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Ecotheology
Sustainability and Religions of the World

Edited by Levente Hufnagel



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Published in London, United Kingdom

Ecotheology - Sustainability and Religions of the World
<http://dx.doi.org/10.5772/intechopen.100196>
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First published in London, United Kingdom, 2023 by IntechOpen
IntechOpen is the global imprint of INTECHOPEN LIMITED, registered in England and Wales,
registration number: 11086078, 5 Princes Gate Court, London, SW7 2QJ, United Kingdom

British Library Cataloguing-in-Publication Data

A catalogue record for this book is available from the British Library

Additional hard and PDF copies can be obtained from orders@intechopen.com

Ecotheology - Sustainability and Religions of the World
Edited by Levente Hufnagel

p. cm.

Print ISBN 978-1-80355-435-8

Online ISBN 978-1-80355-436-5

eBook (PDF) ISBN 978-1-80355-437-2

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Meet the editor



Dr. Levente Hufnagel is an associate professor and the head of the Research Institute of Multidisciplinary Ecotheology at John Wesley Theological College, Budapest, Hungary. He obtained his master's degree in ecology and evolutionary biology and Ph.D. in hydrobiology from Eötvös Lorand University, a Ph.D. in agricultural science from Szent István University, and other degrees from the Corvinus University of Budapest and Adventist Theological College. His research interests are ecology, biogeography, ecological research methodology, ecotheology and sustainability. He has over 20 years of experience at leading Hungarian academic institutions, teaching Ph.D., MSc, and BSc students from various social and cultural backgrounds. He has more than 240 scientific publications (in both aquatic and terrestrial ecological aspects of plants, animals and microbes, at the community as well as population level) and more than 1000 independent citations. He has participated in a number of major ecological research and development projects, and has significant experience in multidisciplinary cooperation, with more than 200 co-authors in different publications. Dr. Hufnagel has wide editing experience and is editor-in-chief of *Applied Ecology and Environmental Research* (an international scientific journal indexed by Web of Science and Scopus). Hufnagel graduated from Eötvös Lorand University with a Master's degree in Ecology and Evolutionary Biology and a Ph.D. degree in Hydrobiology, he also graduated from Szent István University with a Ph.D. degree in Agricultural Science and with other degrees from the Corvinus University of Budapest and Adventist Theological College.

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Preface

By the 21st century, humankind has fallen into a global ecological crisis that endangers not only its welfare, peace and development but also its mere existence and survival. The sustainability of our society, therefore, has a key role to play in our life and thinking.

Multidisciplinary and ecumenical ecotheology is a science that brings together an analysis of the direct determination of the existence and survival of living beings and their communities, and their final determination (“ultimate concern”), which includes their origin, purpose, destiny and meaning. As an applied science, ecotheology is the application of theological methods to the study of the consequences of human action from the perspective of contemporary ecology. It seeks to achieve the harmonious functioning as well as the maintenance and fulfillment of the self-identity of the biosphere (and that of human society as an integral part of the biosphere), by ensuring that the principles of theological ethics (as well as the motivating power of faith and the communities and the institutional system of religious practice) have an effect on human action.

The practical aspect of ecotheology – care for creation – aims to overcome the global ecological crisis and build a sustainable society for humanity.

The chapters of this book cover a wide spectrum from pure/theoretical to applied/practical ecotheology, including sustainability, ecological, sociological, and cultural aspects of our changing planet.

Ecotheology - Sustainability and Religions of the World reports from the frontiers of this transdisciplinary research area. I am sure that this book will be very useful for everyone seeking insights into recent global problems from the viewpoints of the religions of the world.

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Section 1

Ecotheology

Chapter 1

Introductory Chapter: Multidisciplinary Ecotheology a New Approach for Sustainability and Global Problems

Levente Hufnagel and Ferenc Mics

1. Introduction

Multidisciplinary and ecumenical ecotheology is a science that analyzes in unity the direct determination of the existence and survival of living beings and their communities (including human society), their influencing factors (e.g., their environmental limitations, as *causa efficiens*), and their final determination (“ultimate concern” as *causa finalis*, which includes its origin, purpose, destiny, and meaning). Methodologically, it cannot exclude the possibilities of distanced, checking cognition and participatory cognition (because it needs full information), but it ensures the highest possible reliability of knowledge by applying all the possibilities of testing. As an applied science, it thus becomes suitable for overcoming the global ecological crisis and establishing a sustainable society. The aim of this chapter is to summarize the current situation in this field.

Ecotheology, including human ecology, is an interdisciplinary science that studies ecological phenomena using theological methods and approaches, i.e., it is part of ecology. On the other hand, however, it is an interdisciplinary science (belonging to theology) that interprets transcendent reality (which is reflected by the content of faith) in the context of ecological systems, and therefore it requires the cooperation of experts of both fields.

As an applied science, ecotheology is the application of theological methods in order to study the consequences of human action from the perspective of contemporary ecology. It strives to achieve that the principles of theological ethics (as well as the motivating power of faith and the communities and the institutional system of religious practice) can ensure, taking effect on human action, the harmonious functioning as well as the maintenance and fulfillment of the self-identity of the biosphere (and that of human society as an integral part of the biosphere) (according to Ituma [1], “the nature balance”). We consider it important to supplement the definition by Ituma because living systems, especially the biosphere, are usually not in the state of equilibrium; balance of nature is a term used in the previous ecological literature. Care for creation as the practical aspect of ecotheology aims to overcome the global ecological crisis and build a sustainable society for humanity.

2. The present of ecotheology

Contemporary ecotheology combines natural law, moral law, the principles of ecopurists, moral theology, the theology of nature as well as environmental and bioethics. As a constructive theology, it is a rethinking of the Christian faith in the light of ecological results (see [2] for creation, [3] for stewardship, and [4] for priesthood and guardian role).

Santmire [5] identified two schools of thought in ecotheology as two endpoints of the continuum of barren theological debates: reconstructionists and apologists.

Reconstructionists, who identified with McFague, believe that the cosmos is the body of God and therefore everything is the sacrament of God; everything that has been corrupted must be restored to its original sacred state. Their orientation is characterized by the dominance of nature conservation, and their relationship to Lynn White's work [6] is generally positive (see related items of *Laudato si'* 83, 88, 89, 132).

Apologists, on the other hand, start from the concept of good stewardship. Their orientation is rather characterized by environmental protection, and they largely avoid the responsibility proposed by White (see related items of *Laudato si'* 53, 64, 65, 66, 124).

In Jürgen Moltmann's [2] pioneering work (originally presented in a series of lectures held at the invitation of the University of Edinburgh), these two poles still coexist. On the one hand, it states the immanence of the Creator in the world as a theorem: "An ecological doctrine of creation implies a new kind of thinking about God. The centre of this thinking is no longer the distinction between God and the world. The centre is the recognition of the presence of God in the world and the presence of the world in God." On the other hand, it emphasizes the role of man as a steward in pure form: "Human lordship on earth is the lordship exercised by a tenant on God's behalf. It means stewardship over the earth, for God. Only human beings know God's will, and only they can consciously praise and magnify him."

Moltmann's work stands out in the ecotheological literature regarding its quality level, ahead of his time. From an ecological point of view, its particular merit is that it provides an integrative and credible theological reflection taking into account the results of both major schools of thought at the forefront of international scientific debates, the Gaia theory by James Lovelock and Lynn Margulis as well as the theory of synthetic evolution. Moltmann's approach was greatly influenced by the oeuvre of the excellent Jesuit naturalist, Pierre Teilhard de Chardin (1881–1955), which first depicted the theistic evolution, which has been attacked from many sides but has not been surpassed so far.

Teilhard de Chardin's worldview, coupled with Lovelock's Gaia concept, also led to Thomas Berry's (1914–2009) notion of "Sacred Universe," the impact of which can then be tracked as far as Anne Primavesi's holistic theology, "Sacred Gaia" [7].

In addition to all this, there are some shortcomings in the ecotheology of today. According to Sideris [8], the work of "ecotheologians" sometimes refers to a picture of nature that is contrary to ecological knowledge. They interpret their own ecological worldview, which is often an anachronistic, idealized, unrealistic picture.

Significant, internationally listed care for creation organizations belonging to the same denomination come to sharply contradictory findings based on purely biblical reasoning (but without substantive analysis of ecological data in either case), motivated by clearly identifiable (nonscientific) interests [9, 10].

In his study, Stückelberger [11] points out that in ecotheology, there is often a one-sided emphasis on protology; we can rarely find in-depth considerations in the fields of Christology, pneumatology, soteriology, and eschatology, however, in fact, all theological disciplines should be involved in ecotheology.

The ecological activity of Christians can be divided into three groups nowadays. The first group includes the most Bible-centred Christians. They interpret the word “reign” just as King David reigns over his kingdom in the Bible, but the king is also responsible for his kingdom to God. Mankind has to take care of the Earth received from God in this way, because it is responsible for it. The second group considers environmental pollution and climate change as social and legal problems. As these also have a negative impact on human health, they believe that our right to health is violated. Spiritual groups focus on the miracle of the cosmos, of which man is only a tiny part. For the first two groups, the Bible is an important source of inspiration, however, for the third one, the universe itself replaces religious traditions. They are often critical of the scientific worldview [12]. In the 21st century, the biggest challenge for ecotheology is the rapid population growth, birth control, and dealing with overconsumption resulting from the capitalist system.


In conclusion, we can state that there are still many important challenges ahead of ecotheology, so that it can fulfill its role in solving our global problems and organizing a truly sustainable society.

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Chapter 2

Religion and the Environmental Crisis

Michael York

Abstract

The years 2020 and 2021 have confirmed that planet Earth is facing an environmental crisis due to global warming but augmented through industrial decimation of natural and wildlife areas, the consequences of pollution and even the ongoing population explosion. This chapter will examine religion and spirituality through four ideal types, namely the abrahamic, the dharmic, the secular and the pagan. How do individual religiosities conform to a relevant type, how do they contrast with one another and what similarities do they exhibit with each other? Further, what are the causes of the environmental crisis that our host planet is facing, what roles have the world's religions played in causing or furthering the terrestrial catastrophe and most importantly, what might be the various contributions that could emerge from the spiritual frameworks possibly to alleviate ecological problems and even restore the planet's natural balance? Specifically, what are the detriments and advantages to be noted in the world's major religions?

Keywords: ecology, global warming, spirituality, religion, abrahamic, dharmic, secular, pagan

1. Introduction

While religion is among the most perplexing phenomena that we tend to encounter as we transgress through life, we all seem to know what it is and what it does. One understanding holds that, typically, religion—at least in the West—refers to an institution with a recognised body of communicants who accept a particular set of doctrines that pertain to relating us as individuals to some postulated 'ultimate nature of reality' and who gather together on some regular basis for worship. Another understanding considers differently that religion is an attitude of awe towards the gods, God, the supernatural or the mystery of life that relates to belief and affects the fundamental patterns of individual and group behaviour. The term 'religion' apparently derives from the Latin *religare* meaning 'to bind fast'. The idea seems to be that religion is something that draws us and connects us together. The classic original definition of religion is that of the anthropologist Sir Edward Burnett Tylor (1832–1917) who, in his 1871 work on *Primitive Religion: Religion in Primitive Culture*, stated simply that religion is 'belief in spiritual beings'.¹ Tylor is seeking to understand

¹ Tylor ([1], 1.383).

primitive religion as the foundation of all religion, and he sees animism as the most basic stage in the evolution of religion. The trouble with his understanding, however, is that it excludes such an expression as Buddhism that most of us also accept as a form of religion. It also excludes other, perhaps more secular, expressions that could be viewed as religious or are at least of interest to the sociologist of religion.

In contrast to Tylor, the sociologist Max Weber (1864–1920) demurs on defining religion:

To define religion, to say what it is, is not possible at the start of a presentation. Definition can only be attempted, if at all, only at the conclusion of the study. The essence of religion is not even our concern, as we make it our task to study the conditions and effects of a particular type of social behaviour. The external courses of religious behaviour are so diverse that an understanding of this behaviour can only be achieved from the viewpoint of the subjective experience, idea, and purposes of the individuals concerned – in short, from the viewpoint of the religious behaviour's meaning.²

The difficulty remains, however, that Weber never did get around to the conclusion of his study and therefore was unable to come to a useable understanding of religion. Nevertheless, the key notion is that religion is something that is shared between people. It takes a position on the roles, identities and interaction between ourselves as human beings, our physical/tangible as well as spiritual/emotional world and the supernatural, magical and/or miraculous. A religion need not accept the reality of the supernatural for the attitude and practice to constitute a religion, but in all cases, *it takes a position* concerning the supernatural—whether that position is affirmative, one of denial or one of ignoring. Rather than a theory of religion, my own understanding of religion is that of a definition—both ontological *and* functional, that is, attempting to convey what religion is *and* what it does. Consequently, any religion may be considered as a

shared positing of the identity of and relationship between humanity, the world and the supernatural in terms of meaning assignment, value allocation and validating enactment.³

Clearly, human beings are attracted to religion in one way or another because religion itself is fascinating. It deals with whatever is the most significant and valuable in life. It is for this reason alone that it occupies a central niche in all human endeavour. In being concerned with how anything becomes different from being just a machine, religion attempts to explain whatever there is that renders the world, the cosmos and ourselves into something other than the mechanical. In a word, it is primarily concerned with the miraculous, with the how and why something is—or can be—more than merely the sum of its parts.

This consideration in religion with the relationship between the parts allows that religion as a framework is a special form of culture. As such, it is a phenomenon that is

² Max Weber [2] *The Sociology of Religion* (translated by E. Fischoff from the three-volume edition in German originally published in 1920–23), Boston: Beacon, 1990).

³ “A Report on the Citizen Ambassador Program's Religion and Philosophy Delegation to the People's Republic of China”, *Journal of Contemporary Religion* 10.2, 1995:197).

nurtured and cultivated. The different religions of the world provide different frameworks for those who either adhere to them or have been seduced by them. They constitute configurations that allow us to see the world in certain ways, that condition us to see things as we see them, that provide us ways to differentiate what is significant from that which is not, to know the valuable from the non-valuable. To look at the world's religions is to appreciate the various ways we pattern our lives in relation to each other, to our world and to the godhead.

2. The world's religions

From a sociological perspective, the ideal type is a tool that is used to measure religious identity and practice. The ideal type is employed to gauge how much any given religion conforms to one of four ideals and hence how and/or why it is distinct from the ideal itself as well as how and why a religion has both similarities and differences from another religion. The four ideal types are, essentially in order of their historical precedence, pagan, dharmic, abrahamic and secular. In short, paganism represents primarily the root of religious perception and practice for our planet.⁴ The dharmic religions grow out of it and do so largely organically and peacefully, but they are nonetheless fundamentally rejecting of the pagan position. The abrahamic also develops out of paganism but more iconoclastically and belligerently. In fact, the abrahamic faiths appear to be more violently opposed to all other religious traditions—a hostility that even extends among and between its own constituent factions. The irony for our world today, in effect, is that the planet's future precariously hangs increasingly on the clash between the Judeo-Christian West and the Islamic world and/or potential caliphate centred on the Middle East. The secular traditions grow largely out of the abrahamic but have affinities nonetheless with both pagan and dharmic matrixes. The secular, however, often continues the antagonism of its abrahamic predecessor towards other 'faith' positions—such as the enmity against religion to be seen in much scientific rationalism or the aggression of Marxist communism.⁵ Violence, however, is an unfortunate feature of all religion. The pagan empires of the past were certainly no less brutal and cruel than we have continued to see among human behaviour throughout successive chapters of human history. Hindu fundamentalism in the name of the Bharatiya Janata Party (BJP), Vishna Janata Party (VJP), the Tamil Tigers, etc. has deflated the illusion of proverbial Hindu tolerance and gentleness. And the imperial expansions of Ashoka or the internecine conflicts of both medieval and modern Tibet suggest among other events that the same can appear within Buddhism. Consequently, one notion to keep in mind within the study of religions is to what degree is violent behaviour that leads to bloodshed and carnage an intrinsic or extrinsic feature of any particular religion or religious tradition.

The religions of Judaism, Christianity and Islam come under the rubric of the abrahamic tradition, that is, those faiths that claim descent from the biblical patriarch Abraham. These are also known as the three 'religions of the Book'. Judaism divides between the factions of Orthodox, Conservative, Reform and, in Britain, Liberal.

⁴ York [3].

⁵ E.g., Dawkins [4], Marx [5], Greenfield & Chirot [6].

Christianity is likewise fissured between Roman Catholic, Eastern Orthodox, Protestant and Mormon branches; and Islam is known through its Sunni, Shia and Sufi forms. Each of these sub-divides even further, whether officially or schismatically, and Protestant Christianity alone is one of the more complex in terms of proliferating a plethora of competing forms. Among the dharmic religions, we have the Hindu sects of Shaivism, Vaishnavism and Shaktism, and in Buddhism, there are both Theravada and Mahayana, or even Theravada, Mahayana and Vajrayana, branches.

Pagan	Dharmic	Abrahamic	Secular
Indigenous animisms			
Shamanisms	Hinduism	Judaism	Atheism
Amerindian spirituality	Buddhism	Christianity	Agnosticism
Afro-Atlantic practices	Jainism	Islam	Humanism
Contemporary Western paganisms	Sikhism	Baha'i	Marxism

Besides the religious ideals of abrahamic, dharmic, secular and pagan, there is an important spiritual divide that distinguishes religions from each other that may even be present within a specific religious type itself. This division conforms more to a classification rather than as an instrument for phenomenal investigation, namely gnostic understandings vis-à-vis telluric comprehensions. Consequently, a schema for presenting the four ideal-type world-religious traditions is the following:

	Gnostic	Telluric
Cosmically exclusive	Dharmic	Secular
Cosmically inclusive	Abrahamic	Pagan

The ‘cosmically exclusive’ signals the rejection of one of the possible components of existential being: the world, the supernatural, the human. By converse, ‘cosmically inclusive’ is the position in which all three components are accepted as existents. Most religion attempts to grapple with questions of cosmology and cosmogony. And how we understand religions, whether they are telluric or gnostic, is through how they picture the origins (and, hence, consequences) of the cosmos. Positions that start with the transcendent, some sort of being, entity or force that is outside space and time are gnostic. Those that are inherently immanent, that begin with the tangible, with the world rather than the supernatural, are telluric. Putting aside for now the philosophical question that arises if and when we wish to consider the human (rather than either the material or the supernatural) as originator, namely the implications of the anthropic principle, the telluric worldview/cosmos is one which emerges from the bodily rather than the transcendental. If there is one telluric characteristic that is representative and definitive over all others, I would designate it as corpo-spirituality⁶ or, to use a term I heard during the 2004 Annual Meeting of the American Academy of Religions by Florida State University’s Michael Pasquier speaking on ‘Our Lady of

⁶ York [3] & York [7].

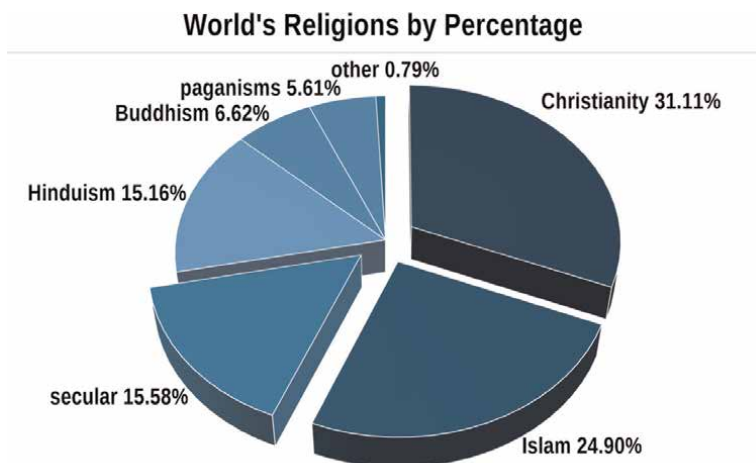
Tickfaw', 'corpo-centricity'. The very notion of physical spirituality is difficult to grasp for anyone of a transcendental or gnostic inclination or acculturation, but it is arguable that the tangible as inherently sacred, the world as divine immanence and the consequences of this-worldly emphasis that derives from it are *prima inter pares* qualities of pagan religiosity.

Moreover, both gnostic and telluric spirituality frequently entertain the concept of reincarnation. But the purposes behind rebirth are radically different. The gnostic will seek eventually to break the chain of rebirth. Life on earth is only a school and preparation for the 'higher' life to come. The earth-oriented position, by contrast, welcomes rebirth as providing the opportunity to celebrate yet again the pleasures and joys and growths of life.

Though the divide between gnostic and telluric considerations is strongest perhaps within pagan religiosities—Platonic, Neo-platonic, Cabbalistic and/or panentheistic for the former; immanent, numinously materialistic, animistic, pantheistic, secular and atheistic for the latter, we find similarities as well with the other ideal types of religion. For instance, while the secular position is usually this-worldly and materialistic, some secular religiosities are astral and deny the existence of the supernatural, that is, they have no consideration of a supernatural horizon. The entire cosmos is comprised by the space-time continuum. Deities are substituted by extraterrestrials. Technology replaces magic or any sort of *extra-totum* intervention. Suggested examples of secular spiritualities that find value more aligned with outer space than with our terrestrial world possibly include the Canadian-French UFO group known as the Raélians, L. Ron Hubbard's Church of Scientology, some of the other flying saucer cults and the England-based Cometan's Astronism. Typically, for the followers of Raël, the universe has no beginning and also no end. It just is. And it is also some kind of cosmic machine. There is no spirit or deity that animates it.

While dharmic religions are essentially gnostic in their aspiration to escape permanently from a perceived cycle of rebirth, the theological position of Theravada Buddhism and Kapila's Sankhya school of Hinduism (as well as the Yoga school of Patañjali that derives from it) in which instead of the standard monism of Hinduism there is instead postulated to be *two* absolute realities: matter (*prakriti*) and self (*purusha*)—each eternal, independent and infinite. *Moksha*, accordingly, lies in recognising the utter separateness of the two. In addition, despite Plato's nominal opposition to Gnosticism and Christianity's similar stance, there is world rejection at the heart of Christian religion. Nevertheless, Matthew Fox's Creation Spirituality ('green' theology) and Unitarian Universalism (including its Pagan and Earth-centred Spirituality organisation of CUUPS) exhibit a more telluric orientation. While Islam is focused primarily on attainment of Allah's heaven, the consideration that the earth is the gift and creation of God allows a non-gnostic tenor to Islam itself. Perhaps of all the Abrahamic religions, despite its transcendental Creator, it is Judaism that retains this-worldly values the foremost.

Once again, while gnostic and telluric principles embody the chief distinction with the two different moral and behavioural standards of spirituality, a blurring of this fundamental divergence is nevertheless to be found across the religious spectrum. A further consideration in regard to the world's religions is to be discerned from David Barrett's *Christian Encyclopedia* for the following calculations. These are, of course, rough estimates at best—though they remain ones that give us some idea of the distribution of the world's religions themselves. Moreover, despite the intention of Barrett to provide a manual for Christian missionary undertakings, his volume furnishes us perhaps the best and most accurate picture of the global religious situation.



If we look at the world as a whole, essentially one-third is to be identified as Christian—two-thirds of which are Roman Catholic; one-third being both Protestant and Eastern Orthodox. The next largest block had been the secularists representing something slightly over one-fifth of the planet's population when calculating from William [8] figures. Although Barrett has released a 2001 update of his survey, the percentages of the world's religions remain essentially the same, although the secular traditions may have declined to something closer to 16% according to the Pew Research Center statistics for 2020. These technically non-spiritual traditions comprise both the legacy of secular humanism in the West and, more significantly, the influence of Marxist communism throughout the world. About 12% of the world is Hindu (though Pew puts this now at 15.6%) and another 6% is Buddhist—bringing the dharmic position to something just under one-fifth of the planet. The aggregate Muslim community had been closer to the size of the secularists than it was to the dharmists, but it has grown the most of any religious tradition and now stands at approximately 24.9%. This means that roughly a full half of planet earth if not more adheres to an abrahamic position of one sort or another. Of the world's major religious traditions, therefore, the pagan is by far the smallest—comprising essentially between 5 and 10% of planet Earth's human population. The bulk of this number comes from the folk religious practices of the Chinese. Of the remaining religious persuasions for the planet, approximately 2% are to be classified as new religions—chiefly to be found in Asia and Africa. Many if not most of these would approximate the abrahamic position over any other. Consequently, all the remaining world religions, namely Judaism (an abrahamic faith), Sikhism, Jainism, Zoroastrianism and Baha'i, *all together* constitute *less* than 1% of the world's population.

3. The environmental crisis

There is no question that with the spiralling increase in human population and the consequences of industrial befouling of air, water and land; corporate farming and large-scale agriculture; planned obsolescence for marketing purposes; unsolved difficulties with waste disposal; mass starvation and uncontrolled migration; continuing loss and reduction of wildlife and biodiversity; and social collapse, over-policing, war and terrorism, human society itself is in peril—one that is accompanied by global warming, light pollution and the proliferation of space debris. The question before human society concerns whether the preservation or restoration of the natural

environmental balance of our host planet is to be or even can be augmented by religion, or, instead, how much of a role does religion—or do the religions—play in fomenting the problem in the first place?

As Associate Professors (respectively, Indiana University and the National University of Singapore) Lisa Sideris and John Whalen-Bridge explain, the Anthropocene period and the ‘Great Acceleration’ refer to the intensification of human activity through ‘population growth, energy consumption, telecommunications, transportation, deforestation, pollution, and water use [that] began perceptively to shift the state and functioning of the Earth system. ... Anthropocene discourse ... taps into millenarian hopes and fears, and [it] draws from ancient reservoirs of prophecy, theodicy, and eschatology’.⁷ The consequences of the Great Acceleration are the deadly floods, wildfires, drought and rising sea levels that are being increasingly witnessed ubiquitously. The physicist Harold Schilling argues that the

*pollution and destruction of [the] environment are religious and ethical problems that derive basically from irreverent and immoral attitudes toward nature, rather than from technological inadequacy alone.*⁸

As Westminster College (Fulton, Missouri) Professor William Young asks, in considering that the fundamental ethical issue of the contemporary world is the well-being of the planet as a whole, ‘[does] the ecological crisis demonstrate a fundamental failure of the world’s religions to follow their own teachings?’⁹ Our specific interest here concerning the crisis is climate change.

4. Abrahamic religions

Probably no religion is completely conducive to ecological sustainability, and no religious position is completely antithetical. Due to the ‘Dominion Mandate’ suggested by Genesis 1:26-28, however, the Abrahamic religions are scripturally handicapped vis-à-vis a non-anthropocentric understanding. In his 1967 article, ‘The Historical Roots of Our Ecologic Crisis’, historian Lynn White, Jr. blamed Western Christianity in particular for causing the worldwide ecological crises. His hypothesis is that ‘What people do about their ecology depends on what they think of themselves in relation to the things around them’.¹⁰

*Especially in its Western form, Christianity is the most anthropocentric religion the world has seen. [...] Man shares, in great measure, God’s transcendence of nature. Christianity [...] not only established a dualism of man and nature but also insisted that it is God’s will that man exploit nature for his proper ends.*¹¹

In consideration of humanity’s alleged hegemony, Islam shares a similar concept of human domination, namely *Quran* 2:30 states Allah as saying, ‘I am setting on the

⁷ Sideris & Whalen-Bridge [9].

⁸ Barbour [10]

⁹ Young [11]

¹⁰ White [12], p. 1205).

¹¹ Ibid.

earth a vicegerent [*khalifah*.]’ The Abrahamic concept is summed up as the teaching that humans are distinct from nature and have therefore a divinely sanctioned right to exploit nature.

With the understanding that the Abrahamic God has given humanity dominion over nature, the control of the natural world through technology has become an essential given for the West. There are, of course, strenuous denials of White’s thesis that appears to endorse unlimited transhumanist transformation due to man having been created in the image of God (*Imago Dei*). The Vatican in particular has condemned the Promethean notion that humans have complete rights over their biological forms. However, the lines between the human and the machine, between the human and the environment and between technology and the environment have become operationally blurred by what White considers to be the predominant interpretation of the Genesis mandate.

Abrahamic Christianity at its strongest anti-ecothological stance is most likely to be witnessed in much of modern-day evangelical and televangelical forums. What has become known as the ‘religious right’, especially in America, refutes climate change and considers that a free-market approach is sufficient for environmental care.¹² The Cornwall Alliance, founded in 2005, claims to be committed to a balanced Biblical view of stewardship but argues that the environmentalist movement is a threat to society. The ‘Green Dragon’ is regarded as evil and must die: accordingly, God does not consider natural wilderness areas as either good or hospitable to man.¹³ Many church leaders, both Catholic and Protestant, have judged ‘eco-theology’ to be undermining Christianity’s central teachings.¹⁴ While the eco-theologian Larry Rasmussen has located other possibilities, the environmental debate appears to be reduced primarily to the dominion versus stewardship binary. Nevertheless, Rasmussen contends that

*Both the Jews and early Christians understood ‘image of God’ and ‘dominion’ as a message of cosmic dignity that affirmed human agency and responsibility.*¹⁵

A growing Christian theologian response is that appropriate dominion requires caring for creation. In this more positive response, the favoured model has become one of stewardship, although many prefer to speak of humans as Earth trustees. Echoed here is perhaps Martin Luther King, Jr.’s declaration concerning Christ’s urging his followers to love their enemies and explaining that ‘Far from being the pious injunction of a utopian dreamer, this command is an absolute necessity for the survival of our civilisation’.¹⁶

And turning for a moment towards Sikhism which is frequently understood as a dharmic faith that seeks release from the cycle of transmigration, in essentials it may be seen as an amalgamation of both Hinduism and Islam. Its belief in a monotheistic Waheguru or God places it in many respects under the umbrella of Abrahamic spirituality. Nevertheless, and much like Islam which honours creation as the gift of Allah, Sikhism is openly concerned with the preservation, restoration and enrichment of the

¹² *Vide* Landrum et al. [13].

¹³ See also, Hickman [14].

¹⁴ Nash [15].

¹⁵ Rasmussen ([16], p. 233).

¹⁶ Cited in Holland [17].

environment that God has created. Consequently, with such conservationist concerns as well as such phenomena as the Evangelical Environmental Network (originally founded in 1993) that counters the Cornwall Alliance, there is within Abrahamic religiosity serious misgivings about the human dominion (the Dominion Mandate) of classical and enlightenment Judaism and Christianity. In short, Christianity, along with Judaism and Islam, is being called to respect the world because it is God's creation, and this idea of responsibility carries with it a task that is specifically human—not a task that is incumbent on any other earthly creature, but is specific to human beings—that of caring for the earth. Additionally, as the Belgian theologian Edward Schillebeeckx puts it: 'On the basis of a proper belief in creation we cannot foist off onto God what is our task in the world'.¹⁷ Heythrop College Lecturer in Theology Martin Poulson signals the issue most accurately:

*If, or perhaps, given the current state of affairs, when men and women neglect their responsibilities, bringing the ecosystem close to the point of disastrous collapse, they cannot expect God to solve all their problems for them.*¹⁸

Poulson concludes that in sum 'faith in creation could make all the difference to the participation of Christians, Jews and Muslims in the current debates about the world and its future'. Consequently, despite Genesis 1:28 and Christian and Islamic eschatological stress on an afterlife, there is a potential with the Abrahamic traditions to address the current environmental threats to the planetary natural balance that may be interpreted to be in conformity to its spiritual understandings.

5. Secular religions

The increasingly contemporary desire for transformation through pharmacological enhancement, genetic manipulation, nanotechnology, cybernetics and computer simulation is perhaps equally one that is shared by the secular positions that discard belief in God, the gods and notions of enchantment.¹⁹ Perhaps one of the earliest statements proclaiming humanity's unlimited and unrestricted potential is Protagoras' 'Man is the measure of things'. Secular religiosities along with those of the Abrahamic and Christian traditions share the notions that have been built into the Western concept of human rights: a right to self-development and to self-realisation. A key notion in the Western tradition of mainstream Christianity for at least its first eighteen centuries is to be traced through Thomas Aquinas back to Aristotle, namely the Christian belief that the human being is the only important member of this world and the secular supposition that the natural world has no intrinsic value.²⁰

Overall, the secular or 'non-religious' religiosities include atheism, scientism, existentialism, perhaps agnosticism, various interpretations of deism as well as both naturalism and humanism. Additionally, we could also consider those major intellectual movements that the anthropologist Clifford Geertz considers from the nineteenth and twentieth centuries, namely 'Marxism, Darwinism, Utilitarianism, Idealism,

¹⁷ Schillebeeckx [18].

¹⁸ Poulson [19].

¹⁹ Hook [20].

²⁰ Singer [21].

Freudianism, Behaviourism, Positivism, [and] Operationalism'.²¹ Admittedly, these last are not religions as such, but the secular outlook does not consider itself to be religious in the first place. Nevertheless, like all religions, all of these 'non-religious' religiosities still take a shared position concerning the relationship between and identity of humanity, the world and the supernatural. Whereas the dharmic religions in general dismiss the reality of the world, the secular orientation by contrast rejects the actuality of the magical extramundane. And there definitely remains at least a latent if not direct concern with ecology. Whether atheists, agnostics or secular humanists, people with these identities accept that this planet is fundamentally all we have got and that expectation of magical solutions is itself inimical to solving the imminent problems associated with climate change.

A standard argument by traditional religious believers and especially Christian and/or abrahamic is that morality depends on the existence of God. Divine Command Theory equates ethical behaviour to the prescriptive commands contained in a holy book. The moral life is considered to be absolutely dependent on the dictates from an authoritative and transcendent lawgiver. By contrast, the emerging secular thought is that while religion might be dependent on ethics, ethics themselves are independent and separate from religion.

In this light, the 14th Dalai Lama, Tenzin Gyatso, discerns that 'secular ethics'

*embrace the principles we share as human beings: compassion, tolerance, consideration of others, the responsible use of knowledge and power. These principles transcend the barriers between religious believers and non-believers; they belong not to one faith, but to all faiths.*²²

Moreover, but as a secular rejection of the Dominion Thesis, the Norwegian philosopher Arne Naess, in the 1970s, coined the term 'deep ecology' (1972) to promote consideration of the inherent worth of all living beings regardless of their instrumental utility to human needs. For Naess, human beings are not different from the nonhuman world but instead fully a part of it.²³ Likewise, by beginning moral reflection with the secular perspective itself, the 'focus on moral questions [becomes] freed from the [otherwise] ongoing and perpetual debate over religious claims'.²⁴ And as the 14th Principle of The Humanist Manifesto II states:

*The cultivation and conservation of nature is a moral value; we should perceive ourselves as integral to the sources of our being in nature. We must free our world from needless pollution and waste, responsibly guarding and creating wealth, both natural and human. Exploitation of natural resources, uncurbed by social conscience, must end.*²⁵

The humanist position accepts humanity as a part of nature, not as an intrinsically separate entity, and human emergence has accordingly resulted from a continuously natural process rather than as the result of the work of a transcendent Creator.

²¹ Geertz [22].

²² Gyatso [23].

²³ Naess [24]; cf. Taylor ([25], p. 189n14).

²⁴ York [7].

²⁵ <https://americanhumanist.org/what-is-humanism/manifesto2/> (accessed 18.01.2022).

6. Dharmic religions

In general, Buddhism is frequently considered to be among the most environmentally friendly of all religions because of its belief in the fundamental equality of all sentient beings through the processes of birth, aging and death. Among the Dharmic religions, however, both Buddhism and Jainism are secular to the extent that they do not accept the reality of a Supreme Creator. But while there are exceptions (Theravada Buddhism, Patañjali's Sankhya-Yoga, Ramanuja's Qualified Non-Dualist and Madhva's Dualist expressions of Hinduism), the predominant theme for Dharmic religion is the non-reality or *māyā* of phenomenal existence. A supreme personal god as Ishvara or Vishnu is accepted by some Hindu branches of belief, but the concept of an absolute Brahman as the impersonal and sole reality beneath the illusion of the physical (pre-eminently articulated by Shankara's *advaita* school of Vedānta) becomes the gnostic goal of *moksha*, release or escape from separate/individual existence and the cycle of reincarnation. Buddhist theology is a variation of this with *nirvana* comprising essentially the same thing. The implicit consequences for maintaining the well-being and ecology of the planet become at best then a secondary and temporary consideration. Detachment from the world allows and even might encourage a disregard for the environmental future of the earth. As with Abrahamic spirituality, there persists with the Hindu manifestations of dharmic understanding a hierarchical evaluation. Typically, in contrast to the 'simply mundane human concerns or ordinary religious aspirations ...'

[the] spiritual tradition of India, not only Vedic but also non-Vedic, have [sic.] a strong basis in mantra, and use it to help us decondition the mind and move beyond limiting concepts, as well as to each higher truths.

Hindutva-proponent David Frawley also speaks of the modern Western mindset as being obsessed with the *lower* energy centres in the human being.²⁶ Here again, the physical dimensions of reality are considered to be inferior to the transcendental.

Nevertheless, Hindu vegetarianism, its veneration of the cow and its practice of *ahimsa* ('non-injury to others') are derivatives of its inherent pantheist belief that stresses the unifying sacredness of all things. This respect and avoidance of violence would appear to counter the value relativity that otherwise results when 'right and wrong are decided according to the categories of social rank, kinship, and stages of life'.²⁷ Consequently, within Hinduism as with most religious persuasions there exist unresolved paradoxes and contradictions that ultimately tend to leave moral behaviour and ecological effort to individual decision rather than to any clear mandate that concerns protecting and restoring the priorities of the ecological and the possibility of transforming the Holocene or more specifically the Anthropocene when considered as beginning in the mid-twentieth century into a Symbiocene in which 'almost every element of culture, agriculture, economy, habitat and technology will be seamlessly re-integrated back into earthly symbiotic life'.²⁸

²⁶ Frawley [26] [my italics].

²⁷ Miller [27].

²⁸ Albrecht [28].

It is, however, with the Jain tradition from which Hinduism appears to have inherited the notion and practice of *ahimsa* that the claim is made that 'the Jain approach to ecological responsibility offers the best hope for resolution'.²⁹

*Many Jains are now working to extend the principle of non-violence ... not just for the liberation of the individual soul, but for the very survival of life on the planet.*³⁰

With its emphasis on respect and compassion for *all* forms of life, Jainism presents a doctrine that, despite its materialistic atheism, is fully open to an aesthetic sociality that remains commensurate with modern scientific thought. Jaina logic itself is understood as related to modern science and scientific thinking.³¹

7. Pagan religions

In many respects, the underlying response to nature within most pagan religions is similar to that felt and undertaken by those of a secular persuasion. The chief difference between the religiosities of those practices that conform to these two ideal types, the pagan and the secular, is the entertainment of belief in and pursuit of enchantment by the former and the avoidance of the thaumaturgical by the latter. If there is a supreme being in paganism, it is the earth itself, the Goddess, the immediate manifestation or embodiment of the entire matter-energy continuum, nature herself/itself. Consequently, despite the claims for both Buddhism and Jainism, the pagan religions emerge as among the foremost if not *the* foremost orientation/s championing the natural ecological balance of our planet. This does not eliminate harm to nature that has occurred by pagan peoples such as the severe deforestation of North America by Native Americans before the arrival of European colonialists. And imperial expansion and destruction have occurred by pre-Christian pagan cultures as well (Mesopotamia, Egypt, Alexander the Great, Rome, the Nahuatl and Quechua civilisations of the New World, etc.)

Much paganism incorporates the notion of the otherworld (whether Summerland, the Elysian Fields, the Western Isles, the land of fairy, the domain of the gods), but its otherworld is never posited as a denial of this world but instead as one that is intimately infused with or within it. Pagan religions rival Christianity in their wide range of diversity. Overall, it is a difficult religiosity to describe both simply and yet in an encompassing manner. Nevertheless, the ideal towards which these orientations point may be presented as in the following:

*Paganism is an affirmation of interactive and polymorphic sacred relationship by individual or community with the tangible, sentient and nonempirical.*³²

If the conjunction 'and' in this definition is replaced by that of 'and/or', this allows such more gnostic Platonic and Neo-Platonic forms also to be recognised as pagan. But paganisms in their more telluric, as distinct from gnostic, expressions are understood

²⁹ Young ([11], p. 171).

³⁰ Oxtoby and Segal [29].

³¹ Mardia [30].

³² York [3].

as an endorsement of relationship between physical and supernatural realities as well as human (and possibly other forms of) consciousness. Some paganisms may accept the supernatural as only approachable through metaphor (religious icons and symbols), or some may also entertain that the supernatural appears and is accessible through the miraculous. But along with their supernaturalism or proclivity for the non-empirical, humanism and naturism are equally weighted. In other words, even if paganism or particular pagan identities may exalt the special or the numinously distinguishable over the whole, or the theistic or even polytheistic over the pantheistic, the divine or sacred is found ubiquitously. Paganism, therefore, allows the divine to manifest in and as the material, whatever else it may also be. Importantly, however, paganism eschews any true hierarchy between the temporal and permanent, between the physical and spiritual or between this-world and the otherworld. In paganism, all realms of being and possibly non-being are understood to partake in a partnership or colloquium that is to be recognised as functioning between potential equals. Moreover, through the consideration that all is related and interrelated, animals and other human beings are deemed to be worthy of respect and reverence.

Today's renaissance of contemporary paganism would virtually appear to be a reflex of the growing awareness of global imbalance and climate change. Urban lifestyles and consumeristic insulation from the natural world both depend on an uncontrolled corporate capitalism that has been judged as mindless in relation to industrial waste and toxic pollution. For the pleasure-and-comfort seeking pagan, pursuit of the sanctity of nature becomes central to his/her non-world-rejecting spirituality.

The cultivation of an eco-awareness and geo-sensitivity are paramount to any viable pagan ethos. ... In a word, caring for Mother Nature and maintaining a symbiotic bond with her that is healthy and mindful of all that may violate her unique and precious balance constitute a pagan ethical imperative that is central to all further endeavor.³³

This is not to say that paganism has all the answers but only that its mindfulness of the fragility of natural ecosystems and of the need to preserve biodiversity is central to its religious understanding—an awareness that pagan spirituality aspires to promote among human consciousness globally.

8. Religions and modernisation

In his 1981 Geary Lecture, Sociology Professor Peter Berger (1929–2017) defined modernisation as a revolution in the human experience of time. Convincingly, he claims that the two institutional processes that factor modernisation are technology and bureaucracy [31]. As already mentioned, the increasingly complicated rules and regulations of administrative procedure were argued by Max Weber as the correlate if not the cause of the modern sense of disenchantment. This raises the question of the possibility of a divide between the modernisation associated with the development of modernity and the supernatural understandings of traditional religions. An irony appears in that our word if not the concept itself for technology is formed from the

³³ York [7].

