leaders rely on this notion of community to boost development of their countries. The *adaptation* of insights of the traditional community court system *Gacaca*⁵ (justice among the grass) in Rwanda has shown its benefits to handle many Rwanda's genocide cases where European trial systems could take years. Additionally, the reliving of the traditional Rwandan *Umuganda* (literally: coming together in common purpose) invites Rwandans to dedicate the last Saturday of each month for community works. Apart from cleaning and construction activities, *Umuganda* provides people with the opportunity to socialise and exchange

⁵ Before the period of colonisation, minor disputes in Rwanda were presented locally to wise men for judgement in Gacaca meetings while kings or mwami heard major disputes. Colonisation meant that the Gacaca system was used less frequently in favour of Western-style courts.

with the authorities about critical issues affecting their community to the point that during its suspension due to Covid-19, people realised the importance of *Umuganda* (Byishimo 2022).

An impact assessment conducted by Rwanda Governance Board estimates the economic value of *Umuganda* until 2017 of \$127 million based on activities like reforestation and road maintenance (Bresler 2019). More than half of Rwandans acknowledge its positive effect on the *Lebensraum* and its effect on air quality and overall improvement in the environment. In 2018, this Ubuntu-selflessness ritual resulted in the building of 1311 schools, the construction of 30314 sanitation facilities for poor people, improving of 114797 public hygiene spaces and planting of 3220981 trees to control soil erosion (United Nations Development Programme 2019:79.86.112). The country could have spent a lot of money for these projects.

In fact, in an African country in which everything is priority, it would be unwise to rely on foreign donors to make things work. Mkapa advised that a leader of such nation must first consider the resources, which are already there: *community participation*. As people partake right from the outset in bringing their development project to fruition, this would foster their sense of ownership (Mkapa 2019:161).

Besides, African traditional governments were made on the principle of inclusivity given the variety of cultural diversities of their people. In this way, the European notion of democracy in which the winner takes everything has no place in Africa. Building on his experience, Mkapa put:

It is unreasonable and unfeasible to expect us to develop nations to almost replicate Western governance structures and processes ... Tanzania is a developing country of over 120 different tribes and two distinct culturally different religions after all. I don't think these considerations are recognized by those advocating a "one-size fits all" democracy (Mkapa 2019:187).

The sages could also depose an unworthy king due to the unsustainability his actions have caused in the community. In traditional Rwanda, the Abiru (the wise) invested the king and could depose *unworthy* kings and proclaim successors based on secretive ritual practices (Diop 1989:24). In modern Africa, Mkapa comments that, if an elected president is deposed

by a coup, there must be some patience for democracy to evolve. In order to return to a civilian government, critical reflection must be made on what led to the coup and how to avoid recurrence. It might be that the "nation should rethink its system" in view of its traditions, history, and circumstance (Mkapa 2019:187). Africans need to establish governmental models that work for the sustainability of the continent.

Mkapa thinks that Africa still needs to fight for its real sustainable departure "whereby we will determine our own political dispensation and destiny that embraces universally accepted democratic norms, but with African characteristics, anchored in our African heritage" (Mkapa 2019:244). Africa will not attain sustainability if it continues building its development on basis of foreign worldviews. For him, "we must not sacrifice our African heritage, our culture, our prism through which we look at, and understand, our own and the outside world" (Mkapa 2019:244). He thus favours a new *chimurenga*, a new revolutionary leadership grounded in the African cosmological and cultural heritage to lay down strong foundations for a sustainable Africa, for an Africa that we want for our children (Mkapa 2019:244).

As to the issue of land sustainability in Africa and the wellbeing of the community, the king made sure the sacredness of the land is preserved in all investment processes and partnerships with other kingdoms. The leaders were sacred rulers and as such had ritual power to influence fertility of the land through judiciary, social, political, and religious ritual (Claessen 2016:44). In modern Africa, Mkapa advised:

Governments must have a formal judicial system, land administration system and relevant public institutions, which are accessible to the poor by recognising and integrating customary and informal legal procedures with which the poor are already familiar (Mkapa 2019:231).

In fact, wherever leaders promote justice in the socio-political spheres, that act promotes the proper integration of social and cosmic orders (Schmid 1984:104). The contrary results in adverse consequences in the community. Thus, the waxing or waning of the land is directly bound with a waxing or waning chieftaincy.

5. Application for eco-theology in Africa

5.1 Moving from the known to the unknown

Mburu defines hermeneutics as moving from the *known* (African worldviews and realities) to the *unknown* (biblical message and implication) (Mburu 2019:7). The threefold African worldview cited above is the *known* and is valid in the traditional and modern Africa. Moral obligation towards nature, the sense of Ubuntu-community and cosmological governance are key framework through which the message of the Bible can be made relevant against issues of sustainability in Africa.

