

The weight of African native-centric ecology in eco-desacralization

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Abstract

The ecological crisis is one of the environmental issues affecting the planet, and it is caused by eco-desacralization, a concept defined by environmental skepticism that relegates the divine identities of the environment. Doubts about the authenticity of environmental degradation or climate change and desert encroachment bear a strong anthropocentric view of nature. Skepticism may have deepened the human understanding of the natural world, but it has also destroyed the environment. In this study it is argued that eco-desacralization is environmental avarice, and steps must be taken to shift the strong anthropocentric perception of the natural world. To overcome this, we unearth African conservation ethics, deeply rooted in native-centric ecology. This concept reconstructs negative attitudes for the benefit of humanity. This study concludes that the resacralization of the environment by the teaching and learning of native-centric ecology in schools can mitigate the impacts of the ecological crisis.

Keywords: Humans. Ecology. Environment. Environmental pollution.

Resumo

O peso da ecologia nativo-cêntrica africana na ecodesacralização

A crise ecológica é uma das questões ambientais que mais afetam o planeta e é causada pela ecodesacralização, um conceito definido pela relegação das identidades divinas da natureza ao esquecimento a partir do ceticismo ambiental. Dúvidas sobre a realidade da degradação ambiental ou das mudanças climáticas e desertificação carregam em si uma forte visão antropocêntrica da natureza. O ceticismo pode ter aprofundado a compreensão humana sobre o mundo natural, mas também destruiu o meio ambiente. Neste estudo, argumenta-se que a ecodesacralização é uma forma de avareza ambiental, e medidas devem ser tomadas para mudar a forte percepção antropocêntrica atual sobre o mundo natural. Para superar tal percepção, buscamos desvelar a ética conservacional africana, profundamente enraizada na ecologia nativo-cêntrica. Esse conceito desfaz atitudes negativas e as reconstrói, com vistas ao bem comum da humanidade. Este estudo conclui que a ressacralização do meio ambiente pelo ensino-aprendizagem da ecologia nativo-cêntrica nas escolas pode mitigar os impactos da crise ecológica.

Palavras-chave: Humanos. Ecologia. Ambiente. Poluição ambiental.

Resumen

El peso de la ecología nativocéntrica africana en la ecodesacralización

La crisis ecológica es una de las cuestiones ambientales que más afectan al planeta y está provocada por la ecodesacralización, un concepto definido por la relegación al olvido de las identidades divinas de la naturaleza basándose en el escepticismo ambiental. Las dudas sobre la realidad de la degradación ambiental o del cambio climático y la desertificación conllevan una fuerte visión antropocéntrica de la naturaleza. El escepticismo puede haber profundizado la comprensión humana del mundo natural, pero también ha destruido el medio ambiente. En este estudio, se argumenta que la ecodesacralización es una forma de codicia ambiental, y que se deben tomar medidas para cambiar la fuerte percepción antropocéntrica actual del mundo natural. Para superar esta percepción, buscamos desvelar la ética de la conservación africana, profundamente arraigada en la ecología nativocéntrica. Este concepto deshace actitudes negativas y las reconstruye, con miras al bien común de la humanidad. Este estudio concluye que la resacralización del medio ambiente por medio de la enseñanza-aprendizaje de la ecología nativocéntrica en las escuelas puede mitigar los impactos de la crisis ecológica.

Palabras clave: Humanos. Ecología. Ambiente. Contaminación ambiental.

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Conceptual clarifications

Environmental skepticism is the denial of environmental problems as either unreal or unimportant. Championed by Descartes, it works as a type of modern anthropocentrism with direct and evident ecological consequence¹. New environmental identities is the term used to cover ideas such as climate change, environmental deterioration, careless garbage disposal, and many other issues caused by the desacralization of nature². Environmental taboos represent environmental awareness and conservation genres wherein human life is hinged on the animal, vegetative, and physical environments, which are then supposed to be identified, named, meaningfully and economically exploited, and safeguarded from pollution, over-extraction and depletion for the well-being of humanity³.

Native-centric ecology

The indigenous study of the environment using centric (local) perspectives is known as native-centric ecology⁴, encompassing indigenous laws, customs, philosophies, and values. This ecological and social philosophy is challenged by eco desacralization. Native-centric ecology upholds indigenous environmental ideals or values by laying forth clear guidelines or principles for how people should behave in the natural world⁴.