Greek *techné* signifying ‘magic; magical art’.³⁴ According to Berger, the application of rational measures to the world when considered as functioning exclusively by rational means is the operating assumption of modernity. As a consequence, religion becomes a private matter for the individual as it is driven out of the public sphere. For the sociologist, the process by which religious institutions and religious symbols lose their former importance is known as secularisation. As Berger explains, ‘Generally speaking, modernisation means that options are multiplied in human life’. In the resultant pluralisms of modern-day societies, choice has come to predominate over traditional resignations to the idea of fate. But for someone like the Scottish philosopher Alasdair MacIntyre, the Enlightenment concept, ‘which put individuals in charge of deciding for themselves what was right and wrong, rendered moral language meaningless’. As a result, ‘Western civilization [has] lost its ability to think coherently about moral life’.³⁵

The secular response to traditional religion in such spiritual, non-spiritual or quasi-spiritual developments as humanism, communism, naturalism, positivism, etc. have adapted perhaps the most to the conditions of modern secularity in rejecting the assumptions of orthodox and conventional religions. They may be seen as direct legacies of modernisation and may also be seen as inimical to the counter-measures necessary for curtailing climate change inasmuch as nature becomes assessed as without having intrinsic value. Instead, the rights of self- and technological-development become paramount. When modern secularism is wedded foremost either to capitalism as an economy or to communism as politics, its contribution to the amelioration of climate change becomes at best secondary when and if it exists at all. When religiosity is pushed into being something private rather than public, individual secularists themselves can be unimpeded in their concern with and efforts for land conservation, habitat restoration and political advocacy. Certainly with the growing obviousness of fundamental alterations in global and regional climate patterns, secularists are at least capable of recognising the extrinsic value of nature and humanity’s, if not also universal life’s, dependence on maintaining or restoring natural balance despite the processes of modernisation. American cosmologist Carl Sagan (1934–1996) referred to the distant image of the earth as a tiny point of light captured by Voyager 1 on 14 February 1990. For him,

*it underscores our responsibility to deal more kindly with one another, and to preserve and cherish the pale blue dot, the only home we’ve ever known. ... In our obscurity, in all this vastness [of the great, enveloping cosmic dark], there is no hint that help will come from elsewhere to save us from ourselves.*³⁶

Nevertheless, while ‘our contemporary faith in progress [is] a Christian inheritance’,³⁷ the very notion of humanity’s continual advance through technology, civil ministries, moral development, the promotion of universal values and the assertion of human exceptionalism is integrally at home with the present-day belief in modernisation.³⁸ Karl Marx (1818–1883), along with the anthropologist James George Frazer

³⁴ Davis [32].

³⁵ Rothman ([33], p. 50).

³⁶ Sagan [34].

³⁷ Beha [35].

³⁸ Ibid.

(1854–1941), ‘theorized human evolution as a gradual disentangling from nature’.³⁹ In contrast to such modernist and secular convictions, secular faith itself ‘recognises the finitude and fragility of our lives’ and counters the Christian belief that ‘nothing we do on Earth today can matter except as preparation for salvation’.⁴⁰ The very notion of eternity vis-à-vis a sanctity for the here and now has emerged as ‘an irreducible conflict between orthodox Christianity and political liberalism’,⁴¹ but the emergence of secular environmentalism, ‘in which concerns about human responsibility for degraded planetary conditions are highlighted, [is generating] renewed moral purpose for addressing the global ecological crisis’.⁴² Consequently, despite ‘the nihilism of secular capitalism [and] the spiritual impoverishment of modernity’,⁴³ the various secularisms may be judged as at least potentially capable of handling modernisation in consideration of the environment. In short, the institutions of spirituality or non-spirituality associated with the effects of secularisation are those that adapt as far as possible to the conditions of modern secularity.

The abrahamic positions are equally as complex if not even more so. Regarding planetary well-being, evangelical Christians, Orthodox Jews and theologically conservative Muslims are among the most who are both counter-modernisation and least involved with inter-religious missions promoting ecological awareness.⁴⁴ Overall, if religion articulates meaning and value concerning the possibilities of the world, humanity and the supernatural, when the world is considered an illusion (Hinduism), valueless (Buddhism) or secondary (Abrahamic), then modernisation has little impact either for or against towards promoting climate change. This stance is perhaps strongest with Protestant evangelical and/or fundamentalist conviction operating under the edict of the Genesis mandate—one in which environmental activism is argued to be contrary to the will of God. The anti-modern reality of the Islamic State is expressed by Sadiq Khan, London’s Muslim mayor, who claims that the philosophy of Isis insists ‘that it is incompatible to have western liberal values and to practice the faith of Islam’.⁴⁵ But, likewise, in a counter-modern position, Adi Shankaracharya’s Advaita Vedanta, the predominant form of Hinduism, also regressively separates humanity from nature and consequently renders any contemporary effort for the protection and improvement of the environment to be a distraction from the true goal of life.

While the secular traditions have little alternative to placing significance in humanity and worldly/physical realities alone, it appears that the pagan religiosities are the most centred on ‘Gaia spirituality’, the sacredness of nature and the integral interconnection of the human and the natural. With contemporary paganisms in particular, there appears to be no intrinsic opposition to modernisation but rather its acceptance as a positive that within the all-embracing framework of reality offers pragmatic and protective environmental change. Nevertheless, one can witness within some secular orientations a resistance to modernisation as being inimical, dangerous and/or unhealthy (e.g., pesticides, plastics, vaccinations, nuclear energy, 4G/Fourth Generation Cellular Networks, etc.), and likewise within pagan religiosity there is the

³⁹ Joerstad [36].

⁴⁰ Thomson [37].

⁴¹ Rothman [33].

⁴² Vivanco [38].

⁴³ Rothman [33].

⁴⁴ Baugh [39].

⁴⁵ Cited in Rifkind [40].

possibility of a luddite opposition to technical progress. For the secularist, a reversion to the traditional may emerge as a desire to avoid the contaminations and pollutions of modern advance.

However, with paganism, the traditional is often recognised as the core of indigenous culture and awareness—but here there is also the recognition of indigenous people’s own recognition of the importance and necessity for working with and within the natural environment rather than against it. Indigenous activism, according to Anishinaabe scholar-activist Winona LaDuke, is rooted in a deep connection to the land.

*As the Earth has become increasingly threatened by population pressures, extractive capitalism, and a global political order hostile to ecological and social justice, a parallel rise in social movement resistance has taken place on a local, regional, and global scale.*⁴⁶

Contemporary and indigenous paganisms are increasingly part of this social movement of resistance to ecological hostility. Besides LaDuke [42], other scholarly presentations of eco-spiritual dynamics include those of Margot Adler [43], Starhawk [44], Frédérique Apffel-Marglin [45], David Pellow [46] and Sarah Pike (2017).⁴⁷ Among some of the other major discussions of the intersections between religion and ecology, there are the works of Bron Taylor [47] and, especially (2010), Roger Gottlieb [48], Whitney Bauman [49] and Willis Jenkins et al. [50]⁴⁸.

Consequently, with regard to climate change, there is to be seen pros and cons across the full spectrum of the world’s religions with both the traditional and the modern and no easily discernible or unifying course of choice between them [51]. As Bron Taylor summarises, ‘Where there is cultural traction is in the ‘dark green’ spiritualities, some indigenous traditions (more than ‘world religions’) and possibly some pagan traditions (although there are problems there too)’.⁴⁹

SWOT analysis of the relationships between religions, nature and modernisation

Strengths	Weaknesses
<ol style="list-style-type: none"> 1. Compatible and flexible adaptability to modernisation (secularism, paganism, Jainism, Sikhism) 2. Acceptance of human responsibility (most religions) 3. Diminishment of belief in a Supreme Creator/ Being (secularism, paganism, dharmic) 4. Ubiquity of the sacred/pantheism (paganism, dharmic) 5. No hierarchical evaluation based on transcendence (secular, pagan) 6. Recognition of life’s dependence on the natural balance (paganism, secularism, Jainism, Sikhism) 	<ol style="list-style-type: none"> 1. Unresolved paradoxes and contradictions (all religions) 2. Extreme sectarian discord (all religions) 3. Chauvinism, racism, and/or extreme focus on the (ethnic) locality (to some extent most religions and secularism) 4. Anthropocentrism (abrahamic, secularism) 5. Hierarchical evaluation based on transcendence (abrahamic, dharmic) 6. Primary goal of heaven or <i>moksha/nirvana</i> (Christianity, Islam, Hinduism, Buddhism) 7. Belief that environmental reform is contrary to the will of God (conservative abrahamic)

⁴⁶ Crews ([41], p. 339).

⁴⁷ Ibid. p. 363.

⁴⁸ Ibid. p. 345.

⁴⁹ Personal communication on 13 February 2022.

Strengths	Weaknesses
7. Rejection of orthodox and conventional religiosity and concepts of eternal salvation (secular, pagan) 8. Deep connection to the land (pagan)	
Opportunities	Threats
1. Understanding creation as a gift (potentially all religions) 2. Acceptance of modernisation as providing means by which to protect/enhance ecological sustainability (secularism, paganism, some dharmic and abrahamic faiths) 3. <i>Ahimsa</i> as contributing to the survival of planetary life (dharmic, pagan) 4. Sense of enchantment as an asset (pagan, dharmic, abrahamic) 5. Developing concept of stewardship (potentially all religions) 6. Non-expectation of <i>deus ex machine</i> intervention (developing in all religions to varying extents)	1. Lack of unity (all religions) 2. Perception of nature as illusionary or secondary (dharmic, abrahamic, Marxist) 3. Luddite tendencies (paganism, secularism) 4. The Dominion Mandate/concept of <i>khalijah</i> (abrahamic—especially evangelism, fundamentalism, Islamic State) 5. Incompatibility with liberal values (Islamic State, Christian fundamentalism, Orthodox Jewish conservatism) 6. Gnostic anti-worldly sentiment/detachment from the world (dharmic, abrahamic, some paganism) 7. Belief in human exceptionalism (abrahamic, secularism) 8. Separation of humanity from nature/evolution understood as a separation from nature (abrahamic, dharmic, secular) 9. Sense of enchantment as an obstacle (secularism)

9. Conclusion

Nature does not need mankind, but humanity needs nature and the liveability it has provided for life on earth—an equilibrium with us as part of the equation. The term 'sanctity' used in the previous sections may well have a religious origin, but it has become more broadly part of the secular ethic.⁵⁰ While all religions appear to retain the notion of ultimate importance as sacred, it is this secular adoption that extends the concept into the trans-religious and as something valuable and applicable to everyone despite different individual persuasions. The dynamic of holiness in this context becomes a universal around which virtually all religions might hopefully agree to work together in maintaining the earth's natural ecosystems. There becomes a need to balance or negotiate between big picture systems theory as well as other animistic Gaian ways of thinking that favour management of the larger environment, on the one side, and allowing or encouraging the spontaneous building of the macro by the micro, on the other.

Concerning modern culture's obsession with hyper-autonomy and consumerism, it is clear that '[climate change] has obvious practical implications. It will kill millions of people, wipe out thousands of species, and so on'.⁵¹ This last observation relates ultimately to astronomy professor Brian Cox's contention that the advancing rate of science and engineering in any civilisation might eclipse the development of political institutions capable of managing them.

⁵⁰ Singer [21].

⁵¹ Mulgan *apud* Perry [52].

It may be that the growth of science and engineering inevitably outstrips the development of political expertise, leading to disaster. We could be approaching that position.⁵²

Whether religion could play a role towards mitigating intelligent life destroying itself remains an open question. However, for the negativity of religious thinking itself that leads to the exploitation of nature rather than its reverence as integral to our very being, the blame has been placed on the Genesis Mandate and the Zoroastrian tradition, with its similar dualism between humanity and nature.⁵³ Dharmic religiosity presents a comparable dichotomy by which the human is separate from either nature or physicality, but nevertheless Jainism, Buddhism and Sikhism reveal the potential of spirituality to counter any established framework that has not been conducive to ecological sustainability. To the degree that the full range of the world's religions might collectively address the future well-being of the global environment and 'the promise of a more viable human coexistence with the Earth',⁵⁴ the issue becomes in part theological and calls for a penetrating re-examination of divine-human relations without the suffocation of hierarchical restrictions. On the other front, there is the need for praxis and an agreed-upon way of living that is commensurate with the collective good and the planet as intrinsically sacred. In the dharmic contributions mentioned above, along with paganism, we already have some established examples. The task now is to recognise the potential that all religions have for the protection and extension of earthly symbiotic life and to advance the positive spiritual models that do exist in ways that become universally acceptable and commensurate to the endeavour that confronts humanity.

⁵² Cited in Leake ([53], p. 15).

⁵³ Clough *apud* Perry [52].

⁵⁴ Ivakhiv [54].

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Chapter 3

Laudato si', Six Years Later

Philippe Crabbé

Abstract

The Christian Churches' traditional environmental ethic is stewardship. *Laudato si'* (2015) has augmented stewardship ethics with an ethics of care. The ethics of care is also the one that inspires Francis of Assisi and Bonaventure, indigenous people and feminist ethics. *Laudato si'* puts a major emphasis on education and pays scant attention to policy because deep changes allegedly need to occur first at the individual level. Policy toward global ecological problems has been difficult to formulate and implement because the latter are public goods “wicked problems”. Some policy experts, in their respective reviews of U.S. climate policies, tend to fall back on ethics rather than policy as a major motivator for appropriate individual behavior, comforting pope Francis' conviction. The relatively recent ethics of relational values may be a useful tool to build bridges among different types of ethics. Could religion, any religion, be an alternative motivator for pro-environmental behavior? Abundant sociological analysis concludes to the contrary. Eco-theology is creation theology that has been shaped by environmental problems. Its summary provided here in point form offers the potential for becoming a mobilizing “grand-narrative”. However, it is still in its infancy and does not have a unified methodology yet.

Keywords: stewardship, ethics of care, virtue ethics, ethics of relational values, creation theology, eco-theology

1. Introduction

Shellenberger and Nordhaus argued many years ago that the environmental movement needs a grand narrative capable of motivating people and nations to take ecology seriously, i.e. capable of changing values, behaviors, and policies towards greater harmony between mankind and the balance of nature ([1], pp. 32–34). This message is translated by nearly all religions into treating creation with reverence and respect. The encyclical letter *Laudato si'* from Pope Francis which came out on May 24 2015 contributes to the required grand narrative not so much by changing the Christian worldview as by changing its ethical emphasis [2]. The relatively technocratic stewardship ethical perspective which goes back to the ancient Greek and Roman philosophers—that implicitly Shellenberger and Nordhaus reject—has been replaced or, at least, refined into the ethics of care. The association of these ethics, practiced by Francis of Assisi and formalized by his disciple Bonaventure, provides one side of the imaginary required by Shellenberger and Nordhaus, the ethical side, the stable side of the required discourse. The other side, less stable as it depends on our current theology, philosophy, and cosmology, is offered by eco-theology. There is

very little current eco-theology in *Laudato si'* but the latter opens the door extraordinarily wide to the former ([3], pp. 145–153; [2], c.2, c.6, Sections 6, 7).

This chapter reviews the ethics of care and its ramifications as well as the more traditional virtue ethics, also present in the encyclical, and ties them together with the more recent ethics of relational values. While ethics and education are capable of changing values, policies are needed to change behaviors. While *Laudato si'* emphasizes the need for education, it does not devote much attention to policies except to remind us of the environmental toolbox and to critique some of these tools for their underlying utilitarian foundations ([3], pp. 172–175). Based largely on D. Jamieson's and N. Rich's [4] respective critiques of climate policy in the U.S., I echo their conclusion that some current environmental problems are “wicked problems” and, therefore, not amenable to easy solutions ([3, 5, 6], Section 2). While the sociological literature on religion as a motivator for environmental behavior finds that religious motivation is weak at best ([6], Section 3), I propose to disseminate widely the current eco-theological story despite its limitations. The latter can nicely tie with the teachings of Paul and some fathers of the Church and thus with the traditional treasure chest of Christian Churches. Moreover, the eco-theological story is widely œcumenical ([3], pp. 60–77).

This chapter is based in part on a book on *Laudato si'* I wrote in French in 2019 [3] and on an unpublished paper in English posted on the Academia platform in the same year [6]. The last section of this chapter on eco-theology is new.

2. The ethics of *Laudato si'*

2.1 To protect the whole of creation is within the purview of the pope's function

In his inaugural homily, Pope Francis made clear his personal commitment to ecology. The pope concluded: “...to protect the whole of creation, to protect each person, especially the poorest, to protect ourselves: this is a service that the Bishop of Rome is called to carry out, yet one to which all of us are called...” [7]. The spiritual leaders of the Orthodox Church have assumed the same responsibility for their Church at least since 1989 ([3], p. 69). The World Council of Churches, which regroups most Christian Churches including the Catholic one (membership limited to its Commission on Faith and Order), placed ecology as an integral part of the Churches' responsibility at its Vancouver meeting in 1983, i.e. 32 years before *Laudato si'* ([3], p. 60).

2.2 Stewardship ethics versus care ethics

Cardinal Turkson, the ghostwriter behind *Laudato si'*, points out that “the word ‘stewardship’ only appears twice” [in the encyclical]. The word ‘care’ on the other hand, appears dozens of times. This is no accident, we are told. While stewardship speaks to a relationship based on duty, ‘when one cares for something it is something one does with passion and love’” ([8], July 10). Being a steward is a job. Caring is a state of being.

I do not intend to spend time in this paper on stewardship ethics except to note that there is a tradition going back to the Greek natural philosophers, Plato and Aristotle, which considered nature as an organism which, in turn, had an intrinsic good of divine origin. The role of mankind was to understand the intrinsic goodness of the non-human world and to improve its relationship with the former towards greater harmony [9]. This is also the Jewish tradition of *shalom* ([10], p. 19).

The improved harmony is obtained through husbanding (and not through entrepreneurship) because only non-human nature creates wealth. This is the origin of the primacy of agriculture in economic thought, which persisted to the Physiocrats and may be traced back to Xenophon [9]. In opposition to this classical influence which leads to stewardship, under Hebrew influence Christianity “gets the idea that nature is a kind of enemy which has to submit itself to human and divine will. Humanity is explicitly entrusted to rule over the earth as God rules over it” ([11], p. 18).

I will add though, as pointed out by Willis Jenkins in relation to Karl Barth's creation theology, that stewardship in Christian theology means obedience to God and implies nothing about the value of non-human nature. The latter has no standing of its own and does not participate in the creative process. It is an outcome of creation *ex nihilo* according to Karl Barth as interpreted by Keller. Jenkins considers that this interpretation encourages the dominion of mankind. Humans are elected by the external covenant through which, according to Jenkins, they witness what God does with creation: “...God's command entirely determines the meaning of creation, and summons as its witness a correspondence in humans” ([12], p. 12).

Care ethics is the ethics of indigenous people, the feminists, and of Francis of Assisi and his disciple Bonaventure. The commonalities of care ethics with the ethics of *Laudato si'*, virtue ethics, and with the ethics of relational values are striking (see *infra*). The Oxford Handbook of Environmental Ethics characterizes the ethics of care as follows:

Ethics of care highlight the affective [my emphasis] dimensions of morality, the inevitability of dependence and interdependence, the importance of caretaking and healthy attachments in the basic fabric of human well-being, and the relational and contextual nature of any ethical question or problem.... They [care ethics' followers] therefore reject the idea that caring and caretaking are trivial or irrelevant in “public” spheres. ...they argue that women may therefore have significant epistemic insight concerning philosophical and practical understandings of care ethics ([13], p. 2).

The care ethics followers underscore “the limitations of worldviews that deny reliance on nature”. They emphasize the importance of caring for other humans, for more effective caring of nature, and, more generally, the importance of relationships that frame a moral problem.

Environmental ethics that incorporate paradigms of caring conceive of environmental harms and the exploitation of nonhuman animals as failures to extend caring to worthy others and see those failures in relation to similar failures to care for other people ([13], p. 3).

They [relationships] have intrinsic value [my emphasis] as sources of identity, community, and spirituality but also instrumental value as sources of sustenance and usable knowledge that furnish guidance on caring for biodiversity and ecosystems. The relationships are morally weighty because they motivate responsibilities involving reciprocity, harmony, solidarity, and collectivity. The term “caring” is used to suggest a value foundational for justice and sustainability ([13], p. 5).

The ethics of caring is the ethics of indigenous people.

We [indigenous people] must look at the life that water supports (plants/medicines, animals, people, birds, etc.) and the life that supports water (e.g., the earth, the rain, the fish). Water has a role and a responsibility to fulfill, just as people do. We do not have the right to interfere with water's duties to the rest of Creation. Indigenous knowledge tells us that water is the blood of Mother Earth and that water itself is considered a living entity with just as much right to live as we have ([13], p. 7, citing McGregor).

...from an Aboriginal perspective justice among beings of creation is life-affirming ([13], p. 8, citing McGregor).

The Kari-Oca 2 declaration calls on "civil society" to respect indigenous "values of reciprocity, harmony with nature, solidarity, and collectivity," including "caring and sharing." The declaration also claims that the idea of saving "nature by commodifying its life-giving and life-sustaining capacities [is] a continuation of the colonialism that Indigenous Peoples and our Mother Earth have faced and resisted for 520 years ..." ([13], pp. 7–8)

In the writings discussed here, we see "care" as referring to recognizing and learning from one's place in a web of diverse relationships and being drawn by the responsibilities that are embedded in such relationships. Indigenous movements emphasize the importance of specific relationships involving reciprocal, though not necessarily equal, responsibilities among participants who understand one another as relatives. Accepting responsibilities is constitutive of realizing healthy ecosystems that already include human communities ([13], p. 8).

The interconnections between our relations with other people and our relations with non-human nature are clearly at the center of the Encyclical. The latter says:

For them [indigenous people], land is not a commodity but rather a gift from God and from their ancestors who rest there, a sacred space with which they need to interact if they are to maintain their identity and values. When they remain on their land, they themselves care for it best ([2], para. 146).

Note the connections between indigenous ethics and the nature rights movement [14].

The ethics of caring is also a feature of feminist ethics. The latter is characterized this way by the Oxford Handbook:

In academic theory, a movement to claim care ethics as a distinct ethical approach was sparked by philosopher Sara Ruddick's articulation of 'maternal thinking' as an effective and pervasive form of moral reasoning focused on attentive caring for dependent others...([13], p. 10).

Another perspective focused on appropriate caretaking and meeting responsibilities within specific relationships.

Early studies indicated that these different approaches to ethics are linked to gender roles within patriarchy ([13], p. 10).

Caring labor is often assigned to and associated with females and subjugated peoples, whose social identities may be defined by self-sacrifice and service for others and whose options may be severely limited to those associations ([13], p. 10).

Feminist care ethics include moral orientations that (1) understand individuals, including human selves and other beings, as essentially embedded and interdependent, rather than isolated and atomistic, even if they also exercise some degree of autonomy; (2) take mutually beneficial caring relationships to be foundational and paradigmatic for ethics; (3) highlight the common association of care work with females and subjugated peoples; (4) emphasize the virtues, skills, and knowledge required for beneficial caring relationships to flourish; (5) are attentive to the contexts of moral questions and problems; and (6) recommend appropriate caring and caretaking as remedies for addressing histories of harm and injustice, and as necessary counterpoints to the overemphasis in some cultures on impersonal, abstract ethical judgments ([13], p. 9).

Feminism had assimilated the inferior status of women to the one of non-human nature. Feminist theology rejects the patriarchal image of an omnipotent God, which is common in many religions, the mind–body dualism at the origin of women’s inferior status, and the superiority of reason in favor of wisdom ([3], p. 76–77).

Of course, Francis of Assisi practiced care ethics with people, animals, and other elements of non-human nature to which he attached a familial connotation, a kinship. His spiritual vision was articulated by Bonaventure, “drawing on the ancient understanding of philosophy as love of wisdom” shared by Augustine among others including the Greek fathers of the Church. “Wisdom ought to take possession of the entire person, i.e. with respect to the intellect, the affective life, and the person’s action” ([15], p. 3).

For Bonaventure, “since God is relational and God is present in all reality, all reality is relational” ([15], p. 3). This is the foundation of the metaphysics of the good. In Bonaventure,

“..We find the intuition and spirit of Francis translated into formal philosophy and systematic theology” ([15], p. 3)... “Both share a radically Christocentric spirituality, a belief that God is revealed through creation, and an understanding that all creation is essentially good and relational in character” ([15], p. 3)... “In God, all life originates, finds expression in the time and space of the created order, and discovers its ultimate destiny in return to God. The Trinity is the template for this circular movement” ([15], p. 4).

Bonaventure understood creation to have an essential role in salvation history. Creation is the language of God to mankind. But the book of creation has been rendered opaque by mankind’s sin ([15], p. 7). Creation is a melody whose components are to be understood as well as the whole ([15], pp. 5–6). This points to the importance of the natural sciences in helping to understand the character of God.

In its fullest sense, salvation is the actualization of the deepest potential that lies at the heart of created reality by reason of the creative love of God. The theology of the return of creation to God is, in essence, the theology of history. Drawn from the Franciscan intellectual tradition that integrates effective inquiry and social engagement, knowledge alone is not adequate to guide the human to a balanced relationship with creation, nor to the sense of religious purpose God intends for all created reality. This is the deepest sense of what the Church understands to-day by “human ecology,” an ecology that includes mankind, and by eco-theology.

[Saint] Francis launched a lay reform movement that emphasized devotion to the Incarnation, Eucharistic adoration, an inclusive, familial spirituality, and practical expressions of compassion within society ([15], p. 2; [16]).

Incarnation was not an afterthought, a remedial strategy. Rather, the Incarnation was conceived before the creation of the world as a means to unite humanity with God through love; it was not a discrete historical event, nor merely a precondition for the word to be preached to us; it was not necessitated by sin. Rather, the Incarnation is the highest expression of divine love ([16] citing Warner).

Because the Eucharist is incarnated in our lives and rooted in our soil, they [our lives and soil] bring the poor and their struggles and the rape of the earth to the center of the Eucharistic celebration ([16] citing Margaret Scott).

Adopting the kinship model demands a form of conversion. It involves a new way of seeing and acting. It involves extending the love of neighbor to embrace creatures of other species. It involves extending the love of the enemy to involve creatures that confront us as others and inspire fear in us. It involves loving and valuing others as God loves and values them. Ultimately, it is a God-centered (theocentric) view of an interconnected community of creatures that have their own intrinsic value ([11], citing Denis Edwards).

2.3 Virtue ethics

Virtue ethics takes into account the context of moral agency as does feminist care ethics. Context gives an opportunity to the moral agent to exercise her virtues. Moral principles are interpreted by someone virtuous enough to implement them properly. Thus virtues of character are antecedents to principles. One has to distinguish between what virtue is needed by a person to be environmentally virtuous and a general theory of virtue that would explain why being environmentally virtuous is part and parcel of being virtuous. In the second theory, environmental humility, sobriety, esthetic appreciation and openness, planetary solidarity, stewardship, loyalty and goodwill, recognition of nature's excellence, being an impartial observer lead to humility and gratitude, and encourages our own pursuit of excellence. According to what virtues are needed to be environmentally virtuous, whoever wants to be virtuous wants the material basis of this virtue to be lasting. Robert Sandler considers that whoever recognizes the intrinsic value of something, will apply to it the virtues of compassion, respect, and justice. In other words, virtue ethics focus on the kind of moral agent one wants to be rather than on her actions ([2], par 217; [17, 18]).

In Jamieson's quest for ethics for the Anthropocene, virtue ethics is privileged:

Ethics for the Anthropocene would, in my view, rely on nourishing and cultivating particular character traits, dispositions, and emotions: what I shall call "virtues." These are mechanisms that provide motivation to act in our various roles from consumers to citizens in order to reduce greenhouse gases emissions and to a great extent ameliorate their effects regardless of the behavior of others. They also give us the resiliency to live meaningful lives even when our actions are not reciprocated ([5], p. 185).

According to Jamieson, humility and temperance would be candidate virtues as well as mindfulness, i.e., "In order to improve our behavior we need to appreciate the consequences of our actions that are remote in time and space." Cooperation is important for collective action. Respect for nature means giving up its domination and our hubris. Finally, global justice among individuals (rather than states) is certainly a goal to pursue when the poor is the victim and the rich is the perpetrator. Jamieson shows that what is required is not so much distributive justice among states as among

individuals. He uses the example of car ownership as a proxy indicator for per capita energy uses and thus carbon emissions in 2010.

The broad and sometimes surprising distribution of car ownership is shown by the fact that only six of the top ten countries in automobile ownership are among those countries required to fund the climate change activities of developing countries under the UNFCCC [United-Nations Framework Convention on Climate Change], while some of the 24 countries that are required to fund these activities are not among the top 24 countries in car ownership. What this means is that rich people who live in countries such as China and Russia escape obligations that attach to poor people who live in countries such as Ireland and Spain ([5], p. 197).

The poor suffer disproportionately from climate-related impacts, even in rich countries. “A picture that views individual people in their various roles and relationships as the primary bearers and beneficiaries of duties and obligations is one that comports more naturally with the climate change problem than a picture that views nations as fundamental” ([5], p. 200). Jamieson then comes back to virtue ethics as the last raft to hang on: “Climate change threatens a great deal but it does not touch what ultimately makes our lives worth living: the activities we engage in that are in accordance with our values” ([5], p. 200). This is definitely depressing for a policy-maker! The encyclical pushes virtue ethics further than Jamieson: “Nevertheless, self-improvement on the part of individuals will not by itself remedy the extremely complex situation facing our world to-day...Social problems must be addressed by community networks and not simply by the sum of individual good deeds...”([2], par 219). “Love...is also civic and political...social love...encourage a “culture of care” which permeates all of society...this too is part of our spirituality” ([2], par 231).

2.4 Ethics of relational values

Relational values are a relatively new category of value articulation, aimed at enriching the dichotomy between intrinsic values and instrumental values and eventually widening the consensus in environmental ethics ([19], p. 1). More precisely, relational values constitute an analytical framework to assess the ways people articulate the importance of ecosystem services in their specific, socio-culturally embedded language of valuation. The concept is based on the Heideggerian intuition that's entities are conditioned by relationships to the point one cannot tell which is the chicken and which is the egg. Actually, Muraca enlarges the category which includes instrumental values to one of relational values, i.e., values that lie in—and are not assigned to—relations. Humans can simply acknowledge or explicit these values. Relations are either functional between pre-existing entities or fundamental, i.e., constitutive of these entities and process-like. For example, land for indigenous people stands for the whole relationship system and has moral value. Fundamental relations are now members of the moral community. They hold the moral significance of entities holding inherent moral values but are not worthy of moral obligation. Instrumental values are functional relational while esthetic and spiritual values are intrinsic-eudemonistic because they are valued as constitutive of the good life and thus fundamental. Fundamental values are basic conditions for people to define themselves. They are not reducible to the benefits and services that they deliver as means like the instrumental values. What characterizes instrumental values is their substitutability ([20], p. 388).

The question arises about whether the encyclical considers relational values in an informal sense since an encyclical is not a contribution to philosophy, theology, ethics, or value articulation. Certainly, the encyclical is about relations. It deals with relations among humans, between humans and non-human nature, between humans and God, and even among persons within the Trinity ([3], p. 116). This is what constitutes integral ecology. The source of value is essentially God present in humans as well as in non-humans and vice-versa (panentheism). For Bonaventure, creation (persons, non-human nature animated or not) is the language of God. Since language is a means to relate to others, creation is relational in a fundamental way. For Bonaventure, since God is relational and God is present in all reality, all reality is relational. So all reality holds moral value. The remaining question is whether all reality is worthy of moral obligation; obviously, not all to the same degree. Certainly, the command “thou shalt not kill” does not apply in the same way to a human and to a spider. But a spider has, nevertheless, moral standing. I may not kill the former gratuitously even though I am allowed to kill it if it scares me (because for me, it does not hold esthetic or eudemonistic value).

People also consider the appropriateness of how they relate with nature and with others, including the actions and habits conducive to a good life, both meaningful and satisfying. In philosophical terms, these are relational values (preferences, principles, and virtues associated with relationships, both interpersonal and as articulated by policies and social norms)... These include “eudaimonic” values, or values associated with a good life... ([21], p. 1462).

Many people believe that their cultural identity and well-being are derived from their relationships with human and nonhuman beings, mediated by particular places... Cultural services are thus better understood as the filters of value through which other ecosystem services and nature derive importance... Cultural considerations fit poorly into the instrumental framing of ecosystem services because they are inherently relational: cultural services are valued in the context of desired and actual relationships... ([21], pp. 1463–1464).

...the relational notion of eudaimonia (“flourishing”) entails reflection on the appropriateness of preferences, emphasizing that value is derived from a thing’s or act’s contribution to a good life, including adhering to one’s moral principles and maintaining the roots of collective flourishing... ([21], p. 1464).

Conservation is still often thought of as something imposed on local peoples by outsiders; it must instead be seen as something we all negotiate collectively as good stewardship... environmental initiatives could solidify and adapt home-grown stewardship by leveraging social relationships ([21], p. 1464).

IPBES [Intergovernmental Platform for Biodiversity and Ecosystem Services] has included relational values in its methodology ([20], p. 1).

Muradian and Pascual ([22], p. 12) identify 7 Relational Models (RM), each characterized by a set of specific social conventions, which can be briefly described as follows: detachment (nature as decor), devotion (non-human nature as superior to humans; deep ecology), domination (non-human nature as subordinate to humans; anthropocentrism), stewardship (humans sharing with non-human nature but also developing the latter), wardship (non-human nature as separate from humans but

with intrinsic value; biosphere reserves), utilization (non-human nature as separate from humans but without intrinsic value; utilitarian model), and ritualized exchange (nature as equal; native religions). Identifying the relevant RM is important because “RMs influence not only how problems are perceived, but also the notion of justice held, as well as the considered policy options and discourses for social mobilization” ([22], p. 13). These RM’s may be incommensurable and constrain trade-offs when various RM’s are held within a social group.” The main goal of valuation should be to identify and disentangle the (not always explicit) RMs involved in socio-environmental conflicts” ([22], p. 13).

Whichever ethics one wishes to adopt, it is clear that the stewardship ethics is insufficient to the task of caring for next of kin, whether human, animate or inanimate.

3. Creation theology and eco-theology

3.1 Eco-theology is not creation theology though these overlap

Creation theology is just a chapter of systematic theology that deals with creation. It goes back to the Greek fathers of the Church. It has actually been codified at the Vatican I Council ([3], pp. 43–44). Eco-theology is much more recent. Eco-theology is a “theological perspective framed by concern for the environment” ([10], p. 2). Ernst Conradie, a South-African theologian, suggests Eco-theology should be regarded not as a sub-discipline of theology but rather as a mode of theological reflection or a reform movement that emerged in the years following the 1961 paper presented by Joseph Sittler, an American Lutheran theologian, at the New-Delhi meeting of the World Council of Churches ([10], p. 3). Sittler argued that the unity of the Church, founded in the reconciliation of all things (Col 1.15–20), is inseparable from ecology’s fate. The beginning of Eco-theology as a movement approximately coincided with the beginning of public environmental concern ([10], p. 3). Thus feminist theology (Mary Daly, Elizabeth Johnson, Sally McFague, Rosemary Radford Ruether) and liberation theology as applied to the environment (Leonardo Boff), and Lutheran contributions by theologians Joseph Sittler, Paul Santmire, John Cobb, and Jürgen Moltmann mark the beginnings of Eco-theology ([3], pp. 61–65). “...Like feminist theology eco-theology engages in a ‘twofold critique’, in that it offers a critique from the perspective of Christian theology on cultural and social institutions that underlie the ecological crisis and at the same time engages in the critique of Christian theology and praxis from an ecological perspective” ([10], p. 3). Eco-theology has American roots except for liberation theology and seems until recently to be mainly an Anglo-Saxon concern. While the discovery of biological evolution goes back principally to Charles Darwin, the evolutionary perspective on creation theology is very recent. It was born in the context of science-religion relations and owe its origin to Anglican theology, the British philosopher and theologian Alfred North Whitehead, the French Jesuit paleontologist Pierre Teilhard de Chardin, and the following theologians: the German Karl Rahner, the American John Haught, the Dane Niels Gregersen who introduced the term “deep incarnation” (see *infra*), the British Christopher Southgate and Richard Bauckham, the Australian Denis Edwards, the American Celia Deane-Drummond and Sr. Ilia Delio among others. This current was imported in France and developed mainly by theologians François Euvé, Jacques Arnould, Jean-Michel Maldamé, Jean-Marc Moschetta and Fabien Revol.

In response to Lynn White's critique, his so-called "ecological complaint", "Santmire argues that the theological tradition is 'neither ecologically bankrupt' nor equipped with a great store of eco-theological traditions." ([10], p. 14). "Eco-theology should contribute to the ecological reformation of Christianity" ([11], p. 35) but "eco-theology is currently characterized by a number of different discourses" ([11], p. 64; [23], pp. 1954–1956) and "... does not have a particular theological methodology or group of methodologies which have enduring significance..." ([11], p. 64). Eco-theology also seeks an ortho-praxis, i.e. ways of living ecologically for a believer. The quest is not only moral; it is also spiritual.

Is *Laudato si'* a contribution to Eco-theology? It is obvious that panentheism, i.e. "the view that the divine reality is inclusive of and also immanent within the world" ([24], p. 2) is an important building block for Eco-theology, re-introduced in creation theology by Jürgen Moltmann ([3], pp. 66–67). It is present in *Laudato si'*. *Laudato si'* does not, however, consider the universe as the body of Christ as did S. McFague ([3], p. 77). The former does not go as far as claiming that God suffers with the world, i.e.,

God is rather an active participant, experiencing and suffering with the environment and the various creatures (including human beings) which belong to it. This is what divine immanence demands. Just as human beings suffer with their bodies, so God suffers with the divine body of creation... for God too is counted among the victims of our ecological disregard... [Quoting Paul Fiddes], if God suffers then God too protests and a God who protests against suffering cannot be the cause of it, or God would be protesting against God.... God is not causing or willing our ecological crisis, but rather suffering its detriments.... ecological suffering can be viewed as the sacramental presence of the suffering God. To see the suffering of other creatures is to also see the suffering of the God immanent to them... ([25], pp. 12–13). [Quoting David Gray Griffin], "divine influence is understood as part and parcel of the world's normal causal relations and never an interruption thereof" ([25], p. 14)

[Quoting Ivone Gebara], "to speak of pan-en-theism is to consider the potentialities of the universe, the potentialities of life, and the potentialities of human life as always open-ended." ([25], p. 14).

Although immanent to God, the world retains its own creative freedom, a freedom which God necessarily works in and through to achieve the goodness of what can be. The naturalism of this "in and through" emerges as an invitation to act, a call to actualize in the world what God can only do through creatures ([25], p. 15).

Eco-theology questions that humans have a special status within creation ([26], pp. 95–117). Eco-theologians attack the "dominion" and the "stewardship" doctrine, which are anthropocentric. Basic tenets of eco-theology are the idea of divine immanence in the whole cosmos; a relational, ecological rather than hierarchical understanding of God, humans, and the created world; a radically reinterpreted view of human dominion over nature in terms of partnership with nature; a commitment to justice for all creatures, not just humans, highlighting the needs of the impoverished masses and endangered species around the globe.

Clearly, creation theology has been strongly influenced by Whitehead's process philosophy and theology that John Cobb introduced in Eco-theology and "that sets forth a deeply incarnational God who is the fellow sufferer who understands". Teilhard de Chardin that the Catholic Church is slowly but partially rehabilitating

plaid an important role as well. As Eco-theology raises issues that are technical, any eco-theological story—including mine!—needs screening by professional theologians. My purpose is to disseminate a story as I understand it and not either contribute to it or criticize it [27].

Moltmann's theology, especially his re-introduction of panentheism, is oecumenical and relies on Jewish theology as well ([3], pp. 66–67). One can thus talk of a unified Christian and Jewish creation theology. As Christians and Jews make approximately 1/3 of mankind, the eco-theological story, therefore, matters.

3.2 The creation story revisited

Theology is always context-dependent. The context is cultural, sociological, and cosmological. It has changed tremendously in the 19th century under the influence of the mathematics of non-linear systems, quantum physics, the discovery of biological evolution and, generally, the progress of the sciences ([28], pp. 44–47). The cosmological context has evolved from the static one underlying the book of Genesis to the one of an expanding universe. In Genesis and some psalms, the earth was thought to be floating on water or supported by columns sunk in water under a sky to which the sun, moon, and stars are anchored. Part of the Christian cultural landscape until the end of the 19th century was the Aristotelian philosophy of the static essences rediscovered in the Middle Ages (Thomism) to be replaced by the dynamic visions of History by Hegel, Marx, and Whitehead among others.

Creation theology is in full transformation. Everything moves; everything is dynamic! The world of the Bible is static. There was a golden age, the earthly paradise. This paradise was lost because of original sin. God sent his son in order to restore earthly paradise. This static vision of things, which originated in the Mediterranean view of the world three thousand years ago, was dominant roughly until the Renaissance: the stationary earth and humans were the center of the universe.

3.3 The Christian eco-theological story of creation in point form as I understand it

Theologian Paul Tillich said of the story of creation in the book of Genesis that it is a myth. A myth is not a made-up story. It is an anthropological story that illustrates the fundamental relationship between God, mankind, and the balance of creation ([3], p. 33, 50). The doctrine of creation asserts that, at each instant, God is the creative foundation of all reality. “The creation stories in the book of Genesis contain, in their symbolic and narrative language, deep teachings about human existence and on its historical reality” says Pope Francis ([2], par 66). The story about this relationship is not limited to Genesis but permeates the entire Bible. Evolution means not only change but also continuity through diversification and complexification ([28], pp. 193–195, 266–268). Creation is not, therefore, simply a past event. The creation story implies that creation finds its origin in God. It does not provide a history of the beginnings of the universe.

During the Renaissance, with the developments of astronomy and of corresponding measuring instruments, thus science, the static vision of the book of Genesis eroded progressively. Revelation is not limited to the books of the Bible but is extended to the “book of nature” that Saint-Augustine and Saint-Bonaventure already spoke about and that Anglo—Saxon natural theology built upon. Sciences play an important role in deciphering this book of nature and allow thus a certain universality of knowledge that cultural conflicts are able to hide (e.g. the dominance of the Mediterranean culture in the Western world).

The creation story is at the same time utopian and eschatological. It is utopian to the extent that it aims at undoing our current predicament by human means. It is eschatological to the extent that it relies upon a divine promise of a better world and upon Providence ([3], pp. 33–38). This dynamic vision illuminated by science completes the biblical vision anticipating the promise. Creation is God's language (Bonaventure) through which God reveals Himself. Thus God has revealed Himself from the beginning of the universe. "God ...can be known with certitude by the natural light of human reason from created things" ([29], c.2; [30], par 6). Rather than seeing creation as a state to be restored, the contemporary creation story sees creation as a promise of a future state based on the hope of resurrection. Creation degradation results in the deterioration of God's language.

Before speaking of Messiah, savior, incarnation, the theme of the perpetual alliance between God and His creation is foremost in the Bible. The world, presently in constant evolution, is imperfect. It currently leaves room for corruption, to sin, to death. It tends however toward the fulfillment of the Promise. The incarnation is a project reflecting God's love for His creation despite the latter's imperfection. Incarnation is not so much due to the sin of mankind as to God's intent from time immemorial to enter into partnership (Alliance) with mankind. This is called deep incarnation. Incarnation is, therefore, not a Plan B but a Plan A ([31], p. 16).

Creation is also a gift ([2], par 76) completed with a promise. Within the anticipative perspective, creation is more a promise than a gift as creation is still unfinished. It is also a sacrament. In the Eucharistic bread, "creation is taut towards divinisation" ([2], par 236). The gift is the visible expression of God's love for an object, resulting in its goodness [Gn 1]), its intrinsic value, its holiness [1 Tim 4.3–5]. The sacrament reinforces creation's agency (e.g. water quenches thirst and purifies; bread and wine nourish; fire illuminates and purifies; oil feeds, perfumes, and illuminates). Sacraments do not sanctify the soul and body of humans only; they also deify nature. Environmental degradation desecrates creation; it is sacrilegious.

The universe will be deified, "eucharisticised" (Teilhard de Chardin), transfigured as Jesus was transfigured before the eyes of a few apostles [Mat 17.1–8, Mark 9.2–8, Luke 9.28–36]. Creation will become the resting place for God, the Sabbath of God, in which the entire creation will participate in a state of bliss. Creation will glorify its creator. The end of the universe is, therefore, not its demise but its eschatological transfiguration into a new creation, a process in, by, and for Christ: "the new Jerusalem" [Rev 21.2]. The purpose of the Sabbath—of the seventh day, of the seventh year—and of the biblical Jubilee is the restoration of the relations among humans and among them, the balance of creation and God. The Sabbath is a reminder of the Alliance among God, mankind, and the balance of creation. Humans occupy a special place in creation but, in exchange, they hold a special responsibility for the latter, its evolution, and well-being. This is where Eco-theology comes in.

Christ was present at the origin of the universe. He is responsible for its evolution. He will be responsible for its eschatological transformation into a new creation. "Christ is the redeemer of the whole process of creation" ([32], p. 106). This is a deep incarnation.