Some researchers alleged that modernization and globalisation have eroded traditional African worldviews. This is debatable since a worldview is so ingrained in the social fabric that it is transmitted both consciously and unconsciously. We have all acquired the knowledge, values, morals, and skills we live by in our communities.

These worldviews can be used as bridges to promote understanding, internalization, and application of the biblical text to address issues affecting a certain community. In so doing, the transforming message of the Bible will be comprehensible to all Christians and not just a select group of intellectuals.

5.2 Interacting with the "otherness" of biblical texts

A fruitful ecological reading must admit that biblical texts were formulated in the world that knew nothing about modern ecological problems. Our confrontation with these texts should acknowledge their otherness to our world and realities in order to avoid forcing the meaning we want to hear from the text (Steck 1980:16). Therefore, interpretation would involve the tension between the outline of current ecological crisis, African threefold cosmological framework, and the horizon of the biblical texts. The aim of this reading posture is to direct the reader towards meaning reconstruction.

Interpretation would never mix in one mould the biblical statements and the interpreter's realities. This means that our realities should never dictate the direction of biblical interpretation, but both worlds should remain in constant enrichment dialogue. The gap separating the concerns of the modern interpreter and the world of the ancient author is enough to prove this fact (Brown 2010:13). Therefore, we must know that any methodological tool helps us to construct a *matrix* of possible meanings, but the original meaning of the text is ever *elusive*. It is unlikely that any hermeneutics claims to have access to their full meaning.

Our idea is that interpreter adopts a hermeneutical roundabout moving from biblical texts to African threefold worldview and contemporary realities without distorting the uniqueness of both worlds. This movement is usually called the "hermeneutical circle" in which the ancient text and the reader's context are brought together into an enrichment dialogue (Brown 2010:16). This hermeneutical mode pays respect to the otherness of biblical texts and while making them relevant for modern problems (Horrell 2011:176).

5.3 The use of African doctrinal constructs

Interpretation of biblical texts in light of contemporary realities often appeals to what Conradie calls "doctrinal constructs," which I call interpretative constructs (Conradie 2010:301). As the term states, these are simply the constructions of the reader to act as the orientation for his/her interpretation, but they are not intrinsic features in the text. They may be viewed as the fruit of a reading perspective.

In this sense, they play a crucial role in the interpretation and the appropriation of biblical texts for current readers. They enable the interpreter to establish a link between the text and current reader's reality, and in this case the experience of Africans of the ecological crisis and their cosmological view. Conradie explains the role of doctrinal constructs in a more comprehensive sense that:

Doctrinal constructs are not only employed to *find* similarities but to *construct* similarities, to *make* things similar, if necessary. The scope of such doctrinal constructs is often quite comprehensive: they purport to provide a clue to the core meaning of the contemporary context *as a whole* and the Biblical text *as a whole*⁶ (Conradie 2006:306).

⁶ The italics are used by Conradie to emphasise the role of doctrinal constructs.

This justifies an attempt of constructing an ecological hermeneutical framework that would help to address African experience of ecological crisis in interaction with biblical texts. It would never be a project of simplification and harmonisation of the meaning of the text to fit with modern realities. Rather, it should avoid harmonising differences of both horizons when African cultural worldviews do not cohere with some aspects of biblical texts. The text should not be read only to confirm what the reader wants to find in the text but maintaining alive the tension between the horizons of the reader and that of text as Gadamer said (Gadamer 2004:305).

Thus, African ecological hermeneutical framework would help the reappropriation of biblical texts without confusing the reader's worldview with that of the text. Obviously, interpretative constructs alter both text and context, bringing certain things into focus, skewing or marginalising others, perhaps ideologically, in prioritising, legitimating, and concealing the interests of dominant social groups (Horrell 2010b:184). There is no other way to read ancient texts to address modern problems.

6. Concluding remarks

With a proper re-configuration, this threefold African worldview can act as a significant hermeneutical vehicle of the Church's commitment to sustainability in Africa. Rather than imitating European pursuit of growth at all costs, this threefold framework pledges for development that includes ethical, cultural, social, and ecological sustainability in the process. In combination with Christian faith, this framework would help to contextualize and make churches real hands of God for sustainability in all sectors of life in Africa.

Bibliography

- Ademiluka, SO. 2009. An ecological interpretation of Leviticus 11-15 in an African (Nigerian) context. *Old Testament Essays*, 22(3):525–534.
- Administration-Rapport 1972. Administration Colonial du Ruanda-Urundi, Rapport.