The centric paradigm involves rethinking the native bionetworks and transitory from generation to generation through oral tradition, mythology, and practice. Attempts to investigate the root of the ecological crisis started with the publication of an article by Lynn White entitled "The Historical roots of our ecological crisis" in 1967; however, the project has lingered and remains uncompleted and under development, with desacralization being one of its new ecological identities in the 21st century².

What is eco-desacralization? The world currently witnesses a modern man who negates the sacred in the name of the dominance of creatures⁵. The Iranian philosopher Seyyed Hossein Nasr was responsible for conceptualizing the philosophy

of desacralization in 1981⁶. Eco-desacralization is an offshoot of Western philosophical skepticism *modern anthropocentrism thus begins with Descartes, with direct and evident ecological consequences*¹. Togetherness in the hierarchy of beings was lost with skepticism, and the absence of eco-spirituality in environmental relationships has worsened the ecological crisis⁷.

The appreciation of skepticism resulted in the truths about the nature of beings in the environment being amiss; a loss of the transcendental dimension of the environment that repudiates the intellectual pursuit of the absolute in environmental protection.

Eco-desacralization negates the divine, intrinsic worth (sacredness), and symbiotic relationship in the exploitation of nature. It is the opposite of eco-sacralization, which affirms that religious structures of the environment are violated by humans and deep-seated isolation of eco-spirituality, whereas the anomaly of desacralized ecology is a reductionist outlook and break between sentient beings. The environment and the Spirit have been recognized at all other times and places throughout communities and tradition. The need for rehabilitation of the sacred ecology is the solution to the ecological crisis⁶.

The overexploitation of nature opens the possibility of a non-spiritual way of being human⁸. The exteriorization of nature is a significant process to promote skepticism without making promises to divine identities⁹. The desacralization of the environment is the process of separating ecological knowledge from its perceived divine source (God or the ultimate reality)¹⁰. This awareness rejects the divine and metaphysical foundations of the environment and confines knowledge to the empirical domain¹¹.

Human activities in the terrestrial biosphere are one of the greatest factors in eco-desacralization, changing the structure of the environment across the globe¹². Climate change, environmental deterioration, careless garbage disposal, and many other issues are new environmental identity. The human search for food and production, including agriculture purposes such as fishing and non-human consumption activities, is the biggest contributor to the degradation of natural habitats^{9,12}.

The desacralization of nature is the root of our ecological crisis, and we know very little about what occurred or what the outcomes were since our understanding of the history of ecological change is still so nascent². As Lynn Whyte exemplified, *the extinction of the European aurochs as late as 1627 would seem to have been a simple case of overenthusiastic hunting*¹³. Moreover, skepticism is cited as the root cause of new environmental identities, as it motivates humans toward environmental degradation¹⁴. The ecological crisis can also be attributed to natural factors, but human actions are usually local and most often the consequence of desacralization⁵.

Eco-desacralization is the reverse of eco-sacralization (native centric ecology), it is a spiritual abuse of the environment that has curt across-the-board and enduring consequences at individual, local, and global levels. The destruction of religious regalia formerly dedicated to sacred objects, plants, or animals renders the object desacralized¹⁵.

Method

This study adopted the philosophical analysis, as it is a critical approach toward words and concepts used in research¹⁶. This approach ensures the greatest possible precision in meaning by clarifying the denotation and significance of the words used. Without a clear analysis, philosophical ideas or thoughts are *cluttered and untidy, their meaning unnecessarily vague and ambiguous, making it difficult to compare ideas and systems of thought because one is uncertain of what is being compared. The philosopher's function is to ensure that the house of ideas is tidy*¹⁷.

Philosophical analysis is an evidence-based method of philosophical research, not a philosophical speculation, that helps a researcher acquire in-depth understanding of the subject, objects, literature, and topics under investigation, to then communicate an idea¹⁷. This study is concerned with an in-depth analysis of the concept of eco-resacralization, a new environmental identity, as understanding native-centric ecology would be a valuable approach and an essential resource for the revival and protection of undervalued ecology.

Our philosophical analysis will be limited to conceptualizing new environmental identities and the approach to addressing them. This may not be a perfect approach to solving the problems of the environmental crisis, but philosophically analyzing such concepts and terms is a worthwhile effort.

"EzeOsis" tradition: a native ecology

In the oral tradition of the Ika people of Delta State, Nigeria, EzeOsis (anunuebe) is a mysterious tree that keeps its leaves throughout the year¹⁸. This sacred tree is feared and respected, decisively dealing with evil and incapable of being influenced by corruption in the course of dispensing justice. Healers and diviners venerate this most powerful sacred tree as it is a bold place of action with a supernatural presence¹⁹.