Christ is contemporaneous to the creation and, therefore, precedes the man Jesus. Christ fulfills a function: he participated in the original creation, partakes in the continuous creation, and will participate in the eschatological one as well. "Christ has not been an already accomplished character from the beginning of the universe. He achieves his accomplishment in the accomplishment of the world and the world

reaches its accomplishment in Christ” ([31], p. 5). Being Christ is not a name only but a function that does not coincide with the one of Jesus. Christ’s function is a cosmic one. Christ is “...recognized as the universal and trans-historical figure of God who unites with creation without being shut off in the singularity of this union” [33].

When God sends his son in order to save the universe from its imperfection, the son fills the entire universe through his resurrection. The function of Christ is to perfect and unify the universe, to synthesize creation and redemption. “In him, everything holds together” [Col 1.17]. Christ is the beginning of everything because, without him, nothing can exist. He is also the first of the universe, i.e., its most important character. He is the end of the universe as well because the whole universe, through its evolution identified by science, tends toward him because of mankind’s co-creative action in unity with Christ (Teilhard de Chardin’s omega). “I am the Alpha and the Omega, the first and the Last, the beginning and the end.” [Rev 22.13–14].

It is customary to divide the creation story into the original, the continuous and the new one.

3.3.1 The original creation

“All things came into being through him [God], and without him, not one thing came into being” [Jn, 1.3]. Creation is such an eternal act of intra-Trinitarian love that it is impossible to identify creation’s beginning ([28], p. 218). Creation *ex nihilo* does not mean bringing into existence (efficient cause) but rather everlastingly optimizing goodness in creation through attraction (final cause) ([28], pp. 217–218).

The universe is completely distinct from God. This means that the universe is not God (no pantheism) even though God is present everywhere (panentheism).

3.3.2 The continuous creation

Since the universe is in constant evolution, it is imperfect. Moral imperfection is only one facet of this universal imperfection. An imperfect universe needs a redeemer. Original sin is not a historical event due to mankind only, therefore, but also to a condition that affects matter and History ([28], p. 343).

After the Great Flood episode, God made with Noah and the whole creation a perpetual Alliance whose sign is the rainbow [Gn, 9.8–13]. The Alliance is foremost in the Bible and was reaffirmed many times: to Abraham and his descendants first with the circumcision and the promised land [Gn 17, Gn 28. 13] then to Jacob [Lev 26.42] and then to Moses with the ten commands [Ex 34.1] and the promised land again. It was renewed in the person of Jesus (the Savior, descendant from David) who said He came not to abolish the Law but to accomplish it [Mat 5.17–18]. It is nowadays being renewed constantly through the Eucharist, the new Alliance manifestation [Luke 22.20].

Creation is called the external alliance by the reformed theologian Karl Barth because creation needed to occur before one is able to establish an alliance therewith. Barth calls the incarnation the internal alliance because incarnation leads to salvation, i.e. justification through grace. The latter as well as creation are a gift from God. Salvation is the new creation that encompasses the whole of nature. Creation assigns a cosmic dimension to salvation [Rev 21, 22].

God is the master of creation. When Genesis says that Adam was created in the image of God and to His likeness [Gn 1.26] and that Adam had the right to name the animals [Gn, 2.19–20], God did not yield the mastery of creation to mankind.

A person is only “dust from the ground” [Gn 2.7] and not separate from the balance of creation.

God’s image is given to mankind. His likeness must be acquired through a virtuous life ([3], p. 70). The Greek fathers of the Church will fine-tune this statement: the deep meaning of mankind created in the image of God and cooperating with Him is that mankind becomes like God through the influence of the Holy Spirit. Humans are creation’s stewards only, kings of creation in the manner of Christ, i.e. creation’s servants. They empathize with creation’s suffering, protect creation and make it grow (parable of the talents [Mat 25.14–30]). If they do not do this, they disobey God. Christ, being in the image of God as well, is also responsible for creation stewardship. The Catholic Church relies on the prophets [Hos 4.2–3; Is 24.4–5] to tie ecological injustice to social injustice. This tie needs to be restored ([32], p. 85).

God inhabits his creatures. This is the foundation of the sacramental approach to creation. The latter underlines the continuity between humans and the balance of creation. There is a continuity between the social and the ecological. Communion is the fundamental structure of everything which exists.

The relation of a person with a personal God must allow this person to personify the world (Vladimir Lossky). It is the care ethic that *Laudato si’* emphasizes and which leads to this personification which allows transcending matter’s limits. This is why creation awaits with impatience the revelation of God’s children [Rom 8.19]. The sacramental approach reveals the insufficiency of the stewardship concept discovered by hermeneutics because humans belong more to nature than the balance of creation belongs to humans.

The person is the priest of creation, i.e., celebrates the latter. Creation is called to enter into communion with its creator through the human person and conversely. All components of creation are integrated into celebrations to be offered to God and transformed through His spirit. “The Eucharist is intrinsically an act of cosmic love.” ([2], par 236) “...The Eucharist is the privileged locus where God is present now to our world as a part of this world” [34].

3.3.3 The new creation

The future of the universe is a promise based on the hope for resurrection. Creation is not a gift only. The universe has no end. It will not be destroyed but will not subsist in its current state. Deuteronomy speaks of a promised land to all creation while Exodus speaks of liberation from a land of oppression and Saint Paul speaks of future liberation, conditional upon human behavior or service. “The natural world is spirituality’s true home rather than a far-removed prophetic aspiration to a heaven—elusive state of perfection detached from the earth” ([32], p. 41). The current cosmology replaces Genesis’ cosmology. Mankind’s well-being depends on the planet’s well-being.

The person is prophet to the extent the former understands the divine design for creation.

When God sent his son to save the universe from its imperfections, the son filled the entire universe through his resurrection. Christ is cosmic: his role is to perfect and unify the universe, to synthesize creation and redemption. Christ is the beginning of everything because, without him, nothing can exist. He is also the first in the universe because the whole universe, in its evolution noted by science, tends towards Him because of the shared co-creative action of humans united in Christ (Teilhard de Chardin’s omega). The fathers of the Greek Church in the first centuries of our

common era were interested in creation within the framework of the cosmic Christ, i.e., Christ present everywhere in the real world. The eschatological purpose of History is to “...reunite the whole universe under one leader, Christ, what is in heaven and on earth” [Ep 1.10].

Through the visible Christ (under His human appearance), we know God but in an imperfect manner [1 Cor 13. 12].

Christ existed before all creatures and is more than the latter. Therefore, everything which has been created, be they angels, humans, or the balance of nature, has been created for Christ and thus for God and is maintained in its existence by Him and for Him.

All of mankind is called to become in Christ similar to Christ. The whole universe in its diversity will be united to Christ because Christ is present in all its components (panentheism). The Church is destined to be the gathering around Christ of all humans united in one body.

Christ is the first to resurrect. Christ's resurrection secures the resurrection of the whole universe. Christ by His death and resurrection obtained victory over the cosmic forces of evil. The latter is responsible for suffering and death which affect the whole of nature. Nature, including humans, must also suffer and die to reach its transfiguration.

Victory over the cosmic forces of evil is a decisive victory, but it requires still extension in space and in time in order to reach the whole of mankind. Despite Christ's victory through His resurrection, the demonic elements of death, sin and chaos operate in the universe. Before His resurrection, Christ necessarily had to suffer and die since He assumed our human condition through his incarnation ([3], p. 197; [35], pp. 36–43).

The balance of nature is the passive victim of the Fall. “...in hope that the creation itself will be liberated from its bondage...” [Rom 8.20–21], creation awaits its liberation because of the active human cooperation towards this goal.

Christ's resurrection insured the redemption not only of humans but of the whole universe. This redemption was needed since creation is imperfect. Humans and nature are interdependent as asserted by ecology and the Fall story.

“God became man so as a man could become God” (Irenaeus) or, more exactly, according to all the Greek fathers of the Church “the Son of God became man so as for men to become sons of God” by adoption ([3], p. 197). This statement is not limited to mankind. The whole universe is recapitulated in Christ. Thus, incarnation, as well as redemption, are cosmic events.

3.4 The eco-theological utopia

Through her prophetic role, the human being understands the divine design of creation that Revelation teaches her, but creation needs the human being to manifest its potentialities. This is where the Christian utopia joins eschatology.

The transfiguration of nature depends on us because “creation itself will be liberated from its bondage to decay” [Rom 8.20] because of evil that exists in the imperfect creation. According to Maxim the Confessor, one of the Greek Church's fathers, God planned the universe so that the latter could unite with His divinity, but mankind turned its back on God's plan.

One action which is required from us is, with the help of the Holy Spirit, to wait with perseverance for Christ's return. Another is to change the existing situation of domination over other human beings and over the balance of nature ([2], par 224) while collaborating on the transformation of the universe in view of Christ's return. Because of its incompleteness, the universe laments about its disharmony and is divided.

It is humanity that must first find its unity again and then be the mediator and prophet between the balance of the universe and its creator in order for the universe to be transfigured through grace and to find its unity. This mediator's role consists in seeing the reason for the created world through contemplation, beyond appearances, the relation between a given creature and its creator as the one of "the rising sun with the things it illuminates" (Maxim the Confessor), and live in the cosmic energy that is love, according to God's design ([3], p. 198).

The whole of human destiny, as the one of the universe, is one of growth and maturation "day after day and ascending towards perfection, i.e. approaching the One who was not created, will not be complete in this life, but will continue in the other" (Irenaeus) ([3], p. 198). It is the prophetic meaning of the Christian utopia. This meaning would not exist without the eschatological one of the resurrection, which needed itself because of the myth of the Fall. O felix culpa (culpa as flaw)!

4. Conclusion

Pope Francis considers it to be among his prerogatives to intervene in the ecological arena. He is convinced mankind needs to change its culture, to make an "ecological conversion". The predominant culture since the advent of the sciences has been that the environment is an open-access resource, i.e. a public good with unrestricted access. Since the nineteen-fifties, large-scale pollution of the air and of the rivers has been an unmistakable early warning sign that the open-access mentality was destroying the environment and its public good features, i.e. non-excludability of any economic agent from the good and non-rivalry in the latter's consumption.

The open-access culture is not biblical. The Bible sees the environment as a commons, a divine gift that mankind is expected to revere, develop, and share as a common inheritance within and across generations according to its creator's intent. The pope proposes Francis of Assisi's spirituality—articulated in a philosophical system by Bonaventure—as the model for the new culture. The stewardship model proposed by the Greeks, the Stoicians, and the Christian churches do not suffice. It needs to be completed by an ethics of care which not only assigns intrinsic value—whose origin is God himself—to all creation but treats the latter as close kin. The aboriginal culture does this to some extent already since kinship with the earth is part of the aboriginal identity. This is one reason why the latter needs preservation. The ethics underlying the relatively new relational valuation current may bridge the various ethical reference frameworks, stewardship, care, and virtue ethics especially. Whether the intrinsic value is assigned to everything created or to relations with everything created matters little as long as relational values are recognized. These are three alternative ethical frameworks that may jointly assign intrinsic value to creation and lead to the needed cultural change.

Climate change took over from place-based pollution as being the global pollution problem which, with the ozone hole and threatened global biodiversity, is affecting the entire planet. Planetary problems and the Anthropocene that they characterize had to be discovered by science first and, especially, by multidisciplinary science organized in networks. As the latter's conclusions were incompatible with vested interests in the statu quo, the validity of the science was systematically questioned as well as the degree of certainty of its results. Science is no substitute for policy, however; both do not use the same discourse. As, since the Middle Ages, the planet organized politically along with nation-states and since nation-states are generally not ecosystem-based, a coordinated solution to planetary problems has eluded the

200-odd nation-states which cover the earth. No effective international environmental institutional regime exists yet. Nation-states have great difficulties implementing any international coordinated action within their own borders as well. Science tells us there is little time left for effective action. As environmental policies need to be supplemented with culture and life-styles changes and as these are slow-moving, it is likely that coordinated action will be implemented too little too late. Environmental problems of the Anthropocene are “wicked problems” [5].


The Compendium of the social doctrine of the Catholic Church is poorly integrated with ecology and thus does not achieve what Pope Francis wishes it to achieve ([6], Section 4). However, the potential for a mobilizing “grand-narrative” lies there. In particular, the theological introduction to the chapter of the Compendium dealing with environment is sound but could be enriched with eco-theology whose fundamental message is that “the future of God and the future of the world are integrated” ([28], p. 311). The Christian “grand-narrative” sufficiently jibes with other religions’ narratives to make a religious alliance possible ([36], pp. 70-80). In 2012, 1/3 of mankind was Christian and 84% of mankind allegedly belonged to some sort of religion [37]. As the Moslem religious membership is expected to be the religious group growing the fastest and reach nearly the same proportion as Christians in 2050, where the effort has to be placed is obvious. Moslem creation theology has many similarities with the Christian one [38]. Pope Francis seems to understand this [39]. Environmentally-motivated people might be able to join this religious coalition if skillfully assembled. Whether this grand narrative, while in competition with other narratives, will be sufficient to mobilize the remaining religious people towards the required ecological conversion and towards an outward-oriented “new evangelization” with an ecological dimension remains to be seen. The eco-theological grand narratives, while still in their infancy and in need of dissemination, are hopefully capable of mobilizing as were Teilhard de Chardin’s writings.

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Chapter 4

The Challenge of Sustainability: A New Covenant for Humanity

Hanoch Ben Pazi

Abstract

Never has humanity experienced so palpably and unambiguously a feeling of collective fate. The common experience of facing danger and suffering disrupts our faith in life and evokes questions of meaning and existence. Humanity facing the challenge of sustainability: global warming, climate change, new viruses, pandemics, and the new technology – Artificial Intelligence. From East to West, people find themselves in fear and exposed to the questions of their fate and real suffering. Nature demands that humankind join hands in the battle against ecological problems. The awareness of the collective fate that has been forced upon us, has the potential to mark a new kind of partnership for humanity as a whole. Jewish tradition tried to teach human beings that their mission in life is to turn fate into destiny, to turn a passive existence into an active one – to move from being an object dictated to by powers greater than he or she, to a subject who determines his or her own path and meaning in the world. The readiness of humanity to enter into the covenant of fate—the willpower of individuals to take responsibility for the community, to join together in times of distress, out of a sense of obligation and responsibility—is worthy of honor and recognition.

Keywords: sustainability, global warming, theodicy, pandemics, Soloveitchik, covenant, fate and destiny

1. Introduction

Never has humanity experienced so palpably and unambiguously a feeling of collective fate. The common experience of facing danger and suffering disrupts our faith in life and evokes questions of meaning and existence.

Humanity faces the challenge of sustainability: global warming, climate change, new viruses, pandemic, and the new technology—Artificial Intelligence. From East to West, people find themselves in fear, exposed to the questions of their fate and real suffering. Nature demands that humankind join hands in the battle against the ecological problems. An awareness of the collective fate that has been forced upon us has the potential to mark a new kind of partnership for humanity as a whole.

Jewish tradition tried to teach human beings that their mission in life is to turn fate into destiny, to turn a passive existence into an active one—to move from being an object dictated to by powers greater than he or she, to a subject who determines his or

her own path and meaning in the world. The readiness of humanity to enter into the covenant of fate—the will of individuals to take responsibility for the community and join together in times of distress, out of a sense of obligation and responsibility—is worthy of honor and recognition.

2. The epidemic of COVID-19 as an alarm for humanity

The epidemic of COVID-19 that accompanies all of humanity between the years 2020–2022, could be a milestone in human history. On the one hand, this epidemic is very reminiscent of other diseases and epidemics that have accompanied humanity since its inception. On the other hand, contemporary transportation and technology make this epidemic different from any other epidemic in human history [1].

I would like to think about our period—“our” pandemic—as another step in the journey of humanity toward a new alliance between peoples and nations. The focus of this article is to suggest new thinking about the “self-consciousness” of humanity, through the various ways people have responded to natural challenges. We need to differentiate between different kinds of human responses to these challenges: religious reactions, scientific explanations, and ethical relations [2–4].

There are religious rites, theological narratives, and cultural acts, that people used to give meanings to the mysteries of nature and to natural disasters [5, 6]. There are scientific explanations—classic, medieval or modern—that revealed the reality behind the history [7]. I would like to present another response to these natural challenges: the imperative of responsibility [8].

The call for responsibility will be a new environmental attitude that sees human existence as part of nature. It requires that people understand themselves as belonging to the earth and to nature surrounds them [9].

3. The natural disasters and the question of theodicy

In the years 2019–2022, humanity met one of the greatest challenges of human history. Of course, this is just another station—and not the worse one—in the history of maladies and pandemics of human beings. But there is something unique in the pandemic of COVID-19. This time, the plague encompasses all of humanity, and all the different countries and groups have to deal with it.

I would like to suggest a new perspective towards natural challenges—like maladies, pandemics, and plagues—be seen as a cultural mirror of humanity. Human reactions to these natural challenges can teach us about humanity with their cultural, practical, and political meanings [10, 11].

In more than one aspect, we can think about the natural challenges as the basis that moves people to create their cultures. It might be said that this is the underlying reason to establish religions—as theological responses to the mysteries of nature. A reasonable reading of Scripture might think about God as the saver of humanity, and thus define his divine authority.

A cynical look at the Scriptures can present them as a collection of stories about “divine violence,” and as a way of establishing religious authority. Divine violence is justified, and the ability to resolve the difficulty in dealing with nature and disasters is just in God’s hands. The meaning of the religious apparatus is to determine the way in which God participates in human history. In fact, the God of the Bible appears as the

one who can solve the problems of people and their behavior in nature, history, and in their human wars.

Ostensibly, God acts in history through miracles, to establish justice. A wide look at biblical history, however, shows that it is not ethics that results in salvation, but God as the ruler of nature. One of the best examples of that biblical message is God's response to Job "out of the storm," which can justify this argument, in a clear and unbending way.

4. Lisbon's earthquake: theological crisis of the theodicy

This is not the first time that all of humanity has faced a common danger from a natural calamity, be it disease or social and political turmoil. The story of the beginnings of mankind tells of Adam's initial journeys on the face of the earth, and recounts thrilling, spectacular events as well as dark and threatening ones. There are remarkable and exciting discoveries, technological and economic progress, but also grim and bloodstained wars, unbearable violence, and humanity's heroic struggle with and against nature. Hidden in that chronicle is another volume, one in which human recounts His holy aspiration exemplified by values, longevity, and good health. It also includes the story of humanity's war with the disease, against tiny, invisible enemies that threaten his life and health. 'Contagious diseases' and 'great epidemics' have accompanied humanity from its earliest history and have impacted all of the aspects of society—politics, faith, economy—and at times even determined the size of the world's population. The chapter that is being written in our days about this year's epidemic—"the corona epidemic"—is but another episode in human's war against his fate.

One of the greatest events in the history of theological thought and the development of theodicy was the Lisbon earthquake (1755). This famous event was the great "disaster" in the history of Portugal in modern times. The earthquake that killed thousands of people has become a theological question about divine justice. The history of ideas is difficult to rewrite, but must be returned to. We have to ask ourselves: what was it about this event—more than any other event—that shook religious thought? It is difficult to give a responsible answer. Still, we know that this event caused a change in religious consciousness.

The question of human suffering caused by disease still plays a major role in religious thought. It is the question Moses asks as he pleads to God "pray let me know Your ways," and by Job, as he cries out "Let me know what You charge me with." It has stirred the passions of philosophers and theologians since the days of the great Lisbon earthquake of 1755, which caused vast destruction and engendered a similar philosophical and theological upheaval regarding the justification for the tragedy and God's actions. How is it possible to comprehend a natural calamity of such enormous proportions that is not the result of the sins of humanity? François-Marie Arouet, known by his pen-name Voltaire (1694–1778), was one of the strongest critics of the religious reaction that sought to justify natural disasters. In his "Candide," he paces his naïve young protagonist through the wide world which he imagines as "perfect," as all forms of tragedy and catastrophe befall him [12]. Its depiction of our world as "the best of all possible worlds" remains a classic until today, as does the scorn he heaps upon those who believe that no natural calamity or suffering can disturb their belief in God's righteousness (theodicy).

5. Covenant of fate and covenant of destiny

Rabbi Joseph B. Soloveitchik, a Jewish philosopher of the twentieth century, approached theodicy from a different perspective, one that focused upon human responsibility, not God and divine providence.

Rabbi Soloveitchik offers a distinction between two types of “covenants” for the individual, for a group of people, and I would like to read this as a suggestion for all of humanity. He distinguishes between the “covenant of fate” and the “covenant of destiny.”

The covenant of fate is the partnership that is forged between people when they are faced with an external challenge. People form partnerships to protect themselves from enemies, or from natural or economic challenges. The “covenant of fate” is the same contract and the same partnership, in which individuals are willing to give up some of their rights in order to create a fraternity of the group.

The “covenant of destiny” is the partnership that human beings create in order to create a common vision, a common future, and a common goal. The challenge of the “covenant of destiny” is not an internal or external threat.

The experience of facing a natural calamity, an epidemic, is an experience that subjects us to the hand of fate, one which has no easy explanation. Humanity experiences its fate as “being bound up in the chains of existence, [and] stands perplexed and confused in the face of the great mystery called suffering.” This is a most appropriate description of life during a plague, in the shadow of an invisible virus when the fear of our death and destruction and that of our loved ones becomes real. The words which Rabbi Soloveitchik chooses to describe the awareness of fate are bitter and painful:

“The sufferer wanders lost in the vacuousness of the world, with God’s fear spread over him and his anger tensed against it; he is entirely shaken and agitated. His agonies are devoid of any clear meaning and they appear as satanic forces, as outgrowths of the primal chaos that pollutes the creation whose destiny it was to be a reflection of the creator.” ([13], p. 6).

But it should be remembered that in contrast to this existence, there is another experience, the awareness that a person has a destiny. The experience of ‘existence under the awareness of destiny’ relates to humanity’s active existence:

“...when man confronts the environment into which he has been cast with an understanding of his uniqueness and value, freedom and capacity, without compromising his integrity and independence in his struggle with the outside world...Man is born as an object, and dies as an object, but it is within his capability to live as a “subject”—as a creator and innovator who impresses his individual imprimatur on his life and breaks out of a life of instinctive automatic behavior into one of creative activity.” ([13], pp. 5–6).

For Rabbi Soloveitchik, the distinction between “fate” and “destiny” is one of the most important ideas in Jewish tradition in dealing with the problem of suffering. Our entire doctrine of suffering, he says, is based upon two dimensions of existence—one of humanity as a child of fate, and the other as a child of destiny, with humanity moving between these two experiences ([13], p. 2).

In Rabbi Soloveitchik's terms, Judaism teaches that humanity's mission in life is to turn fate into destiny, to turn a passive existence into an active one—to move from being an object dictated to by powers greater than he, to a subject who determines his own path and his life's meaning in his world.

In an image taken from the Hebrew calendar, the unique journey of the Jewish people from the Exodus from Egypt to the Covenant at Sinai is replicated by Jewish tradition every year during the period between Pesach to Shavuot. Two distinct covenants connect the individual Jew to the people of Israel: the covenant of Egypt and the covenant of Sinai, the covenant of fate and the covenant of destiny. The days between Passover and Shavuot are characterized as a period during which the people learned to transform their covenant of fate into one of destiny. Israel entered the "covenant of fate" against their will. The covenant of Egypt bound the fate of the nation together in a situation that was forced upon them, a life of slavery, and the feeling of being pursued. Out of the experience of individual suffering, the people of Israel learned that suffering was an experience that was shared by all, and emerged from it to enter into the collective covenant of fate and became a nation. This conferred upon them an identity formed by a collective historical experience, one of decrees and persecutions, pain and common suffering, and of the realization of the need to 'be as one' for the sake of the entire community. The readiness to enter the covenant of fate is worthy of honor and recognition: the readiness of individuals to take responsibility for the community, and the readiness and will to join together in times of distress, out of a sense of obligation and responsibility.

However, there is also another covenant, the "covenant of destiny," which is entered into when the shared bond between people is not 'the product' of common suffering but rather a shared ideal, the desire and readiness to enter into an agreement to lead an ethically elevating and worthwhile life. The "covenant of destiny" is one:

"that the people have chosen of its own free will...which manifests itself as an active experience full of purposeful movement, ascension, aspirations, and fulfillment... the life of destiny is a directed life, the result of the conscious direction and free will."
([13], p. 65).

In these days, the "covenant of fate" of the Jewish people about which Rabbi Soloveitchik taught can be understood in broader terms as a "covenant of fate of humanity." The need to fight fear, chaos, and danger, and the fear of impending suffering and the threat of death—can serve as the basis for a covenant that we must enter into with others in order to save ourselves. I would like to think that the message taught by Jewish tradition—to transform fate into destiny—can become a message for all humanity. We can find the power of the spirit in these days, when all of humanity cooperates in making parallel and collective efforts to fight the threat of the virus in any way possible, and enter into a "covenant of fate." This covenant can then be transformed into another covenant and partnership, a "covenant of destiny" for the elevation of all humanity.

An all-inclusive covenant of destiny for all of humanity conveys the idea of a combined effort to create an inspiring and noble foundation for life and survival, one in which humanity's involvement is not only a response to distress, but also a part of its ability to become a partner in the greatest project of all—human's creation. In biblical terms, a covenant can be created in this time that represents mankind's readiness to respond to God's call: "Let us make a human being"! It is as if He says:

“you and I together will create human”—human being becomes God’s partner in his own creation. The next step is for this unique covenant to transform it into a covenant of destiny, which has the potential to give new meaning to the concept of the partnership of humanity.

According to R. Soloveitchik, Thomas Hobbes described the natural state, and how the state is a kind of “political or social contract” in order to preserve and defend itself. Humans make a social contract that allows them to move from the “natural state” to the “political state.” For Hobbes, as well as for Rousseau and Spinoza, these are the ways in which society—as a society—faces the challenges of the natural state. The natural state is threatening, in the behavior between one person and another. The natural state threatens the challenges that nature poses to man.

The motivation to preserve, each for himself, his unlimited natural rights, will lead to an all-out war. The “Social Contract” describes the way in which human beings, of their own free will, are willing to give up some of their personal rights in order to create a “society.” Human society means the existence of political authorities.

6. Reading genesis again: two stories of the creation of man

One of Rabbi Soloveitchik’s best-known descriptions concerns the distinction between the creation of man in chapter one in Genesis and his creation in chapter two. For R. Soloveitchik, these two chapters are not proof of two different traditions, but the biblical explanation of the inner duality found within all human beings. This is the deep understating of the contradiction in the nature of man: “The two accounts deal with two Adams, two men, two fathers of mankind, two types, two representatives of humanity, and it is no wonder that they are not identical”.

In order to understand this description, there is a need to reread Genesis with the nuances of the narratives of creating a human being. The first human being is described as the first man in chapter I:

“So God created man in His own image, in the image of God created He him, male and female created He them. And God blessed them and God said to them: Be fruitful and multiply, and fill the earth and subdue it, and have dominion over the fish of the sea, over the fowl of the heaven, and over all the beasts which crawl on the earth.”
(Genesis 1: 27-28).

The story of creating man in Genesis II reads differently:

“And the eternal God formed the man of the dust of the ground and breathed into his nostrils the breath of life and man became a living soul. And the eternal God planted a garden eastward in Eden ... And the eternal God took the man and placed him in the Garden of Eden to serve it and to keep it.” (Genesis 2: 7–8, 2: 15).

In the first, man comes out of nature, and is given the role of controlling nature. The commandment that appears in Genesis “and multiplied and filled the earth and conquered it, lowered the fish of the sea and the fowl of the air,” is the prototype of the conquering man, who conquers the continent that would become the United States, and seeks to control the nature around it, and fill the whole country. This

is man, for whom outer space and the ocean depths are the subjects of his interest, primarily to control them, to understand them, and to use them.

The first person of chapter one in Genesis is the person who is commanded by God. He is called to live in the land, to work and guard it. His cosmic function is to preserve as much as possible the flora, the fauna, and the whole of nature. This is the person who finds himself limited by prohibitions and rules. He is the one who accepts the restriction of “and from the tree which in the garden you shall not eat of it ... for in the day you eat of it you shall die.”

“Adam the first, majestic man of dominion and success, and Adam the second, the lonely man of faith, obedience, and defeat, are not two different people locked in an external confrontation ... but one person who is involved in self-confrontation. ... In every one of us abide two personae—the creative majestic Adam the first, and the submissive, humble Adam the second.” ([13], pp. 84–85).

“God created two Adams and sanctioned both. Rejection of either aspect of humanity would be tantamount to an act of disapproval of the divine scheme of creation which was approved by God as being very good.” ([13], p. 85).

7. The current state and the covenant of fate

Can we think of the “current state”—of the plague, of the challenges of sustainability—as the natural state, which requires human partnership? Does the “current state” of “global warming” and other diverse environmental and technology issues require a new social contract? I would like to think of the current situation, as a change that humanity is facing these days.

There can be a new social contract to connect people, to deal with the problems of the natural challenges that are common to all of humanity. We should think about the historical circumstances of this time—and how to connect all of humanity together. Instead of competing with each other, instead of separating the rich and poor countries, instead of creating competition between economic and medical needs between country and country—we can allow for the signing of a new international contract.

Can we think of the “current situation”—of the plague, of the challenges of sustainability—as the natural state, which requires human partnership? Does the “current state” of “global warming” and other diverse environmental and technology issues require a new social contract? I would like to think of the current situation, as a change that humanity is facing these days

Our time allows us to engage in hope, but at the same time make place for fear and despair. Although we want to think that global warming is common to all of humanity, and therefore, should lead to a universal human partnership, it is possible that the results of the current situation will lead to a struggle against each other. It may be that the consequences of the ecological crisis, will eventually lead to a series of wars, and even world wars. Why? Because humanity may be too large a group to think of a social alliance. Humans may prefer to keep their means and abilities to themselves rather than share it with all other humans. Indeed, this may be a mistake, but for any country, it is a good enough reason for the political powers not to share with others.

8. Responsible theology facing contemporary challenges

There are different and varied ways to think about the meanings of the COVID-19 epidemic and its challenges [14–16]. Some are related to the ongoing suspicion that the scientific world is out of control. Some suspect that the plague is not a result of a natural disaster, but the result of the development of science and medicine. It could be worse, like the unwanted result of creating biological weapons, one that gave birth to an unplanned mutation. It might have been developed purposely to create chaos, or maybe something went wrong in the process.

Like the descriptions of the Golem, man's attempt to control his environment led to a devastatingly unplanned outcome. This suspicious approach is not an immediate political or socio-economic suspicion, but a description in the microcosm, of industrial and economic processes, in which the person seeking to control nature, to control the world, and is surprised to find that nature continues to control it. Man creates the Golem—or robot—so that a machine can help him manage his personal or national affairs. And here it turns out that the Golem is nothing but a destructive and dangerous monster. And as in a horror movie, the creature created by man, gets his monstrous nickname and threatens society and even its creator.

We may be dealing with an act of natural destruction, of ecological damage, whose severe effects are encountered through melting glaciers, global warming, and climate change, including the outbreak of new diseases we have not known to date. The twenty-first century is the century of man's encounter with ecological processes and their impact on man: significant damage to flora and fauna—extinction of animal species and of plants—which ultimately harms man himself. Previous warnings of diseases have become a global warning through the epidemic of Covid 19. However, it becomes a threatening warning against the next diseases we face.

We may have to direct our thoughts to the modesty of mankind, to his limits, to the ability of science and politics to organize our lives. The Covid epidemic has brought us face to face with a lot of uncertainty and question marks, about what we can and cannot know about our environment. It has revealed to us the human limits in knowledge, deed, and influence. The most important discovery of the plague is not what we know, but rather what we do not know.

I want to suggest that these questions are the great questions of sustainability facing humanity at this time. Humanity pretends on the one hand to control nature, but on the other hand, understands the limits of her knowledge and learns in the hard way about the limitations of her actions. The Age of COVID forces us to rethink the meaning of human action, and its religious meaning in particular.

I want to think of the story of heaven as a parable, since we have supposedly turned the whole earth into a paradise on earth [17, 18].

We knew most of the paths of the Garden, like the first man we were able to name all the animals, like the first man we learned to know which tree should be eaten from and which is forbidden, and like the first man we guarded and nurtured the garden ... for human needs. In this parable, the tree of knowledge of good and evil is not a particular tree, but represents what we do not know completely, and those things whose purpose we do not understand. And here, as a man of the parable of the garden—the man and the woman in heaven—if we too are not careful about guarding and respecting the garden, we will find ourselves expelled from heaven. In a sense, what seemed like a parable of divine punishment, seems now the necessary result of the activity of man in a world that he does not respect.

The close reading of the parable of the garden also reveals the moral significance of human activity. Not only within the relationships between God and man, but within the relationships between man and man. The parable of the garden in Eden, becomes our world, a world in which ecological deterioration becomes a problem of climate crisis, provokes diseases and epidemics, and turns out to be a theological problem.

9. Conclusion


Never has humanity experienced such a feeling of collective fate so palpably and unambiguously. In order to offer a way to deal with this dilemma, I reflected upon ideas taken from the writings of R. Joseph B. Soloveitchik z"l (1903–1993), one of the most prominent thinkers and leaders of modern Orthodoxy in the twentieth century. “Existence in the awareness of fate” says Rabbi Soloveitchik, destabilizes humanity, as if his life is in the control of external forces, a mere object, subject to the forces of nature. The common experience of facing danger and suffering disrupts our faith in life, and evokes questions of meaning and existence. Humanity’s battle against the corona virus has succeeded in crossing borders and surmounting walls. Enemies and allies both near and far, are threatened alike by the vicious storms of corona and its effects. Different societies and states—from East to West—find themselves in fear of an invisible enemy, the epidemic, which has already exposed everyone to the question of fate and suffering. Fear of the epidemic places the fate of humanity on everyone’s shoulders, as nature demands that mankind join hands in the battle against corona in order to save ourselves and the entire world. In these times, the need for humanity to come together is stronger than ever. The awareness of the collective fate that has been forced upon us has the potential to mark a new kind of partnership for humanity as a whole.

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Chapter 5

Post-Truth in the Industrial Revolution Era 4.0 Shaping Children's Morals in the Household

Asman

Abstract

The family is the most important informal institution in the formation of children's morals with Islamic religious education. The position of the child as a mandate from God then formed a three-dimensional relationship with parents as the center. The relationship of children who still need guidance with God through parents and the relationship of children with parents under God's guidance. But on the other hand, the family can also be a killing field for the development of a child's soul if the parents wrongly educate them. The existence of this post truth in the era of the industrial revolution 4.0 makes parents control a lot of children's activities, especially in the use of social media. Because the family is the only educational institution that is able to carry out the way of religious education through good example and habituation from parents to their children.

Keywords: post-truth, Industrial Revolution 4.0, child morals

1. Introduction

Every human being must have the nature of the desire to produce an item on a large scale. Regardless of the surrounding environment. In this case, a radical nature often emerges to obtain large profits. This radically major change to produce goods was called the "Industrial Revolution". Along with the times, the industrial revolution is classified into several phases, including: Industrial Revolution 1.0, Industrial Revolution 2.0, Industrial Revolution 3.0 and Industrial Revolution 4.0 [1].

The Industrial Revolution 1.0 was marked by the steam engine which was much stronger, more flexible, and more durable. This is because the power of humans and nature cannot produce an item on a large scale and tends to be expensive. The Industrial Revolution 2.0 was marked by the emergence of factories that use electric power. The Industrial Revolution 3.0 was marked by the emergence of computers and robots that replaced the role of humans in producing goods. The Industrial Revolution 4.0 was marked by the emergence of smartphones and the internet [2].

These two factors have a major influence on human behavior today, because humans today cannot be separated from the use of smartphones. In the industrial revolution 4.0, smartphones are the most important instrument because smartphones have become human hands in the current era. This is evidenced by the dependence of

humans on smartphones [3]. This dependence has a negative impact on the physical and psychological aspects of humans. One example is introverted behavior (closed) to the outside world. In addition, using a smartphone for a long time can also interfere with health, one of which is eye health.

It is conceivable if this negative impact has occurred to children. Children are a golden phase in human life at this stage, children's personalities begin to form. Children will follow what is seen and what is taught by the people around them [4]. For example, we can see one case where children tend to prefer playing online games rather than playing traditional games with their friends. The personality of the child in this case starts from the parenting pattern of parents who tend to give freedom to their children without being limited. Even though this personality has a negative impact on the child's psyche [5]. Because it will form an introverted personality (closed). In the second case, we see that there are children who tend to be lazy, this is due to the parenting pattern of parents who do not care about their children, for example, a child who asks his parents for assignments, but his parents even give him a smartphone to use their children do the work, not teach their children. This makes the child lazy personality. Because children prioritize the instant way rather than the process.

In the third case, there is a child who tends to be violent. This is due to what children see when watching TV or playing online games. Basically, children will do or imitate something they see without understanding the meaning of what they see. Therefore, parental supervision is needed in accompanying the child. In the fourth case, we find many children who wear glasses [6]. This is caused by using a smartphone or watching television for a long time and at a distance that is too close. This is what causes children to tend to wear glasses.

From the four examples above, it can be concluded that the era of the industrial revolution 4.0, in this case smartphones, television, and the internet, has penetrated the world of children. If this continues, it is possible that children will have bad personalities, and declining health [7]. One of the causes of the negative impact of smartphones, television, and the internet is parenting. There are several types of parenting from parents Parenting patterns are divided into 4, namely authoritarian, permissive, situational and democratic. Below will be described as follows:

a. Authoritarian parenting style

Authoritarian parenting is a parenting style where parents have the right and authority to regulate their children strictly. The characteristics of this parenting pattern are emphasizing all the rules, parents must be obeyed by children, parents act arbitrarily, without being able to be controlled by children [8]. Children must obey and should not argue with what the parents ordered.

b. Permissive parenting

Permissive parenting is a parenting pattern in which parents form a spoiled personality in children, because of the nature of this parenting, children centered, namely all family rules and regulations in the hands of the child. What the child does is allowed by the parents. Parents obey all the wishes of children [9]. Children tend to act arbitrarily, without parental supervision. He is free to do whatever he wants.

c. Situational parenting

Situational parenting is a parenting pattern where parents have the right and authority to regulate their children in a moody manner, in the sense that often the parenting pattern is not applied rigidly, meaning that parents do not apply it flexibly, flexibly and adapted to the situation and situation conditions that existed at that time.

Of the three parenting patterns above tend to form a bad personality towards children. Where for authoritarian parenting, children will tend to have a hard personality and tend to apply what they have received to the people around them, especially their playmates. For the second parenting pattern, which is permissive, children will tend to have a spoiled, consumptive, and lazy personality [10]. The third parenting pattern is situational parenting, children will tend to have an apathetic personality because parenting patterns from parents tend to be undirected.

Therefore, the best parenting style is democratic parenting. Where in this parenting pattern, the position of parents and children is balanced. However, the rules from parents are obeyed by the children. This parenting also involves the child in making a decision, this is good for forming a critical and democratic child's personality. In this parenting pattern, parents usually trust their children to do something with parental supervision. This is good for shaping the child's personality who is responsible for something he does [11]. If the child makes a mistake, the parent allows the child to find the solution on their own, accompanied by input from the parent.

From the three points above, namely the era of the industrial revolution 4.0, children's personalities, and parenting patterns have very close attachments. Where the industrial revolution era will not be limited. Therefore, parenting from parents is needed to sort out what is good and what is bad to give to their children. So that children have the personality expected by parents.

2. Discussion and results

The method is generally defined as a way of doing something, while in the letterlijk sense, the word "method" comes from the Greek language consisting of "Meta" which means through and "hodos" which means way [12]. So the method is the way to go. In Arabic, the method is called *tariqah*, which means the way, or involvement in doing something. According to the term, the method is a way that regulates an ideal [13]. So it can be understood that the method means a path that must be passed to present learning materials in order to achieve teaching goals.

Educating children in the family through Islamic education is a conscious guidance from education (adults) to children who are still in the process of growing based on Islamic norms so that their personality is formed into a Muslim personality. Then what is meant by the method of educating children in Islam is the way or way that can be taken to convey educational materials or materials through Islamic education to children in the family in order to realize a Muslim personality.

In this case the author means that the method of educating children's religion in the family is the path that parents take in educating their children in the field of religious education carried out in the family environment. Among the methods in educating children in the family through Islamic education are:

2.1 Exemplary

Exemplary is the main tool in educating, because the role of parents or family is very strategic in determining the diversity of their children. Parents are required to provide role models for their children. Because parents need to develop role models from an early age, remembering that in each child will grow a certain attitude towards religion, in accordance with the attitudes of their respective parents. The exemplary method is a method used to educate by giving examples of good behavior in everyday life, so that children in the family can imitate them [14]. These examples can be from the parents concerned and can also be from the examples exemplified by the Prophet Muhammad and the Prophet's companions, as well as the examples of prominent figures.

This exemplary method is very important for children, so that they can imitate and identify with others. Therefore, good role models from both parents or the environment greatly affect the child's personality [15]. If the role model from parents is good, then it is likely that the behavior produced by the child is also good, and vice versa.

From the explanation above, it states that we must do the following points [16]:

1. Provide understanding to children that our condition is not as expected and therefore everyone in the house must change their behavior.
2. Want to criticize ourselves and admit our mistakes, while to children, we must talk about the importance of repentance.
3. We always say that every Bani Adam must be guilty, and the best of people who are guilty are those who repent. Meanwhile, our Prophet Muhammad SAW is a perfect example as Allah has honored him by giving him *ishmah* (protection from sin). A good example is to harmonize words and deeds.

A father is not enough just to have good Islamic insight to direct his children. Parents also cannot just order their children to realize what they have been ordered to do. To be a direct role model, parents must have an attitude or character that is *uswatun hasanah*. Among them are parents who have *uswatun hasanah* characteristics, namely being honest, trustworthy, having noble character, being brave, not immoral, and so on.

In the process of child development, there is a phase known as the imitation phase. In this phase, a child always imitates and imitates the adults around him, especially his parents or teachers. This exemplary method is very suitable to be applied in this phase. In educating, educators (parents and teachers) are not enough just to give advice in the sense of ordering, but should set an example, for example sending children to the mosque, while he has never been to the mosque. The absence of words and actions, makes parents or teachers not have authority as educators, and makes children confused, because what they see does not match what they hear so that children cannot obey their parents or teachers.

2.2 Habituation

Habituation is a way to get children to think, behave, and act in accordance with the guidance of Islamic teachings. Habituation is an educational approach that

requires supervision. Habituation begins by setting a religious attitude or behavior then being trained and accustomed to the child [17]. Habituation is very effective in its application to children, because they have strong memory records and immature personality conditions, so that children are easily dissolved by the habits they do everyday. The habituation method is a method used by providing good experiences to get used to and at the same time instilling the experiences experienced by the characters to be imitated and accustomed to by children in everyday life.

This method of refraction is to instill a sense in children to be done repeatedly with the aim that the experience that is done can become a part of the child, so that the child will feel accustomed to doing it. Habituation in the family, for example, children who are accustomed to getting up early to pray at dawn and living clean will become a habit [18], children are asked to get used to reading basmalah before eating or before doing other activities, and reading hamdalah after eating or after doing other activities.

There is no denying that children will grow up with the right faith, decorated with Islamic ethics, even to the peak of high spiritual values, and the main personality, if he lives and is equipped with two factors, namely the main Islamic education and a good environment. Something accustomed to since childhood, will eventually become a person's personality. It will be seen in his behavior, speech, way of thinking, even in his philosophy of life.

In addition, children can get used to saying greetings and kissing hands to their parents before leaving for school. Obviously, an action that is often repeated will certainly become a habit, and if the habit is repeated continuously it will eventually become part of one's personality [19]. Which can then be applied in the household of good daily behavior.

Therefore, educating through habituation is an effective way to instill moral values into children's souls. And the values that are embedded in him will then be manifested (real form) in his life since he started stepping into adolescence and adulthood. So that habits must be preserved so that they are personal and integrated in children's lives which are carried out in various aspects of religious life.