- African Manners. 2012. *Gikuyu Proverbs: (1000 in Total)*. [Online]. Available: https://africanmanners.wordpress.com/2012/07/07/gikuyuproverbs-1000-in-total/.
- Bacon, F. 1974. *Neues Organ der Wissenschaften*. Darmstadt: Wiss. Buchgesellschaft.
- Binswanger, L. 1957. Der Mensch in der Psychiatrie. Pfullingen: Neske.
- Bresler, A. 2019. *How Rwanda's Mandatory Community Workday Made Kigali the Cleanest City in Africa*. [Online]. Available: https://matadornetwork.com/read/rwanda-community-work-day/
- Brown, WP. 2010. *The Seven Pillars of Creation: The Bible, Science, and the Ecology of Wonder.* Oxford: Oxford University Press.
- Byishimo, B. 2022. *Umuganda returns: What did we miss?* [Online]. Available: https://www.newtimes.co.rw/news/umuganda-returnswhat-did-we-miss
- Chibvongodze, DT. 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. doi.org/10.10 80/09709274.2016.11906968.
- Claessen, HJ. 2016. The Emergence of Pristine States. Social Evolution & History, 15(1):3–58.
- Clines, D. 1995. Varieties of Indeterminacy. Semeia, 71(1):17-27.
- Colding, J & Folke, C. 2001. Social taboos: "Invisible" systems of local resource management and biological conservation. *Ecological Application*, 11(2):584–600.
- Conradie, EM. 2006. The Road Towards an Ecological Biblical and Theological Hermeneutics. *Scriptura*, 93:305–314.
- Conradie, EM. 2010. What on Earth is an Ecological Hermeneutics? Some Broad Parameters. In: DG Horrell, C Hunt, & C Southgate, Eds. *Ecological Hermeneutics: Biblical, Historical and Theological Perspectives.* New York: T & T Clark. 295–313.

- Conradie, EM. 2011. The Church and the Environment: Seven Stations Towards the Sanctification of the Whole Earth. *Scriptura*, 107(0):156– 170. doi.org/10.7833/107-0-133
- Cooper, R. 1993. Textualizing Determinacy/Determining Textuality. *Semeia*, 62:3–18.
- Descartes, R. 2000. *Discourse on the Method of rightly Conducting the Reason and Seeking Truth in the Sciences*. Informations, Inc. [Online]. Available: https://ebookcentral.proquest.com/lib/huberlin-ebooks/ detail.action?docID=3314500.
- Dickson, KA. 1984. Theology in Africa. Maryknoll: Orbis Books.
- Dienstag, JF. 2016. Hans-Georg Gadamer, Truth and Method. In J.T. Levy, Ed. The Oxford Handbook of Classics in Contemporary Political Theory. Oxford: Oxford University Press. 1–14. doi.org/10.1093/ oxfordhb/9780198717133.013.20
- Diop, CA. 1989. *The African Origin of Civilization: Myth or Reality.* Chicago: Chicago Review Press.
- van Dyk, P. 2017. Eco-theology: In and out of the wilderness. *Old Testament Essays*, 30(3):835–851. doi.org/10.17159/2312-3621/2017/ v30n3a17.
- Fessy, T. 2021. Congo Investigation a Chance to Fight Corruption: Allegedly Embezzled Millions helped Deprive Congolese of their Rights. [Online]. Available: https://www.hrw.org/news/2021/12/02/congo-investigationchance-fight-corruption.
- Finch III, CS. 1995. Nile Genesis: Continuity of Culture from the Great Lakes to the Delta. In Second ed. I. van Sertima, Ed. *Egypt Child of Africa*. New Brunswick & London: Transaction Publishers. 35–54.
- Gadamer, H-G. 1985. *Philosophical Apprenticeship*. Cambridge: MIT Press.
- Gadamer, H-G. 2004. Truth and Method. New York: Continuum.
- Gathogo, J. 2001. *The Truth About African Hospitality: Is there hope for Africa?* Mombasa: Salt.