EzeOsis is a deep green guard, and it is used to prepare all sorts of charms and no bird perches on it. It is *an evergreen, woody, spinous flowering tree about 10 meters in height referred to as 'desert date,' is a fabulous therapeutic source of curing ailments. It is a member of the family Balanitaceae, which is broadly spread in waterless land areas of Africa and the southern part of Asia. It consists of saponins, flavonoids, alkaloids, lipids, proteins, carbohydrates, and organic acids*²⁰.

EzeOsis is an endangered species subject to bush burning on many Ika lands, which takes away the natural vegetation cover that shields the soil surface, exposing the land to water erosion and ultraviolet radiation, and leading to an ecological crisis²¹. In Australia, government agencies estimate that about 50 nationally threatened animal and plant species have had at least 80% of their living grounds affected by bushfires²², meaning biodiversity losses.

The desacralization of EzeOsis is a spiritual abuse with wide and enduring consequences at individual, local, and global levels¹⁵. The reappraisal of EzeOsis from an ideologically deep-rooted view of nature means recapturing its sacred medicine and divine environmental identities, as opposed to the prolonged suppression of African ideology for the preservation of the environment. The EzeOsis tradition is a part of African ontology that must be understood in terms of the cosmology of African peoples⁹.

The reality of EzeOsis is a composite of the unity and harmony of natural forces and the environment, a holistic community approach of mutually enforcing values for the protection of sacred sites, stones, sand, mountains, rivers, plants, and animals²³. The sacredness of EzeOsis is the affirmation that all reality bears a vital force or energy, such that harmonious interactions are for the common good of humanity²³.

The distinctive identity of EzeOsis covers the prohibitions and strict taboos under which a species or area was forbidden by the ancestors due to social norms that concerned acceptable behavior when harvesting or engaging with such species²⁴. The appreciation of certain environmental taboos enlightens an arcane and environmentally-based awareness that is meant to promote sustainable use of nature's resources²⁵. The rationale for strict taboos is that they offer protection to threatened species—such as EzeOsis—and non-adherence to community taboos result in sanctions²⁵.

Eco-resacralization promotes the sustainable use of the environment and informs impenetrable, environmentally-based knowledge. The Shona people, like any other African society, has felt the impact of eco-desacralization, but certain values have defied such changes and continue to profile human behavior as it relates to the environment; the taboos underscore their morality and are critical in conserving the environment and shielding water sources, natural vegetation, wildlife, and nonhumans. Ecological prohibition fosters the sustainable use of the environment²⁵.

The continuation and integration of divine identities, such as taboos, would defy negative perceptions of the environment and shape human conduct. We thus sustain that native centric ecology is crucial to preserve the environment²⁵.

The oral tradition of systematically studying EzeOsis has been undomesticated for over half a century²⁶. The tree is an endangered species, and this raises significant ethical issues over the desacralization of habitats²⁶. The most immediate ethical concerns involve the undocumented conservationist approach of the EzeOsis by the African peoples, an approach that can be transferred from generation to generation through myths, songs, and many other mediums²⁶.

Important ethical considerations are also involved in the authenticity of research about the great EzeOsis and how non-indigenous researchers could interact with the locals and extract meaningful thoughts^{26,27}, which turned into a major problem in the research of the EzeOsis tradition.

The concept of native centric ecology

The resacralization of the environment simply means (native centric ecology), the transformation of human consciousness to rediscover the sacred qualities of the environment, as humans themselves have lost the sense of sacredness. The native centric ecology is the rediscovery of a sacred nature that can only be achieved through the practice, teaching, and learning of indigenous ways of life^{4,5}.

Native-centric ecology is adopted as a panacea to the ecological crisis because of its non-anthropocentric capabilities toward the environment²⁸. African conservationist ethics extends the sacred morals beyond anthropocentrism and includes non-sentient beings²⁹.

Indigenous conservationist ethics show how African societies employ different values and customs to make their environment physically and spiritually sustainable, including taboos and norms that set correct or incorrect behaviors towards nature²⁹. However, eco-desacralization forced many African societies to abandon some of these conservationist values and sustainable practices *where humans have moral responsibility only towards humans, development means the complete disregard for traditional African holistic values and customs*²⁹, for an anthropocentric approach.