2.3 Advice

In the human soul there is a disposition to influence the words heard. Innateness is usually not fixed, therefore words must always be repeated. In addition to words that must be repeated, humans can also be affected by the words or speech they hear as long as they are interesting and in the center of their attention.

Influential advice opens its way into the human psyche directly through feelings. Advice with gentle words conveyed sincerely will be able to have an influence on the feelings and personality of the child. Religion is advice which means that both parents should always provide religious advice to their children every day [20], as Lukman al-Hakim did for his children about the importance of giving a religious understanding to children by giving advice in the family.

According to An-Nahlawi, what is included in mau'izah is advice and tazkir (giving a warning or reprimand). Both are ways to invite people to the path of Allah. As for giving advice from parents to their children [21] it can be done in the following ways:

1. Giving advice in the form of an explanation of the truth and interests in accordance with the aim that the person being advised stays away from disobedience

so that it is directed to something that can bring happiness and luck, advice should be done with pure intentions, and sincerely

2. Giving advice in the form of warnings, namely the adviser must retell concepts and warnings into the child's memory so that the concepts and warnings can arouse feelings, affection (affection) and emotions that encourage them to do good deeds and immediately lead to obedience to Allah and the execution of His commands.

Another important method in educating children, forming faith, preparing children's moral, spiritual and social values is education by giving exemplary advice. Because this advice can open children's eyes to the essence of things, encourage them to lead to noble situations, decorate them with noble character, and equip them with Islamic principles.

Al-Quran also uses sentences that touch the heart to direct people to the ideas they want. This is what came to be known as advice. But the advice he conveys is always accompanied by a role model or example from the giver or conveyer of that advice. This shows that between one method, namely advice, with other methods, in this case example, are complementary [22]. Good advice is advice that is in accordance with the development of the child's soul, and with good words the child hears, so that what the child hears enters the child's soul, and is then moved to put it into practice.

An example of good advice can be seen in Luqmanul Hakim's advice to his son [23], namely:

1. Advice for monotheism and not committing shirk.
2. Advice on the supervision of Allah.
3. Advice to establish prayer, carry out *amar ma'ruf nahi munkar* and be patient with all calamities.
4. Advice do not insult and act arrogantly.
5. Advice to speak gently and simply in walking.

As stated in the discussion above, it is clear that parents in giving this advice must use soft words, which can touch feelings, so that children are moved to practice it in everyday life. And also this advice is conveyed through stories, stories, or parables. In addition, in advising children in the family, parents should also set a good example, because if the actions of the parents are not good, then the advice will not be obeyed by the child. Therefore, before advising children, parents must set a good example.

2.4 Attention

Educating with attention is to devote, pay attention to and always follow the development of children in creed and moral development, spiritual and social preparation, in addition to always asking questions about the situation of physical education and the power of scientific results. The lack of attention and supervision given by parents will make a child go wild from his environment. This attention cannot be measured and replaced with material gifts, because material is a physical need, while attention

is a spiritual need [24]. The failure of education at an early age will cause humans to burn their emotions by themselves which are not directed at their early age.

A child's instinctive need for love will continue to accompany him at any time, especially at an early age. This love is in the form of parental attention to their children. So that with the attachment of love from parents, children will easily accept what their parents teach in the household. The child will do it because of his concern. To both parents at any level and position should make caring for their children a basic part of the job, and make time every day for them.

Thus, parents should always pay attention and direct their children so that they are accustomed to carrying out religious teachings, and provide instructions and answers if children experience difficulties in carrying out religious teachings.

2.5 Lecture

The lecture method cannot be separated from weaknesses in its use, including interactions that tend to be centered (centered on the speaker) and do not provide opportunities for others to actively express their opinions. To overcome these shortcomings, the speaker needs to provide adequate explanations and explanations, movements and examples and use representative (clear) media to eliminate other misunderstandings about the material provided, for example materials related to aqidah or belief issues, for example, faith in angels, faith in the last day [25].

Educating through the lecture method is a way of conveying a subject matter by way of oral narrative to children or the general public. The method of educating with lectures is a form of educative interaction through information and verbal narration by teachers or parents and educators to a group of listeners (students, children) [26]. This understanding can be understood that basically this lecture method is carried out for children to provide subject matter by way of oral narrative. This method is very much done by educators that can be applied in households in educating children, because this method is considered easy to do, also cheap and does not require equipment.

In general, in society, children who reach adulthood will develop with their physical, mental and social conditions. They hang out with their friends in that association they find a partner that they feel is suitable for themselves. The change in intimate relationships then fosters a sense of love, which in the end both want marriage. This is what makes them fall into the promiscuity of a child, especially a girl, which results in forbidden love resulting in pregnancy outside marriage, dropouts occur. In fact, today's teenagers have free sex that has exceeded the limit called free sex, resulting in underage marriages that should not be wanted by their parents [27]. Underage marriages generally do not have the maturity of the soul in carrying out marriages, so that if they marry, then the husband and wife cannot carry out their rights and obligations properly as husband and wife in married life, and will cause shock because this has deviated from the existing provisions.

Marriage that is still too young invites many unexpected problems because the psychological aspects are immature such as anxiety and stress. Therefore, underage marriage can have an impact on children's anxiety, stress and depression. Early marriage is usually carried out at the age of under 19 years for women and men, they usually do not have a permanent job which in the end will be a burden on both parents [28]. If you already have children, this will add to the burden on your parents.

From the explanation of the verse above, parents must follow the changing times by giving gadgets to their children, but parents must control, protect, guide and

educate children so that they can provide direction to use it in a positive way so that they can maintain their children's religious education in the household. Therefore, parents should actualize in the family their rights and obligations as a responsibility for maintaining honor, religion, soul, mind and property to their children in the current era of the industrial revolution 4.0 [29]. Nurturing and raising children. This is a spontaneous urge for parents to implement. Because children really need attention from parents. Parents must always pay attention to what children are doing in this digital technology era, namely controlling what children access and do through their gadgets. Parents need to provide learning related to technological developments and become a fortress against children so they do not access negative content in the mass media through gadgets.

Protect and ensure health, both physically and spiritually from various diseases or environmental hazards that can harm children. This must also always be held by parents in the family towards their children, which cannot be denied in the current era of the industrial revolution 4.0. Many children are seen from the facts on the ground that cannot be separated from their gadgets, even though if this is done by children continuously, it has an impact on damaging and disrupting children's health [30]. That way, this is the right and obligation of parents as a responsibility that parents should not allow in educating their children. Educate with various knowledge and skills that are beneficial for children's lives. Parents should not prohibit children from getting to know digital technology but must accompany them in recognizing the development of science in this digital technology era [31]. Knowing the development of technology can make children creative and think well. Therefore, parents still have the responsibility to educate their children in accordance with the development of science and innovation in the current era of the industrial revolution 4.0, but also pay attention and filter what children need to do in family social life.

To make children happy for the world and the hereafter by teaching religious education in accordance with the provisions of Allah SWT as the ultimate goal of life for every Muslim family. Parents must be fully aware of their rights and obligations as a responsibility in educating and fostering children continuously for each parent in accordance with current developments. This responsibility is an aspect of interest in educating children in the current era of the industrial revolution 4.0 [32]. However, parents must still be obliged to provide spiritual education in accordance with the provisions of the Islamic religion taught by the Prophet Muhammad to his people. Therefore, the responsibility of parents for the religious development of their children in the family becomes a life goal that parents must be held accountable for in the hereafter.

Paying attention and supervising what parents give to children, for example in the form of assets. This requires parents to always control what children want, because not all children's desires are their needs. Parents are also responsible for their rights and obligations towards children for the assets given to children considering that in the era of the industrial revolution 4.0, it is possible for children to tend to choose digital technology in the form of gadgets as social media that is easy to obtain and use. In the current era of the industrial revolution 4.0, where humans can access all information anywhere and anytime that can bring positive changes or lead to negative things. But it is religion that is the main fortress that guides a person to be a good person in the community and in the family, especially in educating children.

Thus parents must be sensitive to the lives of children at an early age, so that they can prevent children from promiscuity. Because when a child is trapped in promiscuity, it is difficult for parents to shape the character of a child to be good, it needs to be

processed again. For example, if a child has entered a vicious circle or promiscuity, it is the parents themselves who are blamed, not someone else. So be a parent who cares about the future of the child. Because "Children are Parents' Most Valuable Assets".

3. Conclusion

Based on the theory and the results of interview research, it is clear that parents' attention to their children is not optimal because they have to divide their time by working to increase and support life so that the education that their children receive from their parents is not carried out properly, especially when parents lack knowledge of religious knowledge. Therefore, the education that their children get is only from school.

Talking about education Law number 20 of 2003 concerning the National Education System in Indonesia also clearly states that education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence and noble character, and must have the skills needed by himself, society, nation and state.

Therefore we as parents must be aware of the education of children to increase the potential that exists in our children, especially and the main thing is to educate through Islamic religious education in the family to increase their faith and piety to Allah so that they become children who are devoted to their parents and become pious and pious children in domestic life.

However, to improve the quality and quantity, the writer considers it necessary to submit the following suggestions:

1. The importance of Islamic education for parents to educate children in the family in an effort to increase the religious (spiritual) intelligence of children, parents should prepare carefully what is taught to children in the family. Because the Islamic religious education provided by parents will determine the development and shape of the child's personality. For this reason, parents must be optimal in transferring their knowledge as the first and foremost educators for their children.
2. Parents are expected to always supervise and pay attention to religious education in educating their children, because if parents wrongly educate their children, there will be a field of killing children in the family children's aqeedah and killing the future and ideals of children
3. It is expected that all rural communities pay attention to each other and remind each other to parents to carry out their obligations in educating children and creating a healthy and good environment in order to avoid actions that harm the future of children and the noble hopes of parents for their children.
4. The village head should provide counseling to the community on the importance of religious education for children, while also providing adequate and supportive learning facilities, especially for early childhood education. One more thing, the village head must tell the community to control their children going out at night or wandering so that they ignore the compulsory school hours for children who should be at home, to protect the good name of their family and village.

Notes/thanks/other declarations


The author expresses his gratitude to the big family of the Sultan Muhammad Syafiuddin Samba Islamic Institute who has fully supported this research through information about research cases, and the local community of Sambas West Kalimantan and especially the Sharia Faculty and individuals who have provided moral and material support during the implementation of this research.

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Chapter 6

Integral Ecology and Spiritual Dialogues

José Ivo Follmann

Abstract

The essay has as its starting point, a brief awareness of the accelerated degradation and depletion of Planet Earth and the incompetent or insensitive economies toward the scandalous increase of social inequalities and situations of *human waste* in the world. Next, come some core points of the Church's Social Teaching under Pope Francis, highlighting *integral ecology* and dialogue, as well as some relevant aspects in the debate of global ethical standards and new perceptions of the paths of spirituality. With this broad framework, the central focus of the text synthesizes a proposal for a concept of promoting justice considered coherent and operative within this context, emphasizing the relevance of *spiritual dialogues* as a transforming practice within the complexity that questions and challenges us. Even without directly addressing the concept of sustainability, by focusing on integral ecology and spiritual dialogues, the essay's main horizon is to suggest paths to sustainable societies.

Keywords: integral ecology, spiritual dialogues, Pope Francis, socio environmental justice

1. Introduction

The essay was written at a time of tremendous acceleration in history, where, after a syndemic pandemic,¹ we experienced the impactful images of war.² Placed at the center of a dramatic design of humanity and the Planet Earth, breathing the uncertainty of its survival, we join our voice to a multitude of voices that have swelled more and more, over the last decades, in a pathetic clamor dissolving between despair and hope.

It is a painful epochal change that is underway. It is a living process that has marked our history over the last few decades. Many thinkers and humanists followed one another in the search for the elucidation of the main causes and, also, the possible ways of overcoming them. At the same time, we also witness important advances in knowledge and design of paths to sustainability, amid the manifestations of chaos and strong signs of unsustainability, which multiply in a dizzying way.

¹ The essay dates from March 2022. The concept of “syndemics” was conceived by Merrill Singer (2009), meaning the aggravation of health problems by the combination of several interrelated factors. In Brazil, philosopher Paulo Ghiraldelli [1] uses the concept of “syndemics” to characterize the high political, cultural, and economic impact in the pandemic moment that Covid-19 represented.

² War of occupation of Ukraine, declared by Russia, at the end of February 2022.

Some voices fill us with faith in life and are of great encouragement. Among them, we highlight the voice and witness of the Holy Father Francis, who has vigorously resumed dialogue in the construction of a horizon of the future, supported by *integral ecology* and the Christian theology of reconciliation. The Church's Social Teaching and the effort of dialogue are outstanding under the leadership of this Pope.

Over the last few decades, the search for global ethical standards has also intensified, increasingly becoming a fundamental requirement. In this sense, the efforts made by the German theologian Hans Küng [2, 3] are well known. From the same perspective, the Brazilian theologian Leonardo Boff [4–6], in his very perceptive reading of the world, brings us some important clues to a necessary spirituality in today's times.

The essay reports also, in summary, a collective effort, which I had the opportunity to coordinate in the Jesuit Province of Brazil, proposing an operational concept of promoting socio-environmental justice in coherence with the dreamed future horizon. The idea of *spiritual dialogues* is seen as a base amalgamation in this operational conception. Thus, this idea ends the essay not as a conclusion but as an invitation to deepen the reflection or fruitful signaling of a future of overcoming. This ending also includes some mobilizing questions within the present historical moment, whose dramatic design is outlined at the beginning.

This is the path taken in the essay that unfolds in six moments or subtitles.

2. A dramatic design

What sense do absurd military budgets have in our time? What is the meaning of human life if we are not able to react (in the face of all this) and leave prehistory? Because I believe that, as long as war is our way of overcoming our conflicts, resolving our conflicts, we will continue in prehistory ... How long? This is a challenge for young people from now on, to fight for a better world, and we realize the collective responsibility we have as a society. Is it impossible to dream? Is it not possible that, in today's world, the utopia that man can improve himself and society can be affirmed? It's a little question that I leave in the air. (José Mujica – Ex-President of Uruguay).³

We live in times of civilizational degradation in human society. This reality is mirrored in different ways in most countries. The most correct, perhaps, is to say: We live in a planetary civilizational crisis! Assertions about this phenomenon, which marks our times with sick humanity on an equally sick planet, are nothing new. There are also many studies and manifestations of all kinds that focus on the theme of increasing and explicit symptoms of the seriousness of this global disease. Many elements come together for the analysis of this diagnosis.

The main symptoms are: Humanity has lost its “common human sense,” involved in superficialities, and with its fundamental values shaken. Among these values are life itself and dignity. The syndrome of arrogant and self-sufficient prepotency of some small groups is wide open to everyone's eyes, hiding under false facades. There are clear signs of neglect which, in many political, economic, and social situations, is not only misguided but blatantly irresponsible, resulting in the ignominious accumulation of concentration of wealth and the exclusion and death of the most suffering

³ José Mujica: “Mujica sobre a crise na Ucrânia e a ‘loucura da guerra’” (23/02/2022). (2819) Mujica sobre a crise na Ucrânia e a “loucura da guerra”—YouTube.

people, who are poor, discarded from the world, and vulnerable in their dignity.⁴ In many places, too, manifestations of racism, xenophobia, and various discriminatory prejudices have become frightening. The accelerated process of environmental degradation and the increase in inequalities and situations of exclusion are clear signs that sustainability, despite all the technological advances we have experienced, is always more fragile and shaken.

Humanity suffers, above all, from a glaring disregard for the very future of life, in every sense, concerning “Mother Earth” and the “Common Home.” In the context of countries like Brazil, it is degradation, verging on depravity, that threatens the civilizational achievements of humanity, generally carried out with struggle and blood.⁵

The Brazilian Commission for Justice and Peace—CBJP, on February 21, 2022, in its periodic analysis of the conjuncture,⁶ when referring to the geopolitics of the moment, began with a reflection on Pope Francis’s expression, who spoke of the “world war in parts”:

Still in 2014, eighteen months into his pontificate, Pope Francis, after visiting a military cemetery, warned that “the world is experiencing the Third World War in parts,” whose most latent face is “crimes, massacres, and destruction.” What appeared to be a rhetorical exaggeration, embraced under the emotion of witnessing to those who had died in combat, demonstrated a remarkable analytical lucidity.⁷

It is an expression associated with the idea of “hybrid warfare.”⁸ It is a war where more than missiles, tanks, ships, or planes,⁹ most crimes happen through “cyber bombings,” with the practice of spreading cyber infections, stealing information, and fraud in operating systems. The truculent dissemination of partial versions full of falsehoods is associated with economic sanctions that suffocate national and international production and trade. “Hybrid warfare” is a resource that has strengthened and expanded with the advent of weapons of mass destruction.

The tendency is that weakly or moderately constituted national states, poor, and/or divided by religion, ethnicity, and internal political disputes are victims of global rivalries on a larger scheme. The divisions will get decisively exploited by the powers.

⁴ Attention to the rule of the great oligarchs and big corporations is becoming ever more common today, both in the East and in the West.

⁵ The three preceding paragraphs, in the present item, reproduce partially three paragraphs of author’s Preface to the second edition of “Promoção da Justiça Socioambiental - Marco de Orientação,” *Província dos Jesuítas do Brasil* [7].

⁶ This organization provides a periodic analysis service of the conjuncture for the National Conference of Bishops of Brazil—CNBB. It is a group of experts linked to various research centers and Catholic Universities.

⁷ CBJP situation analysis, February 21, 2022. <https://justicapaz.org> See references in https://www.bbc.com/portuguese/noticias/2014/09/140913_papa_guerra_1k

⁸ Hybrid Warfare—New Threats, Complexity and “Trust” as the “Antidote.” Bilal, Arsalan. *Nato Review*, November 30, 2021. <https://www.nato.int/docu/review/articles/2021/11/30/hybrid-warfare-new-threats-complexity-and-trust-as-the-antidote/index.html>.

⁹ Although its concrete terror remains alive, as shown by examples in dozens of countries around the world, and, at the moment, also in Ukraine, with the violent Russian occupation war, in March 2022. (The writing of this text coincided with the outbreak of the “Ukrainian occupation war,” declared by Russia and which began in late February 2022).

Consequently, there is a growing trend of fierce political disputes, separatist demonstrations, religious and ethnic massacres on the periphery of the world, especially where resources and trade are abundant [8].

If we move to another scenario, in which the same actors on the agenda are also present; in another focus of reality, we can echo a phrase that most must have heard, several times, in early November 2021: “The Earth is talking to us, and it’s saying we don’t have time anymore.” These are the words of the young indigenous Txai Suruí, a Brazilian representative, in the opening speeches of the Climate Summit (COP26) in Glasgow, Scotland (October 31—November 12, 2021). The Earth wants to talk to all the inhabitants who live on it.

The whole point is that our “Common Home” [9]¹⁰ is falling apart, too neglected and disordered to provide sustainability and good living conditions for the entire “big family” that lives in it. It becomes very serious because the main groups, or large oligarchies and corporations of power, become ever more insatiable and mysteriously untouchable within this “great family,” to the detriment of most of humanity and specifically of peoples who have already been accumulating historical suffering.

Often, when talking about socio-environmental problems, the bias immediately leads us to the issues of dispute for natural assets, far from the urban context. However, as serious (or more serious) than these conflicts are those generated in the daily life of the socio-environmental conflict lived in the urban context, more directly evidenced, or witnessed in the countless slums and the underworld of the discarded. For example, it rarely happens in academies to present the large concentration of black population in Brazilian *favelas* as an expression of one of the biggest socio-environmental problems, which cuts the country from north to south. It is a living expression of environmental racism, whose concept, incidentally, is at the very origin of the concept of environmental justice or environmental injustice, as it is widely known from the contributions of Robert D. Bullard [10] and others. In these subhuman and violent contexts, the “world war in parts” is also taking lives, in an endless process. Of course, the socio-environmental problems of large urban centers should be seen on a broader horizon. We must be aware, for example, above all, of the stark fact of the growing demands of consumption of goods, which large urban concentrations, by their own characteristics, demand.

Pay attention! I am not trying to divert attention from the grave attacks on the environment that occur, for example, in the Amazon context or relation to biomes in general, resulting from criminal extractivism. I reinforce the awareness regarding the deleterious and devastating force for Planet Earth and humanity that is present in the growing and scandalous aggressions regarding the reserve of life on the planet that is the Amazon biome and other similar biomes in the world. I just want to draw attention to the extent of the socio-environmental injustice that surrounds us, and that is concentrated, above all, in large urban centers, which are, on the one hand, spaces for the consumption of goods in a disorderly and almost “savage” way, and, on the other hand, machines of concentrated pollution and agglomerations of very aggressive housing degradation.

I only want to draw attention to the extent of the socio-environmental injustice that surrounds us, and that is concentrated, above all, in large urban centers, which

¹⁰ In this text official documents of Pope Francis will be quoted with their respective abbreviation acronyms: LS = *Laudato Si'* (LS, 2015); EG = *Evangelii Gaudium* (EG, 2013); FT = *Fratelli Tutti* (FT, 2020). In textual references or quotations, the acronyms and the numbers of the paragraphs referred to or cited, will be used, such as: (LS, 17).

are at the same time machines of concentrated pollution and clusters of very aggressive housing degradation.

Perhaps it should be said that at the heart of this problem is humanity itself as such, which is muffled, repressed, and forgotten. In other words: The human being seems to have been, in different ways, deviated from its own humanity. I have heard the statement several times: Humanity has lost its soul! Perhaps, putting ourselves in Leonardo Boff's perspective [6], we can say that human beings are neglecting their "dimension of depth." ([5], p. 162–164)

3. The human drama in the mirror of the paths of knowledge

Today, it is common to hear that the way in which the development processes are more usually conceived is in evident contradiction with the perception, which is always more universal and lucid regarding the indissoluble relationship between the so-called "environmental problem" and the "human and social problem." A development based on the exploitation of nature and inconsequential consumption, for a long time, has been giving signs of risk and activated the red light of warning for humanity and the entire biosphere and its multiple ecosystems.

We also know that this alert relates to a broader issue involving the knowledge process per se. There are many voices that have already been raised, outside and inside the scientific environment, giving strength and vigor to the alert in question. It is an alert not only for specialists and scholars but, above all, for humanity itself, that is, for human wisdom and prudence.

One of the main causes of socio-environmental problems is the historical process that cuts and segments the sciences, producing knowledge in pieces and fragmented. Nature and society have been studied in parts according to the lens of different disciplines. With the division of disciplines, science has not been successful in understanding the whole, in its complexity. New knowledge has been sought capable of comprehending the problem in its complexity and its dynamic and relational unity. There is a need for a strategy so that long-term planning can be performed, integrating the various historical, economic, social, political, ecological, and cultural processes.

It is known that the chemical scientist Ilya Prigogine, already in the 1970s, was inviting us to the need and urgency of establishing a "new alliance." Having received the Nobel Prize in Chemistry in 1977, this scientist, in one of his most influential works, co-authored with Isabelle Stengers, "The New Alliance" [11], appeals to the urgent need for a "re-enchantment of the world." According to the authors: "*The time has come for new alliances, which have always been established and for a long time ignored, between the history of men, their societies, their knowledge, and the exploring adventure of nature.*" ([11], p. 226).

It is never enough to repeat, to us, that the advances in knowledge and the search for correct approaches to overcome the limitations of modern science itself have been great. There were multiple paths. At the level of Environmental Sciences, we highlight the view from the perspective of environmental racism and environmental justice or injustice, so widely worked today by several authors since the 1980s and 1990s (especially in the United States) to the present day, as we have already mentioned when mentioning Robert Bullard [10]. In Brazil we could mention for this essay, the work of Henri Acselrad, Cecília Mello and Gustavo Bezerra [12] and works such as those of Leonardo Boff [6], Elimar Nascimento [13], Daniela dos Santos Almeida, Thula Pires and Virgínia Totti [14], and Teresinha Gonçalves [15].

It is considered paradigmatic the great lucidity of the contributions of Enrique Leff [16], who brings a strong differential contribution to Environmental Sciences by underlining that, from the interests of each scientific discipline, also the knowledge of the peasant, the indigenous, and the Afro-descendant population must be considered. Also relevant are the contributions of Joan Alier [17], with the concept of the “ecologism of the poor.” In the same way, the contributions of the sociologist Boaventura de Sousa Santos [18, 19] should be highlighted, with the conception of the “ecology of knowledge” in overcoming the abyssal line between modern reason and traditional knowledge and others cultivated outside the reach of the academy. We should assuredly mention Edgar Morin [20, 21], with his rich elaborations on the horizon of complexity theory. In the same sense, dialogue with the thought of David Harvey [22], so lucidly explained in “Spaces of Hope” is indispensable.

An important production regarding the relationship between production, circulation, and consumption, focusing on the protection of the environment and the socio-environmental impact of human actions is organized by Silvia Aparecida G. Ortigoza and Ana Tereza C. Cortez [23]. This is certainly a fundamental path when we talk about sustainability. As already indicated above, urban spaces are characterized, in large part, by concentrated consumption and waste along with a large concentration of pollution, added to the juxtaposition between ostentatious luxury and housing degradation.

Another path of fundamental importance could be identified through reflections and deepening by the bias of “ecosophy” and/or “deep ecology” [4–6, 24–29] with approaches broadly focused on a conception of sacred reverence for everything that surrounds us, and which is based on or refers with respect to ancient wisdom and religious traditions.¹¹

According to Basarab Nicolescu [33], renowned physical scientist and theorist of the transdisciplinary proposal, it is knowledge produced with attention to the “included third.” This included the third party is extra-academic and does not use disciplinary language and scientific jargon. The contributions of this author, from the perspective of transdisciplinarity, must be considered in the analysis and the search for solutions to the dramas experienced by humanity.

After this small and representative authorial cast, we can infer that, with the appearance or evidence of the various levels of reality in the studies of natural systems, the complexity presents itself, provoking a new logic of seeing the environmental problem, not reduced to the environmental one, but socio-environmental, involving the different dimensions of human coexistence. Or, more radically, it is about meeting the true meaning of an ecosystem. For, strictly speaking, every ecosystem – a favela, a dam-building enterprise, an agropastoral production enterprise, an indigenous village, a university campus, etc. – is complexly constituted of all spheres of human and natural relationships. Strictly speaking, it is a question of guiding the idea of sustainable ecosystems.

4. Pope Francis and his social teaching: integral ecology and dialogues

God of love [...] Enlighten those who possess power and money, that they may avoid the sin of indifference, that they may love the common good, advance the weak, and care for this world in which we live. (LS, 246).

¹¹ With the title *Ecologia Integral: Abordagens [im] pertinentes (Integral Ecology: [Not] Relevant approaches)*, a collection in three volumes was published in 2020 and 2021 (Vol. I and II, 2020; Vo. III, 2021), organized by José Ivo Follmann, containing 27 selected original chapters [30–32].

I want to start this item by evoking this passage from the Christian Prayer with Creation, with which the Holy Father Francis closes the text of *Laudato Si'* [9]. It is a controversial phrase that demonstrates a deep belief in the possibility of conversion. As we will see in the sequence of this reflection, *spiritual dialogues* can perhaps be one of the most fruitful paths to this conversion.

In my perception and of many others, the person who is better able to mobilize world opinion concerning this whole issue at hand is, without a doubt, Pope Francis. I present here a key to reading, on which I rely, and is the same key to reading cultivated today in the Social Teaching of the Church¹² itself. I do so, relying on the two most recent social encyclical letters: *Laudato Si'* [9] and *Fratelli Tutti* [34].

In *Laudato Si'*, referring to an “*integral ecology, one which clearly respects its human and social dimensions*” (LS, 137), Pope Francis is accurate and precise in his assertion:

We are faced not with two separate crises, one environmental and the other social, but rather with one complex crisis which is both social and environmental. Strategies for a solution demand an integrated approach to combating poverty, restoring dignity to the excluded, and at the same time protecting nature. (LS, 139).

As I have already pointed out, Holy Father Francis obviously is not a pioneer in this assertion. However, the novelty is in the way he engages today in mobilizing human minds and hearts about this crisis of humanity, which is a unique crisis, underlying and permeating the social and environmental crisis. Its origin is the very way in which human beings have been led to use and abuse their fellow human beings and the gifts of creation, or the riches of the Earth.

In 2020, with the encyclical letter *Fratelli Tutti* (FT), Pope Francis sought to address the human and social dimensions as if drawing a new chapter of the previous encyclical. In presenting this new encyclical letter, the Pope expressed himself by saying that: “*Human fraternity and care of creation form the sole way toward integral development and peace, already indicated by the Popes Saints John XXIII, Paul VI, and John Paul II*” [35]. It is important to note that the Pope does not say “two ways,” but “the sole way.” There, behind this care with the language, resides undoubtedly, a very clear message regarding the proposition already explained in the LS, which points to the need for an *integral ecology*. It seems that the Pope is signaling that the FT content must be deepened in an integrated way with the content of the LS. The two encyclical letters, as a whole, add within our reading and perception, a great current synthesis of the Social Teaching of the Church.

According to Pope Francis, “*An integral ecology is also made up of simple daily gestures which break with the logic of violence, exploitation, and selfishness*” (LS, 230). In a previous document, in the Apostolic Orientation *Evangelii Gaudium* ([36], EG), Holy

¹² Certainly, not all readers are followers of the Catholic Church, but I believe that the proposal is consistent with the entire Christian proposal and, above all, the proposal of humanity. In the Social Teaching of the Church, the ecological issue and its relationship with the social issue have been matured since Pope John XXIII, in the Encyclical Letter *Pacem in Terris* (1963) and Pope Paul VI, in the Encyclical Letter *Populorum Progressio* (1967), passing, posteriorly, by Pope John Paul II and Pope Benedict XVI, until today. The innovative differential of Pope Francis lies in the strong insistence on considering social and environmental challenges in an integrated and interrelated way, proposing reflection from an integral ecology and the cultivation of fraternal dialog, as the necessary path for peace and sustainability. The title of this essay “Integral Ecology and Spiritual Dialogues” is strongly inspired by this.

Father Francis had already strongly signaled the importance of sobriety and freedom in the use of things, with care for everything and everyone (EG, 223 and 229).

Long before the Encyclical *Fratelli Tutti* was made public, the Brazilian theologian Elio Gasda [37], when reflecting on the social texts of the Pope, already advanced an in-depth and coherent reading of what would be expressed in the new Encyclical two years later. He then expressed:

For a change in mentality and lifestyles, it is necessary to form a conscience to give importance to the integral meaning of the Common Home. [...] The moment urgently needs alternative proposals. Capitalism presents serious challenges to the principles of social justice, the common good, and human dignity. Reality demands a new look that integrates the advances of the economy with critical dialogue and the new actors involved in alternative practices. ([37], p. 46–47).

Within this line of reasoning, the author makes relevant references to practices, which we can call testimonials within history, pointing out the path of “well-living” that characterizes the culture of many peoples, especially Latin Americans. He recalls a small excerpt from Pope Francis’s speech at the Meeting with the People of the Amazon in Puerto Maldonado, January 15–22, 2018:

For some, you are considered an obstacle or a hindrance. In fact, you, with your lives, are a cry to the conscience of a lifestyle that cannot measure its own costs. (Apud [37], p.57).

Pope Francis highlights, above all, the importance of dialogue today. In *Fratelli Tutti*, he devotes an entire chapter (chap. VI) to the theme of “dialogue and social friendship.” This chapter begins with a list of some tremendously expressive verbs:

Approaching, speaking, listening, looking at, coming to know and understand one another, and to find common ground: all these things are summed up in the one word “dialogue” (FT, 198).

According to the pontiff, persevering and courageous dialogue will help the world to live better. When we talk about the need for *spiritual dialogues*, we focus on the urgency of this ongoing educational exercise in our lives and societies, in the search for a culture of sustainability.

5. In search of global ethical standards and a new spirituality

1. No peace among the nations, without peace among religions. 2. No peace among religions, without dialogue among religions. 3. No dialogue among religions, without global ethical standards. 4. No survival of our Globe in peace and justice, without a new paradigm of international relations based on global ethical standards. (HANS KÜNG).

The German theologian Hans Küng [2, 3] cultivated, over the last thirty years of his life, these four principles as four “mantras” of his deepest convictions. According to this thinker, a Global Ethics Project requires the alliance of believers (followers of religions) and non-believers (followers of other orientations) for a new common *basic ethos*. There is a basic rule of humanity which is human dignity, that is, “every person

must be treated humanely.” And there is also the so-called golden law, present in many sacred texts: “*What you do not want to be done to you, do not do to anyone else.*” (See [3], p. 12).

The author centrally commented on the great significance represented by the Declaration on the World Ethos, formulated by the Parliament of Cosmic Religions, in 1993, in Chicago. The declaration highlights some common ethical principles and essential guidelines, such as the obligation for a culture of non-violence and respect for life; the obligation of a culture of solidarity and a just economic order; the obligation for a culture of tolerance and a life of authenticity; and, finally, the obligation for a culture of equal rights and the partnership of men and women.

According to Hans Küng,

This clarification should be studied and discussed intensively in all our groups, parishes, in religious and ethical teaching: it is written in the language of our time, it is generic, but not abstract; it is concrete, but not casuistic; it is critical and simultaneously hopeful” ([3], p. 13).

In this sense, it is very opportune, from a more spiritual perspective, to also make here, together with Hans Küng, a particular reference to the Brazilian theologian Leonardo Boff, who leads us freely along paths of thought where new ethical demands fertilize new proposals for spirituality.

Indeed, the new requirements call for a spirituality that radically changes us in our practices. May it make us return to the true path of justice. Leonardo Boff, in “Reflections of an old theologian and thinker” [4], points out that:

The singularity of our time lies in the fact that spirituality has been discovered as a dimension of the depths of the human being, as the necessary moment for the full blossoming of our individuation, and as a space of peace amid social and existential conflicts and desolations ([4], p. 166).

Spirituality generates inner change. The author reminds us of a radical thought of the great Eastern religious leader Dalai Lama: “*Spirituality is that which produces a change within us! (If it doesn’t produce a transformation in you, it’s not spirituality!).*” The author comments on this sentence, stating that there are changes and changes. The human being is a being of changes because he is never ready. However, there are “*changes that do not transform its basic structure,*” and there are changes which are true transformations “*capable of giving new meaning to life or opening new fields of experience and depth, toward the very heart and the Mystery of everything. It is not uncommon in the realm of religion that such changes occur. But not always.*” ([4], p.165–166).

This manifestation of the value of spirituality, as a regenerating force, is supported by the author’s own cry, which tells us: “*let us create judgment and learn to be wise and to prolong the human project, purified by the great crisis that will surely crush us.*” ([4], p. 158). He adds:

The Judeo-Christian scriptures encourage us: “Choose life, and you will live.” (Dt 30:28), and God presented Himself “as the passionate lover of life” (Wis 11:24). Let us move quickly, for we do not have much time to lose. ([4], p. 159).

It is a little cry added to infinite other cries that rise in every corner of the Earth, chorusing the great and unfathomable mystery of love, expressed within

the Christian tradition, in the “*regenerating cry*” of Jesus Christ. However, neither Christianity nor any other religion has a monopoly on spiritualities. And not even religions in their total sum can encompass the existing expressions of spirituality.

There are, however, some proposals that offer a horizon of reference that facilitates dialogue with the present moment. Specifically within the traditions of spirituality, cultivated in Catholicism, I want to highlight a brief consideration made by the Brazilian Jesuit Lúcio Flávio Cirne [38] when he refers to two important paradigmatic paths in the Christian tradition: the spiritual heritage of Francis of Assisi, known above all for the famous “Canticle of Creatures,” which expresses praise to the Highest God, humanity that becomes the sister of creatures and the respect and admiration for the entire created world; and the legacy of the Spiritual Exercises of St. Ignatius of Loyola, in which the Principle and Foundation itself presents a way of life in which God, human beings and the environment (the world) are intimately interrelated; finding God in all things and all things in God is the great horizon in the “prayer to reach love” of the Ignatian Spiritual Exercises (See [38], pp. 191–197).

Perhaps we can describe it as an imperative that, in terms of spirituality, what is expected of humanity, that is, of us, today, is the disposition of our hearts to seek the best paths for the construction of life-generating societies; to rebuild ourselves in our ability to recognize the other in their dignity; to be indignant in the face of scandalous and unacceptable inequalities, and the inhuman situation experienced by many brothers and sisters; to take care of life and the gifts of creation, impelled by the love for every life that will pulsate on this Planet Earth, in the future. It is the willingness to be, in everyday life, cultivators of socio-environmental justice. These are proposals that cut across all religious traditions, in one way or another, and overflow them in many ways. They are propositions that have secure anchors in Franciscan spirituality and Ignatian spirituality, seen in an integrated way. The testimony of Holy Father Francis demonstrates this.

6. The promotion of justice: an operational essay

Since 2015, the Social and Environmental Justice Network of the Jesuits of Brazil has been nurturing a concept of socio-environmental justice developed within the horizon of *integral ecology* and theology of reconciliation, seeking a sufficiently didactic and comprehensive format that could be of easy operability in transforming practice. It intends to cover basically all dimensions of social life, involving personal and interpersonal relationships, relations with society and in society, and relationships with natural assets and the environment.

To shed new light on the present essay that puts “*integral ecology and spiritual dialogues*” on the agenda, I believe it may be useful to present a brief synthesis of the core of the definition of this operational concept used, as expressed in the “Marco de Promoção da Justiça Socioambiental.”

The concept of socio-environmental justice¹³ is related to the broad concept of *integral ecology* and is consistent with the theology of reconciliation. It is defined operationally by an internal transversal dynamic, showing three dimensions or

¹³ The main content of this item is an adaptation from a collective production, coordinated by the author of this essay, presenting an operative concept of socio-environmental justice [7]. Already published by the author in another article [39].

thematic vectors in the coexistence within our great “Common Home” and three levels or strategic spaces of incidence.

The three dimensions of socio-environmental justice, that is, emphases or thematic vectors, which help to delimit specific coordinates inherent to socio-environmental justice practices, are 1. Recognition of the dignity of all human beings within the different ethnic-racial roots, religious beliefs, different generations, gender, worldviews, and options, always looking for ways to establish the dialogue, the value of plurality, the reception of others, of the different—for example, migrants and refugees—and the care of the vulnerable in their dignity; 2. Solidarity with the world’s poor and discarded and overcoming social inequalities, promoting universal access to basic rights to work, social assistance, social security, health, housing, education, food, and national identity. Surveillance and advocacy for public policies, political life, and institutional transparency. 3. Caring for the gifts of creation: Conservation, preservation, and proper use of natural gifts, to care for healthy ecosystems and life for the future of Planet Earth and its inhabitants, and special attention to our way of being, living, and working, and the diversity of life in different environmental biomes.

The three levels of incidence, that is, the different strategic spaces in their exercise, considering the complex relationship between concrete and abstract, empiricism and theory, or the narrowest and the broadest, in each of the dimensions or thematic vectors of socio-environmental justice, are 1. The level of knowledge production, through the recognition of the different ways of knowing and perceiving life and things, far beyond the mere knowledge disciplined by the academic world, highlighting the search for overcoming the abyssal line that separates, on the one hand, academically valued knowledge, and, on the other hand, knowledge excluded from the rational-scientific world. We highlight, on one side, the appreciation of diversity in the perception of reality and, on the other side, the perverse process of negationism and superficialities of all kinds dominating today’s culture. 2. The level of decision-making in society, with an attitude of open and non-excluding cultivation of knowledge, respecting the place of speech of everyone, and imprinting increasingly democratic practices is, without a doubt, a fundamental contribution to higher success in management, accounting for an authentic and broad culture of participation and recognition of the dignity of the subjects involved in decisions, politics, economy, and social, cultural, and institutional organization. It is fundamental when disbelief in politics and institutions is growing. 3. The level of everyday practices is the real ground of care within personal and collective practices in everyday life. It is the field of daily life, of day-by-day simplicity, of care, and justice in life as it happens; the space and time of deep sedimentation of the care for our Common Home, in the living, witnessing the recognition of the other within their cultural, religious (and other) specificities, however different they may be if compared to ours. It is the level of wisdom nurturing and spiritual deepening.

In other words, in our search to promote socio-environmental justice (social and environmental justice) through the care of the radical recognition of human dignity, care for the commitment to combating social inequalities, and care for the gifts of creation, we seek to be attentive to the most appropriate spaces for the exercise of incidence or transformative practice, which may be the level or place of ideas and knowledge, the level of participation and direct influence with the different forces concerning society, and/or the particular level of personal witness and community within the simplicity of our daily lives. It is never enough to repeat: All of this will find more connectivity and more “links” as we evolve in our *spiritual dialogues*.

Obstacles, however, are always alive and glaring. Perhaps one of the most serious obstacles is the tremendous mismatch (sometimes abysmal distance) between theory and practice in academia; between the promises of political discourse and the search for real solutions to problems; between the often calculating or alienated/alienating formulation of religions and religiosities and the effective spiritual experience in caring for life and dignity in everyday life; between immediate and superficial reactions and reactions thought out and discerned in knowledge. It is necessary that the curtains of hypocrisy, superficiality, reductive formatting, and corruption—in short, alienation—be broken in all spheres.

There is nothing better than *spiritual dialogues* to facilitate these ruptures and purify our practice of justice (socio-environmental justice) at all levels and dimensions. If we draw our attention to the original questions in the sacred text of the Judeo-Christian and Muslim traditions, we can summarize them in the following basic questions: “*Where are you*”? This is how God questioned Adam. (Gen 3,9).¹⁴ “*Where is your brother*”? This is how God challenged Cain. (Gen 4,9). “*How is the creation*”? This is how God challenged humanity, not letting it forget its mandate to take care of everything. (Gen. 1, 26–31; 2, 15).¹⁵ The questions are reproduced in the Christian Bible. Their meaning also resonates in the sacred texts of other traditions. God challenges humanity, which hides from itself by cowering in denialism. God challenges humanity throughout history and through all religions. These are questions that have resonated in the universe since the dawn of humanity. These are questions that humanity asks itself. Adam hid himself. Cain killed Abel. Humanity has forgotten.

7. Spiritual dialogues as a fruitful signaling—conclusive considerations

To start this final item, I seek support in a tremendously concise and consistent synthesis made by Leonardo Boff [5] when talking about the relationship between us, human beings, and sustainability. According to this theologian:

The individual human being is a single and complex reality, structured in three dimensions that intertwine and always have the same and unique individual subject as a bearer. He presents himself with an exteriority – man/body, an interiority – man/psyche, and a depth – man/spirit. [...] ([5], p. 158).

In addition to the bodily exteriority and psychic interiority, and everything that sustainability implies in these dimensions, the author also invites us to reflect on the sustainability of the man/spirit, that is, on the importance of cultivating the space of the profound in us. If he points to the importance of moments “*for recollection to listen to one’s own heart and raise oneself to the heart of God*” ([5], p.163), it is, however, important, within the proposal of our text, to highlight the dialogic aspect. According to the author himself, “*the spirit means the capacity for relationship and connection that all beings entertain with each other, generating information and constituting the network of energies that sustain the entire universe*” ([5], 162). When I speak of the importance and urgency of spiritual dialogues, I rely on this conclusion expressed here, too.

¹⁴ An original question addressed to the humanity of all times, which hides, ashamed of itself.

¹⁵ As for Gen. 2, 15, and especially Gen. 1, 26–31, in theological terms, “the human being in creation” is approached in a detailed and profound way by [38], p. 82–89.

In humanity that is succumbing to the virus of selfishness, indifference, and the loss of the profound meaning of its own existence and the meaning of its being in the world, perhaps one of the most radical appeals or imperatives is to stimulate and provoke, in everything, the dimension of dialogue, in what is the deepest of existence, that is, the dimension of depth. Dialogue with God must be exercised in communication with others and with the goods of creation, and dialogue with others and with the goods of creation makes the dialogue with God gain in-depth and consistency. It will allow us to grow in our citizen commitment and in the exercise of promoting justice. Citizenship commitment will only be able to grow in someone, to the extent that one is effectively willing to break the shell of egocentrism, immediate interests, and personal accumulation. The greater the multiplication and diversification of dialogues, spanning different dimensions of human coexistence and different levels of incidence, the more chances will be to grow in citizen commitment and the feeling of co-responsibility for one's own life, for others, for all humanity, and all the beings on the planet.