- Gathogo, J. 2008. African Philosophy as Expressed in the Concepts of Hospitality and Ubuntu. *Journal of Theology for Southern Africa*, 130(March):1–11.
- Gatwa, T. 2000. Mission and Belgian Colonial Anthropology in Rwanda. Why the Churches Stood Accused in the 1994 Tragedy? What Next? *Studies in World Christianity*, 6(1):1–20.
- Grange, L le. 2012. Ubuntu, ukama, environment and moral education. Journal of Moral Education, 41(3):329–340. doi.org/http://dx.doi.org/1 0.1080/03057240.2012.691631.
- Grünbaum, A. 2000. A New Critique of Theological Interpretations of Physical Cosmology. *British Journal for the Philosophy of Science*, 51(1):1–43. doi.org/10.1093/bjps/51.1.1
- Habel, NC. 2009. An Inconvenient Text: Is a Green Reading of the Bible Possible? Hindmarsh: ATF Press.
- van Heerden, W. 2005. Norman Habel se Interpretasie van Genesis 1:1-2:4a binne die Raamwerk van die Earth Bible Project. *Old Testament Essays*, 18(2):371–393.
- van Heerden, W. 2014. Dealing with the History-Nature Dualism in Ecological Theology. *Journal for Semitics*, 23(2i):547–568.
- van Heerden, W. 2017. Ecological Interpretation of the Jonah Narrative Have they succeeded in Overcoming Anthropocentrism? *Journal for Semitics*, 23(1):114–134. doi.org/10.25159/1013-8471/2775.
- Heidegger, M. 1967. Sein und Zeit. Tübingen: Max Niemeyer Verlag.
- de Heinzelin, J. 1962. Ishango. Scientific American, 206(6):105-118.
- Hiebert, T. 1996. *The Yahwist Landscape: Nature and Religion in Early Israel.* New York: Oxford University Press.
- Hillard III, AG. 1995. Bringing Maat, Destroying Isfet: the African and African Diaspora Presence in the Study of Ancient KMT. In Second ed. I. van Sertima, Ed. *Egypt Child of Africa*. New Brunswick & London: Transaction Publishers. 127–148.

- Hillman, E. 1993. *Toward an African Christianity: Inculturation Applied*. New York: Paulist Press.
- History.com Editors. 2018. *Renaissance*. [Online]. Available: https://www. history.com/topics/renaissance/renaissance
- Höchsmann, H. 2007. Foreseeing a Fusion of Horizons Gadamer, Quine, and Chung-Ying Cheng. Journal of Chinese Philosophy. 34(1):127–149. doi.org/10.1111/j.1540-6253.2007.00404.x
- Horrell, DG. 2010a. *The Bible and the Environment: Towards a Critical Ecological Biblical Theology*. London: Equinox.
- Horrell, DG. 2010b. The Green Bible: A timely Idea Deeply Flawed. *ExpT*, 121(4):180–186.
- Horrell, DG. 2011. Ecojustice in the Bible: Pauline Contributions to an Ecological Theology. In M.J.M. Coomber, Ed. *Bible and Justice: Ancient Texts, Modern Challenges*. London: Equinox. 158–177.
- Jahn, J. 1961. *Muntu: An Outline of the New African Culture*. New York: Grove.
- Kagame, A. 1985. Sprache und Sein: die Ontologie des Bantu des Zentralafrikas. Heidelberg: P.Kivouvou Verlag/Editions Bantoues.
- Karenga, M. 2004. *Maat, the moral idea in ancient Egypt: A study in classical African ethics.* New York: Routledge.
- Kato, BH. 1985. Theological Anemia in Africa. In: *Biblical Christianity in Africa: A Collection of Papers and Addresses, Theological Perspectives in Africa 2.* Accra, Ed. Africa Christian Press.
- Katongole, E. 2011. *The Sacrifice of Africa: A Political Theology for Africa.* Grand Rapids: Eerdmans.
- Kavusa, KJ. 2019. Ecological hermeneutics and the interpretation of biblical texts yesterday, today and onwards: Critical reflection and assessment. *Old Testament Essays* 32(1):229–255. doi. org/10.17159/2312-3621/2019/v32n1a13.