Native centric ecology is concerned with how cultural practices reconstruct negative human perceptions and recreate a divine environmental identity^{4,25}. The African ecology of conservation is concerned with how the environment influences African cultural practices^{23,30}, and African ontology is supported conservationist moral values, though conservationist attitudes have been destroyed by the exploitative ethos of skepticism nowadays²³.

The reawakening of indigenous environmental concerns would help sustain the environment³¹. The African ecology of conservation is committed to the divine relationship between humans and the planet Earth. It is essential to the ontological well-being of both humans and the environment³⁰.

The question is: how can we resacralize the divine environmental identities, knowing the impacts of skepticism? Ideological denialism negates eco-spirituality and has done more harm than good, including the negation of ecological transcendental beings.

Skepticism may be understood as “ideological denialism,” which conceals underlying contradictions and perpetuates the current social order. The denial of climate change involves recognizing it as a problem but failing to diagnose the root causes and prescribe solutions that maintain the current system³², working as an act of doubting divine identities, cultural orientation, social trust, and philosophical interplay for the protection and conservation of the environment¹⁴.

Zhou argued that skepticism stems from insufficient education and self-assessed environmental knowledge, religious and conservative values, a lack of trust in general society and science, and other concerns competing with environmental concerns^{14,33}. In the same vein, environmental disbelief holds that ecological crises such as global warming, desert encroachments, pollution, climate change, and many others are products of natural chemistry aimed at deterring man from exploiting the environment³³.

The massive destruction of the EzeOsisi, plundering of elephants for ivory, environmental pollution, the danger to various plant and animal species, recklessly killing wild animals and harvesting of their parts for various purposes, and the destruction of various habitats due to deforestation can be channeled into environmental skepticism and the denial of the aforesaid environmental problems^{23,34}. These are attempts to separate human society from non-human nature and reject ecology as a legitimate ground of moral concern³⁴⁻³⁶.

A new environmental identity is real, and humans must be guided for long-term sustainability³⁷. The vastly exaggerated, human-induced greenhouse gas concentrations play a substantial role in changing the environmental

divine identity, as global warming affects humans, plants, and wildlife. Climate change is thus a product of ecological destruction and is dangerous to humans and the environment alike. Radical environmental policies are likely to be ineffective, ill-timed, and harmful to humanity³⁷. We maintain that environmental skepticism is an overgeneralization of environmental trust and ask the question: is eco-resacralization a panacea for the ecological crisis?

Native-centric ecology is an emerging field and was coined by Osebor in an article entitled “Native-centric ecology as a panacea to aquatic crisis?”^{4,24}. This philosophy revolves around the restoration of divine ecological identities⁴. This social construct is disheveled with morals, ideological stances, priorities, and aspiration beliefs that shape the transition and pathways to re-establish, reinstate, or accelerate the recovery of the divine nature of an ecosystem that has been disturbed by the identity crisis¹². The philosophy of native-centric ecology is an act of reawakening religious beliefs to counter the new environmental identities model³⁸.

In African cosmology, the environment is considered sacred³⁹, and key for several human activities, such as sustaining the ecological provision of food and fresh water, drinking, cooking, cleaning, sanitation, and fishing, and the generation of energy, navigation, recreation, and tourism. Safe, sufficient, and healthy water is essential for achieving food security and ending poverty^{39,40}. The moral implication of sacred environmental identity shows that community taboos promote, conserve, and protect biodiversity or, by default, punish environmental predators⁴¹.

The sad destruction of the sacred and environmental degradation is inimical to the flourishing of natural habitats. The environment is important to humanity and an important part of who we are. Humanity should relate positively and have a sense of reconnection to the nonhuman environment, since divine attachment and otherness with it are ways in which we see and act toward the world to protect its naturalness. The profusion of the sacred environment offers us a sense of connectedness, of being a part of something bigger than ourselves, and of the commonalities we share with others⁴². The sacred identity communicates eco-spirituality and

connectedness with nature, to preserve and protect the environment for posterity⁴³.

The sacredness of nature is the metaphysical connection between human beings and the environment⁴⁰. The ecological divine is the essence of nature's creation without separateness, and environmental separateness is a consciousness of the self that does not aim for sustainable development³⁸. Resacralization will reconfigure sacred topologies, achieve spiritual enlightenment, and reinitiate habitual appropriation of the environment^{4,44}. In the face of increasing scientific evidence supporting the need for urgent and transformative action, effective responses to address eco-desacralization remain obstructed³².