I have a great expectation that the pandemic, which in countries like Brazil manifested itself with true "syndemics" [1], has made us more vigilant and careful. I have great expectation that the horrors of the "world war in parts," so publicized in the case of the Russian occupation of Ukraine but which have been torturing various territories and peoples without a reasonable explanation for humanity, will challenge us and bring renewed lessons. May we always be attentive to promoting spaces for *spiritual dialogue* in our midst, allowing ourselves to be questioned and permanently questioning our lives, in all dimensions and levels, for the great question of nurturing human dignity and the value of life, in all their expressions.

Both the reality of the pandemic (syndemics) and the reality of wars, in addition to putting us face to face with limitations, degeneration, and human coarsening, have also provided us with important testimonies of human greatness and overcoming, vividly demonstrated by the high spirit of solidarity manifested on all fronts along with a substantial human outcry of indignation and protest against inhumanities. Multiple cases of true heroism have been witnessed in defense of the profound meaning of humanity. Thus, recent history brings us a new imperative: It is necessary that all this good energy, full of hope, be widely nurtured, with great dedication and care, so that it can grow ever more vigorously and never diminish and succumb to the perversity of the reigning cultures that are reductive and generative of human emptiness.

I want to emphasize that spiritual dialogues occur whenever we allow ourselves to be questioned by the soul of humanity, whenever the academy allows itself to be questioned by the soul of humanity, whenever politics allows itself to be questioned by the soul of humanity, whenever religion allows itself to be questioned by the soul of humanity.

Whenever we know how to establish relationships mediated by the profound and spiritual dimension, we will take steps toward the radical regeneration of humanity from within itself, in the perspective of renewed sustainability. That is why I wanted "*integral ecology and spiritual dialogues*" to be another provocation for our reflection on the present and future of humanity and Planet Earth.

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Chapter 7

Ancient Greco-Roman Views of Ecology, Sustainability, and Extinction: Aristotle, Stoicism, Pliny the Elder on Silphium, the Modern Legacy in Cuvier, Humboldt, Darwin, and beyond

Paul Robertson and Paul Pollaro

Abstract

The ancient herb *silphium* is known as the first recorded species extinction, documented by Pliny the Elder in the first-century CE. Pliny, however, was an outlier among his peers; the predominant religious and scientific views of his time understood extinction as only local and/or temporary. Frameworks ranging from Aristotle to Stoicism understood ecology as occurring within a divinely natural order, whose broader realities humans could only influence in a limited way. We are therefore able to identify two distinct poles of Stoic scientific and religious thought around ecology: The first, drawing from Aristotle, sees nature as divinely providential and hierarchical, allowing for higher-order beings such as humans to freely extract from an self-replenishing environment; the second, with Pliny and others, understands nature more holistically and argues that humans' ecological activity can be irreversibly destructive and should therefore be sustainable. We then explore how these two poles of thought extend all the way into the nineteenth century. There, a similar debate occurs in the views of Alexander von Humboldt, Charles Darwin, and Georges Cuvier, all foundational voices around the relationship between religion, science, and ecology that influentially shaped modern environmental views on humanity's proper relationship to nature.

Keywords: silphium, Pliny the Elder, extinction, Aristotle, Stoicism, Humboldt, Darwin, Cuvier, sustainability, ecology

1. Introduction

While sustainability may be a relatively modern concept, attempts to understand the proper relationship between humanity and nature date back at least to ancient Rome and Greece. Unlike the modern world where science, religion, and philosophy

tend to be discrete subjects with their own, distinct views on ecology, in the ancient Mediterranean these subjects were understood and studied together. As a result, ancient Greco-Roman thinking on sustainability and ecology was informed by a unique intersection of religion and science. For ancient Greek thinkers like Plato and Aristotle, for example, understandings of the natural world were part and parcel of a broader, philosophical exploration of both the nature of humanity and the nature of divinity. To understand whether nature was divine, for example, had important ramifications for understanding not only how nature operated scientifically but also how we should interact with other plant and animal species. For ancient Greco-Roman thinkers, the ethics of sustainability were inseparable from their metaphysics.

Ancient views on the metaphysical relationship between sustainability, ecology, religion, and science were not uniform, however. Key differences can be found not only in general metaphysical perspectives but specific views on ecology, such as around the notion of extinction. Some of our earliest thinkers such as Aristotle believed that extinction was impossible because creation was divinely ordained and largely outside the purview of human activity. But other thinkers, particularly from the school of philosophy Stoicism, diverged from Aristotle in understanding extinction as a terrible, irreversible event. In both cases, metaphysics similarly underpins views on sustainability, but different views on sustainability arise as a result of different metaphysical assumptions and understandings.

The same is true in modern thinking, from the Renaissance onward. In many ways, influential thinkers on modern ecology such as Alexander von Humboldt and Charles Darwin replicate the same debates around sustainability and ecology we find in ancient thought. Like the debates in Greco-Roman thought, key differences in metaphysical understandings of nature explain differing views on ecological topics such as extinction and humanity's ethical obligation regarding sustainability. By exploring and comparing a variety of historical periods' views on the intersection of sustainability, ecology, religion, and science, we can identify how our own metaphysical understandings and assumptions today can lead to a more ecologically sustainable future.

2. Ancient Greco-Roman views of religion, science, ecology, and extinction: Plato, Aristotle, and Theophrastus

In many ancient Greek and Roman traditions, it was believed that the natural world was created to provide for humankind. Humanity, as a higher-order lifeform, had natural dominion over all other organisms (e.g. plants and animals) and was thus fully warranted to utilize its authority for personal gain. As early as Homer's *Odyssey* (8th century BCE), Odysseus' encounter with the Cyclops Polyphemus sets up a clear contrast between civilized Greeks who cultivate and sow the Earth and the barbaric or inhuman Cyclopes who live in a state of wild, uncultivated nature [1–3]. Odysseus, in this view, was justified in his exploitation of the Cyclops and the violence done to him. Nature was not something peaceful to be respected but rather something to be conquered and used.

Ancient philosophical and scientific views reflected this same attitude regarding the hierarchical relationship of humanity to nature, starting with Plato (5th century BCE). Plato's tripartite view of the self – reason, spirit, and appetite – held that while humanity shared its appetitive characteristics with other organisms such as animals, humanity was distinguished by its unique possession of reason which allowed the soul

to ascend to a higher contemplative state [4]. Aristotle (4th century BCE) followed his teacher in emplacing humanity at the top of the creaturely hierarchy, and progressed even further by discussing in greater detail the relationship between humanity and nature. Underpinned by Plato's ontological foundations, Aristotle's view of the hierarchical relationship of humanity and/over nature became dominant and largely persisted in the western world – with exceptions, discussed below – until the European Renaissance.

Aristotle follows Plato by asserting that humanity is superior to nature on the basis of our rational character, which is not shared by other animals, much less plants or natural objects [5–7]. Aristotle understands this hierarchy teleologically, where everything in nature exists for a function – a notion that underpins many of his other scientific views too. This results in the conclusion that nature, and all of its many constituent parts lacking rationality, are subservient to rational humanity [8]. Aristotle famously and explicitly articulated this view in the *Politics*:

“In like manner we may infer that, after the birth of animals, plants exist for their sake, and that the other animals exist for the sake of man, the tame for use and food, the wild, if not all at least the greater part of them, for food, and for the provision of clothing and various instruments. Now if nature makes nothing incomplete, and nothing in vain, the inference must be that she has made all animals for the sake of man.” [9]

This view, of what is ultimately a divine and providential understanding of nature undergirded by an anthropocentric metaphysics, is widely present in both Peripatetic and Middle/Late Stoic thought (3rd century BCE – 3rd century CE). We will see many parallels in our treatment of Stoicism below.

Aristotle was aware of the fact that ecological exploitation could result in the decline of a wild species' population, but also held the belief that the creation of life happens spontaneously and continuously, in a manner irrespective of human conduct [10]. In *On the Generation of Animals* (*De Generatione Animalium*, henceforth *GA*), Aristotle posited that the creation of an organism could occur by means of sexual reproduction but also due to spontaneous generation (*GA* 759a-b, 762a), a climactic process of admixture between rain and matter which we also see in Lucretius and Pausanias [11, 12]. This chthonic, spontaneous generation is present in a variety of species, for example, the fish that he discusses in *History of Animals* (*HA*) (*HA* 569a, 548a; cf. *HA* 539b). Such views were extended by later thinkers to a whole host of organisms, ranging from amphibians to mammals [13, 14].

Aristotle extends his naturalistic theories to metaphysics, as “the explanation of animal generation also has metaphysical importance for him ... the generation of an entity must be explicable within that system” [15]. For Aristotle, all generation – spontaneous and not – depended not only on localized conditions (which might conceivably be influenced by humans) but more fundamentally on the metaphysical conditions of the cosmos more broadly, namely “the activity of the heavenly bodies upon the *pneuma* and the material” [15]. Humans, of course, affect the natural world, but the productive capacity of the natural world is an inevitable product of larger forces beyond the sphere of human influence. Aristotle's view explains why the notion of extinction was largely foreign to him, for it violated the notion that humanity could have a permanently destructive effect on the environment or any single given species.

Theophrastus (4th-3rd century BCE), successor to Aristotle, articulated this view well: he claimed that the silphium plant came into existence as a result of

“spontaneous generation” after a black rain of a “heavy, pitchy” nature blanketed the region of Cyrenaica (present-day northeastern Libya) in the 7th century BCE [16]. Here, Theophrastus mirrors the broadly providential view of nature that Aristotle held: the loss of any one plant or animal species was only temporary and humanity’s influence on the environment marginal. After all, any species whose population had been diminished by human activity could spontaneously reappear at any moment. Extinction in the modern, permanent sense of the word was simply impossible according to Aristotle’s (dominant and highly influential) scientific and metaphysical views.

3. Pliny the elder: a new voice in ecology

One figure stands apart from this Aristotelian strand of thought: Pliny the Elder. Pliny (23–74 CE) was a highly distinguished member of ancient Roman society. Over his life he held important military positions and was closely connected with the political elite, for example a direct friendship with Vespasian [17]. He was also prolific in his literary output, which included not only historical works but also extensive work in the natural sciences [18]. Most notable in the latter was his *Natural History* (*Naturalis Historia*), a sprawling and encyclopedic work with huge swaths of material in the natural sciences including geography and botany.

Pliny’s work contains many prior influences from Aristotle and subsequent philosophical traditions [19]. In fact, his *Natural History* is full of references to both the idea of spontaneous generation by nature and the notion of nature being hierarchical and therefore of use to humanity. On the latter, in a typical example, he writes that “[Nature] pours forth a profusion of medicinal plants, and is always producing something for the use of man.” (1.2.63) [14].

Pliny also follows Aristotle in the importance granted to the spontaneously generative power of wind and rain. He variously describes reports of matter falling from the sky, ranging from the mundane (stones; tiles) to the alarming (milk; blood). While the former might be explained away by the wind taking up material objects, the latter is not explained but merely highlighted as a given (1.2.38, 57) [14]. Pliny even notes the generation of plants in this manner, reiterating Theophrastus’ account of silphium’s appearance as an example (3.16.61) [14]. He concludes broadly that “All these productions owe their origin to rain, and by rain is silphium produced”, right in line with Aristotle (4.22.48) [14]. However, in nearly every such instance, Pliny provides details such as the location and date, perhaps to suggest that he himself is skeptical and that the reader should go confirm the occurrence of these events for themselves.

Importantly, Pliny expands this conclusion with a claim that notably departs from the prevailing ecological theory of his predecessors: “As already observed, the silphium of Cyrenae no longer exists” (4.22.48) [14]. Indeed, it is in *Natural History* that we find, for the first time in ancient western history, an explicit engagement with the notion of extinction as a permanent ecological phenomenon, with regard to the ancient herb silphium [20]. Noting a variety of the distinct geographic, botanical, and cultural factors at work, Pliny comes to the novel conclusion that the actions of humanity directly resulted in the extinction of a species and that this result is irreversible; recent research has argued that human-caused climate change was the principal factor in silphium’s extinction [21].

This conclusion begs a series of questions around ancient ecology and religion. If Pliny believed that the natural world providentially furnished things for humanity,

what would it mean that one could no longer exist? How could the extinction of a species be permanent if that same species were the product of natural forces such as wind and rain? If humanity has little power over these divine and natural forces, how could we even force something to go extinct if we tried?

We argue that the key to answering these questions can be found in Pliny's metaphysics, in particular at the intersection of religion and ecology. This intersection reflects a particular brand of Stoic thinking that highlights a fundamental tension in Stoic thought around the role of humanity and its relationship to a divinely understood nature.

Pliny's metaphysics take influence from both Aristotelian and prior Stoic views (among others) that there is a power beyond humanity over which we have little control. Pliny clearly conceives of nature in the classic Stoic sense as divine, not in a deistic sense of an agential and person-like god, but rather in a broader and more abstract sense of the divine. He asserts that the "world, and whatever that be which we otherwise call the heavens ... we must conceive to be a deity, to be eternal, without bounds, neither created, nor subject, at any time, to destruction." (1.2.1) [14] As such, he asserts that "it is ridiculous to suppose that the great head of all things, whatever it be, pays any regard to human affairs" (1.2.5) [14]. It is clear that nature, in the sense of ecology, is understood as itself a divine force: "the power of nature is clearly proved and is shown to be what we call god" (1.2.5) [14]. In this paradigm, nature cares little for humans because we are merely small creatures living within the grand operations of the cosmos; therefore nothing we do can truly influence nature. Such a line of thought largely underpins Aristotelian and some Stoic views, leading to the notion that it is not possible for human actions to cause the extinction of a species.

Pliny, however, comes to a different conclusion. Although he clearly understands nature as a divinity, he does not view nature as an agential and a person-like god. Nature, therefore, cannot operate according to whims, desires, and intentions; in other words, not like the gods classically understood in Greek mythology. Rather, the divinity of nature operates according to universal principles, such as those of science:

"[God cannot] make mortals immortal, or recall to life those who are dead; nor can he effect, that he who has once lived shall not have lived, or that he who has enjoyed honours shall not have enjoyed them; nor has he any influence over past events but to cause them to be forgotten. And, if we illustrate the nature of our connection with god by a less serious argument, he cannot make twice ten not to be twenty, and many other things of this kind." (1.2.5) [14]

Nature, as with god, cannot bring somebody back to life or change the past or any number of other things. Nature is limited by nature's own inherent operations.

This point helps explain Pliny's earlier comments around humanity's inability to create, destroy or otherwise alter the natural world. When Pliny states that humanity cannot affect nature (which is framed as a god), he is asserting that humanity cannot change the fundamental workings (e.g. natural operations; universal laws) of the universe. These not only include the known processes of the natural world (e.g. gravity, geology, reproduction, chemical and biological change, etc.) but also the unfounded natural processes which Pliny believed to have existed (e.g. spontaneous generation of organisms and material objects). In stating this, Pliny is *not* asserting that humanity cannot influence the manifestation of nature on Earth. So while humans cannot change the inherent ability of two animals to reproduce, for example, they might capture, injure, or kill the animals and thereby thwart the manifestation of this biological process. While humans cannot change the properties of water such that

it turns to steam at high temperatures and freezes at low temperatures, humans can surely remove or add heat to water to prevent or facilitate these changes in a given situation. The causes and operations of nature/god remain beyond the bounds of humanity, but not the effects and manifestations. To briefly look ahead, Charles Darwin himself settles on such a view too.

Pliny's differentiation (causes/operations vs. effects/manifestations) is crucial, as it allows him to take a wider view on the deleterious effects of human actions on the natural world. In poetic language strikingly similar to modern ecological writing, Pliny takes a dark view of humanity's ecological behaviors:

"[Nature] is continually tortured for her iron, her timber, stone, fire, corn and is even much more subservient to our luxuries than to our mere support. What indeed she endures on her surface might be tolerated, but we penetrate also into her bowels, digging out the veins of gold and silver, and the ores of copper and lead; we also search for gems and certain small pebbles, driving our trenches to a great depth. We tear out her entrails in order to extract gems with which we may load our fingers ... And truly we wonder that this same Earth should have produced anything noxious!" (1.2.63) [14]

Nature is readily anthropomorphized, in a prototypical blend of religion and ecology, as Pliny notes that the natural ecological balance theorized by prior thinkers was about meeting natural needs. By contrast, humanity's avarice for "luxuries" beyond "mere support" leads to nature being "continually tortured", being penetrated for mineral extraction, and having her entrails torn out sheerly for the sake of human decoration.

Along similar lines, Pliny affords nature some broad agency, using the extractive relationship of humanity and nature to explain why the "Earth should have produced anything noxious". Humanity, it seems, has upset the divine and natural order, with resulting consequences. In another strong echo of modern ecological writing, Pliny then continues to say that all of this exploitation of the natural world would result in disastrous consequences for humanity, "inasmuch as all this wealth ends in crimes, slaughter, and war" (1.2.63) [14]. By upsetting the divine and natural order, in the end we are only hurting ourselves. And nature – well, she will exist long after we are gone: "while we drench her with our blood, we cover her with our unburied bones; and being covered with these ... her anger being thus appeased" (1.2.63) [14]. Nature is both divinely anthropomorphized and understood as unified with the human condition; in doing the Earth wrong we do ourselves wrong as we are part of nature; and ultimately this is all understood not only in a clear scientific context of cause and effect between the natural and human worlds but also in the urgent terms of a sincerely held religious view of our place in the cosmos.

4. Two poles of stoic thought: a divergence around humanity's role in ecology: hierarchy and extraction versus holism and equilibrium

Pliny's views are strikingly written, novel with regard to the recognition of extinction, and distinct in their ability to link together religion and ecology in a way that finds parallels in the modern world. Indeed, we will treat the latter parallels explicitly in our next section. But in the context of ancient Greco-Roman views around religion and ecology, Pliny's views highlight an interesting tension in the predominant religion-ecology nexus of the day, as found in ancient Stoicism.

Philosophically, Pliny is probably aligned closer to Stoicism than any other philosophy. We must caution that he was not a systematic and whole-hearted Stoic through and through [22]. But particularly his natural philosophy, that intersection between ecology and religion, was clearly and most strongly informed by Stoicism [23]. Sometimes specific aspects of his thought can even be traced with confidence to certain Stoic thinkers [24]. More broadly, he was not only familiar with foundational ideas from Stoicism and key texts and thinkers such as Zeno (4th-3rd century BCE, founder of Stoicism) [23], but also a variety of other philosophers from whom he freely drew [25]. So while we focus here on Pliny's Stoicism in light of other Stoic thought, it is important to remember that Pliny's use of ancient philosophy was not confined to Stoicism alone.

In Stoicism, however, there were notable differences of thought, with debate around subjects such as cosmology, ethics, and human nature. Despite core, shared ideas across different thinkers, Stoicism was no monolithic system of thought and it contains both disagreements between thinkers and changes over time and. We argue that one of these internal Stoic debates which has not yet been fully recognized or explored is the relationship of humanity to nature. In the language of our conclusions above regarding Pliny, Stoic thinkers varied in how they understood the relationship of religion and ecology.

We identify two general poles in Stoicism around the relationship of religion and ecology. One pole, which we have already explored above, generally follows the Platonic and Aristotelian view: Humanity was created as a higher order being in a hierarchically ordered universe, and it is therefore natural and in some sense good for humanity to make use of and even dominate the natural environment.

Stoic thought roughly contemporaneous to Pliny, in the first and second centuries CE, is full of these ideas, ranging from Epictetus to Seneca the Younger to Marcus Aurelius. Perhaps most famously, Marcus (2nd century CE, a century after Pliny) wrote in his *Meditations* that the "lower exists for the sake of the higher" (11.18) [26]. For Marcus, lower order forms were created providentially and according to some type of divine plan; it was therefore normal and necessary for higher order forms to make use of them. This was not only a statement about religion and ecology, but also a convenient political ideology for Marcus (one of the most relentlessly imperial emperors), who could use this Stoic ideology to help justify his campaigns against militarily weaker peoples; we see a similar link between (holistic) ecology and (equitable) politics found in the modern period in Alexander von Humboldt, discussed below.

More proximately to Pliny, meanwhile, we find similar ideas expressed by Epictetus and Seneca. Epictetus, in his *Discourses* compiled by his pupil Arrian in the early first century CE, writes:

"For animals not being made for themselves, but for service, it was not fit for them to be made so as to need other things ... Nature has formed the animals which are made for service, all ready, prepared, and requiring no further care. So one little boy with only a stick drives the cattle." [27]

Such a view aligns easily not only with Marcus and some of Pliny's comments but also the ecological-hierarchy view of Aristotle. Nature has some things ready made for others and humans are rightly in charge over cattle; hierarchy and the ruling of one organism over the other is natural and even good.

This notion of some organisms being naturally created for service to others finds clear parallel in Stoic views of the body. This is best espoused by Seneca the Younger (1st century CE), who writes:

“I think that the Earth is controlled by nature, and on the model of our own bodies, in which there are both veins and arteries; the former are receptacles for blood, the latter for breath. In the Earth too, there are some passages through which water runs, others through which breath does; and nature has created such a resemblance to the human body ...” (3.15.1) [28]

The body makes for a ready parallel to nature, the micro in the macro, as individual elements of the body are created for and function in service to the whole. One would readily cut off a finger to save an entire organism, and as such there are clearly aspects of the body which are subservient to the whole and therefore relatively expendable.

Extending this view to a macro, cosmic scale, this metaphysical and religious view of our place in the universe underpins Stoic ethics, in particular the view that suffering and death are ultimately inconsequential. A single human life is to the universe as, perhaps, a fingernail is to an individual human. Just as the universe might see fit in its grand operations to destroy us individually or as a species, so too we should think nothing of cutting off and discarding a fingernail. In both cases these operations are natural and, in that Stoic sense, good. By the same logic, some organisms higher in the grand hierarchy of nature can and even should make use of others.

There is a second pole of Stoic thought, however, that speaks to how humanity should not simply exploit and extract and dominate, but rather exercise our reason to live in harmony. This view is also, in fact, derived partly from Platonic and Aristotelian views privileging the rational mind of humanity. Yet instead of seeing humans at the top of a hierarchy and justifying domination, our place at the top of the created hierarchy results from reason, which – when properly exercised according to Stoic principles – results not in violence but in harmony. Thus, Epictetus can write the following too:

“Well then God constitutes every animal, one to be eaten, another to serve for agriculture, another to supply cheese, and another for some like use; for which purposes what need is there to understand appearances and to be able to distinguish them? But God has introduced man to be a spectator of God and of his works; and not only a spectator of them, but an interpreter. For this reason it is shameful for man to begin and to end where irrational animals do; but rather he ought to begin where they begin, and to end where nature ends in us; and nature ends in contemplation and understanding, and in a way of life conformable to nature.” (ch. 6) [27]

While the first part of this passage seems to reflect the more extractive, dominating view seen in our first pole of Stoic thought, here the conclusion is notably different. It is indeed “shameful” for humans to do what animals do, presumably fight, suffer, and struggle over narrow and instinctual concerns. Instead, humanity’s rational nature calls us to a higher purpose as our “nature ends in contemplation and understanding”, an echo of Platonic influence. Conforming to nature does not simply involve participating in a violent, exploitative hierarchy of being, but rather this “life conformable with nature” is one that is aware of, and attentive to, one’s effects on others. ‘Conforming’ denotes adaptation and accommodation, not bending others to one’s own will, whim, or preference.

We see this second, accommodating pole of Stoic ecological thinking voiced severally by Seneca. Seneca writes that the proper operation of nature has to do with the notion of sufficiency:

“All things by nature seize enough for their own nourishment, and the world has appropriated as much as it needed for eternity. I shall offer you a tiny illustration of this important fact: eggs contain enough liquid to generate the creature that will emerge.” (2.5.2) [28]

The proper functioning of nature manifests an ecology in a state of equilibrium. Of course, some things naturally make use of other things (the creature in the egg and the liquid within), which well matches the first pole of Stoic thought, but this ‘making use’ reflects *only* the particular amount that the Earth needs. This amount is tremendous, sufficing forever, but only insofar as organisms within a species exist and behave according to their natural needs; so is the case of the chick emerging from the egg. The egg provides liquid for emergence, the natural need, but nothing more that might reflect preference, desire, or (in human terms) greed.

Indeed, Seneca understands the world in terms of a balanced reciprocity according to natural need and consequent use:

“Nothing is exhausted if it returns to itself. There are reciprocal exchanges between all the elements: whatever one loses turns into another, and nature weighs its parts as if they were placed on a pair of scales, to make sure that the world does not become unbalanced because the equality of its components is disturbed.” (3.10.3) [28]

Nature operates in a balance and the natural operation of its parts maintain that balance. If humans take a natural amount – such as for their natural “nourishment” per the earlier quote above – then the Earth will reciprocally take and in turn provide this nourishment. However, moving beyond what is natural – to take more than what is necessary for mere nourishment – will upset this balance:

“Any deviation by nature from the present state of affairs is sufficient for the destruction of mortals. So when that inevitable moment arrives, fate sets in motion many causes at once; for such a change cannot occur without the world being shaken.” (3.27.3) [28]

Nature provides if its constituent parts behave accordingly. If the parts do not behave according to their nature (e.g., nourishment alone) then what follows is inevitably “destruction”. Crucially, this destruction will occur via violence amid the world itself (“such a change cannot occur without the world being shaken”). Deviations from nature will invite consequences that will convulse the world and punish humanity as a result, for indeed we are a part of nature. To continue our body analogy from earlier, if a finger ceases to operate properly by harming the body, it will be subject to inevitable destruction. This destruction will harm the greater whole (body = nature) but will certainly punish the offending part (= organism/species).

This line of metaphysical thinking aligning religion and ecology readily reflects widely held Stoic understandings of ethics. In Stoicism, one should behave according to one’s general nature as a species (which Stoics call ‘a good’) and even according to one’s individual desires (which Stoics label a ‘preferred indifferent’, being neither good nor bad). A human can therefore be justified in using violence to defend their life because of an organism’s basic biological rights and nature directed toward survival, but not justified in using violence simply to get what one desires.

Indeed, Stoic ethics generally do not espouse violence but rather acquiescence; not domination but rather peaceful differences; and not extraction for excess but rather

making do with the bare minimum. This is not only a metaphysical view about the ideal ‘Stoic sage’ and our relationship to the cosmos but also has clear applications to our micro-cosmos too, namely our ecological environment. Just as Stoics argued we should generally accept our lot in life and seek no more than demanded by nature for sufficiency, by extension so too should we use nature and other organisms where necessary but never to a point of excess. One must eat, but never feast; one must kill to survive, but never for sport; one might need to extract resources to build a house to survive the winter, but this does not mean one is justified in extracting resources for ornamentation.

Furthermore, deviating beyond what is necessary for mere “nourishment”, to again use Seneca’s term, is ultimately a recipe for destruction. Firstly, it results in the forfeit of one’s individual virtue and thereby doing oneself violence – Stoics label as ‘bad’ anything that undermines virtue. But secondly, it also harms the wider environment (nature/god itself) which in the Stoic metaphysical and religious view is ultimately aligned with the self, just as the finger is identified with the body but should never be privileged before it. Any wider damaging of nature/god disturbs natural order, and this disturbance is not only bad for nature/god (a metaphysical and religious ill) but will also ultimately result in partial or complete self-destruction. For this line of Stoic thinking, ecology *is* religion and therefore sustainability constitutes proper ethics.

5. The legacy of ancient ecology and religion in modern thought: Parallels between ancient stoicism and Humboldt, Darwin, Cuvier, and modern conservationism

The ancient extinction of silphium seems to reflect the second pole of Stoic thought that we have detailed here. The harvesting and use of silphium was natural and normal, and in that sense good, as part of our biological existence on this Earth. But over-harvesting beyond what was necessary for nourishment showed improper judgment, both about ourselves and the natural world. Because we *can* affect the manifestations of natural processes, humanity has the ability to disturb the balance of nature itself. By disturbing this balance, we act not only non-virtuously from the Stoic perspective but also actively damage nature/god which will, in turn, have damaging consequences for us.

From an ecological point of view, certainly the first consequence – that we sacrifice our own virtue when we take more than is necessary – has continued to bear out time and again over the course of human history. A philosophical orientation toward nature of unfettered use and extraction beyond the survivalist minimum has resulted in cultural attitudes of extraction, imperialism, and a host of hierarchical and bigoted views ranging from neo-colonialism to outright racism. A capitalist ideology of profit maximization for personal gain will doubtless incentivize productivity and capital production, but at the cost of disincentivizing a virtuous relationship, not only with nature but with each other too.

The second ecological consequence is even more obvious: an attitude of not living in ecological balance and self-sufficiency has resulted in an unprecedented rate of species extinction, both plant and animal [29–30]. The so-called ‘Anthropocene Epoch’ has been so devastating to other biological life on Earth that this era of human dominance has been rightly faulted for “the sixth mass extinction” [31]. Pliny’s Stoicism, which recognized that humans can destructively influence nature to the point of making a plant go extinct, was simply the beginning. To this we can add the many

ways that, as Stoics predicted, the Earth has responded with violence to both itself (“the world being shaken”) and humanity (“destruction”): anthropogenic climate change and hazardous pollution are the two most ready examples that come to mind, to say nothing of the warlike destruction our species visits upon itself with historical regularity.

Modern ecological thinking has attempted to redress our relationship with the natural world in a manner strikingly similar to ancient Stoicism, by re-thinking nature and our place in it in metaphysical and religious terms. In ancient Stoicism, Seneca described a view of nature that emplaces humanity within the framework of religious humility, as he is baffled by humanity’s narrow-mindedness around our place within nature while being simultaneously in awe of nature and its grand operations. These two operate side by side:

“I myself give thanks to nature whenever I see her, not in her public aspect, but when I have entered her more remote regions, when I am learning what the material of the universe is, who is its creator or guardian, what God is, whether he is totally focused on himself or sometimes takes notice of us too, whether he creates something every day or has created once and for all, whether he is part of the world or the world itself, whether even today he may make decisions and amend part of the law of fate, or whether it would be an impairment of his greatness and an admission of error to have made something that needed alteration.” (1.3) [28]

Seneca continues, framing the issue truly as a matter of good and evil, extending the religious view of ecology in the previous quote:

“[The mind] has consummated and fulfilled the blessings of human destiny only when it had trampled over every evil and has sought the heights and entered the inner recesses of nature. Then, as it wanders among the stars themselves, it takes delight in laughing at the paved floors of the wealthy and at the whole Earth with its gold – I refer not just to what it has disgorged and given to the mint for stamping into coinage, but also to what it keeps hidden for the greed of posterity.” (1.7.8) [28]

Humans have moved far beyond nourishment and, in Stoic terms, have acted non-virtuously, extracting not out of necessity but out of greed. This is all fundamentally baffling, for our desires and wants and wars are miniscule in a metaphysical view that blends nature with god:

“The mind cannot despise colonnades, and ceilings gleaming with ivory, and topiary forests and rivers channeled into houses until it has toured the entire world and until, looking down from on high at the Earth – tiny, predominantly covered by sea, and, even when it rises above it, mainly uncultivated, and either burnt or frozen – it has said to itself, ‘this is that pinprick that is carved up among so many nations by sword and fire?’” (1.7.8) [28]

Such views are striking, not only in their poetry but in their similarity to modern ecological writings, especially those with a more religious, spiritual, or new-age bent. The origins of modern environmentalism and ecology can be rightly traced to the work of Alexander von Humboldt (1769–1859), the famous naturalist, explorer, and polymath whose influence in the world of nature science was so colossal and unparalleled it is difficult to overstate [32].

Among Humboldt's many scientific contributions, one of his most lasting was the view of nature as a unified whole governed by inter-relationships, personified in his magnum opus *Kosmos* where he argued for the interrelationship of not only all of biological nature but all of science and humanity too [32]. As far as historical influence, Humboldt's views and writing importantly gave rise to Charles Darwin's (1809–1882) own views on evolution and speciation, who in turn has become much better remembered than Humboldt himself. But Humboldt's work was one of only two that Darwin brought on his famous voyage on the *Beagle* to the Galapagos Islands and beyond, and Darwin's writings engage extensively with Humboldt, whom he admired greatly [32].

In a fascinating parallel to the two poles of ecological thinking we found in ancient Stoicism, we see a similar dynamic playing out in the work of Humboldt and Darwin around their views of nature. Scientifically, Humboldt and Darwin are rightly understood as part of a single intellectual lineage, for they both understood nature as acting upon and within itself, and as both highlighting the importance of understanding nature holistically in terms of the inter-relationship of all its parts, ranging from climate to population dynamics to the dynamism of natural change.

But there is a core difference between the two in terms of how they understood nature's holism [33]. Humboldt took the much broader view, that nature can and should be understood holistically, that ecology in the large was to be understood as a single organism functioning in harmonious equilibrium. By contrast, Darwin focused on the notion of competition (so-called 'survival of the fittest'), that nature was teeming with violence and the struggle for resources. In the words of Stephen Jay Gould, there are (at least) three fundamental "aspects of the new Darwinian world. All confute central aspects of Humboldt's vision" [33]. First, Darwin believed that "Nature is a scene of competition and struggle, not higher harmony" as Humboldt believed [33]. Second, also contra Humboldt, Darwin argued that "Evolutionary lineages have no intrinsic direction toward higher states or greater unification. Natural selection is only a process of local adaptation" [33]. And third, Darwin concluded that "Evolutionary changes are not propelled by an internal and harmonious force", which departed strikingly from Humboldt's own conclusions [33].

Darwin understood nature locally and brutally, with a series of random, weighted events propelling survival and speciation outcomes. Humboldt saw nature broadly and beautifully, with a sort of divine order and harmonious outcome of balance. Of course, both are true biologically, as it is simply a matter of scale: at the micro level of individual organisms and species you see savage and unrelenting violence and competition; at the macro level of an entire ecosystem, however, one sees harmony, balance, and beauty. It merely depends on one's own metaphysical view of where to locate the truth of nature.

Humboldt was himself not religious. Indeed, he does not mention God once in his magnum opus *Kosmos*, which described the entirety of the universe at both macroscopic and microscopic scale [34]. But his more spiritual perspective on nature is strikingly similar to the non-deistic view of 'nature as god' propounded by the Stoics, who frequently used the term 'god' in their writings but not in the sense of the person-like, agential deities found in Greco-Roman mythology. In both Humboldt and Stoic thinking, nature operates broadly and harmoniously and provides propitiously for all biological organisms. To pick up our argument from our analysis of the ancient sources, Humboldt's view is closer to the second pole of Stoic ecological thought, which focused on balance and harmony and humanity's ability to destroy and disrupt nature. Indeed, Humboldt's works were innovative and influential in speaking to the

deleterious human effects on nature, in some of our first theorization around species loss and climate change [32].

Humboldt's more spiritual perspective on nature therefore lent itself to later ecological thinking along these lines. He was particularly influential, for instance, on the scientific (and sometimes even religious) views of later ecologists in the West. This includes both more historically proximate writers such as Henry David Thoreau (1817–1862, a founder of modern naturalism) and Ralph Waldo Emerson (1803–1882, leader of transcendentalism), but also later preservationists such as John Muir (1838–1914, the key driver for the founding of the National Parks System in the United States, which in turn became a model for the global West) and Rachel Carson, whose 1962 book *Silent Spring* in many ways birthed the modern ecological conservation movement [32].

Humboldt's view also gave rise to analogical thinking in the humanistic and political sphere. He thought, for example, that because all of nature was unified and beautiful in its diversity, that such principles extended to human culture as well. He was therefore a strong proponent of cultural and racial equality, arguing loudly and across his entire life against slavery and in favor of equal rights to those oppressed by the European colonial empires [32]. For Humboldt, colonialism and theories of racial hierarchy were environmentally destructive too [32], showing the fundamental linkages between all of nature, not just plants and animals but humanity and human systems of politics too.

By contrast, Darwin's view – of competition, violence, and hierarchy – well parallels the first pole of Stoic ecological thinking, that such principles are natural and normal in nature. The founders of modern naturalism and ecology, in other words, continued to struggle with the same tension we see in Stoicism. And while Humboldt made no mention of God in *Kosmos*, Darwin's ecology more explicitly engaged with the notion:

“To my mind, it [nature's perfection] accords better with what we know of the laws impressed on matter by the Creator, that the production and extinction of the past and present inhabitants of the world should have been due to secondary causes, like those determining the birth and death of the individual.” (383) [35]

In the words of a modern interpreter of Darwin, “Darwin invokes the “Creator,” but leaves him out of the work of life and death ... The Creator may impress his laws on matter, but the laws of matter are all that are revealed by the phenomena Darwin investigates” (xxv) [35]. Like Humboldt, Darwin's thought includes the “absence of divine intention” (xxv) [35], but while Humboldt is comfortable excluding deism entirely, Darwin is still willing to engage with the notion of a Creator. Humboldt's religious views seemed to abstract away entirely from a creator god in terms of his ecological metaphysics; Darwin seemed to allow for a creator god but, in a manner strikingly similar to our second pole of Stoic thought, Darwin believed that divinity could be found in the metaphysical and scientific principles of nature while things like extinction were due to “secondary causes” such as human influence.

Darwin's thought, meanwhile, gave rise to a very different kind of humanistic and political thinking from Humboldt's. While Darwin himself was no racist or bigot and indeed was explicitly anti-slavery [36–37], the notion of ‘Social Darwinism’ was later derived from his thought [38]. This idea – that hierarchy is natural and normal and thus such principles should also apply to human society – was used for decades in an attempt to justify slavery, racial hierarchy, and colonialism. Just as with Humboldt, we

see that one's metaphysical views of nature are extended into the world of politics and culture too. One might well favor Darwin's biological perspective, and indeed there is a reason that we remember his name more than Humboldt's when it comes to his theories of nature and its operations, but Humboldt's more spiritualist view of metaphysical unity certainly leads to a more sustainable, holistic, and equitable view of human diversity.

We can now return to the idea that began our paper, extinction, and the role of scientific and religious thinking in its understanding. Our modern understanding of extinction stems from the work of Georges Cuvier (1769–1832), a contemporary of Humboldt whose scientific ideas cohere in some ways with the shared Humboldtian and Darwinian ecological frameworks. In Cuvier's *Essay on the Theory of the Earth* (1813), he set out with the simple objective to determine the identities of organisms found in the fossil record [39]. Cuvier came to a bold conclusion: some of the fossilized animal remains found below the surface of the Earth were so unlike existing species that they must have gone *extinct*. Such a conclusion was controversial in his time. Other naturalists, such as Jean-Baptiste Lamarck (1744–1829), believed that species could not go extinct, but rather adapted to their environments throughout their lifetimes, ultimately passing on those newly acquired traits to their offspring [40–41]. In this view, such fossils merely represented earlier versions of still-existing species, making extinction an impossibility.

Cuvier took the opposite view, arguing in favor of extinction and firmly opposing the idea of species adaptation:

“Why may not the presently existing races of land quadrupeds, it has been asked, be modifications of those ancient races which we find in a fossil state; which modifications may have been produced by local circumstances and change of climate; and carried to the extreme difference which they now present, during a long succession of ages? This objection must appear strong to those especially who believe in the possibility of indefinite alteration of forms in organized bodies; and who think that, during a succession of ages, and by repeated changes of habitudes, all the species might be changed into one another, or might result from a single species. Yet to these persons an answer may be given from their own system. If the species have changed by degrees, we ought to find traces of these gradual modifications. Thus, between the palaeotheria and our present species, we should be able to discover some intermediate forms; and yet no such discovery has ever been made.” [42]

Here, Cuvier proposed a revolutionary idea for his time: animal remains found in the fossil record offered clear evidence for species extinction. Yet in the same stubborn breath, he perhaps made the biggest blunder of his academic career by dismissing Lamarck's idea that species could adapt to changing environments. In hindsight, we know that neither Lamarck nor Cuvier were entirely correct, but each of them had made an important contribution to the broader understanding of life on Earth.

Cuvier believed that all species were perfectly adapted to their environments and as a result, any significant change of those environments could threaten their very existence. This idea aligns closely with the Humboldtian view of nature's harmonious balance of interrelated species, each of which occupies a unique ecological niche to the benefit of the larger whole. However, Cuvier did not always see nature as beautiful, but rather as a brutal system plagued by shocking changes, intense competition, and occasional catastrophes. This view – which parallels Seneca's previous assertion that disturbing the balance of nature would result in its destruction – influenced Darwin's

own ideas about competition, ecological change, and extinction. Extinction, according to Darwin, only occurs when a species is unable to adapt to their changing environment.

Cuvier's outright dismissal of species adaptation was in effect an intellectual road-block, preventing him from capturing the whole picture of natural selection. In doing so, he also left open the major question of how species are created, lending credence to the ancient ideas of spontaneous generation and godly creation. Indeed, Cuvier's own stance was widely used by creationists and those seeing divine design in nature [43], a position that has persisted in small and non-scientific areas of thinking today.

6. Conclusion: the metaphysics of ecology

In this chapter, we have surveyed key strands of thought in the western tradition, both ancient and modern, around the relationship between religion, science, ecology, and sustainability. In the ancient Mediterranean, the most influential explorations of this relationship include Aristotle and the later Stoic tradition. Our earliest views in ancient Greece saw nature as providential, divine, and therefore not allowing for human-caused extinction such as those of plants or animals. Later Stoic views, in particularly Pliny the Elder, noted the extinction of the famous and valuable plant silphium.

This extinction event illuminates a key difference between ancient Stoic thinkers. While Stoicism generally holds to a metaphysical view of nature as divine, Stoics themselves differentiated on the extent to which humans can and should exploit nature and its resources. We identified two poles of thinking in ancient thought: one pole that followed Aristotle in arguing that nature's divine providence results in hierarchical exploitation being natural and therefore to some extent good; and another pole that departed from Aristotle, especially as articulated by Pliny, in arguing that nature's divine providence results in hierarchical exploitation being unnatural and therefore to some extent bad. This difference results, we think, from the core metaphysical orientations of these two poles, regarding the nature of religion and ecology. The former pole sees sustainability outside the province of humanity, while the latter pole sees sustainability as a crucial element of one's proper religious and philosophical orientation to the universe.

In the later west, we see this same metaphysical intersection, encompassing all of science and philosophy and religion around the subject of ecology, in the pioneering work of Alexander von Humboldt and Charles Darwin. Although aligned in a great many ways, Humboldt and Darwin departed in crucial ways around the nature of ecology. Humboldt's metaphysical views of the cosmos see unity and harmony as fundamental principles, and therefore that human's extractive behaviors are abnormal and morally wrong, going against the very principles of the universe. It is for this reason that Humboldt's thought had an outsize effect on later syntheses of ecology, philosophy, religion, and sustainability, ranging from transcendentalism to modern eco-spiritualists. Such lines of thought in Humboldt and subsequent thinkers in his lineage well parallel the second pole of Stoic thinking, as found in Pliny but also in others such as Seneca and Epictetus, that views humanity as potentially destructive of nature's natural and divine harmony. In this view, extinction is unnatural and fundamentally bad; humanity's influence has resulted in a host of deleterious extinctions.

Darwin, by contrast, viewed competition and struggle as fundamental principles of nature. While Darwin did not pursue the humanistic social and political implications of his thought as Humboldt did, this metaphysical stance was appropriated by later

thinkers who believed that the hierarchy and violence found in nature were natural and therefore good, using this stance to justify deplorable political, economic, and social systems. In this way, *mutatis mutandis*, such lines of Darwinian thought parallel the other pole of Stoic thinking, as found in the notorious imperialist Marcus Aurelius as well as the earlier Aristotle and his view of ‘natural slavery’ (*Politics* 1254b16–23) [44], that views humanity as deserving of nature’s bounty and that lower order beings of all kinds are naturally suited to be used by others. In this view, extinction is natural and not necessarily bad; indeed, extinctions and major extinction events have occurred long before the influence of humans.