- 2021a. Creation as a Cosmic Temple: Reading Genesis 1 :1-2 ;4a in light of Willie van Heerden's Ecological Insights. *Journal for Semitics*, 30(1):1-23.
- 2021b. Towards a hermeneutics of sustainability in Africa: Engaging indigenous knowledge in dialogue with Christianity. *Verbum et Ecclesia* 42(1):1–10. doi.org/https:// doi.org/10.4102/ve. v42i1.2263.
- Levy-Bruhl, L. 1923. Primitive Mentality. London: Allen and Unwin.
- Loader, JA. 1987. Image and Order: Old Testament Perspectives on Ecological Crisis. In V.S. Vorster, Ed. *Are we killing God's Earth? Ecology and Theology*. Pretoria: Unisa Press. 6–28.
- Maluleke, T. 2020. Black and African Theologies in search of Contemporary Environmental Justice. *Journal of Theology for Southern Africa*, 167:5–19.
- Martin, D. 2008. Maat and Order in African Indigenous Knowledge: A Conceptual Tool for Understanding Indigenous Knowledge. *Journal of Black Studies*, 38(6):951–967.
- Masenya, MJ. 2001. An Ecobosadi Reading of Psalm 127:3-5. In The Earth Bible. N.C. Habel, Ed. *The Earth Story in the Psalms and the Prophets*. Sheffield: Sheffield Academic Press. 109–122.
- Mbiti, J. 1972. The Growing Respectability of African Traditional Religion. *Lutheran World*, 19(1):54–58.
- Mbiti, J. 1985. African Religions and Philosophy. London: Heinemann.
- Mburu, E. 2019. African Hermeneutics. London: Langham.
- Meyer, EE. 2011. Respect for Animal Life in the Book of Leviticus: How Green were the Priestly Authors? *Old Testament Essays*, 24(1):142–158.
- Mintz, SI. 1962. *The Hunting of Leviathan: Seventeenth-Century Reactions to the Materialism and Moral Philosophy of Thomas Hobbes.* Bristol: Thoemmes.
- Mkapa, BW. 2019. *My life, My Purpose: A Tanzanian President Remembers.* Dar-es-Salaam: Mkuki na Nyota.

- Mudimbe, VY. 1988. *The Invention of Africa*. Indiana: Indiana University Press.
- Office of International Religious Freedom. 2021. Democratic Republic of the Congo: 2020 International Religious Freedom Report. [Online]. Available: ttps://www.state.gov/reports/2020-report-on-internationalreligious-freedom/democratic-republic-of-the-congo.
- Packard, R. 1981. *Chiefship and Cosmology: An Historical study of Political Competition*. Bloomington: Indiana University Press.
- de Pury, A. 2009. The Absolute Beginning of Pg. Goma. 99–128.
- Ramose, MB. 2002. The philosophy of Ubuntu and Ubuntu as a philosophy. In P. Coetzee & A. Roux, Eds. *Philosophy from Africa: A Text with Readings*. Oxford: Oxford University Press.
- Ricoeur, P. 1961. Civilisation universelle et cultures nationales. *Esprit*, 29(10):439–453.
- Schmid, HH. 1984. Creation, Righteousness, and Salvation: Creation Theology as the Broad Horizon of Biblical Theology. In B.W.
 Anderson, Ed. *Creation in the Old Testament*. Philadelphia: Fortress Press. 102–117.
- Sindima, H. 1989. Community of Life. *The Ecumenical Review*, 41(4):537–551.
- Sindima, H. 1990. Community of Life: Ecological Theology in African Continent. In C. Birch, W. Eaken, & J. McDaniel, Eds. *Liberating Life: Contemporary Approaches to Ecological Theology.* New York: Orbis Books. 137–147.
- Steck, OH. 1980. World and Environment. Nashville: Abingdon.
- Stenger, F. 2001. White Fathers in Colonial Central Africa: A critical Examination of V.Y. Mudimbe's Theories on Missionary Discourse in Africa. Hamburg: Lit Verlag.
- Sundermeier, T. 1998. *The Individual and Community in African Traditional Religions*. Hamburg: LIT.

- Tempels, P. 1959. *Bantu Philosophy* (trans. C. King). Paris: Présence Africaine.
- Tödt, HE. 1976. Parameter der Friedensforschung und die Theologie südafrika. In H.E. Tödt, Ed. *Theologie im Konfliktfeld Südafrika: Dialog mit Manas Buthelezi*. Stuttgart//München: Klett/Kösel. 214–253.
- United Nations Development Programme. 2019. Rwanda National Human Development Report 2018: Policy Innovations and Human Development. Rwanda's home-grown solutions. New York. [Online]. Available: https://hdr.undp.org/sites/default/files/nhdr2020_ruwanda. pdf.
- United Nations Environment Programme (UNEP). 2015. *Paris Agreement*. [Online]. Available: https://unfccc.int/sites/default/files/ english_paris_agreement.pdf.
- Werner, D. 2020. The Challenge of Environment and Climate Justice: Imperatives of an Eco-Theological Reformation of Christianity in African Contexts. In P. Öhlmann, W. Gräb, & M.-L. Frost, Eds. African Initiated Churches and the Decolonization of Development: Sustainable Development in Pentecostal and Independent Churches. New York: Taylor and Francis. 51–72.
- White, L. 1967. The historical roots of our ecological crisis. *Science*, 155(3767):1203–1207.
- Yellen, JE. 1998. Barbed Bone Points : Tradition and Continuity in Saharan and Sub-Saharan Africa. *African Archaeological Review*, 15(3):173–198.