We maintain that eco-resacralization is a critical step in considering new environmental identities and re-manifesting the divine environment and the relationship between human beings and their surroundings, allowing them to symbiotically sustain each other. Re-manifestation of divine environmental identities would incorporate a symbiotic and insightful awareness that all life on planet Earth is metaphysically connected and cannot be explored for mere anthropocentric reasons³⁸. The metaphysical connection is a religious epistemology of protecting the Earth from predators⁴⁵.

Native-centric ecology is a wake-up call to return to the divine tradition or the religious paths of ecology. The rediscovery of sacredness and the revival of tradition will shape human behavior and trigger social life, culture, and environmental identity^{4,14}. Native-centric ecology aims to re-establish the ecosystem on a trajectory to reach full recovery and the restoration of a tainted ecosystem^{4,46}. For example, forest resacralization is the planting of trees, but full recovery means the site should be a fully functioning forest with mature trees in the age classes representative of a mature native forest, the return of humanity to the understanding of sacred tradition^{4,6}.

The central premise of eco-resacralization is the use of an environmental divine source (God) to revive ecology and restore eco-spirituality. Although eco-spiritualization has been criticized for its metaphysical nature, religion and spiritual values will continue to play an important role in ecological restoration. Nasr argues that

*every human can know the sacred because consciousness is itself proof of the primacy of the spirit or divine consciousness, of which human consciousness is a reflection and echo*⁶.

The question is: why does the sacred end up destroying the sacred? The desacralization of ecology is the separation of the sacred and the profane, which has influenced contemporary humanity and led to an ecological crisis, so, we maintain that eco-desacralization is a *strategy or set of strategies beleaguered to preserve distinctive identity as a people or group*⁴⁷. Native centric ecology is not fundamentalism but a selective retrieval of doctrines, beliefs, and practices from a sacred past. The retrieval of the sacred past is refined, modified, and sanctioned in a spirit of shrewd pragmatism⁴⁷.

African conservationist ethics can contribute to ameliorates or, at least, mitigate the devastating effects of eco-desacralization in Africa and on a global scale⁴. Although Africa may bear the smallest amount of responsibility for eco-desacralization, the continent suffers the greatest burden from the adverse effects of the new environmental identities²⁹. There is an urgent need to embrace indigenous solutions to the ecological crisis in Africa without compromising much-needed development on the continent.

Contemporary women and men have lost the sense of awe, wonder, and the sacred, hardly being aware of how miraculous the mystery of intelligence and human subjectivity is, as well as the power and the possibility of objectively knowing to preserve the environment⁶. Native-centric ecology is value-based and communicates religious values and expectations to environmental stakeholders, it provides guidelines for the formulation of policies, decision-making, and the justification of values or standards for the use of nature^{26,48}.

The harmony and equilibrium of the cosmos required a movement within the heart and soul of at least several contemporary men to rediscover the sacred at the very moment when the process of secularization seemed to be reaching its logical conclusion in removing the presence of the sacred altogether from all aspects of human life and thought^{49,50}. The problem-solving and overarching framework are significant for sustainable environmental management, including

environmental policies to help us conserve, protect, and distribute the Earth's water for human and industrial uses.

Eco-resacralization is a reflective equilibrium about what ought to be accepted or not in the environment. It presents different perspectives rather than defending or developing a particular ethical position, working as an ethics of value that *takes different forms in different cultural groups. In Western societies, ethical restrictions tend to take the form of behavioral rules that ultimately are codified in law*⁵¹. Native-centric ecology is an integrationist ethic that explores debates about the environmental crisis and the world⁵². However, a critical analysis of eco-desacralization would offer justification for questions about intrinsic value and the sacredness of the environment.

Final considerations

From a philosophical analysis of the metaphysics of eco-desacralization, this study found that the major cause of new environmental identities is skepticism. Although skepticism may have deepened human understanding of the natural world, it also resulted in the destruction of the environment.

The study concludes that although a large range of scholars propose theoretical and efficient methods of investigating the new environmental identity to save the environment, such philosophies may not be sufficiently powerful to mitigate the human community on a global scale to solve the ecological crisis problem because none of them incorporate the indigenous approach the

native-centric idea of the sacred, which *alone can enable us to reassert the sacred quality of nature and therefore realize its ultimate value beyond the merely utilitarian*⁵.