An attention to both ancient and modern thought helps us today to illuminate the relationship between science, philosophy, and religion around the subjects of sustainability and ecology. Influential voices in history have essentially argued in favor of the hierarchical exploitation of nature and non-sustainable ecological practices. However, other important voices have identified sustainability as a crucial dimension of our ideal religious and metaphysical stance. The issue of species extinction in particular highlights how thinkers, both ancient and modern, explore the relationship between sustainability, ecology, religion, and philosophy. A goal of ecological sustainability is not only metaphysically possible within the history of western scientific and religious thinking, but also justified by thinkers ranging from Pliny the Elder to Alexander von Humboldt and beyond.

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[44] Karbowski JA. Aristotle's scientific inquiry into natural slavery. *Journal of the History of Philosophy*. 2013;51(3): 331-353 N.b. Karbowski's point that Aristotle closely links his scientific orientation with his social one. We saw the same in Humboldt, but around a different metaphysical stance and therefore with a different set of conclusions around hierarchy: Aristotle's scientific views saw hierarchies in nature and therefore he saw the same in humans with a famous argument around how some people were 'natural slaves'; by contrast, Humboldt's scientific views saw holism and inter-connectedness in nature and therefore he saw the same in humans with a famous argument against slavery

Sustainability and Religion: Mutual Implications

Lluís Oviedo

Abstract

Whether sustainability goals advance depends greatly on the human factor, or the set of beliefs, values, and attitudes held by entire populations, besides governments, authorities or boards. Recognizing the role that the human factor plays might ensure a better consideration of religious bodies or churches when trying to design more sustainable complex systems, a point frequently ignored in secular societies where the weight of religious beliefs seems to be dismissed as insignificant. Post-secular arrangements could open the door to a greater engagement from religious organizations and individuals. At the same time, it is important for churches and theological reflection to assume the sustainability aim at the centre of their interests and development. There are some exceptions, as the case of apocalyptic-driven religious forms, which are little interested in sustainability, and could expect a rather catastrophic end of times. However, most religious expressions should be more concerned about contributing to sustainable programs.

Keywords: social systems, culture, beliefs, values, sustainable systems, human factor, transcendence

1. Introduction

The late German sociologist Niklas Luhmann asked in a book published in 1986 about what religion and theology could offer to address the ecologic crises, beyond sheer attitudes of protest and obvious statements about the need to engage for greater care of our natural environment [1]. His view was quite provoking, and it questioned which role religious institutions could play in relationship to great systems, like economy and politics. Indeed, what was at stake concerned the function of religion in advanced societies, and therefore, to what extent religious performance can involve such big issues. Many are convinced that its role is much more modest and restricted to managing uncertainties, or to reduce the excess of complexity. In fact, in Luhmann's model, religion works somewhat to reduce uncertainty, not to increase it denouncing great dangers and scaring people: the message would be rather "Be quiet, things will adjust with the help of divine providence".

Obviously, the described starting point is too reductive and ignores the great complexity affecting social system's relationships, including religion, and other elements that clearly fall upon environmental issues, like values, cultural background, or general beliefs. If we want to tackle the question about the role that religion can play

in addressing sustainability issues, then we need absolutely to broaden our vision to include more factors and to raise the complexity level, especially considering a post-secularization state in which religion does not compete with politics and other social spheres but collaborates and becomes better integrated into the social fabric.

Trying to better describe what is understood for sustainability, the present essay follows the broad model coined with the acronym ESG and amply assumed in international organisms: environmental issues; social and equality concern; and governance at organizational level. The idea is to assume a very comprehensive view that encompasses different dimensions involved in ensuring a balanced and better future for all.

In a nutshell, religion is clearly related to sustainability, and the connections are several. For instance, religious bodies are clearly affected by those trends: if our world is not sustainable, neither will be its religious institutions. This general rule finds an exception in those more inspired and motivated by apocalyptic expectations, whose interest is less to assist in sustaining our world, but rather the opposite. But the issue can be seen in a more specific way: in times of strong religious decline, what is at stake is the continuity or sheer survival of religious congregations, which appear for many – in the current conditions – as little sustainable; in fact, even if advanced societies could survive and thrive, churches would sharply decline and even disappear. However, the implication could be more constructive: some religious forms appear as ‘adaptive’ in the sense that they help a population to better adapt to their environmental conditions, something that has happened in the past and can be traced back, integrating well their own environment and building more resilient societies [2]. However, a look to the ample published literature offers a different view: how religious beliefs and values inform and influence attitudes toward the environment. This happens at more levels: theological or reflexive, ethical or practical, and ritual.

If sustainability needs to be seen as a broader concept, and hence not just focused on environmental issues, but as a normative idea embracing social justice or equality as well as good governance, then the application range of religion or its possible contacts and effects will increase, as the concept “integral ecology” might imply. In any case, we need to better determine how these interactions proceed, in both senses: how religion impacts in sustainable policies and at the sociocultural level; and how sustainability as a normative idea influences religious faith and practice in the current conditions and in more concerned cultures. The proposed topic can be studied at several levels. The first one is structural or systemic, since religion can be conceived and analysed as a social sub-system entertaining complex relationship with the whole system and the other sub-systems. The second is more cultural and can make good use of cultural evolution and adaptation theories as a framework, and other studies that highlight the important role that culture plays in social and personal dynamics. The third moves more to the area of personal beliefs and values, or to what can be designed as “the human factor” in sustainability, where religion surely is more salient, and as a factor that could weight strongly in the development of a more sustainable society.

The present article will review the suggested three scenarios where the mutual interactions between religion and sustainability can be better described. The ultimate aim of this short analysis is to better assess religions’ possibilities and limits regarding the high priority and urgency that we recognize to programs for enforcing a sustainable future. The inspiring motive is that sustainability models suggest integration and a holistic view, where every dimension contributes to general stability and wellbeing.

2. Exploring the systemic level

The systemic and structural level is probably the most abstract and hard to describe when trying to analyse how religion interacts with society in a whole and with other social systems to achieve goals related to the sustainability ideal, but it becomes a good guide into such dynamics.

Taking the social systems theory of Niklas Luhmann as a general framework [3] and trying to update and adapt it to new circumstances, we can develop a model that could reveal several hidden dynamics when religion is thought as part of a system aimed at becoming sustainable.

Luhmann never ignored religion as a relevant social sub-system, and he devoted several essays along his fruitful career to dissect the functions that religion could perform in highly differentiated societies [4]. From this broad view, to speak about social systems and sustainability would be a redundancy: indeed, per definition, a social system is an entity that subsists despite the odds and manages to articulate a network of meaningful communications in contrast with its noisy environment. The general idea is that a social system is a living case of social survival, and societies exist since a very early stage of human evolution, but they have evolved too, following a path that moved from more hierarchical to more meshed, differentiated and specialized structures, well ingrained and inter-dependent. It is apparent that that evolution has been positive and helped to better adapt to changing circumstances: a progress arrow can be described. In the developed stage, several sub-systems arise to better address their functional issues, like in the case of economy, politics, science, and others. Religion experiences its own evolution, from providing the description and meaning of the entire system, to be a part dealing with a specific issue: managing the residual contingency, or those problems other systems could not manage or fix. In this schema, religion becomes the ultimate resource for unsolvable or pending issues beyond the reach of economic, political, or scientific intervention [5].

Luhmann's analysis moved later to still more abstract functions, like dealing with the paradoxes that unavoidably engenders a self-referential social system like ours. In principle, the sustainability of a society depends on some balance between the differentiation process, that leads to a high specialization of each sub-system, and the integration or coordination of such autonomous instances, with their own approach and communication codes. Furthermore, a society is sustainable when it is able to keep a balance with its own environment – not just natural – and its internal functions. Each sub-system needed to contribute in the right way, performing its own function. The schema reserves a place and a role to religion as an instance able to tackle the hardest or ultimate issues through a code that distinguishes between immanence and transcendence, and remits to a transcending dimension what cannot be adjusted in the immanent or immediate reality.

The emergency we try to address under the label of 'sustainability' forces us to observe our social systems from a different perspective, even if in continuity with what sociologists like Talcott Parsons and Niklas Luhmann could observe from their systemic gaze. The point is not so much how stable societies are at the present, and how they manage to keep so, but rather, how they can preserve in the future a condition that is now perceived as deeply endangered by several disrupting factors. Even if we managed to survive as integrated societies until now, despite many disasters, plagues, and wars, we can no longer take for granted such resilience, when the current conditions appear as more threatening and climate change is setting a concerning trend, together with other contingencies we do not manage to address.

The new condition puts religion under a rising tension, since the growing uncertainties, or non-manageable risks, increase the pressure on the function that the social systems theory assigned to religion. However, providing hope or even to establish a sharp distinction between this-worldly and other-worldly expectations – the first one doomed and the second one open to be revealed – does help only in a relative way, and clearly reduces the range of religious function when the entire system is in question.

Religions have always played a ‘vicary role’ in many societies, trying to address sectors that were incompletely covered by secular means. In that sense, the idea of ‘residual management’ acquires a new meaning. In fact, Christian churches have engaged many times in supplying material and human resources to cover gaps in the education, health and welfare systems in many societies. It has been a constant provider of such services during the 19th and 20th centuries in many Western areas, a model later transferred to other societies in worse conditions. Even today, and as the American anthropologist Tanya Luhmann stated [6], many Churches in America provide assistance to people suffering psychological illnesses and difficulties, and in that way, they help to remedy a shortage in services that cannot be covered by other administrative or social resources of the Welfare State. The point is that religions show a very adaptive flexibility that clearly contributes to fill gaps and to render the entire social system more resilient and sustainable.

The question is: To what extent do evolved religions exhibit this adaptive capacity, and will become useful to address the far greater concerns linked to sustainability? My proposal has been to expand the basic idea of Luhmann’s social systems theory to assume that religion has been vicarious and has always addressed residual problems or has filled empty gaps in the social fabric no other systems were able to fill, or simply inadvertently opened. If this is the case, then, this other great emergency, threatening humanity’s future, will mobilize all the available resources to cope with this risk, not just providing hope, but encouraging practices and pressing to reach more reassuring conditions.

Obviously, it is not easy to compare churches interventions aimed at alleviating educational needs, physical or mental health demands, and other social deficits, and to remedy a state of things that could bring to a general collapse. In the first case, concrete actions are expected in schools, hospitals, and charities; in the present emergency it is less about assisting people in need, and more about changing minds and hearts and to interact with other social systems exerting some pressure or lobbying for sustainable management. Several churches and religions have already adopted such a strategy, at least at the level of their declarations and intentions. It is less clear to what extent these religious bodies could effectively interact with more powerful systems, like economy and politics, to achieve these goals.

A main difficulty can be devised in this context: even if religion can play a vicarious role at filling gaps left in the social fabric, it becomes harder to contrast the own dynamics presiding contemporary standard economy, based on increasing production and conspicuous consumption. In this case, religion does not just provide some remedies, without interfering with other system’s development, but might contrast and even disrupt those same systems which follow a divergent logic. From a systemic point of view, such interferences should lead to new configurations and adaptations in each system, but the problem could subsist and leave open wounds in the social body.

I have mentioned from the beginning that the interaction works as a two-way dynamic: it is not just about how religions contribute to ensure a sustainable future, but how the model of sustainability can influence and help these religious entities. The expectation is that such a model informs and inspires these institutions, and that

they assume sustainability as their main goal, for them and for all the society in which they are inserted. That means a special emphasis and a style more sensitive towards the common shared future and a revision of everything from this priority. Religious organizations confront similar – or even worse – scenarios as every other social body, and they need to focus more on something that was quite neglected until recently, since the stability of those organizations was presumed. This shared sense of risk clearly invites to redefine priorities and to adapt the organization to whatever can ensure a viable future.

The suggested perspective should assist in redefining the mission of religious organizations according to the current emergency. The central question is whether withdrawing religion and churches from the equation, things could stay the same or even improve to reach better levels in sustainability rankings. This would be the ultimate test when trying to ascertain the function that religion still plays in societies struggling with several threats and a highly uncertain future. The expectation is that the religious sub-system can assume a greater commitment in this field, and that doing so, it focuses all its resources to contribute to assuring life and stability for next generations, beyond providing transcending hope. The point is that such development could work to reintegrate religion and its function into this new context that demands to all social systems to engage – each one in its own way – in improving the present conditions. Not just religion, but every social sub-system needs to review and update its priorities, functions and performance according to that broad goal: ensuring a sustainable future. That goal will redescribe the social system with its many components or sub-systems, now more encompassed according to the current emergencies. Religion will probably not play a leading role in this new configuration as in earlier times, but it could nevertheless make a difference in dealing with the described challenges. Religion is called to contribute to render a society more sustainable than other society without.

Until now, religion has been described in highly general and abstract terms, avoiding the reference to specific religious traditions. Probably each religion offers its own style and rules to better address the described challenge, and surely some religions will be better endowed than others to assume that task and to tackle those issues. We need to move further to practice this analysis in a more accurate and nuanced way. Some steps have been already done, and several studies have been published focusing on particular religious traditions [7–9], but more needs to be done in order to better specify the connections between each religious expression and the described agenda, however this work transcends the limits of the present essay.

3. Religion as a cultural expression, and what it means for sustainability

The second level to examine is the cultural one. Culture plays a central role in inspiring behaviours and it is very flexible and dynamic, changing in the last times at an accelerated pace. It is clear too that cultures are very complex sets of beliefs, values, and views, shared by a population when they reach some critical mass, and providing orientation and legitimation for individuals and groups. Cultural contents and preferences clearly bias not just personal views or judgements, but decisions and attitudes. Regarding sustainability, a sharp distinction can be traced between those cultural configurations that help to address such concerns, and cultures that become ‘counter-adaptive’ or that nourish living styles that become less sustainable. A good example is consumerism as experienced in Western societies [10]; we have in mind a cultural

framework nourished by publicity encouraging living styles that threaten the future of the entire planet. Other cultural forms clearly support a more austere attitude or living standards which contribute to a more sustainable society.

The idea that culture plays a big role in motivating more sustainable behaviours by individuals and societies alike invites to explore what can render a culture more fitting and less counter-adaptive, and to discern whether religion can play a role in this area. To the first question, it is apparent that cultural expressions are the result of many elements contributing to create a broadly shared opinion, sensitivity, or to build 'collective imaginaries'; among them the media take a first position; then perhaps politicians and authorities with some prestige; and – recently – the so-called 'influencers'. The media continue to be powerful levers in this process, but in the last times, other social media are competing to nourish the cultural milieu and they often reach a critical mass, competing with traditional ones. Media contend with strongly held traditions, with education programs, and with other sources of what is called 'high culture'. However, culture is not a unique container, but a plural one, and this is still more the case in our times and societies. Nevertheless, we can identify 'dominant cultures' and 'minority cultures', which often are linked to social minorities with their own codes, symbols, values, and references. A tension grows between different and sometimes competing cultural expressions. Indeed, a vectors field of forces and attractors, like in physics, could be a more proximate representation about how cultures influence and gain more or less sway in a social setting.

Regarding religion, it is broadly assumed that religious beliefs and values are often integrated into a general culture or appear as minority expressions in clear contrast with dominant forms. In the first case, they configure traditions and nourish a mentality that is learned and assumed in less secularized societies, or even leave a rest in local cultures, as an element hard to disentangle from those massive worldviews. But, in other cases, religious culture becomes just a minority expression that challenges several positions in the dominant culture. The described situation could lead even to 'culture wars' or big tensions between different and contrasting values and worldviews. The point is that religion usually plays an important role in the cultural field, but this role is obviously more or less powerful depending on the secularization levels in a given society: a very secular context is one in which religious culture plays a very limited role or is unable to define any value; a postsecular one offers new opportunities for religious cultural leverage.

Cultures evolve, as a growing specialized literature reveals [11]. This is just a starting point; it is harder to specify the ways and conditions leading cultural evolution. The easiest approach is to assume the same process that applies in the biological realm: cultures know variations, selection of the fittest, and replication. However, the experts have pointed to many specific traits in cultural evolution that discourage such a model as too simplistic. Indeed, cultural transmission is not just genetic, but it works at more levels, like learning. Useful information is the basic unit in that process, and it can be transmitted in a richer way as does the biological model. At the moment some consensus has been reached that recognizes an equal value to cultural and genetic dynamics in the general process that governs human evolutionary history.

It might seem that I am deviating from our main goal and taking a bypass when trying to highlight the importance of culture in social processes and to better describe the role that religion plays. In reality, this alternative focus is just complementary to the first one exposed above: religion can be observed as a cultural expression assuming all the characteristics we can attribute to such social phenomena. In other words, recognizing to religion the status of a culture means that it interacts in a complex way with other cultural configurations assuming similar functions or capacities.

Back to our main argument, the question is how religion might work as a cultural instance connecting with sustainability demands, or able to encourage sustainable styles and organizations. At least three possibilities arise: convergence between cultural expressions aimed at similar goals; resistance against negative cultural forms; and complementarity, providing inputs that other cultural forms neglect.

The first relevant model points to cultural convergence. In a social configuration where many cultural forms coexist, competition and clash between cultures emerges often, but in other case we can observe cultural cooperation and mutual enrichment. Christian culture could converge in the last couple of centuries in many areas with local and national cultures, and indeed a long historical season has witnessed this dangerous conflation between nationalism and Catholicism or other Christian confessions. Some experiences or attempts have been done trying to join Christian faith and some contemporary political movements, like fascism or communism. We can now judge such attempts as mostly misguided and flawed in their outcomes. In other cases, some Christian cultures – like Catholicism – have moved towards great hostility and concurrence with other expressions, giving place to ‘culture wars’; this was the case with liberalism during the XIX and a good part of 20th century; or socialism later. In many cases, the ideals, values, and expectations of a secular State were seen with suspicion by many Churches. Something similar can be perceived in some expressions of conflict between religious and scientifically inspired cultures in our days. Then some religious cultures could feel in clear contrast with popular cultures exalting narcissism, individualism, and hedonism.

We assist now to a different process, one in which more common ground can be found and explored. In this new development, the urgencies and dangers we foresee constrain us to rather unite forces and to build a more constructive approach able to summon different sensitivities or cultural backgrounds. Sustainability reflects not just a cultural form or a living style, but it represents a call to engage for the goodness and wellbeing of everybody, involving all possible sectors and cultural forms. Many cultural expressions, like living religions, ideologies, or sensitivities can get together under the same flag and contribute from one’s own specific cultural motives to the same cause.

Pope’s Francis last Encyclical *Fratelli tutti* offers a good case for embracing a convergence stance, and not a concurrence or exclusivist model for engaging in the pursuit of a common good, as it is the case when what is at stake is our general survival as human species. This model entails a disposition to recognize every other cultural or religious instance that pursues a similar goal, and that contributes to the peace and unity of the human race.

Besides the convergence model, other models come to mind when considering religions as cultural forms. In fact, it is quite usual to advance a model of resistance and contrast. This is characteristic for expressions that have a cause to vindicate or to fight for, and it is associated to protest movements, but it can be expanded to many cultural forms that resist being assimilated to a majority or dominant culture that ignores or even dismisses other views and rights, calling for greater justice, equity and respect for the ‘others.’ Indeed, a part of the standard ESG model that rules in the world of sustainable assessments places emphasis not just on environmental issues, but on social ones, including equity and equality or social justice. The point is that religion as a cultural expression sometimes needs to assume a similar version of resistance and protest, to contrast cultural dominant forms that result in marginalization, injustice or justifying the powerful and the abuses against those worse off.

Religion as a culture plays both games: converging with cultural expressions engaging in a similar interest to ensure a more sustainable future; and the contrasting

game, against cultures that endanger our planet's equilibrium or that cover injustice and inequality. This 'double game' poses the question about the required discernment to find out when a religious body feels more called to engage in one or the other strategy, depending on circumstances and facts – not just ideas.

A third possibility – besides those described – can be added when we take religion as a cultural form: complementarity or implementation of neglected issues. This is a topic that requires further study. At first sight, several issues that appear important for most Christian traditions, like family stability, fecundity or intergenerational concern and engagement, could appear as absent in most agendas dealing with sustainable projects; indeed, they are usually missing in the criteria to value and rank ESG or sustainable levels in organizations and countries. However, the religious point of view, grounded in its own tradition and values, and then in common sense, suggests a set of issues that are very related to any sustainable social setting. Some of them are too obvious: a society without stable families will suffer in their present and future development. Furthermore, if families do not form and people do not want to have children, no sustainable future can be conceived. The point of intergenerational concern is perhaps less obvious, but it plays an important role: if elderly people are left alone or there is no concern for the wellbeing of our grandchildren in a long term, then sustainability becomes an empty program or an insensitive technical issue, not something human and with a soul.

The described contributions in the last point remind us about a role that religions as cultures can still play, and to the idea, already advanced, which renders religions necessary when thinking on a complex program of sustainability. Possibly without the emphasis religions place on these family issues and others regarding human dignity and care for those in need, we would once more notice big gaps and neglects that other cultural systems are unable to address and fill. Religion as a cultural instance becomes then a fundamental factor, whose absence would result in many gaps and neglects.

4. The 'human factor': the role of beliefs and believing process

We move now to the third level in where the relevance of religion for sustainability programs can become more significant, but now the perspective changes from the structural and cultural level to the personal. For many scholars, religion works more at the individual level, or transferring to that level general or social issues, to deal with them better. In fact, religions are usually big organizations with their own structure, and they need to be integrated into the social fabric, through complex interactions. However, its focus is on the person, its beliefs, values and hopes. I will not discuss now about that thesis – if religion resorts mostly to the individual treatment of perceived problems – but we need to pay attention to how religion becomes relevant at that level when we try to better understand its role or function concerning a sustainable future.

A good approach to the question invites us to consider the important role that beliefs play in our societies and how they determine their future and even the legitimacy of democracy and other social entities. According to several recent studies, believing or holding the right or the wrong beliefs becomes the most sensitive factor in open societies affecting their stability [12, 13]. The impact of beliefs and believing on sustainable systems is more than apparent; many examples come to mind. For instance, when a population sector does not believe the scientific reports pointing to climate change, then we can expect that these people will resist demanding policies

aimed at contrasting that dangerous trend. When people do not believe in vaccines, then their resulting attitude could jeopardise efforts at fixing a pandemic.

Beliefs are not just self-generated, but they arise from many inputs, perceptions and data, a process now better-known and studied [14, 15]. Recently the enormous expansion of new media, social networks, and the conspicuous diffusion of fake news using those channels prompt a wave of false beliefs, biases and delusions hard to tackle and to confront with the current means. A big issue in our time and social context is – after recognizing the central role that beliefs play – how to help in forming the right beliefs, those more useful or functional, and to avoid beliefs that become destructive and encourage irresponsibility and deceit.

A recent study has highlighted how the ‘human factor’ is missed in most instruments aimed at measuring and valuing levels of sustainability in organizations, or the most standardized ESG [environmental, social and governance] controls and rankings [16]. Possibly the problem lies in that it becomes much harder to assess such a factor, than measure other technical issues, like carbon emissions, or recycling and waste management, or analysing GINI rankings. This is harder, but not impossible when we count now with more sophisticated polling means, and we access much more data revealing beliefs, moods, and feelings towards issues like environment, equality, or social justice. The point is that any program aimed to establish a more sustainable future should avoid ignoring the sets of beliefs, values and hopes that encourage people to behave in a way or the other, or to support policies that could mean more sacrifices in the short run, but which could repay in the long term and correct disastrous trends.

Religion is about beliefs and believing, but it is not the only system that relies on beliefs. Most – if not all – social systems need for their right functioning that individuals commit to a set of shared beliefs and values: this is evident in politics, economy, and the judiciary system, but it reaches to sciences as well, grounded in a network of deeply shared beliefs and values [17]. Religion is not just a system that needs strong beliefs, sometimes quite counterintuitive and counterfactual, but it is for a long time a system to infuse and educate in the right way to believe, a system to watch over beliefs and tries to correct their most dangerous and negative expressions. Believing is indeed a complex cognitive system that clusters several mental functions, including perceptions, probability estimates, emotions and culture [18, 19]. The critical point is whether religions can assist in forming better, more balanced beliefs, and to encourage beliefs that are functional in order to improve our chances for a sustainable future.

The answer needs to be nuanced. Indeed, a set of lightly held beliefs could make little difference. Recent studies reveal the dynamics that render religious belief and practice effective in the long run, and incisive in practical life [20]. The idea is that religious beliefs per se, without the right training and implementation, could have a very limited effect, when it remains too fuzzy and inarticulate to one’s own living. Beliefs come in degrees and express different levels of strength, which then translate into greater or lesser commitment. If faith is not well supported in rituals and practices, it will eventually fade away, lose strength and fail to motivate sustainable living styles.

Religions may be polyvalent and ambiguous in that respect. We can identify apocalyptic versions that do not care for sustainability, but rather long for a world collapse that might give place to a radically different reality presided by a new divinely imposed order. The question is that many religious forms choose now to encourage beliefs and values that lead their faithful towards greater responsibility in that area. Several studies point to this effort and provide examples on how religious beliefs encourage values aimed at supporting sustainable programs [21–25]. Religious

beliefs need to adjust to these new perceived needs, and in that sense, they evolve to make place to such new perspectives, surely absent in former stages of each religious tradition. In this sense too, the mutual model works in both senses: from and towards religions. Sustainability objectives re-entry in the set of religious held beliefs and values, and become integrated into their own symbolic configuration.

5. Concluding remarks

The present study tried to address an initial provocation by one of the greatest theoretical sociologists in the late 20th century: religion would have very little to provide when trying to address ecological challenges, and its sometimes very vocal declarations would add rather little to what other social systems can do without such a redundant voice. The radical question is posed in those terms: Can religious traditions improve things and offer a significant contribution to address these pressing issues? Can advanced secular societies do well without religion, which becomes even embarrassing when trying to tackle with its weak means what requires much more technical and harder intervention?

I have tried to show that religion offers an effective contribution at three levels, even if quite related: the systemic, the cultural, and the human or believing system. This quick review has showed that religion – as in other cases – can play a positive or a negative role with respect to sustainability. It happens too in the studies on religious coping: not every religious form becomes helpful when trying to cope with personal crises and distress; actually, some versions could even worsen the problem. In a similar vein, we can discriminate between religious forms that rather hope for a universal collapse and are happy with the self-destructive trends present in our societies and cultures; and other religious forms that engage in pursuing a sustainability agenda. This is clearly a recent trend that needs to be integrated into the body of very traditionally rooted systems of beliefs and values, and conforming cultural clusters; and it is related to an evolutionary process that requires time and changes to better adapt to current conditions. To some extent, we cannot take for granted the connection this article has tried to establish between religion and sustainability. Probably, the conditions that could favour such a link are in place, and each religion has to decide whether it will adapt to this new context integrating such beliefs and values and contributing to the general effort aimed at ensuring a better future for all; or whether it prefers to stand out and to follow its own way, unaffected by those risks and demands, just trying to be faithful to its old traditions.

In a sketch, religions can exert a positive influence on conforming a more sustainable future, if they engage at the systemic level, interacting in a critical way with other social systems; at a cultural level, nourishing the collectively shared views; and at a personal level, encouraging beliefs and values which become functional. However, this is not taken for granted and every religious tradition must make choices in that regard.

In any case, a last reflection invites to assume a more critical stance in dealing with that proposed link. I am aware of internal secularizing effects in many religious organizations when the attention is displaced from the traditional religious activities, aimed at keeping alive the communication on transcendence, towards ethical or even political issues and activities, which appear as more alluring or flattering in some cultural contexts, like embracing secular causes for peace, justice and the environment. My concern points to the necessity to keep a right balance: only when religion

develops in a conscious and improved level its own and proper missions to provide transcendent meaning and hope, it can deliver a good assistance to address, together with many other social instances, the current challenges we go through and to heal what is wounded in our planet, our society and in each person.

Conflict of interest


The author declares no conflict of interest.

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Chapter 9

Indigenous Religions as Antidote to the Environmental Crisis: Surveying a Decade of Reflection

Anthony Oswald Balcomb

Abstract

While it is generally accepted that the environmental crisis that the world is experiencing is a direct result of human activity, what is less obvious is that this depends on the nature of the relationship between human beings and the natural environment. This, in turn, is shaped by how human beings mentally construct the relationship between themselves and the world. I have been reflecting on this phenomenon for more than a decade, paying particular attention to the dynamics around an enchanted way of being in the world, typical of indigenous communities, compared with those of a disenchanting way of being in the world, typical of modernity. This essay attempts to summarize and condense some of these reflections. Enchantment brings with it the experience of an intersubjective, personal world with porous boundaries in the relationship between beings, and is typically characterized by interdependence and vulnerability. Disenchantment objectifies this world, disengages the self from it, and rids it of any agency other than that exercised by the autonomous self, thus gearing it toward mastery and control. This increases exponentially the ability of human beings to impact and change the world around them in ways that are eventually destructive for the environment.

Keywords: enchantment/disenchantment, worldview, epistemology, agency, control, power, vulnerability, habitus, interdependence

1. Introduction

At the heart of the debate around the environmental crisis is the extent to which human activity is responsible for it. The overwhelming consensus is that if it were not for human activity, we would not be facing the crisis that we are at the moment, including that of climate change. What is seldom considered is the profoundly important epistemological question of how human beings understand the relationship between themselves and the world around them because it is this that shapes the way we live in the world and change it. Of the 62 articles and book chapters that I have published in peer-reviewed journals and books over the past two decades, 26 have traversed this topic—how the habitus, the mental universe in which we live and move and have our being, impacts the habitat, the physical world in which we live and move

and have our being.¹ The journey began with a spiritual mission of reconciliation between the races in apartheid South Africa and rapidly developed into an examination of the epistemological crises and consequences that can occur at the interface of opposing cultures. In the past decade, this journey has focused more specifically on the ecological implications of the encounter and more specifically still on how religion and spirituality shape the relationship between Indigenous peoples and the natural environment in contrast to Westerners whose worldview, generally speaking, has become exorcized of spirituality or, in Weberian terms, disenchanting. Understanding this phenomenon, that is the phenomenon of disenchantment, is crucial to understanding the relationship between a Western worldview and the environmental crisis. The question that needs to be asked is: what has happened in the relationship between human beings and the natural environment that has put us on the path of alienation and destruction in which we find ourselves globally, and what is it about indigenous religions that can help to put us back on the right path?

2. Two ways of being in the world²

Two of the most fundamental ways in which human beings mentally construct the world around them and place themselves within it have been called, following Max Weber, the enchanted and the disenchanting. It is this particular binary that has fascinated and absorbed me for the past two decades and that I have reflected on and written about extensively. I am well aware that the advent of postmodernity has led to the rejection of such binary and essentialist interpretations of reality. At best, people say, such thinking serves as a heuristic device. My argument, however, is precisely that worldviews are heuristic devices that we all have and cannot do without. These two particular characterizations, while originating with Max Weber, have resonated throughout ethnographic history ever since the encounter between the “west” and the

¹ The word “habitus” was coined originally by Aristotle and subsequently adopted by Bourdieu whose name is associated with the empiricist school of philosophy. The habitus is a repository of values and dispositions within the individual that he or she has learned from society, which predisposes him or her to act and react in certain ways to external phenomena. The subconscious nature of the habitus means that social rules, laws, systems, structures, and categories of meaning can only function effectively when they submerge into the habitus, which becomes a template by which everything is filtered and interpreted. The expression “in whom we live and move and have our being” is taken from the book of Acts 17:28 where Paul is describing the relationship with the “unknown God.” I use this expression because it emphasizes an epistemology of intersubjective involvement rather than the detachment that is typical of the Cartesian paradigm.

² I am using the expression “being in the world” instead of the word “worldview” here because it better expresses what I am trying to convey. “Worldview” implies an objective observer, standing outside the world and looking at it from a distance. This, in turn, is suggestive of Cartesian separateness, which is precisely the paradigm that I am wanting to contrast with its opposite, which is an immersion in and participation with the world. The expression I am using is almost a direct translation of the word Heidegger uses—*dasein*, in his articulation of a phenomenological approach to philosophy. I say almost because in fact the English translation of *dasein* is usually hyphenated as in “being-in-the-world” so that the idea of immersion is further emphasized. These two approaches, being out of the world in order to understand it (Descartes) and being in the world in order to understand it (Heidegger), broadly resonate with a Western as opposed to an indigenous epistemology. For the purposes of this essay, I will be using the terms worldview, lifeway, habitus, being in the world, cosmology, belief, and epistemology interchangeably.

“south” or the “modern” and the “pre-modern.” That there is no one single worldview in the West and that worldviews change and evolve is undeniable. That there are numerous shades of gray in terms of levels of enchantment/disenchantment in between the two poles, especially in pre-modern or so-called “developing” societies, and that the post-modern condition has made space in modern societies for forms of enchantment, is also accepted. It is how the processes of disenchantment work, what happens to our understanding of the world as they evolve, and what we do or do not do to the world around us because of them, that matters. So what are the enchanted and disenchanted worlds.

3. Enchantment: what it is and what it does

One of the memorable moments of my life was an afternoon spent, after hours of trekking into the Matopos mountains of Zimbabwe, in a cave ([1], p. 67). My wife and I were treated to a panoramic display of layers and layers of art on the face of the cave wall cut by nature in the form of a horizontal wedge into a mountain side. The cave was about 10 meters across, 5 meters deep, and 4 meters high, and the main wall was completely covered with the most exquisite depictions of animal, insect, and human life. I did not need to be an expert in rock art to realize that the people who painted these images were not only extraordinarily gifted from a technical and artistic point of view, but that they understood the world around them in a way quite different from the way I understood the world. I had the distinct impression that what I was witnessing was not simply art but cosmology. The cave wall became a membrane upon which appeared the significations of a world experienced through senses that clearly did not perceive things in terms of the dichotomies of subject and object, time and space, material, and spiritual (see **Figure 1**). The inclusion of the artist in the picture, running, jumping, being with, the animals, birds, and insects, suggested intimate participation between painter and painted, self and not self, world and being in the world. Figures resembling human beings looming in the background suggested that the entire scene was presenced with spiritual beings that could not be seen but were clearly there; in other words, the blurring of boundaries between the seen and the unseen. I was reminded of J.V. Taylor’s extraordinary description of what he called the “primal” worldview:

*Not only is there less separation between subject and object, between self and not-self, but fundamentally all things share the same nature and the same interaction one upon another - rocks and forest trees, beasts and serpents, the power of the wind and waves upon a ship, the power of a drum over a dancers body, the power in the mysterious caves of Kokola, the living, the dead and the first ancestors, from the stone to the divinities an hierarchy of power but not of being, for all are one, all are here, all are now ([2], p. 56) (**Figure 1**).*

These existential descriptions from those of us living outside of the primal world and looking in are tinged with a kind of romantic Thoreauian magicalism and need to be described in more precise philosophical terms. Harold Turner helps us by identifying six distinct features: first, a sense of kinship with nature in which animals and plants have their own spiritual existence and place in the universe; second, a deep sense that humankind is weak and vulnerable and in need of a power greater than itself; third, that humankind is not alone in the universe but lives in a spiritual



Figure 1.
Bushman art in a cave in the Matopos Mountains Zimbabwe.

universe that consists of beings greater than itself; fourth, that humankind can enter into a relationship with these beings; fifth, that there is an acute sense of the afterlife and therefore an important place is given to ancestors; and sixth, that the universe is sacramental—that is, there is no sharp distinction between the spiritual and the physical ([3], p. 93).

4. Disenchantment: what it is and what it does

One of the most insightful philosophical examinations of the concepts of enchantment and disenchantment comes from the Canadian philosopher Charles Taylor. In *A Secular Age* [4], Taylor asks a simple question—How was it that in sixteenth century Europe, it was almost impossible not to believe in God, whereas by the twentieth century, it is at best difficult and at worst impossible to believe in God? This question could well be applied to Africa except in reverse form—How is it that in Africa it is almost impossible, to this day, not to believe in God? What happened in Europe that changed the habitus of Europeans, and what is it about the habitus of Africans that makes it impossible not to believe not only in God but in spirits, ancestors, and an animate universe. Taylor answers the question by posing the idea of the porous and the buffered self, with the porous self inhabiting an enchanted world and the buffered self a disenchanted world [5].

Between the sixteenth and twentieth centuries, the European habitus became disenchanted through the complex processes of secularization. The enchanted world, says Taylor, is the pre-modern world of spirits, demons, and moral forces. The everyday experience of people in such a world is one in which interaction constantly takes place between the seen and the unseen world, and spirit possession is a frequent occurrence.

Taylor explains the differences between the porous and the buffered self through the rubrics of meaning, agency, boundaries, and vulnerability ([5], pp. 236–239).

In the enchanted world, meaning exists in the thing itself, not in the mind of the observer. A thing “can communicate this meaning to us, impose it on us ... by bringing us as it were into its field of force” ([4], p. 30). Meaning, therefore,

[C]an no longer be placed simply within; but nor can it be located exclusively without. Rather it is in a kind of interspace which straddles what for us [“moderns”] is a clear boundary. Or the boundary is, in an image I want to use here, porous ([4], p. 33).

Because meanings are attached to things outside the mind in the enchanted world, they can have agency, they can impose themselves on us, be communicated to us, bring us into their field of force, penetrate us in some kind of way. The deepest feelings within us can be perceived as being under the control of an outside force to which we may succumb. This force may be associated with a spiritual being because the enchanted world is filled with such beings. In the disenchanted world, on the other hand, there can be no “charged” objects outside the mind and “causal relations between things cannot in anyway be dependent on their meanings which must be projected on them from our minds” ([4], p. 35). If the source of the feelings and thoughts that we have are simply in the mind, then their influence can be restricted and controlled. If they originate outside of us, then our control of them is limited. They can weaken us or invigorate us, depending on their origin. If they are negative, then to counteract them we will need to use other positively charged objects to counteract their force and protect, heal, or deliver us from them.

A crucial feature of the enchanted world is “a perplexing absence of certain boundaries which seem to us essential” ([4], p. 33). There is an apparent absence of boundary between personal agency and impersonal force, between mind and meaning, individual and community, person and world, experience and belief. If the enchanted world is defined by the absence of boundaries, the disenchanted world is defined by their presence. There are clear boundaries between the material and spiritual worlds, the self and others, individuals and society, causes and effects, mind and body, subjects and objects, religion and society. The separation within being, between beings, and between beings and the world around them, exists at the profoundest of levels. “There is,” says Taylor, “something in the move to the mind-centred view [where thoughts only exist in individual minds] which has given us a fatal sensitivity to atomistic theories” ([4], p. 34). This is partly because the buffered self is able to disengage from things across the boundaries it has created between itself and the world in order to take itself out of the world and objectify it, giving the world, and the self, its own autonomous order.

On the other hand, the porous self is profoundly vulnerable to the surrounding world. You are vulnerable to the thoughts and feelings of others who might want to harm you; you are vulnerable to the forces attached to the meanings of things that you have limited or no control over; you are vulnerable to possession by the spiritual beings that roam the cosmos; you are vulnerable to substances that are charged with causal forces. Vulnerability, says Taylor, “extends to more than just spirits which are malevolent ... it goes beyond them to things which have no wills, but are nevertheless redolent with evil meanings” ([4], p. 37). It goes without saying that the disenchanted condition brings to the buffered self a far greater sense of invulnerability and power. Disengaging oneself from anything that exists outside of the mind and imposing on reality your own order of things creates at least the illusion of invulnerability if not

the reality. The point that Taylor emphasizes here is that a set of conditions that places all reality outside of oneself effectively objectifies reality puts one in a situation of control over reality and allows one the possibility of defining everything in terms of how one can use reality to one's own advantage. As a buffered self, I have the feeling of being able to dictate the terms of the relationship with the world outside, whereas the porous self cannot do this because meanings, objects, etc., have their own agency. And since you cannot impose your will on them, the best thing to do is negotiate with them. Indeed the spatial geography of things, that which is on the inside of the self and that which is on the outside, is by definition a matter of uncertainty in the enchanted world [5].

The emergence of the buffered self, according to Taylor, took place over several hundred years, produced profound changes on psychological, spiritual, sociological, economic, esthetic, and political levels, and resulted in a substantially transformed person living in a substantially transformed world that we call modernity. Taylor's use of the expression "to seize the self" probably best epitomizes this process since it denotes the central, existential shift of agency that is at its heart—where the decisive locus of influence, the command center, as it were, no longer exists outside the self but inside the self. Taylor describes the various processes of transformation as taking place interactively and simultaneously, each reinforcing the other in the journey toward secularism. His description of three of these processes encapsulates the shift that took place—"the rise of the disciplinary society," "the great disembedding," and the formation of "the immanent frame." The disciplinary society, among other things, was associated with the autonomization and disciplining of the self, the autonomization and domestication of nature, and a new emphasis on human agency in the world. There was a move away from ritualized toward more personalized religion, and a manipulable universe could now, with the help of a transcendent and disengaged deity, become ordered.

To understand what Taylor means by the great disembedding one has to be reminded that in the enchanted universe, there could be no separation of the individual from the socio-spiritual matrix and religion from the whole of life. There was not even the possibility of the notion of such separation. The "great disembedding" involved, among other things, the removal of the individual from the socio-spiritual matrix, deity from the world, and religion from the whole of life. The immanent frame speaks to the emergence of a self-sufficient immanent order or constellation of orders in the cosmic, social, and moral universes that has sloughed off the need for an imminent God and prepares nature for exploitation in the Baconian mold and therefore for the scientific revolution that was to follow. The enchanted world without becomes the enchanted world within in the Jungian and Freudian sense. Where there was possession by spirits, there are now psychological symbols.

5. The environmental consequences of the enchanted vs. disenchanted worldviews and the role of religion

Profound vulnerability at every level—epistemologically, ontologically, and existentially means that living in an enchanted universe is not for the faint-hearted. It is an animate universe charged with spiritual agency that, if tampered with in the wrong way, could have dire consequences. On the other hand, disenchantment objectifies the world, rids it of the numinous, exorcizes it of spiritual agency, and puts the autonomous human being in charge. It brings about the feeling of an invulnerability unprecedented in the history of humankind and, in the process, gives humans carte blanche to exploit

the world without paying attention to the consequences. But it must be stressed, once again, that such invulnerability is an illusion. When Weber first came up with the idea of disenchantment to describe the new set of relationships that would emerge in a modern world, he warned that it would lead to the “iron cage” of bureaucracy, but he did not anticipate the iron cage of environmental destruction that would ensue [6].

Science has largely replaced religion in our understanding of how the world works and what our role in it is, but that does not mean that religion has disappeared. It is just that religion can now be appropriated into the arsenal of weaponry, along with a transformed epistemology, to further reinforce the human tendency toward the will to power. Gregory Bateson stated this in no uncertain terms.

If you put God outside and set him vis-a-vis his creation and if you have the idea that you are created in his image, you will logically and naturally see yourself as outside and against the things around you. And as you arrogate all mind to yourself, you will see the world around you as mindless and therefore not entitled to moral or ethical consideration. The environment will seem to be yours to exploit. Your survival unit will be you and your folks or conspecifics against the environment of other social units, other races and the brutes and vegetables ... If this is your estimate of your relation to nature and you invent an advanced technology, your likelihood of survival will be that of a snowball in hell. You will die either of the toxic by-products of your own hate, or, simply, of overpopulation and overgrazing. The raw materials of the world are finite. If I am right, the whole of our thinking about what we are and what other people are has got to be restructured ([7], p. 472).