Native-centric ecology can certainly help in changing the mental landscape cluttered by so many forms of philosophical skepticism, and eco-resacralization stands out among the several alternatives to solving the ecological crisis. The solution to the current environmental crisis is the eco-resacralization of the environment. The native-centric ecology is *not by man, who has no power to bestow the quality of sacredness upon anything, but through the remembrance of what nature is as a theater of divine creativity and presence*⁵.

To overcome eco-desacralization, there is an urgent need to integrate the natural ecology to solving the ecological crisis. Native-centric ecology is an African conservationist ethic that reconstructs human negative perceptions and recreates a divine environmental identity. The study concludes that recreating a divine environment is possible by teaching and learning eco-resacralization in schools to mitigate the impact of the ecological crisis.

Although skepticism affects education and self-assessed knowledge, education and self-assessed awareness are more effective at confronting skepticism. Policymakers should implement the teaching and learning of eco-resacralization in schools. Stakeholder involvement is also instrumental to unearthing and nurturing environmental ideas by reconstructing behaviors and promoting values that would help to avert the ecological crisis facing humanity.

References

1. Kureethadam JI. The philosophical roots of the ecological crisis: Descartes and the modern worldview [Internet]. Newcastle: Cambridge Scholars Publishing; 2017 [acesso 18 jun 2024]. Disponível: <https://bit.ly/46bgBb0>
2. Loureiro JA. Hossein Nasr on the environmental crisis. In: Valera L, eds. Pantheism and ecology: ecology and ethics, vol 6. Edinburgh: Springer, Cham; 2023. p. 30-40.
3. Makaudze G. An eco-critical exegesis of shona taboos. Curr Writ [Internet]. 2021 [acesso 18 jun 2024];33(2):143-53. DOI: 10.1080/1013929X.2021.1970356
4. Osebor IM. Native-centric ecology as a panacea to aquatic crisis? Sapientia: J Philos [Internet]. 2023 [acesso 18 jun 2024];18:151-9. Disponível: <https://bit.ly/4cUMrek>
5. Nasr SH. Religion and the resacralization of nature. In: Cain CC, editor. Many heavens, one earth: readings on religion and the environment. New York: Lexington Books; 1994. p. 83-98.

6. Nasr SH. Knowledge and the sacred [Internet]. New York: State University of New York Press; 1989 [acesso 18 jun 2024]. Disponível: <https://bit.ly/3W4wkDT>
7. Howard D. Defying the immanent frame. In: Howard D. Being human in Islam: the impact of the evolutionary worldview [Internet]. Londres: Routledge; 2011 [acesso 18 jun 2024]. p. 1-14.
8. Sotillos SB. The eclipse of the soul and the rise of the ecological crisis. *Spiritual Stud* [Internet]. 2022 [acesso 18 jun 2024];8(2):34-55. Disponível: <https://bit.ly/3WoPuWB>
9. Sparenberg D. Deontology, ecology, and core shamanism. *Trumpeter* [Internet]. 1994 [acesso 18 jun 2024];11(2). Disponível: <https://bit.ly/4f95YJR>
10. René G. Symbols of sacred science. 2ª ed. Teheran: Sophia Perennis; 2004.
11. Heer N. Knowledge and the sacred. New York: State University of New York Press; 1989.
12. Monday OI. The relevance of deep ecological principles in the aquatic crisis: a philosophical analysis. *Bangladesh J Bioeth* [Internet]. 2020 [acesso 18 jun 2024];11(2):42-8. DOI: 10.3329/bioethics.v11i2.50392
13. White Jr. L. The historical roots of our ecological crisis. *Science* [Internet]. 1967 [acesso 18 jun 2024];155(3767):1203-7. Disponível: <https://bit.ly/3S6blu0>
14. Zhou M. Public environmental skepticism: a cross-national and multilevel analysis. *Int Sociol* [Internet]. 2015 [acesso 18 jun 2024];30(1):61-85. DOI: 10.1177/0268580914558285
15. Lutkajtis A. Lost saints: desacralization, spiritual abuse, and magic mushrooms. *Fieldwork Relig* [Internet]. 2020 [acesso 18 jun 2024];14(2):118-39. DOI: 10.1558/firn.40554
16. Ikechukwu O, Benson K. The anthropocentric truth of soren kierkegaard: a critique. *KKU Int J Humanit Soc Sci* [Internet]. 2022 [acesso 18 jun 2024];12(2):84-96. Disponível: <https://bit.ly/3WesRmy>
17. Jorgensen E. On the philosophical method. In: Colwell, Richard. *MENC handbook of research methodologies* [Internet]. New York: Oxford University Press; 2006 [acesso 18 jun 2024]. p. 176-98. Disponível: <https://bit.ly/46bV2H5>
18. Adaobi O. A brief walk into the lives of the Ika tribe. *Pulse.ng* [Internet]. 2020 [acesso 18 jun 2024]. Disponível: <https://bit.ly/3Y16Aek>
19. Ighbo Medicine and Culture Nigeria. The sacred tree, called Osisi Anunu Ebe (birds don't perch). Facebook [Internet]. 2018 [acesso 18 jun 2024]. Disponível: <https://bit.ly/3W0Pv1s>
20. Al-Thobaiti SA, Zeid IMA. Medicinal properties of desert date plants (*Balanites aegyptiaca*): an overview. *Glob J Pharmacol* [Internet]. 2018 [acesso 18 jun 2024];12(1):1-12. DOI: 10.5829/dose.gjp.2018.01
21. Yakubu OE, Gto O. A review of the impact of recurrent bush burning on the climate change paradigm: the nigerianexperience. *Int J Biol Res* [Internet]. 2019 [acesso 18 jun 2024];(4)4:92-101. Disponível: <https://bit.ly/4d14vTW>
22. Adam M. More than 100 threatened species were hit hard by Australian bushfires, pushing many towards extinction. *The Guardian* [Internet]. 2020 [acesso 18 jun 2024]. Disponível: <https://bit.ly/4d0x8AA>
23. Osebor IM. Inclusive symbolic frames and codes shaping cultural identity and values. *MEΘEXIS Journal of Research in Values and Spirituality* [Internet]. 2024 [acesso 22 jul 2024];IV(1):82-99. Disponível: <https://tinyurl.com/y3kxuffc>
24. Jones JP, Andriamarovololona MM, Hockley N. The importance of taboos and social norms to conservation in Madagascar. *Conserv Biol* [Internet]. 2008 [acesso 18 jun 2024];22(4):976-86. DOI: 10.1111/j.1523-1739.2008.00970.x
25. Munamoto C, Dennis M. Taboos as sources of shona people's environmental ethics. *J Sustain Dev Afr* [Internet]. 2010 [acesso 18 jun 2024];12(7):4. Disponível: <https://bit.ly/4f38eCj>
26. Gruen L, Fultz A, Pruetz J. Ethical issues in African great ape field studies. *Ilar J* [Internet]. 2013 [acesso 18 jun 2024];54(1):24-32. DOI: 10.1093/ilar/ilt016
27. Monday OI. The relevance of deep ecological principles in the aquatic crisis: a philosophical analysis. *Bangladesh J Bioeth* [Internet]. 2020 [acesso 18 jun 2024];11(2):42-8. DOI: 10.3329/bioethics.v11i2.50392
28. Aubin L. The agroecological paradigm and the crises of contemporary society: socio-anthropological contributions from the mimetic theory perspective. *Desenvolv Meio Ambient* [Internet]. 2017 [acesso 18 jun 2024];41:270-94. DOI: 10.5555/2017336690