Bateson’s argument, while stated in rather hyperbolic terms, has been validated by a number of other scholars. A watershed moment in the realization of Christianity’s complicity in environmental destruction, for example, came with the publication of an article by the medieval historian Lynn White. White’s thesis in his landmark publication paved the way for much of the present debate among scholars about the negative role of Christianity in the environment. The domination of nature in Christianity, argued White, finds its roots in the Genesis creation narrative itself. The import of Gen. 1:26–28 is that dominion over creation is a characteristic of God and because humankind is made in the image of God humans too have dominion, with the creator, over the creation. In White’s terms:

Man shares, in great measure, God’s transcendence of nature. Christianity, in absolute contrast to ancient paganism and Asia’s religions ... not only established a dualism of man and nature but also insisted that it is God’s will that man exploit nature for his proper ends ([8], p. 105).

It is important to note first of all that White frames his critique of Christianity by way of a comparison with paganism, setting the tone for the debate that was to ensue. He stated his case in rather radical terms, arguing firstly that the “widespread practice of the Baconian creed that scientific knowledge means technological power over nature mark[s] the greatest event in human history since the invention of agriculture, and perhaps in nonhuman terrestrial history as well” ([8], p. 185), and secondly that “the victory of Christianity over paganism was the greatest psychic revolution in the history of our culture” ([8], p. 188). The first fundamentally shifted the relationship between human beings and nature from interdependence to dominance, and the second led to the removal of all restraints already spoken about. This

was in accordance with the Christian doctrine of the natural world being given to humankind to use and exploit for its own purposes.³

Kinsley summarizes the tradition of antipathy between Christianity and nature under three headings—desacralization, domination, and degradation ([9], p. 103). Desacralization, disenchantment, or demystification takes place when nature is emptied of spirituality, domination occurs when humans get the idea (from the Bible) that this is the command of God, and degradation follows through overexploitation. Kinsley picks up the point strongly made by White that in the popular religion of antiquity “every stream, every tree, every mountain contained a guardian spirit who had to be carefully propitiated before one put a mill in a stream, or cut the tree, or mined the mountain” ([9], p. 103). On the other hand,

To a Christian a tree can be no more than a physical fact. The whole concept of the sacred grove is alien to Christianity and to the ethos of the West. For nearly two millennia Christian missionaries have been chopping down sacred groves which are idolatrous because they assume spirit in nature ([9], p. 104).

Such an attitude finds its roots in the Hebrew Bible with the attitude of Israel to the Baal cult, which was the indigenous religion of Canaan. This cult was based on “rapport with, reverence for, and propitiation of the powers latent in the land” ([9], p. 106). In this kind of religion, spirituality has nothing to do with the presence of the divine in the environment but with the transcendence of God outside of it, over it, and above it. The environment is only sacred in that it is the creation of God and therefore indirectly bears the mark of God. The move from the indigenous belief that the environment itself is personal and has spiritual agency, to monotheistic religion where spiritual agency lies only with the transcendent deity constitutes, for White, the central radical shift that revolutionized the attitude of humankind to the environment and opened the way for exploitation and abuse.

In spite of his devastating critique of Christianity, however, he finds a single prophetic voice within the tradition, St Francis of Assisi.

The greatest spiritual revolutionary in Western history, St. Francis, proposed what he thought was an alternative Christian view of nature and man's relation to it: he tried to substitute the idea of the equality of all creatures, including man, for the idea of man's limitless rule of creation. He failed. Both our present science and our present technology are so tinctured with orthodox Christian arrogance toward nature that no solution for our ecological crisis can be expected from them alone. Since the roots of our trouble are so largely religious, the remedy must also be religious, whether we call it that or not. We must rethink and re-feel our nature and destiny. The profoundly religious, but heretical, sense of the primitive Franciscans for the spiritual autonomy of all parts of nature may point a direction. I propose Francis as a patron saint for ecologists ([8], p. 193).

³ In some ways, it could be said that the entire system of private property in the West finds its inspiration in the Genesis narrative. This because John Locke, whose philosophy laid the foundation for the private ownership of land, justified his position from Genesis 1:28, following in the footsteps of Francis Bacon, who was the first to articulate the need for an aggressive exploitation of nature.

6. Theistic religion vs. indigenous religion in the exploitation of nature: what is the empirical evidence?

The idea that indigenous religion is non-exploitative of the environment and theistic religion is has been thoroughly debated. I have attempted to summarize this debate [10] and support the argument that there is “voluminous ethnographic literature filled with carefully detailed examples of conservation practices, land stewardship, and religiously based environmental ethics among traditional peoples all over the world” ([11], p. lxii). This does not mean that indigenous communities are faultless when it comes to environmental care. All human communities exploit nature to one extent or another. It is only a question of how much and with what effects. One of the theories that have emerged concerning indigenous exploitation is what has been called “Pleistocene Overkill” in which Native Americans allegedly brought about widespread mammalian extinction. The theory seems to be highly contested and rubbished by some scholars [12]. A counter argument maintains that the norms and regulations that establish responsible harvesting levels, discourage waste, and prevent ecological damage prevail among these communities and are common to most of them. The reason for this, in Africa at least, is likely to do with taboos around the enchanted nature of the environment put forward in the White argument. Blasu, for example, argues that what he calls “eco-virtuous” character is a lifelong experience in primal (read “indigenous”) African communities. This is based on the vulnerability to spiritual entities other than God in the precarious ecosystems and is, according to him, “the main reason why our ancestors establish both elaborate religious procedures (eg rituals) to manipulate the spirit forces and ethical rules (eg taboos) for prohibiting and inhibiting human conduct in the holistic eco-community” ([12], p. 107).

Romantic notions of harmony between humans and nature in indigenous world-views largely miss this element. Attentiveness toward the environment that grows out of an esthetic or spiritual appreciation is one thing, that based on a mixture of “numinous dread,” respect, and a sense of profound dependence on it is another altogether. Such a view of the environment has little or nothing to do with the romantic notions of nature held by some of the more famous lovers of nature in the West such as Thoreau, Muir, and Leopold, who argued that nature met the spiritual needs of humankind which modernity had robbed it of.⁴ Indigenous people go much further than this as they “try to understand nature exactly as how it is so they can figure out how to survive and prosper within its changeable actions” ([12], p. 6). Catherine Tucker’s observation nicely summarizes the reason for the pro-environment position of Indigenous cultures.

Traditional peoples live within animate worlds of mutual obligations with spirits or nonhuman beings, and their beliefs constrain the behavior of members of the communities, ideally limiting their environmentally destructive behavior. Modernization processes, on the other hand, disenchant and despiritualize those worlds to enable life without the constraints and obligations ([13], p. 14).

The idea that modern, theistic forms of religion are prone toward environmental destruction and pre-modern forms is not was further interrogated in a research project in which I participated as principal researcher in 2017 on the topic of African spirituality [14]. Two hundred and fifty (250) people from a cross section of the

⁴ See David Kinsley [9] for a good summary of the Romanticist position on the environment.

population and a diversity of religions, including African Religion, Christianity, and Islam, in five African countries, were interviewed on a wide range of topics, including the issue of the sacred environment. The countries where the research took place were Ghana, Ethiopia, Cameroon, Burkina-Faso, and Zimbabwe. The informants were distributed throughout the religious, denominational, educational, and age spectrums. Topics included marriage, customary tradition, relationships with spiritual beings, dreams, spirit possession, gender, success and failure in business, and corruption. The particular question relating to environmental care was: “If you or someone else wanted to cut down a tree (e.g. on your property) that was considered sacred, what would you do?” All of the respondents who were adherents of indigenous religions said they would not cut it down except one who said that it depended on whether or not the land itself was sacred. Most of the Christian respondents, on the other hand, said that they would cut it down, although they would have been afraid to before their conversion to Christianity. The following response from one person was typical of many of the Christian respondents.

I will have it cut down. In fact, there were two such trees in the garden of my parents. A diviner said that they were not to cut them lest bad things would happen to the family. I had it cut down after I came to Christ as a teenager. My mother and grandmother feared for my life, but nothing happened. These things are from the devil [Female 35–44, Married, University / Tertiary, Christian, Charismatic] ([14], p. 30).

While the evidence is clear from this particular piece of research that the disenchantment thesis is at play in the contemporary African scene, there are also indications that there continues to exist a measure of mitigating restraint in the attitude of many of the respondents. A number of them did not believe they had *carte blanche* to do whatever they pleased with the environment. For example, they would pray about cutting the tree down, or they would consult others before they did so.

7. Philosophical, anthropological, theological, and scientific trends in mitigation of the Western contribution to the environmental crisis

The recognition that modernity has brought with it forces that are destructive to the environment has led to what I have called a counter modernist trend across academic disciplines. I have published several essays around this theme [15–17].

The influences shaping counter-modernism have the following guiding motifs in common: the recognition of the earth as a living organism; the removal of human beings as the apex agent, and the recognition of multiplicities of agencies; a cluster of values frequently described in terms of relationism, holism, and interconnectivity; and the recognition of the intrinsic worth of the other-than-human world. These motifs are discernible in religion, anthropology, and science theory and can be found in process thinking (both in science and theology), cybernetics, the Gaia hypothesis, eco-feminism, the rediscovery of indigenous worldviews and methodologies, the shift from theism to pantheism, and the “greening” of religion.

7.1 Counter-modernism in philosophy

Postmodernism has brought about a distinct reaction to the idea that the best way we can understand something is to disengage ourselves from it. The implication of

this is the realization that it is impossible to apprehend the world in a way that does not involve some level of participation within it. At a minimal level, this has meant a far greater emphasis on the need to recognize the role of the participant observer who cannot escape influencing the object of observation rather than the detached observer who examines in order to classify, use, and control it. At a far more radical level, however, is the belief in the intersubjective nature of the whole of reality. The world is in constant process of formation and must therefore be understood as being “alive.” This has brought into question the fundamental nature of the universe as conceived by Newton and other early scientists as holding together by a set of immutable laws. The theory of relativity put paid to this notion, and the door has been opened for consideration to be given to other constructs of reality that make sense of a universe that is more dynamic than static and more alive than dead. The world of Descartes and Newton has had to give way to that of Einstein and Whitehead. The metaphysics of participation has replaced the metaphysics of separation. This has raised the question of what it means existentially to live in such a world; of whether this would make any difference to our attitude to the environment, and whether we can learn from cultures that relate to the world in a way that perceives it as animate. A new emphasis is being placed on the body’s presence in a more-than-human and more-than-material world, which is imbued with multiple forms of agency, the existence of organisms in relation to other organisms and not as autonomous units, the interaction between organisms and the environment in a profoundly interconnected way, and the role of the human being not as engineer or architect, imposing shape, pattern, and form on a hapless environment, but as one agent amidst many whose very agency is itself being shaped by many other forces in existence.

This kind of thinking is well illustrated in the work of contemporary anthropologist Tim Ingold.

7.2 Counter-modernism in anthropology

Ingold poses the following conundrum: from an evolutionary point of view, all organisms are essentially the same; that is, they derive from, and are made up of, the same matter. This means that humans are constituted with the same basic matter as all other things. From this point of view, “we” are one of “them” when it comes to comparing stones, clouds, chimpanzees, and humans, though obviously with varying degrees of complexity. But human beings have added a further element to themselves which they call mind or self-awareness. We are the same as all other things except, apparently, in this respect: we are creatures.

[F]or whom being is knowing, [who] can so detach [our] consciousness from the traffic of [our] bodily interactions in the environment as to treat the latter as our object of concern. To be human in this sense - to exist as a knowing subject - is, we commonly say, to be a person ([18], p. 90).

Ingold rejects this fundamentally dualistic ontology and attempts, in his own thinking, to “restore human beings to the organic lifeworld in a way that does not reduce them to mere objects of nature” ([18], p. 90).

Three things stand out in Ingold’s work—his rejection of mainstream Cartesian thinking in the human sciences; his embrace of Phenomenological methodology; and his use of indigenous culture as paradigmatic of an alternative way of being in the world. This is no better illustrated than in his discussion of the propensity in

primal cultures to accept as normative the fact that all things are potentially animate. Stones, clouds, and trees may have the same kind of life as otters, elephants, and human beings, depending on the circumstances in which they participate in the life of other beings in the world. All organisms, including human ones, are not lifeless things but beings. As beings, persons are organisms, and, being organisms, they, or rather we, are not impartial observers of nature but participate from within in the continuum of organic life. *It is not what goes on within things that cause them to have life and being but what goes on between them.* I emphasize this because it underscores Taylor's notion of the porous self and the issue of relationality that is at the heart of the indigenous worldview. Because such a worldview is so foreign to the Western rational mind, the stereotype of the primitive savage is reinforced. Reality as posed by primal cultures, in the Western schema, is no reality at all. Reality is not what our experience tells us but what our [scientific] minds tell us. And our scientific minds must operate not on the basis of involvement in the world, where such "confusion" as we see among primal culture reigns, but on the basis of detachment from the world. Only thus can we get some kind of certainty of our relationship with the world around us. But what happens to personhood in such a process? Ingold poses the (il)logic of the argument for disengaged reflection thus:

The notion that persons, as beings in the world, can appear in both human and other-than-human forms may sound strange, but it is not half as strange as the notion that to become a person - to be in a position to know and reflect upon the nature of existence - means taking oneself out of the world ([18], p. 90).

7.3 Counter-modernism in theology

If separation between being and world is the key motif of a Cartesian philosophy and the separation between the animate and inanimate the key motif of Cartesian anthropology, then separation between God and world is the key motif of Cartesian theology. Shifting to a participatory paradigm in philosophy, as discussed above, means bringing being and world back together in dynamic relation. In anthropology it means understanding life as a function of the relation between beings. In theology it is to do with understanding God's Being-in-the-world and the world's being-in-God.⁵ The separation of God from world is as fundamental to Cartesian epistemology as the separation of mind and body. Descartes did not deny the existence of God. On the contrary, the notion of God featured quite largely in his philosophy. But he identified God with the idea of an Infinite Mind. The influence of such thinking in the creation of a separate, secular realm, the realm of this world, cannot be underestimated. The typical form of God conceived of in the Cartesian framework is Deism—the notion of a distant Originator that has no direct involvement in the world. Where there exists a concept of God in modern science and philosophy it has, until recently, always been this notion. To conceive of God as participant in the world, one has once again to turn to a worldview that does not have the Cartesian influence. Theologically this means turning to the sacramental theology of Eastern Orthodoxy, the mystical traditions, Process Thought, and Panentheism.

Panentheism is basically a compromise between pantheism, where God is completely, without remainder, in the world, and theism where God totally transcends the world. The former sacrifices transcendence for immanence and the latter immanence

⁵ An excellent articulation of this notion is to be found in the work of Phillip Clayton and Arthur Peacock [19].

for transcendence. Panentheism attempts to restore to the world God's immanent presence and expose God to a vulnerable relationship within it. It rejects the notion of aseity, the denial that God responds to events outside of Godself, and emphasizes a mutuality between God and world. Consistent themes in Panentheism are the cosmos as God's body and as sacrament; the language of "in and through," denoting the idea of inextricable intertwining, rather than "above and beyond," denoting the language of transcendence; the dependence of God on the cosmos; the intrinsic, positive value of the cosmos; and the possibility and ability of God to suffer.

7.4 Counter-modernism in science

Process thinking has also influenced the counter-modernist trend in science. It has become a unifying force between science and religion, which is one of the guiding aims of the Center for Process Studies under the leadership of scholars such as John Cobb Jr and David Ray Griffin [20]. However, a prominent scholar in the field of science studies, Bruno Latour, stands out as one of the most vociferous and articulate contemporary proponents of the Gaia hypothesis, which proposes the earth as a living organism interacting with other living organisms to help maintain conditions for life on the planet. In essence, the Gaia hypothesis not only reestablishes the notion of interdependence but also opens the way for us to understand the earth as a being with whom we have to relate, populated by other beings, only some of whom are human. Latour has produced a spectacular body of work that challenges many of the axiomatic assumptions of Western modernity. In his early book with the provocative title *We Have Never Been Modern* [21], he argues that the cleavages that modernity has brought to our way of understanding the world are artificial, and we need to experience our world in the way that our "primitive" ancestors did, that is as a seamless and interdependent whole. He is also one of the inventors of Actor Network Theory, a tool for scientific analysis that takes into consideration the potential for the action of the entire panoply of entities that are assembled in the field of study—both animate and inanimate, human and nonhuman.⁶

8. Indigenous lifeways and the environmental crisis—limits and conundrums

In this essay, I have presented indigenous and modern epistemologies, for heuristic purposes, as opposite ends of a spectrum. It bears reminding, however, that dynamic interaction has taken place between these ever since the inhabitants of these two worlds met and continue to meet. The very nature of the habitus is that it is continually changing as interactions take place between peoples inhabiting different cultures traveling at different stages of a journey. This raises the question of how far modern and postmodern travelers are prepared to go down the road with their pre-modern fellow travelers and, indeed, how far indigenous people are prepared to go down the road with their modern fellow travelers. In the above discussion, for example, while

⁶ For an example of the use of Latour's Actor Network Theory as an analytical tool, see my article on an indigenous mass greening movement in southern Zimbabwe. In this essay, I argue that the dynamic relationship that existed between all the entities in the field of study, including the religious practitioners, the rituals that were being performed, the beliefs that were behind these rituals, the trees themselves, and the money that was being put into it from overseas funders, were all part of the panoply of forces that were behind its rise as well as its fall. The movement could be best understood only when these relationships acting together in a meshwork were taken into account [22].

it is clear that there are numerous areas in which the counter modernist trend learns from indigenous religion, especially in terms of its monistic ontology, it has not, indeed arguably cannot, go the way of complete re-enchantment. Not even in the most radical of postmodern worlds is there the belief in spirits or spirit possession. Though this does exist in various forms of contemporary Christianity. Many African Christians, for example, have no doubt at all that spirits, and spirit possession, exist, as do many Pentecostal Christians. This demonstrates that the pre-modern, modern, and postmodern conditions continue to exist as coeval realities in the contemporary world and should not be categorized in evolutionary or developmental terms.

So here is the conundrum: If, as it has been argued by many others besides myself, that Christianity, at least in sub-Saharan Africa, has become so insinuated into the African habitus, cannot it also be argued that it has become indigenized? [22]. Many of its Western adherents would be hard pressed to recognize some of its African forms as the same religion that they belong to. This has profound significance for an African eco-theology. If, as I have argued, indigenous religion is exhibit A when it comes to environmental care and Christianity is exhibit A when it comes to environmental destruction, then what happens when Christianity becomes the most popular religion in Africa? This is one of the crucial questions that scholars of ecological religion need to face. I have made the argument that ecological theology in the West attempts to emulate some of the basic elements of Indigenous Religion. These are the numinous presence of the divine, the enchantment of nature, and the recognition that humans are vulnerable and interdependent beings among other beings who are not human. Now if all of these are characteristic of Indigenous Religion, which continues to exist in various forms in Africa at least, then why can they not simply be appropriated into an African theology of the environment? Unfortunately it is not that easy. The Western theological project is largely taking place against the backdrop of secularism and the practical obliteration of the original indigenous religions. Emulating Indigenous Religion where it poses no threat whatsoever to one's essential (secular) beliefs is quite different from a situation where indigenous beliefs are an ever-present reality, where the lines are continually being drawn and where contestations continue to take place between it and Christianity. The worldview shared by these religions in an African context is fundamentally the same. God, the devil, and the supernatural, are existential realities, and theology is to do with understanding them and negotiating with them in a way that concretely affects the way people live their lives.⁷ There is no place for the kind of intellectual "play" with different, interesting theological ideas that might be useful for particular purposes that characterizes theology in the West. This became clear in the Templeton funded research mentioned above. When there is the widespread belief, for example, in the notion of spiritual marriage where people may enter, often against their will, into relationships with spiritual beings, the option of recognizing enchantment as a possible way to protect the environment becomes a little more consequential than in a context where such a notion is ludicrous. More specifically, to reintroduce as a theological necessity the notion of a spirituality of nature to someone who has recently been "saved" from a situation of "spiritual bondage" (that is the belief that they were subject to spiritual forces that were part of the panoply of spiritual powers against which they have been struggling) is clearly a risky proposition.

Blasu's work, cited above, is illuminating in this regard. He argues that the holistic but precarious nature of African cosmology means that multifarious spirits vivify the cosmos, but malevolent ones may discourage belief in Christ and prevent people from

⁷ Birgit Meyer's work among the Ewe of Ghana illustrates this very well [22].

living the fulfilled Christian life. Hence, salvation is understood as redemption from sin and evil forces, transformation into a new person, and turning away from creation by waging war against the evil forces. If the taboos and rituals that lead to the protection of nature are motivated by fear of punishment from spiritual entities residing in nature and conversion amounts to freedom from such entities, then further consort with them through some kind of “re-enchantment” project in order to recreate a scenario where nature can be protected will surely not be an option.

This, then, is the essence of the conundrum that is at the heart of the African religious world: while Indigenous Religion offers an example of best attitude when it comes to the environment and many Western thinkers recognize this, it does not remain an option for converts from African Religion to Christianity who consider it an existential threat in their lives.

This begs the question of what an African Christian theology of the environment might look like. Blasú's is the best text on this topic that I have come across. He argues, as it turns out rather ironically in the light of Western eco-theologies that attempt to mitigate the transcendent nature of theism in the pantheist turn, that what he calls African “theology” will be more orthodox in nature with a strong emphasis on theocentrism and the vice-regency of God, while appropriating certain aspects of African culture that are friendly to the environment.

9. Conclusion

This essay has attempted to summarize some of the writings I have published over the past 10 years or so that are relevant to the topic of indigenous beliefs and environmental crisis. It is impossible to cover all the topics that I have addressed in these writings but rather to highlight some of the essential themes that have shown up during the course of my peregrinations around the topic. These mainly revolve around the notions of enchantment and disenchantment, which constitute the core characteristics of the indigenous and modern worldviews, respectively. Using a variety of sources I have attempted to unpack what these mean for those who live within the worlds that they create and how this shapes certain behaviors that impact the environment. I have also suggested that the epistemological shift in the West in reaction to alienating and destructive relationships with the environment have given way to postmodernist attitudes, which indicate a move in the direction consistent with the values and epistemologies of Indigenous Religions. This is indicative of a recognition that we need to learn from indigenous ways of being in the world. However, from a Western perspective, there are intellectual limits to this journey into an enchanted world. Recognition, for example, of the validity of ontological oneness is one thing, acceptance of the existence of spiritual beings is another. However, I have also pointed out that in Africa there is no such intellectual aversion to spiritual beings and a full-on belief in an enchanted world continues to exist in many ways and in many places. This is particularly the case concerning the most popular religion in sub-Saharan Africa—Christianity. This has posed a conundrum in the light of the critique that Christianity has given legitimacy to alienating and destructive attitudes to the environment and such attitudes are discernible in converts to Christianity from African Religion. This necessitates a different approach to an African Christian theology of the environment than a Western Christian approach.

If an ecosystem is a biological community of entities that live in an interdependent relationship with each other, each affecting the integrity of the life of the other, then

it must surely be clear, from the above discussion, that indigenous people understood this concept long before the advent of postmodernity. The notion of the ecosystem is now commonplace in our everyday parlance. We use the word to describe a host of communities that interact with each other in order to survive and flourish, in all areas of life, including the political, the economic, the social, and the religious. We need to remind ourselves that Indigenous communities have known about it, even if they have not used the word that we use, from time immemorial.

Finally, we need to be reminded that this whole discussion takes place against the backdrop of the pending state of disaster for the world due to environmental destruction. This in turn demands that we fundamentally interrogate the value systems and the epistemologies that lead to the unrestrained exploitation of the earth's resources. The question of how this destruction can be avoided is constantly bedeviled by the fact that we (that is, Westerners) seem not to be able to live in this world other than in such a way that is hardwired to conquer and control it. We demand that the earth and all its resources meet the ever-increasing voraciousness of our need for ever increasing levels of ease, comfort, and longevity, not realizing that in the process we are putting impossible pressure on these resources. The indigenous way will never be able to "develop" the world and meet these increasing levels of demand because it does not create the needs that create the demand in the first place. This is because it understands the world and relates with it differently to us. When the world is a person who you have to listen to and negotiate with and not an object that you can manipulate and control, this makes a universe of difference to the way you treat it. To a Western mind, this fairy tale talk. To an indigenous mind, it is the way of survival.

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Re-Enchanting a dis-encharnted universe – Postmodern projects in Theologies of Space. *Religion and Theology*. 2009; 16:67–77.

The Metaphysics of Participation – Exploring an Idea whose time has returned. *Journal of Theology for Southern Africa*. 2013;145:18–34.

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Chapter 10

African and Lakota Ecological Perspectives

John-Okoria Ibhakewanlan

Abstract

This chapter presents a general background of the traditional and religious cultures of Africans and the Lakota of North America. Relying on pertinent works such as *Black Elk Speaks* and *Things Fall Apart*, the author shows parallels between both religious traditions. The Lakota and the Africans represent people who had learnt to live in harmony with nature before the advent of colonialism. Evident in the two religious traditions are important ecological themes or ideas that need to be revisited. These ideas are conceptualized in terms of the anthropocentric, theocentric and cosmic/environmental. These three ‘realms’, described by the author as *Costheanthropic*, represent the emphases on community, God, and the physical environment, respectively. All three exist in a unity of relationship. The author laments the hitherto misrepresentation of this type of relationship to the physical and non-human world as animism, nature worship or earth cult. The ecological relevance of the *Costheanthropic* worldview is rather compared to Pope Francis’ emphasis, in the encyclical *Laudato Si’*, on the theme of human relationship with the rest of creation. Both the African and Lakota traditions, as well as other indigenous traditions, deserve further in-depth study towards a worldview that invites humanity to greater ecological consciousness.

Keywords: Africa, Lakota, religion, ecology, indigenous, Costheanthropic

1. Introduction

It is important today to recall that traditional religions and cultures of the world have over many centuries evolved ways of living in harmony with the physical environment. That is why we are still here, living on this planet. Works of religious traditions ought to now attract significant attention at the highest level of scholarship. Two examples of such traditional religions and cultures are the North American Lakota culture and the African culture. Both traditions are well described independently in the published works *Black Elk Speaks* and, among others, *Things Fall Apart*.

Although am an African, I find *Black Elk Speaks* very appealing. The Lakota culture may appear to be one of the most distant from Africa; yet there appear to be parallels with the African tradition. The religious traditions depicted in *Black Elk Speaks* go beyond mere representations of the Lakota culture of North America. Similarly, the precolonial tradition presented in *Things Fall Apart* is more than the cultural practices of the Ibo tribe of West Africa—specifically south eastern Nigeria. Both represent traditions shared by a people who had learnt to live in harmony with nature before the advent of

colonialism. Are there ecological features in the religious tradition depicted in *Black Elk Speaks* and in the African religious tradition? As a background, it is helpful to point out briefly the socio-political context of *Black Elk Speaks* and that of traditional Africa.

1.1 Socio-political and cultural context

Both the Lakota and African societies faced colonialism as well as socio-economic and cultural intrusion. Stoeber ([1], p. 612) notes that the collaborative authorship of *Black Elk Speaks* is “complicated by the issues of colonial repression that Black Elk needed to navigate to make his voice heard...” However, the experience of colonialism depicted in *Black Elk Speaks* goes beyond politics and economics [2]: “... for the nation’s hoop is broken and scattered. There is no centre any longer, and the sacred tree is dead.” Rather, colonialism would have had much cultural and religious impact on the Lakota people, as was the case in Africa, beyond the economic and political. African authors in the colonial and post-colonial eras have similarly struggled to express their traditional ways through the lens of the education they received from the colonialists. Similar to *Black Elk Speaks*, colonialism in the African experience went beyond politics and economics: Achebe [3] writes, for example: “The white man is very clever. He came quietly and peaceably with his religion. We were amused at his foolishness and allowed him to stay. Now he has won our brothers, and our clan can no longer act like one. He has put a knife on the things that held us together and we have fallen apart.”¹ Note the similarity between the above statement and the words of Black Elk quoted earlier.

1.2 Aim/purpose of this paper

The purpose of this paper is to first show a similarity, ultimately ecological and religious, between elements of the indigenous spirituality evident in *Black Elk Speaks* and an African traditional view of the world. I hope to first conceptualize some of the major themes that emerge from *Black Elk Speaks*, specifically the anthropocentric, theocentric and cosmic/environmental. Each of those three ‘realms’ represent the emphases on community, God, and the physical environment, respectively, which are similarly present in some African religious worldviews.²

This brief paper will not focus on tangential issues surrounding these two traditions. For example, there is controversy over the authorship of *Black Elk Speaks*. There is also dispute over the validity of speaking about a single African perspective – given the many tribes that make up the continent. Others have adequately discussed such matters [1, 6–8]. The view of this paper is that *Black Elk Speaks* and *Things Fall Apart*, as well as other similar writings about or from the perspectives of indigenous peoples, generally contribute important ecological ideas that need to be revisited and may otherwise be lost forever.

¹ Achebe [3] here voices his view on colonialism in his traditional African society. Also, in his book *Political Values and the Educated Class in Africa*, Mazrui [4] argues that although colonialism appeared initially to be only political and economic, it fundamentally had a cultural and spiritual impact on Africans.

² For want of a better expression I use the word ‘realm’, but more significantly I will use the term “Costheanthropism” to describe the unity of the anthropocentric, theocentric and environmental/cosmic realms mentioned above. The term is a combination of Cosmos, Theos, and Anthropos, to represent the above three aspects of reality in a unity of relationship. Costheanthropic is the adjectival form of that word. I first used the term in a previous research study [5]. (Costheanthropos is in line with Raimon Panikkar’s synthesis of the human, physical and ultimate realities, in terms of a “cosmotheandric” principle).

This paper is divided into five main sections or parts. Section 1 will be followed by a brief review of *Black Elk Speaks* to tease out the Costheanthropic perspective. The same will be done from an African religious worldview. A statement on the ecological relevance of both traditions forms Section 4 before the conclusion.³

2. A Lakota spirituality

There are specific aspects identifiable in the Lakota spirituality or worldview of *Black Elk Speaks* (henceforth *BES*) that form an integrated whole. These include an intimacy with nature; the Spirit World; and the Shaman – a human being with access to the spirit world.⁴ These three categories as well as others appear to be compatible with three aspects (Cosmos, Theos and Anthropolos) of reality referred to in this paper as the *Costheanthropic* perspective or worldview.

2.1 An Oglala holy man called *Black Elk*

Black Elk is one of the most studied Native Americans. He was an Oglala Lakota holy man, who had a vision about his society and people. The author John Neihardt teamed up with Black Elk to publish the story of this Lakota native from his childhood to the 1890s. The result is the excellent work *Black Elk Speaks* published in 1932. The reader may consider reading this book-length poem for more background about this Holy Man of the Oglala. The focus of this chapter is ecological themes about the Lakota presented by Black Elk.

2.2 *Black Elk Speaks* Cosmos

There is a human intimacy with the physical world or the cosmos evident in Lakota spirituality. In preparation for the opening meeting at Black Elk's home, where he would narrate his vision that would form the substance of the book, John Neihardt notes that "Many small pine trees, brought from a considerable distance, were set up around the log cabin" ([2], p. 13). The interdependence and affinity native peoples have with nature includes animals. Anyone who reads *BES* cannot help but be struck by the tradition of naming people after animals. Examples abound throughout the book. Black Elk was named after his father, grandfather and great-grandfather ([2], p. 20); his mother was called "White Cow Sees"; his maternal grandmother was "Plenty Eagle Feathers"; paternal grandmother was "Red Eagle Woman"; his best friend from childhood was "Standing Bear" ([2], p. 31); his apparently favorite character (and cousin) was "Crazy Horse" ([2], p. 75).

The tradition of giving people the names of things in the physical world also includes elements like water and stars or phenomena that occur naturally in nature. The name of the Oglala Sioux chief and peacemaker is "Red Cloud" ([2], p. 23); the Lakota holy man who dreamed about what was to be is called "Drinks Water" ([2], p. 22). The medicine man paid to cure Black Elk of the illness he suffered during his great vision, and who also recognized that Black Elk had a genuinely mystical experience, is called "Whirlwind

³ To avoid excessive repetition, *Black Elk Speaks* will be abbreviated as *BES* in the rest of this paper.

⁴ According to Edwards [9], shamanism is the oldest spiritual practice on earth and has existed in every part of the world.

Chaser” ([2], p. 62). There are other examples throughout *BES* that show respect towards and intimate relation with nonhuman creatures and elements within the cosmic realm.

2.3 Black Elk Speaks Theos

There is another realm of activity in *BES*, which is the *Theos* or realm of the Divine or the spirits. It also includes the ancestors and all that is sacred. The word sacred appears many times in *BES*. Since this realm is not visible to the physical eyes, the role of the medicine man is very important, as a channel between the realms of cosmos and theos. The holy man may also play a prophetic role, as illustrated by Black Elk, who says, for example: “A long time ago my father told me what his father told him, that there was once a Lakota holy man, called Drinks Water, who dreamed what was to be; and this was long before the coming of the Wasichus” ([2], 22).⁵

Thus it becomes possible for this spirit realm to penetrate the cosmic realm through the knowledge received via mystical experiences – including that received by Black Elk himself. In fact, the primary goal of *BES* seems to be a desire to convey “the things of the Other World” ([2], 12). In a most Platonic language, *BES* describes this otherworldly realm as follows: “That is the real world that is behind this one, and everything we see here is something like a shadow from that world” ([2], 98).

2.4 Black Elk Speaks Anthropos

Black Elk was clearly obsessed with the wellbeing of his people. At the end of the day, the whole purpose of his spiritual vision was to help his people respond to and survive in the socio-economic and political context of colonialism – that involved the degradation of his environment. His mystical gift of healing was essentially to help his people — at no cost. He judged his success and failure in terms of how much he was able to help his people using the power received through a mystical vision. “Hear me in my sorrow, for I may never call again. O make my people live!” ([2], 287). Other writers have confirmed that the Lakota spirituality or their powers received from the spirit world is for the benefit of the community [10].

The understanding of this realm of people in *BES* is not one of individualism. The strength of the people appears to be in their community spirit and their weakness in their disintegration. Black Elk laments the lack of unity among his people based on what his father told him:

“He said that Red Cloud was a cheap man and wanted to sell the Black Hills to the Wasichus; that Spotted Tail and other chiefs were cheap men too, and that the Hang-Around-the-Fort people were all cheap and would stand up for the Wasichus”
([2], 106).

Hence this narrated spiritual autobiography appears to end as a tragedy. The book laments the erosion of the people’s indigenous spirituality alongside the disrespect and exploitation of their physical environment. Black Elk spoke “of a holy tree that should have flourished in a people’s heart with flowers and singing birds, and now is withered; and of a people’s dream that died in bloody snow” ([2], 15). Black Elk lamented that he was unable to use his powers from the realm of Theos for the benefit of the Anthropos, *qua* community. Such is the importance of this realm of Anthropos in *BES*.

⁵ *Wasichu* refers to the colonialists.

2.5 *Black Elk Speaks* Costheanthropic

The above three realms, Theos, Anthropos and Cosmos, are not separate in *BES*. There is interdependence. Nature is not disconnected from the sacred, so the ‘yellow metal’ and other gifts in the Cosmic realm are not merely for economic exploitation. Once when Black Elk was about to shoot a bird, he “remembered that I was to be like a relative with the birds. So I did not shoot” ([2], 64).

The human relationship with the sacred also appears inseparable with the relationship to the entire earth. As a Shaman, Black Elk is a special medium within the realm of the Anthropos connecting the Cosmos with the Theos. The interconnectedness is well captured in a most beautiful prayer, a praying through the earth, that sets the tone for the *BES* narrative. Brevity must now be sacrificed, for it is difficult to abridge any further this most *Costheanthropic* of prayers:

Grandfather, Great Spirit, you have been always, and before you no one has been.

There is no other one to pray to but you... And you, Mother Earth, the only Mother, you who have shown mercy to your children! Hear me, four quarters of the world — a relative I am! Give me the strength to walk the soft earth, a relative to all that is...

Great Spirit, Great Spirit, my Grandfather, all over the earth the faces of living things are all alike. With tenderness have these come up out of the ground. Look upon these faces of children without number and with children in their arms, that they may face the winds and walk the good road to the day of quiet. This is my prayer; hear me!

The voice I have sent is weak, yet with earnestness I have sent it. Hear me! It is finished.

Hetchetu aloh! Now, my friend, let us smoke together so that there may be only good between us ([2], pp. 18–19).

3. An African spirituality

The above major themes of the religious tradition depicted in *BES* are not totally unique to the Lakota culture. As will now be shown briefly, the *Costheanthropic* features evident in Black Elk’s narrative are shared by the African religious tradition. Like the controversy surrounding *BES*, what is meant by Africa or African is equally contentious. Africa is both geographical and cultural. It is generally conventional to speak of Africa in terms of sub-Saharan Africa [11]. This is because the countries of North Africa are regarded as part of the Arabic culture. This chapter follows that convention by basically drawing from the literature (mostly based on a stockpile of proverbs, tales, legends and cultural practices) of Sub-Saharan or ‘Black Africa’⁶

⁶ Some fellow Sub-Saharan Africans, especially a few who are Egyptologists, would object to the appropriateness of the dichotomy or distinction between the northern and southern parts of the continent. I do not question the validity of their objection. Since I have never done any field research in North Africa, I confine myself here to Sub-Saharan Africa.

Like *BES*, much of the early writings about Africa are in reaction to the colonial experience.⁷ However, what has seemingly endured are, not the politically driven ideas, but the rich insights from the cultural and religious practices of traditional Africans. The worldview that emerged from such practices is the product of various, more or less ethnographic, works in different parts of Africa. These include Jomo Kenyatta's *Facing Mount Kenya* and several others [16–18]. It will now be shown how these have provided a Costheanthropic African worldview similar to that described above in *BES*.

3.1 *Black Africa Speaks Cosmos*

A general observation of the ritual practices and belief-systems evident in various traditional African societies would reveal a pattern that corresponds to a sense of relationship to the physical and non-human world. That is why land was for a long time in many parts of Africa never owned [19]. “To people of this kind land was something akin to water or air; it had no owner...” Hence the physical and non-human world was not something to be owned and exploited like the yellow metal in *BES*, but to be regarded as respectable ‘beings’ in relationship with humans. The preponderance of totems and a generally rural lifestyle in traditional African societies also reflect the close connection that Africans had to the natural world. In many parts of Africa today, one still finds totems, either in the form of specific animals, plants, or any other natural being, which people believe to be ancestrally related to their ethnic group, clan, or family. The particular totem is seen as a tutelary spirit, to which the people attach very deep feelings. It is highly forbidden to kill such a totem. Members of the particular ethnic groups would never trap, torture, kill, nor eat, a totemic animal [20].

3.2 *Black Africa Speaks Theos*

Traditional Africans experienced a relationship to a power beyond their control, as experienced in the vision of Black Elk, something beyond what is observable in the rest of the physical and non-human world. This realm of Theos is described variously in terms of gods, spirits and ancestors. Similar to the Platonic world of forms described in *BES*, Africans [21] “subscribed to the existence of two worlds—the human world in which they lived and the spiritual one in which the ancestors dwelled.” This was before the advent of institutional religion like Christianity and Islam in Africa. “Among such a people you see little external evidence of religion.” [22]. Rather, this awareness of the realm of the Theos [23] “has its roots in African culture before and separate from contact with Christianity or Islam.”

⁷ In an early postcolonial context of various attempts to restore the African dignity, a variety of indigenous African philosophies emerged from the pen of the first set of Africans to receive Western education [12]. As Mushi notes, this movement took place at a time when more than 70% of the African population could neither read nor write ([13], p. 4). Hence among the several characterizations of the African worldview then, such as Consciencism, Négritude, Authenticité, only Julius Nyerere's *Ujamaa* was practicable [14]. Nyerere was a traditional African and a devoted Catholic of supreme integrity, who had a great vision for his people [15]. Yet even *Ujamaa*, like Black Elk's vision, did not achieve the results desired by the one who had that great socio-political vision.

3.3 Black Africa Speaks Anthropos

As in *BES*, relationship with people was central in traditional Africa. Hence the realm of the Anthropos or community is very important. People in traditional African societies lived in extended family units “based within large households or compounds” ([23], p. 82). For example, in the ancient Zululand, the Nguni peoples lived completely in extended family houses ([21], pp. 35–36).

The underlying philosophical principle in this realm of the Anthropos has been described in the non-Cartesian terms of “we are, therefore, I am” ([17], p. 109). The original expression is Zulu [24], “Umuntu ngumuntu ngabantu” or “I belong therefore I am.” Therefore, the realm of Anthropos situated Africans in a relationship of mutuality and complementarity. A colleague and professor of African Theology at Hekima College in Kenya sums it up perfectly, stating that life in traditional Africa is a “Relationship Imperative”:

The realization of sociability or relationships in daily living by the individual and the community is the central moral and ethical imperative of African Religion. Relationships receive the most attention in the adjudication of what is good and bad, what is desirable and undesirable in life. Not only is the view of the universe at the service, so to speak, of the formation of and execution of good relationships, but relationships make possible the continuing existence of the universe [25].

3.4 Black Africa Speaks Costheanthropic

The three realms described above exist interconnectedly, as observed in *BES*. In the African’s lived experience, there is similarly a unity of relationship and deep interconnectedness in the realms. Through images and ritual practices this worldview permeates all aspects of the individual’s life. Zuesse [26] writes:

“The African who unself-consciously and humbly bends, sweating in the brilliant sunlight, over some ‘medicines’ and dirt mounds at the edge of his field to invoke the ancestors and God, is not just praying for the maintenance of his family and fields. In the deepest level of himself, he is praying for the preservation of the entire astonishing fruit-bearing reality he moves in and knows so well, from the celestial spirits to the textures of the wild grasses in his fingers.”

The above quotation sums up well the Costheanthropic unity, the relationship or interconnectedness with the Divine, with one’s community and with nature. Zuesse shows the traditional African simultaneously relating to the Cosmos, Theos and Anthropos in a unity of relationship – which is also deducible from *BES*. Like the Lakota holy man (Drinks Water) who dreamed of what was to be, the African Oracle is a medium within the realm of the Anthropos connecting the Cosmos with the Theos: “The elders consulted their Oracle and it told them that the white man would break their clan...It said that other white men were on their way.” ([3], p. 97).

4. Relevance of both traditions

The traditional African beliefs and ritual practices as well as those of *BES* should not be dismissed as primitive or fetish. In the current context of a pending

ecological crisis, tensions surrounding globalization and cosmopolitanism, both the African and Lakota traditions offer some alternative ways of relating with the environment and with other human beings. This relevance is best captured by McCluskey ([8], p. 242): “The forces that defeated Black Elk and the Sioux are the same that many Americans revolt against today: technological rape of environment and soul, progress without humanity, values too materialistic, and individualism too sterile.”

4.1 Ecological relevance

In ‘The encyclical *Laudato Si’*, Francis [27] emphasizes the same theme of relationship with the rest of creation as observable in *BES*: “Everything is related, and we human beings are united as brothers and sisters on a wonderful pilgrimage, woven together by the love God has for each of his creatures and which also unites us in fond affection with brother sun, sister moon, brother river and mother earth.”

Unfortunately, this type of relationship to the physical and non-human world in *BES* and in traditional African societies was often misinterpreted as animism, nature worship or earth cult. Such cults/nature worship are on the contrary not true in the African context. Parrinder [28] observes: “It might be expected that cults of the sun and the moon would play a large part in the life of African peoples, since such cults were of great importance in ancient Egyptian religion. But in fact such worship is rare even in the pantheons of West Africa.”

That Black Elk was a Catholic (even a Catechist) at the time he provided his narrative is evidence that his perspective on holding nature in great esteem is not at the level of worship or religion.⁸ Rather, in both *BES* and the African tradition, it reflects the unity of relationship that the people experienced with both the divine and other non-human realities.

4.2 Relevance for social relationship

In a more recent encyclical *Fraterlli Tutti*, Francis [30] calls humanity to fraternity and the value of social relationship. As evident in the prayer by Black Elk, quoted above, all are created and exist in relationship to the one Creator. By virtue of that relationship to the Creator, all are called to a fraternal relationship with others and the natural world. An acknowledgement of such interrelatedness is important in today’s context of sterile individualism and for the recognition of the inherent worth of everyone.