29. Tosam MJ. African environmental ethics and sustainable development. *Open J Philoso* [Internet]. 2019 [acesso 18 jun 2024];9(2):172. DOI: 10.1007/s10806-021-09853-4
30. Machaqueiro RR, Grinker RR. Environmental anthropology in Africa: from the cattle complex to environmental. In: Grinker RR, Lubkemann SC, Steiner CB, Gonçalves E, editores. *A companion to the anthropology of Africa* [Internet]. Hoboken: Wiley; 2019 [acesso 18 jun 2024]. p. 375-96. DOI: 10.1002/9781119251521.ch17
31. Mbhi J. African environmental ethics and sustainable development. *Open J Philoso* [Internet]. 2019 [acesso 18 jun 2024];9(2):172-92. DOI: 10.4236/ojpp.2019.92012
32. Petersen B, Stuart D, Gunderson R. Reconceptualizing climate change denial, human ecology review. *Open J Philoso* [Internet]. 2019 [acesso 18 jun 2024];25(2):117-42. DOI: 10.22459/HER.25.02.2019.08
33. Jacques MPJ. *Environmental skepticism: ecology, power, and public life*. Londres: Routledge; 2009.
34. Peter J. The rearguard of modernity: environmental skepticism as a struggle of citizenship. *Glob Environ Polit* [Internet]. 2006 [acesso 18 jun 2024];6(1):76-101. DOI: 10.1162/glep.2006.6.1.76
35. Hoffman AJ. The culture and discourse of climate skepticism. *Strateg Organ* [Internet]. 2011 [acesso 18 jun 2024];9(1):77-84. DOI: 10.1177/147612701039506
36. Pintor J, Gavin NT. Climate skepticism in British newspapers, 2007-2011. *Environ Commun* [Internet]. 2015 [acesso 18 jun 2024];10(4):432-52. DOI: 10.1080/17524032.2014.995193
37. Shani A, Arade B. Climate change and tourism: time for environmental skepticism. *Tour Manag* [Internet]. 2014 [acesso 18 jun 2024];44(2):82-5. DOI: 10.1016/j.tourman.2014.02.014
38. Valerie L. Ecospirituality: a pattern that connects. *J Holist Nurs* [Internet]. 2000 [acesso 18 jun 2024];18(3):227-44. DOI: 10.1177/089801010001800305
39. Ikeke MO. The role of climate ethics in biodiversity conservation. *Eur J Sustain Dev* [Internet]. 2021 [acesso 18 jun 2024];10(3):205-13. DOI: 10.14207/ejsd.2021.v10n3p205
40. David B. The global water crisis and human rights. A/HRC/46/28. In: 46th session of the Human Rights Council [Internet]. Monaco: United Nations Human Rights Special Procedures; 2021.
41. Jean-Pierre KB. The contribution of the sacred in traditional African societies to environmental ethics. *Anthropol* [Internet]. 2013 [acesso 18 jun 2024];1(3):1-4. Disponível: <https://bit.ly/464GQzH>
42. Clayton S. Environmental identity: a conceptual and an operational definition. In: Clayton S, Opatow S. *Identity and the natural environment: the psychological significance of nature* [Internet]. Cambridge: MIT Press; 2003 [acesso 18 jun 2024]. p. 45-65. Disponível: <https://bit.ly/3Y7zKIW>
43. Koehrsen J. Eco-spirituality in environmental action: studying dark green religion in the German energy transition. *J Study Relig Nat Cult* [Internet]. 2018 [acesso 18 jun 2024];12(1):34-54. DOI: 10.1558/jsrnc.33915
44. Farrell J. Environmental activism and moral schemas: cultural components of differential participation. *Environ Behav* [Internet]. 2013 [acesso 18 jun 2024];45(3):399-423. DOI: 10.1177/0013916511422445
45. Healing Earth [Internet]. Loyola University Chicago; 2021 [acesso 18 jun 2024]. Disponível: <https://bit.ly/4f3Lulz>
46. Eco-restoration what is ecological restoration? [Internet]. Washington, DC: Society for Ecological Restoration; 2024 [acesso 18 jun 2024]. Disponível: <https://bit.ly/3Y5aumi>
47. Vaidyanathan B. Understanding resacralization (part 3) [Internet]. Nova York: The Immanent Frame; 2011 [acesso 18 jun 2024]. Disponível: <https://bit.ly/4f999ks>
48. Webb WN. Ethical culture and the value-based approach to integrity management: a case study of the department of correctional services. *Pub Adm Dev* [Internet]. 2019 [acesso 18 jun 2024];32(1):96-108. DOI: 10.1002/pad.1602
49. Monday OI. The ethical implications of eco-individualism for a sustainable environment. *Eur J Sustain Dev Res* [Internet]. 2021 [acesso 18 jun 2024];5(3):em0167. DOI: 10.21601/ejosdr/11092
50. Monday OI. Ethics of cognitive restructuring: a rehabilitation of rape victims and offenders. *Voices Bioeth* [Internet]. 2020 [acesso 18 jun 2024];6. DOI: 10.7916/vib.v6i.7223
51. Schmidt JJ, Peppard CZ. Water ethics on a human-dominated planet: rationality, context and values in global governance. *Wires Water* [Internet]. 2014 [acesso 18 jun 2024];1:533-47. DOI: 10.1002/wat2.1043
52. Vaughn KJ, Porensky LM, Wilkerson ML, Balachowski J, Peffer E, Riginos C, Young TP. Restoration ecology. *Nat Educ Knowl* [Internet]. 2010 [acesso 18 jun 2024];3(10):66. Disponível: <https://go.nature.com/3zLaDkQ>

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