At the heart of this perspective on social relationship is an understanding of the human person. As mentioned in the traditional African worldview, a person is understood in terms of *Umuntu ngumuntu ngabantu*, “I belong therefore I am”.⁹ The Holy Father has rightly invited humanity to such a universal fraternity based on a common Creator.

⁸ The religious hybrid (Christian–Lakota) in *BES* is beyond the scope of this paper. Others have dealt adequately with that theme [1, 29].

⁹ This is not to say that modern Africa lives by this perspective. Nor does this presuppose that there was a commonality of perspective among the people of traditional Africa and of Black Elk’s Lakota. The ideal remains a noble one.

5. Conclusion

This chapter has attempted to show a similarity in ecological themes discernible in the Lakota (*Black Elk Speaks*) and African religious worldviews. In presenting briefly the two traditions, the chapter conceptualized the themes in terms of the anthropocentric, theocentric and environmental or cosmic. Importantly, it stated that all three aspects are connected or exist in a holistic way (*Costhenthropism*) in both the African and Lakota traditions.

The relevance of both cultural traditions today was stated in terms of ecological and social relationship issues. Therefore the two ancient traditions highlight the importance of a respectful approach towards indigenous spirituality in the ecological project. Both cultures offer us a worldview that is termed *Costhenthropic*. It is a worldview aimed at restoring a unity of relationship among living organisms, particularly humans, and the physical environment. The unity of perspective on the three realms evident in the *Costhenthropism* of these primal traditions thus strongly supports the call for ecological consciousness and responsibility.

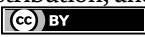
A comparative study of the Lakota and African indigenous traditions makes for a vast topic. Within the length and scope of this book chapter, it is impossible to explain all the essential tenets. However, despite such constraint, it hoped that this chapter has managed to point out an important ecological theme deducible from two geographically different religious traditions – in terms of a worldview that invites humanity to greater ecological consciousness.

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Chapter 11

Abrahamic Religions and the Environment: Intimate Strangers?

Marcel Poorthuis

Abstract

The relationship between Abrahamic religions and environment is a delicate one. Critical voices argue that already in Genesis the human being is situated in a hierarchical position above the animals. Only by admitting his animal status humankind could be freed from its arrogance. Other voices point instead to the solidarity between human beings and animals as fellow-creatures. Particularly in Jewish interpretation (midrash), the dignity of the human being goes together with responsibility for the whole of creation, a responsibility which cannot be required from animals. In addition, the seventh day is a day of rest for human beings and for animals. It is our anthropocentric reading of the Bible that has excluded animals from our religious consciousness. In this chapter, the religious attitude toward animals and to nature in the three Abrahamic religions will be documented. A bit more. A purely anthropocentric reading of sacred Scripture has been dominant the last centuries, but fails to do justice to the Bible. The protestant bias against nature by identifying it with idolatry and with fertility cults of a goddess has also caused a blind spot for the environment in religious perspective.

Keywords: animals and humans, hermeneutics of creation stories, Abrahamic religions, image of god, feminist criticism, anti-nature theology

1. Introduction

Assuming that care for the environment is more than just a matter of technical adaptations, it is worthwhile to delve into the religions. Will they serve as an incentive to necessary changes in our dealing with creation, or are they tributary to our problems? We limit ourselves to the so-called Abrahamic religions: Judaism, Christianity, and Islam. This not because only these religions have something to contribute, but because of their similar basis in the creation story they can be treated together (without, incidentally, suggesting that their message as to creation is identical). In the course of our discourse, we will have occasion to side glance at other religions as well, although each religion would deserve a separate treatment.

First, we will deal with the religious perspective on the human being and on humankind, to continue with more specific religious notions of care for the environment.

2. Religious perspectives on the human being

Undoubtedly, the notion of the human being created in God's image as stated in Genesis 1:27 is a cornerstone of the Abrahamic religious perspective on human beings. Critical voices argue that here already the exploitation of the earth finds its legitimation: The human being is distinguished from the other living creatures, created "according to their species." Hence, a closer look is necessary. Indeed, Genesis 1:26 allows the human being to rule over the other living creatures. A few verses further, God even instructs the human being "to fill the earth and to subdue it" (1:28). Small wonder that critical voices point to texts such as these to accuse the religions of complicity in exploiting the earth.

Let us take a closer look by drawing upon the interpretations the religions themselves offer. Indeed, humankind is presented as separated from the rest of the living animals. Although both human beings and animals are creatures and as such related to each other, God addresses only the human being directly, vouchsafing him the dignity of being created in God's image. This dignity is explained ethically, rather than ontologically: The human being bears a responsibility for all of creation, and just like the First Human Being, the *Adam Kadmon* (both male and female) has been entrusted with the whole of creation. In that respect, each individual may consider him- or herself as equal to the First Human Being.¹ Obviously, we cannot expect from animals to fulfill such a responsibility and although the human being has often forfeited this responsibility he should be considered capable of doing otherwise. The statement, often heard from activists of the environment, that the human being is "just an animal," fails to acknowledge this special responsibility. Still, the statement finds its origin in a typically human concern for the whole of creation.

The anthropocentric reading of Genesis ignores the fact that the day of rest is intended for both human beings and animals. It likewise fails to assess the specifics of the covenant between God and Noah in which the animals are included as partners of the covenant (Genesis 9:10). Only then a certain alienation between human beings and animals seems to be emphasized (Genesis 9:2), as if Adam and Eve in paradise lived more harmoniously with their fellow creatures the animals than humankind outside paradise. This may have fostered the idea that initially Adam and Eve were not allowed to eat meat, happy as they were as vegetarians. Only after humankind had shown how much evil it could spread, the eating of meat would have been allowed (Genesis 9:3). Hence, the eating of meat may be interpreted as a concession to the cruelty of humankind and to prevent him from doing violence to his fellow human beings. Even then, restrictions on eating meat remain in force: Blood as the seat of life is forbidden. The notion of divine permission to be asked before slaughtering an animal finds its origin in these texts. Ironically, ritual slaughter in Judaism and in Islam is often the target of attempts to abolish this practice, although the respect for animal life is a hallmark of it: Even a prayer is said over each individual animal is said before the slaughter.

In this perspective, vegetarianism is not an obligation, but can still be seen as an anticipation of messianic times, in which paradisiac vegetarianism will be restored. A peaceful relationship between the animals and the human beings belongs to the characteristics of messianic times, as can be seen by the many lives of saints in which an animal plays a role. In addition, some monastic rules prescribe a vegetarian menu. However, as with many messianic elements, enforcing vegetarianism without humankind being ready for it leads to violence and mutual dissension.

¹ See [1].

The notion of the human being created in God's image knows of a plethora of religious interpretations, some of them seemingly rather exclusive. The banishment from paradise has been interpreted as a Fall of humanity, by which the dignity of the image of God has been obscured, rightly so if we consider the murder and deterioration described in Genesis 4-9. However, Christianity may claim that only redemption by Christ restores the image of God in the human being. This would imply an inability to act responsibly in all other human beings. This is, however, not the general line in Christianity: free will, although damaged by the Fall, is never completely absent. Distinguishing between the image of God and the likeness of God (Genesis 1:27), some theologians argue that the image of God should be considered a permanent state, whereas the likeness invites to *imitatio Dei*, by obeying His commands. Anyway, the notion of dignity-as-responsibility does seem to be preserved here as well.²

Greek-orthodox theology has always emphasized the dignity of the human being more than his condemnation after the banishment from paradise. An interesting theology of the environment connects the human being again the First Human Being in paradise. Just like in Paradise, the good of the earth has been celebrated as God's gift to humanity; nowadays, the Human Being should be considered a priest of creation, receiving the gifts of the earth in gratitude, consciously of the Giver of all these benefits and rendering grace for that. If humankind would be conscious of having received the goods of the earth, humankind would not consider himself as the sole possessor of the goods, but he would be willing to share with others what he has received himself.³ Possibly, some similarity with the cosmic notions of the human being within Hinduism may be detected here. Obviously, the *creatio ex nihilo* (creation from nothing) has fostered the independence of the human being, but at the possible expense of an absence of the divine in creation. In contrast, both Greek-orthodox theology and Hinduism reckon with an incarnatory theology of the divine presence in the world, the one by viewing the incarnation as a cosmic event, affecting the destiny of all living creatures, the other by affirming *avatars* as manifestations of the divine and by assuming a continuity between human beings and animals (reincarnation) and by considering some animals sacred. Add to this the fact that the Jewish mysticism, known as Kabbalah has transformed the *creatio ex nihilo* into its opposite by claiming that the Nothing (=God) has effused Himself into creation, and it will be clear that Kabbalah as well may be seen as an ally in environmental spirituality. The parallelism between macrocosm and microcosm known in Kabbalah and in many other religious manifestations, likewise bridged the gap between the divine and the world.

The Greek-orthodox concept of priestly dignity is undoubtedly also a correction of the ambiguous notion of the human being as the steward of creation. This notion has been derived from the parables in the New Testament, in which it denotes the human responsibility to develop and increase the wisdom/Torah received from God. In the course of history, this notion of stewardship of the talents has been taken literally, as money, instead of metaphorically, as God's wisdom. It began to serve as a legitimization of capitalist increase of money and wealth. Coupled with the obligation that wealth

² The most serious threat to this universal dignity is the reasoning that only the male human being would be created in God's image, whereas the female would be created according to the example of the male (cp. 1 Cor 11:7). I consider this gendering as a sidetrack, caused by a practical inability to accord to women the same dignity and responsibility in church as to men.

³ The "green Patriarch" Bartholomew of Constantinople has developed this priestly concept into an environmental theology.

should be re-invested rather than enjoyed,—“in the sweat of your face you will eat your bread” (Gen 3:19)—sociologists like Max Weber and Richard Tawney detected in this religious notion a possible foundation of capitalism. Be it as it may, the human being as priest of creation allows for an generous distribution of wealth and a sincere enjoyment of God’s good gifts, deserved to be treated with holy reverence.

It should be noted that Islam is hesitant to use the concept of human being as “image of God.” No doubt, fear of a too anthropomorphic speaking about God lies at the heart of this hesitance. Although it should be stressed that according to the Bible, God creates the human being in His image, which should not be confused with the human being creating God in *his* image, the Islam keeps aloof from this concept.⁴ The concept to denote the dignity of the human being in the Qur’an is: *ḥalif*, which can be translated as: vice-regent (Qur’an 2:30). Bold interpreters of the Qur’an claim that the human being is here considered God’s vice-regent on earth. Others point to the fact that in the context of the creation of the human being, the protest of the angels against the creation of the human being has been silenced.⁵ Hence, the human being could be considered as the successor of the angels (although his being a *ḥalif* is located on earth, not in heaven!). The context of the Qur’anic account is remarkably similar to the Genesis account in that the human being is considered capable of all kinds of cruelty and depravity. The angels are quick to emphasize that. Yet the dignity of the human being allows for more noble expectations from him as well.

2.1 Nature and history

From a more general perspective, it is clear that the Hebrew Bible knows of many regulations about animals. They should be treated with care and without vexing them, allowing them to rest together with the human beings. The long lists of pure and impure animals, which has laid the basis of *kashrut*, often lack a rational foundation, but retain the animal in the religious consciousness. In addition, Biblical feasts such as Pesach and Shavuot (Feast of Weeks) are based upon agriculture. Due to German protestant influence upon Biblical scholarship, this attachment to nature has been downplayed in favor of the dimension of history.⁶ Obviously, Pesach celebrates the liberation from slavery in Egypt, but the agricultural aspects should not be overlooked. The bone of the lamb as representation of spring and the of the new-born of the flock, the unleavened bread, and many other elements still betray the agricultural layer.⁷ Due to an ideological bias against nature as supposedly more prone to idolatry and to veneration of a goddess of the earth and of fertility, German exegetes like Von Rad staunchly combatted all references to nature in Biblical feasts. By doing so, they robbed the Bible of its ability to solidarize human beings religiously with their fellow creatures. Particularly, feminist scholars have criticized this ideological approach to nature in Biblical context.

In the course of history, animals have more or less disappeared from the religious consciousness, except for farmers who, in spite of an industrialized agriculture, still feel attached to their animals. Not long ago, the day of slaughtering animals was still

⁴ See for a nuanced treatment which allows for exceptions: [2].

⁵ It should be noted that the protest of the angels against the creation of the human being can be found in the Jewish interpretations of Genesis (Midrash Rabba) as well.

⁶ See: [3].

⁷ Note how the search for unleavened bread *in the houses* betrays a sedentary civilization (Exodus 12:15), although the Israelites are on the eve of 40 years of desert!

celebrated as a feast of thanksgiving to God. Hence, we should not blame the Bible for ignoring animals and all of creation, but rather an anthropocentric reading of the Bible as it has developed in Western society, possibly only after the Middle Ages. Whereas in the Middle Ages, according to some thinkers the tripartite division of the soul in a vegetative animal and human soul, as proposed by Aristotle, were all of them present in the human being, Western philosophy has ignored the position of nonhuman creatures until recently.⁸

Another relevant topic when it comes to Bible and environment is time perception. The noncyclical linear time perception of monotheistic religions is held responsible for exploiting the earth.⁹ The linear time concept would have fostered a blind faith in progress and expansion. Suffice it to state that the notion of a last judgment can indeed be understood as the End of Time, but also as the ultimate expression of human responsibility for his behavior. This last element is, however, sadly neglected in Christianity. The cyclical time perception in Hinduism may have led to an undervaluation of history, but also to a less result-driven approach to life.¹⁰ Mutatis mutandis the African concept of time in which the remote future does not seem to play an essential role (John Mbiti) may provide a less-exploiting attitude to the environment. However, all this needs further scrutiny.

3. Some specific religious regulations about environmental protection

Pope Francis has surprised the world with his encyclical *Laudato Si'* (2015).¹¹ The document propagates an inclusive ecology combined with economic reform. It points to the problems of the poor countries which suffer the most under the ecological crisis. "The interconnectedness of all creatures (not only human beings) invites to acknowledge the worth and dignity in love and admiration".

The encyclical develops this concept in five sections: ecology of the environment; cultural ecology; ecology of daily life; the principle of the common good; and: justice among the generations.

Ecology of the environment (1) should prevent the human being from considering nature as a mere object outside himself. Resorting to the notion of creation (instead of the more physical term nature) the interconnectedness of all creatures and creation as a gift of God are stressed. From the outset, the human being is implicated in the notion of "creation." The notion of nature with its duality of culture is less clear in that respect. The encyclical rejects fatalistic approaches to the ecological crisis by stating that an overly anthropocentric approach to the world has caused a one-sided exploitation of the earth.

Surprisingly, concern for the destruction of *local cultures* (2) is also one of the topics about the ecological crisis. Destruction of large forests often go hand in hand with

⁸ If a dualism between body and mind may have fostered such an anthropocentric reading, the philosopher Descartes may have been the culprit, as he laid the foundation for a "ghost in the machine" concept of the human being.

⁹ One of the first to bring forward this accusation is [4].

¹⁰ The shared interest for the animal sacrifice as the basic religious attitude has surprisingly fostered affinities between Hinduism and Judaism. The same holds good for the bodily orientation towards purity rules. See my book: [5].

¹¹ See the overview in: [6].

oppression of local cultures. These locals could be of service as keepers of the forests and of wildlife.

The ecology of daily life (3) should analyze the way people live together in towns and suburbs. The feeling of togetherness can be enhanced by a humane architecture in which people do not feel lost or superfluous.

The *common good* (4) presupposes the respect for the human person and the human rights.

Last but not the least, *justice among the generations* (5) introduces a new notion of responsibility, in which future generations are included as well as the respect for the heritage of past generations.

The encyclical ends with introducing the term: ecological conversion. Conversion to God and to creation is the only way to spiritually combat the ecological crisis we are in.

Turning to Judaism: The Jewish scholar and Rabbi Norman Solomon distinguishes six basic principles in the Jewish approach to the environment [7]:

1. The creation is good and God (who should be distinguished from creation) may be praised because of that;
2. Biodiversity should be guarded according to the Bible. Each animal is created according to its species;
3. The hierarchy of living creatures with the human being at the top should be acknowledged accompanied with this principle: the higher the ranking the higher the responsibility
4. Human beings are responsible for the active maintenance of all life.
5. Land and people belong together. This would imply for the Jewish people exemplary way of dealing with water, the soil, and the air in the land of Israel.
6. Do not waste. This Biblical injunction (Deuteronomy 20:19) can be applied to water and chemical waste¹²

Islam may be less known for its environmental thought. Still already in the Middle Ages, the animals are told to start a lawsuit against the human beings because of the bad treatment by the latter.¹³ The Islamic scholar Abdelilah Ljamai brings forward a plethora of literature about environmental care, hardly known in Europe and America [9]. Some of the Muslim writers he quotes are critical about the way Islamic countries deal with the environment. They resort to the Qur'an, to post-Quranic narratives, and to Islamic jurisprudence in order to develop an Islamic environmental ethics. The worldview of the Islam consists of three principles:

¹² However, the obligation to keep the camp in the desert clean (Deuteronomy 23:13), brought forward by Solomon, op. cit. 252, as an example of environmental care, does not seem to be very appropriate, as the garbage is allowed to be thrown outside the camp! This is quite similar to the European habit to dump chemical waste in Arica.

¹³ See the Sufi text, probably from the 10th century: [8].

1. The cosmos reflects the glory of God;¹⁴
2. The cosmos may be taken into service of humankind;
3. Destruction of nature is a gross form of injustice.

Nonhuman beings have an intrinsic value and hence, the concept of rights of animals is not alien to Islam, as our example above has shown.

Striking are the practical exhortations, often backed up with some saying allegedly going back to Muhammad: plant trees; revive dead soil (one is even entitled to become the owner); prohibition to pollute the air; moderate eating; careful handling of water resources (prohibition to defecate); withdrawal of water for one's own field should not happen at the expense of other farmers. Both in traditional Islamic sources and in modern publications emphasis upon the rights of animals and the rejection of cruel treatment of animals can be found [11].

4. Conclusion

The way we have dealt with religious perspectives on the environment is both hermeneutic and benevolent. Hermeneutic because it allows for a merging of ideas of the past with our modern horizon of understanding. This is in marked contrast to historic-critical approaches which aim at a reconstruction of past phenomena without taking into account our modern world.

Our approach is also benevolent: Obviously, people from centuries ago did not have the same sense of urgency and the same knowledge of technological issues as we have. The examples quoted above should be considered paradigmatic rather than identical to modern issues. They may offer spiritual vistas to be explored further, without claiming to offer exhaustive solutions or direct applications. Still, the spiritual depth of these religious traditions may surprise us, accustomed we are to assume the preeminence of our own technological era. The advancement on the spiritual level, if at all, is less clear than on the technological level. A future for our planet cannot dispense with spiritual resources such as these. A broad perspective on religions and spiritualities, critically assessing its possibilities and stumbling blocks, may contribute to overcoming the spiritual crisis of the human attitude to the environment.


¹⁴ Lufti Radwan [10] emphasizes the connection between the unity of God (*tawhīd*) and the unity of the created world, which is especially relevant given the objections against monotheism as intolerant and anti-nature.

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Down to Earth?: A Crisis of the Environmental Crisis

Sergey Dolgopolski

Abstract

Are we down to earth in our connection to earth? If we are environmentalists concerned with “environmental crisis,” then does our guiding notion of “environment” (and the by necessity implied notion of a center—most often with a human there) get closely enough to the earth? Departing from either localism or cosmopolitanism in thinking earth, globe, and the environment, this chapter aims at a theoretical critique of the very notion of “environment” as the guiding notion of what the expression “environmental crisis” spells. Perhaps, “environmental crisis” is less a description of “our” situation, and more an indication of a problem formulated not strongly enough? The notion of “environment” and “environmental crisis” predetermines the currently regnant approaches to global warming, air and soil pollution, nature preservation, and reducing the human impact on the environment. At the same time, the notion of “environment” steers its adherents toward the modern natural science as both (1) the ultimate contributor to the environmental crisis due to technology and (2) the ultimate instrument to save us from the apocalyptic swirl, in which technology drives humanity. Linking environmental crisis to science, which is only an instrument of both its creation and management, forecloses a more fundamental human dimension of that crisis. This essay asks to attend to one element of that more fundamental dimension.

Keywords: environment, environmentalist crisis, earth, Husserl, Augustine, memory of the present, mereology of earth, localism and cosmopolitanism, theology, Philo of Alexandria, *huparxis*

1. Introduction

A necessity animates the argument in this essay: to expand the horizon of our thinking about earth beyond the opposition between Ptolemean (geocentric) and Copernican (heliocentric) worldviews. The Copernican worldview undergirds modern science and technology in approaches to the environmental crisis today. By contrast, the Ptolemean worldview is relegated to outdated beliefs. Yet the both run a version of centrism, a claim that there always is a center or a number of them. Opposing Ptolemy and Copernicus too strongly takes any other (call them “a-centric”) approaches to earth off the table. These tacitly suppressed approaches can promise more in how one goes about environmental crisis today.

The argument is also responding to a much more obvious but much harder to face necessity: The environmental crisis is political and human in nature; as such, it cannot be fully addressed—let alone understood—by technology. Instead, a critical rethinking of the fundamental assumptions about politics and about humanity in approaching earth becomes due. The essay contributes to such rethinking by asking how thinking earth as “environment” preempts one from thinking earth¹ Attempting to manage the crisis is always only the second step. The logically first step is in having committed to the terms in which one thinks of the crisis. One has to rethink the first step before getting too far into second.

Facing the contemporary “environmental crisis,” one therefore needs “to step back” both in time and in the conceptual scope, in order to revisit the notion of environment as defining and possibly also blindfolding one’s approach to the crisis. This essay commits such a stepping back to rethink the relationships between earth and environment. By necessity to become clear below, that evokes “old” bodies of text and thought, not only from the last century, when environmentalism was first taking shape, but also from the late antiquity, from the long *durée* of the Western thought. The working assumption is that a simple passage of time does not automatically render “old” irrelevant, but rather that placing a modern issue into a framework of an “older” tradition of thought yields a double new result. It invites “to step back” in thinking through a modern issue and also to rethink the pertinence of the “old” corpora of thought in a new light.

To provide an in-advance outline of the argument-structure and result of this essay: The analysis first turns to Edmund Husserl’s (d. 1938) deductive-analytical mereology (a theory of whole as always more than its parts) of earth as a simple bodiless whole, from which all bodies split off. The essay further compares Husserl’s mereology with Augustine with structurally (but not thematically) similar mereology of “mind” in Augustine (d. 430 C.E.), for whom mind is an equally simple whole without parts. That in turn allows to juxtapose both approaches to the the nineteenth to twentieth centuries mereologies of organic and complex bodily wholes, from which modern notions of environment and environmentalism stem. That delineates the origin and the limit of organicist mereologies and of environmentalism having stemmed from them. This framework of analysis allows to show that environmentalist crisis is not only a crisis of preserving environment but also and more foundationally a crisis spurred by environment as a notion purporting to regulate human attitude toward the earth.

¹ Although history of thought about humanity, politics and earth in the twentieth century is not the focus of this essay, a fragment of that history can help illuminate the necessity to which this essay attends; and to illustrate the importance of turning back to history in order to rethink our current condition. The essay will engage Edmund Husserl’s text of 1934 about Copernican, Ptolemean and Husserl’s own approaches to earth [1]. Suggestively, Husserl’s argument was a search for an intellectual, political and ethical alternative to the “blood and soil”-approach to earth in Germany of the time, as if the earth were one’s “native,” “local,” and therefore “true” environment. Husserl’s mereology of the singular bodiless earth (which this essay articulates) can also be seen as Husserl’s response to Heidegger’s political-philosophical thought about earth via *being* and *locality*. Husserl’s argument is ultimately suggesting: approaching earth as locale does not get down to earth. Husserl among many other intellectuals of the time is in search of a new conservatism in the wake of nationalist and globalist approaches to earth and environment. The strength and weaknesses of his results are heuristically important today. In the given framework, I only intimate these connections, leaving a full-fledged analysis for another occasion.

My argument arises in rethinking Edmund Husserl's 1934 work about earth² as a way to address limitations of the notion of environment as the constitutive notion for any discussion of "environmental crisis." After a preliminary exposition of such limitations, I will first of all show how, in thinking the earth, Husserl committed a more radical move than either environmental localism³ or environmental cosmopolitanism (or globalism) can afford. Husserl was offering a more demanding and, in his view, more precise notion of the earth than any locality-driven nationalist environmentalists did, as they sported the specter of "blood and soil." (I take the most extreme version of this kind of political thought, which also manifested itself in the magnanimous figure of "the Soviet Land" and in a miniature of "the little motherland," each one was to love.) Husserl was not a localist. Nor was his notion of the earth a cosmopolitan one: The cosmopolites' specter of the "citizen of the world" would only negate and thus still depend upon (even if only negatively) on the locality-driven politics of "blood and soil." Effectively leaving both the locality-oriented and cosmopolitical versions of environmentalism behind, Husserl offers what I interpret as a holistic approach to earth—a mereology of the earth, which both localism and cosmopolitanism fail to account for properly.

After outlining Husserl's mereology of the earth, I will second of all introduce its structural (rather than thematic) parallel, Augustine mereology of the *mens* (mind), and draw a connection between Husserl's "earth" and Augustine mind as two mereologies of a whole without parts—in contradistinction from modern mereologies of organic wholes. To articulate the structural differences and limitations of Augustine and Husserl's mereologies, I will third of all introduce a broader context for the two thinkers, having to do with Philo's interpretation of the Biblical G-d *via* a philosophical neologism, *huparxis* (G-d's involvement with the world without being a part of that world), which I will further juxtapose with the Palestinian Rabbinic mereology of the divine law arising, as I will show it is, from the sense of impossibility and necessity to cite the divine law of the past. I will fourth of all chart an implication of this analysis for a conceptual critique of modern environmentalism, its disproportional belief in science as both cause and remedy of environmental crisis, and its reduction of the humanitarian core of the crisis to an opposition between national locality and cosmopolitan universality. This reduction, I will ask to show, precludes an understanding of environmental crisis as a crisis of mereology, that is to say as the advent of the mereology of organic wholes (the wholes with organs) at the expense of the more foundational mereology, that of a bodiless whole without organs, which and only which promises a fuller and more sober access to earth.

² Ref. [1], pp. 305–327. Husserl did not publish this text (probably because of as we will see a very radical return to geo-centrism that the work was advancing). The work predated and prepared his very radical but still more conform position in the *Crisis of European Sciences* [1]. The relation of the two works, however, is beyond the scope of this essay. On a slightly different note: Suggestibly, Husserl 1934 argument [1] was a search for an intellectual, political and ethical alternative to the "blood and soil"-approach to earth in Germany of the time, as if the earth were one's "native," "local," and therefore "true" environment. Husserl's mereology of the singular bodiless earth (which this essay articulates) can also be seen as Husserl's response to Heidegger's thought on earth via being and via locality. Husserl's argument is ultimately suggesting: approaching earth as locale does not get down to earth. In the given framework, I can only intimate these connections, leaving a full-fledged analysis for another occasion.

³ In the context, the most important examples of a localist approach to environment would be geociticism and geopoetics, approaches insisting on inextricably human connection to a locale—the connection technological language can neither account for nor fully eliminate. See respectively: Refs. [2–4].

2. Environment: a preliminary critique of a guiding concept

A constitutive and guiding notion in all discussions of “environmental crisis” is that of “environment.”

According to Oxford English Dictionary, etymologically “environment” suggests an “action of surrounding something.” The German synonyms for “environment”—“*Umwelt*”⁴ (lit. “the world around”) and “*Umgebung*” (lit. that which is around) along with other modern languages—amplify that suggestion. “Environment” means surrounding and even periphery, therefore implying a center. That suggests: Whoever is either talking or thinking about or goes about the environment is compelled to place oneself at the center.⁵ “Environment” is in other words a centrist notion. Whoever or whatever then stands at the center of any environment faces a choice: to keep one’s centrality or to reconsider and displace one-self from the center. This choice is not as radical as it seems, for the centrism of any notion of environment is unavoidable. By necessity, a version of centrism is at the core of any version of environmentalism whatsoever; even if one chooses to step aside from the center, one still always begins from the center.

The notion of environment is thus unavoidably centrist. This remains unchanged, no matter whether one subscribes to Ptolemean views, which are considered by some outdated; or to Copernican views, which are considered by others misleading in their reduction of humans to just objects of science. Do humans on the earth mark the center of the universe (the word “universe” designates no more than an extended version of the “environment”) around which the sun and stars are rotating? Alternatively, is the earth only one of the many planets? Is there one privileged center of the world (which is also “ours”) or are there many centers and thus no Center with the capital “C”? Either answer must begin from a version of centrism. There simply is no environment without at least one—but potentially also several—centers. Centrism and environmentalism are inseparable one from another.

The notion, of “environment,” is thus too geocentric and too anthropocentric to not obfuscate the discussion of the “environmental crisis,” which it seemingly purports to be leading. My argument below responds to that obfuscation. Is that possible, and if so, how to avoid such a centrism? In search for an answer, I first turn to the geo-thought of Edmund Husserl.

⁴ For a contextually important articulation of the *Umwelt* (immediate surrounding) as a notion of relationship of a living being (human or other animal alike) to surrounding in contradistinction from a relationship to the *Welt* (World, or World-view) at the time and in the context in which Husserl’s 1934 notion of mereological earth takes its shape see: Ref. [5]. Famously exemplified in the image of a woodland tick who never has a relationship to an object as such, and thus is “poor in world,” Uexküll’s notion of the *Umwelt* made its way to Heidegger’s distinction between World and Surrounding in his 1927 *Being and Time*. See the establishment and analysis of this connection in Ref. [6]. Husserl’s 1934 text [1] can be seen as exploring a way to the earth beyond and before the engagement with objects as objects or a lack thereof becomes a guiding distinction in thinking the “environment” versus “world.”

⁵ This initial central-placement can consequently be changed. For example, one might consider oneself a part of a surrounding rather than the center thereof. Yet, this is always only a second step; the one *after* placing oneself at the center of the environment.

3. Husserl's bodiless earth

Looking for a logically necessary foundation (“source,” *Ursprung*) from which space and nature arise, Husserl arrives to a surprising result. Contrary to how one experiences earth (a locality and its extensions to national territory and to the Globe), on the level of a logical necessity, earth as a whole is not a body, and all bodies we know or can know empirically emerge by a separation from that bodiless whole.⁶ This whole has neither parts nor organs. Every mereology sees the whole as more than a sum of its parts; Husserl's mereology is not an exception; what, however, is exceptional is that if “parts” are “Copernican” bodies—planets and the Earth as one of them—the “whole” is not a body. In this, Husserl differs from organic mereologies, in which not only “parts” or strictly speaking “organs” are bodies, but the whole, the organism is a body as well.⁷ Earth is not.

However, Husserl's is not the only mereology, in which the whole consists of neither parts nor of organs; Augustine view of the *mens*, mind—human and divine alike—is another.⁸ Thematically different, “earth” versus “mind,” the two mereologies, however, approximate each other in structure. Drawing connections and differences between the two thinkers, a slower reading of the core elements of Husserl's 1934 theory of earth is in order. I commit such a reading by reclaiming the importance of the Husserl's argument in the context of environmentalism and environmental crisis. In this context, Husserl allows us to see that however much environmentalism finds both the cause of and solution for the environmental crisis in the modern—read “Copernican,” or heliocentric—science; the Ptolemean, geo-centric and human-centric approach remains to be a necessary core of environmentalist thinking. Husserl opens up a possibility to advance beyond the opposition between Ptolemy and Copernicus, toward its root in understanding earth as a ground of all experiences (of all environments); Husserl's work thus allows and demands to move beyond that ground toward an earth, which is not a body. That means to move toward a critique of environmentalism for missing what environmentalism attempts to defend most daringly: the earth.

⁶ “The earth is a whole, the parts of which can be thought of as ... itemizable, dividable bodies; yet as “whole” the earth is not a body” [1], p. 313; my transl. In Fred Kersten's translation, “The earth as a whole whose parts—if conceived by themselves as they can be as separated off, as separable—are bodies; but as a “whole” the earth is not a body.) Husserl adds polemically: “Here is a “whole” consisting of Copernican bodies as its parts, yet as a whole, the earth is not a body.” (idem).

⁷ In this essay, I do not address a line of thinking unfolding from Husserl notion of *Leib* (“visceral ego”) through Merleau-Ponty to Deleuze's “body without organs.” Below, I will justify this interpretation of Husserl's *Leib* as “visceral ego” in differentiating it from body-objects such as organic bodies in medicine, fashion bodies on podiums, cars, trains, or planets; but also from the bodiless ego, one often ascribes to Descartes. *Leib*, however important, and however (as we will see) Ptolemean is still only one of the split-offs from Husserl's bodiless Earth. See, for example [7], Ref. [8], pp. 9–16. Deleuze develops Husserl's visceral body into a “body without organs;” in parallel and in distinction, this essay highlights the other line in Husserl's argument, the simple mereology of the bodiless (and thus also organ-less) earth.

⁸ I refer primarily to Augustine's approach to *mens* in *De Trinitate* (datable to the first third of the fifth century, C.E.) addressed in the second part of this essay. See: Ref. [9].

4. Husserl's mereology of the bodiless earth

Husserl departs from an understanding of the Earth as a body in either Ptolemean or Copernican sense and arrives to a mereological understanding of Earth “as a whole which is not a body,” from which, however, all bodies—planets, stones, cars but also visceral living bodies, like “my own” living body emerge through a process of separation. Highlights of Husserl's argument are as follows. (1) Apodictically (but not necessarily empirically) on the way to earth and people in space, there first must be an initial absolute earth-body (either an ellipsis or a flat plateau), which neither moves nor rests; this would be a base-earth in relation to which the movement and rest of all other bodies become determined in the first place. (2) On such a base-earth, there is and must be a visceral, living Ego, which, like the initial (Ptolemean) base-earth, is neither moving nor resting, thereby allowing for the Copernican earth-planet to move and to rest. The visceral ego allows to transition from the (1) to the earth-planet as a relatively moving and relatively resting body among other bodies. That means that the visceral living Ego takes place of the base-earth in (2): the visceral Ego neither moves nor rests, giving a foundation for movement and rest of all bodies. (3) This living visceral Ego logically *precedes* all actual and all possible entities [*Seinden*], and gives them the very sense of their being in the first place: They are entities presented *to* or present *for* that visceral Ego.⁹ (4) The psychological or “empirical” time (the time as one experiences it) conceals the apodictic time, the time of the origin, source, *Ursprung*, in which the necessary moves from (1) to (3) occur. The result of these moves is a mereology of the bodiless earth.

Husserl builds this argument in response to what for him are unsurpassable “difficulties in establishing Earth as body.”¹⁰ However, as shaped as they are by the notion of environment, the discussions of the environmental crisis do not account for these difficulties, thereby, as Husserl helps see, missing the very earth these discussions purport to preserve. Yet, making this missing of the earth clear and loud might invite rethinking the terms of the “environmental crisis” in the first place. As this interpretation of Husserl highlights, these difficulties in establishing Earth as body apply to both Copernican and Ptolemean notions of the earth, thus revealing the common ground behind the two worldviews, a ground pertaining to the very notion of environment, however conceived. Whether the earth is thought of as a Copernican body (a planet among others) or as a Ptolemean body (an absolute center and an absolute neither moving nor resting ground for determining movement and rest), the “difficulties” Husserl lays bare remains the same: It is only possible to establish earth

⁹ A reference to Heidegger's question of what gives sense to “beings” (*Seinden*) is hard to miss, especially in light of Heidegger's 1936 “The Essence of Truth” [10], where he is explicitly addressing modern “mathematical” (read ‘Copernican’) science to say that its core is not in the mathematization of nature (which, as he has it, the medieval schoolmen also had) but rather in the “space-time determined interconnection of the movement of the mass-points” [10], p. 61, which, in his broader argument hides rather than opens up the role of “being” in giving law-commensuration to the beings in their essentiality or one might say in the stability of their presence as opposed to their immediate presentation of themselves, which can be merely a shadow, with no access to essence. Being is what gives beings their having an essence, Heidegger argues. Where for Heidegger stands being, for Husserl is earth. Any further elaboration of this connection between being in Heidegger and earth in Husserl requires a separate treatment. Here it is only necessary and possible to indicate this connection.

¹⁰ Ref. [1], p. 313.

as body when and if earth is a mereological premise, foundation or ground (logical, physical and humanitarian alike) on which and only on which a body, indeed any and every body, can be ever thought or experienced.

To understand these “difficulties,” a more detailed exposition of Husserl’s 1934 argument is required. In the development of his argument, Husserl has four notions of earth: (1) a neither moving nor resting ground/base of experience of all moving and resting bodies; this is an outlook, which “I” gets through transferences to other Egos; this for Husserl holds for Copernican and Ptolemean and all other possible world-outlooks alike; (2) a moving and resting body (a planet among other planets); (3) the Ego-viscera [*das Leib*], the neither moving nor resting visceral ground of experiencing all moving and resting bodies (which for him is a necessity of Copernican outlook)¹¹; and (4) the mereological earth, which as a totality is not a body at all; but of which all bodies emerge as spilt-offs. This mereological earth cannot be reached by transferences from my Ego to the experiences (and in particular travels) of other Egos. Rather this is a purely mathematical, “phenomenological” non-perspectival “view” of the earth.

Moving through these four senses of earth, Husserl arrives to a practical application of his mereology: If earth is not a body, there is and there can be only one earth¹² and only one humanity: On whichever planet you (the visceral ego) go, you cannot arrive to another earth as such a whole or such a totality which is not a body.

The result of his argument is especially important in the context of polemics between local and national environmentalists on the one hand and the global environmentalists on the other: Both parties reduce the pieces of earth (Germany, France, continents) or even the whole planet Earth to a body, and this precludes the discussion of how to preserve earth by reaching its proper scope: How to think the only earth and the only humanity in the first place.

How then to evaluate Husserl’s mereology, both in its own terms, that is, as a mereology, and in terms of its application for the discussion of the environmental crisis? The second part of the question cannot be addressed without a due diligence with the first part. How then to place, that is to say, how to find proper limits to Husserl’s mereology of the bodiless earth. As already noted, his is not a mereology of an organic whole, for his earth is not a body, and thus is not an organism either. The closest to Husserl’s mereology of the earth can therefore be found in Augustin’s mereology of the mind. As we will momentarily see for Augustin mind is a whole without parts, which therefore entails a bodiless whole, as well.

5. Augustine mereology of the mind

Augustine *De Trinitate* is as much a theology as it is an anthropology. The figure of *theos* to have become *anthropos*, that is, of G-d to have become a human transpires in Augustin in a move which is at once that of a theology of the human and of the

¹¹ Merleau-Ponty [11] developed this line of argument in rethinking the visceral body, and Nigel Thrift [12] interpreted organelles mereology in terms of his “Non-representational theory, NRT) thus developing this specifically Copernican element in Husserl’s analysis.

¹² One can perhaps argue that where Heidegger places being is where Husserl places mereological earth. In other words, that there is a parallelism between the two thinkers. One should ask, however, whether Husserl’s and Heidegger’s positions are fully commensurable. If they are, placing Earth and Humanity where Being and *Existenz*.

anthropology of the divine. I follow Alain de Libera¹³ in his analysis of Patristic theology as intrinsically anthropology. I further follow his suggestion that a theological treatment of G-d to have become a human is the birthplace of anthropology, as long as the latter were to answer the question of “Who is human?” rather than “What is human?” The latter question was answered along the lines of “an animal possessive of logos,” “rational animal,” “the one who has four legs on dawn, two in mid-day, and three by the evening,” etc. All these answers implied a what-question and an exhaustive answer to it. The question of “Who is human?” comes about by differentiation from the “What is human?”: The main difference would be that for the Who-question no answer suffices. In the Who-question, there always remains an excess, for which there is no answer. This excess has everything to do with Augustine mereology of the mind.

This mereology comes by way of polemics Augustine stages against Cicero.¹⁴ For Cicero, he argues, at stake is a virtue of prudence. A prudent one is to differentiate three kinds of phantasms one experiences from one’s intellectually clear cognition. The phantasms about the *before* are recollections, they cannot be certain or sure, and a prudent one is to take them as such. The phantasms of the *after* are even less certain (unless one is a future-teller or “prophet”). A prudent one is not to take his or her bodily sensual perceptions of the *now* for certain either, however compelling they might appear. The only things certain are those achieved by and through intellectual cognition. These are about what truly is or certainly “present”; that means “present” not to bodily senses but to the bodiless mind, *mens* (Examples are the mathematical or moral truths, considered by intellectual contemplation).

Based on this concern with the prudent person, Augustine creates a time structure. Phantasms of the *before* become recollections and memories of the past; prudent anticipations of the *after* relate to the future; and seeing the world with one’s eyes or with one’s mind relates to the present, now understood as an element of time. Augustine both introduces and disagrees with this time structure. In his argument, a line between recollection of the past and memory comes afore: There can be a prudent memory of the future (e.g., *memento mori*) but there can only be a recollection for the past. Moreover, unlike recollection, memory does not have to relate to a specific phantasm; in fact, memory is not phantasm at all. Rather, as Augustine argues, because memory ties with no phantasm, there is a memory of the one *who* is present, the who, who is not fully definable as any kind of what. Augustine innovation is the paradoxical concept of the “memory of the present” or the memory of the one who is present. That means of a *who* without the *what*. That allows Augustine to solve a problem: Mind, as he argues, is not adventitious to itself: Mind does not come across itself as a “something.” Rather, mind is a who, who remembers (but not recalls oneself *without* or at least prior to knowing anything or anybody else). This move allows Augustine to posit *mens*, mind as a bridging concept allowing him to find the divine *who* in the human *who* and vice versa—without giving a classificatory definition of either the divine or human. Thereby, Augustine is able to create a theology which is anthropology and an anthropology which is theology. *Mens* as a who, who is the memory of the presence, or rather of the present. This present, the who, is first of all, a memory

¹³ See: Ref. [13].

¹⁴ See: *De Trinitate* (c. 428 C.E.), Book XIV: Chapter XII—14. For English, see: Ref. [9].

of the who, who is present: that means present but not defined. It is only second of all that this present encounters things, recalls the uncertain before, anticipates the unpredictable after and perceives the deceptively certain now or cognizes the certainly present with intellect. The memory of the present¹⁵ and the memory of the who without any definitions or answer is Augustine innovation, a theological and anthropological one in one move.

Augustine result is a mereology of the mind which is a whole—in his case the who—who does not encounter oneself as a part of oneself, but only remembers oneself as a whole, that is to say as the present without parts.

What Husserl's earth and Augustine mind have in common is a presence (Earth or Human/Divine mind) which/who is not defined as anything specific. For Husserl, it was the Earth which is not a body, from which all bodies are stemming. For Augustine, it was the mind remembering its own presence before the mind recalls, anticipates, perceives and/or contemplates things and matters.¹⁶ Mind is first of all memory and humanity is first of all earth; the two thinkers conclude respectively and almost in structural unison with each other. For both, there is a whole, a presence, which has no parts and from which all parts stem.

The differences between the two mereologies are too obvious to enumerate, yet one is particularly important: Husserl locates thinking in the visceral ego, while Augustine does not afford for the mind (which would be the best candidate for that) any bodily status whatsoever beyond what transpires from the memory of the present.

To understand the limits of these two mereologies is to relate them to what might be revealing about their common theological root. Other derivations from that same root can be instructive for understanding a particular direction Augustine mereology took and Husserl's mereology followed. That common root will become clearer through juxtaposing the two mereologies with that of Philo of Alexandria in his philosophical reading of the G-d of the Septuagint.

6. A mereology of the Septuagint's G-d: Philo's *huparxis*

If both Husserl and Augustine offer mereologies of bodiless wholes without organs or parts, an interpretative move of Philo of Alexandria in his understanding of relationships between the Septuagint's G-d and the world (*cosmos*) can be revealing of the common structural foundation of the three mereologies.¹⁷

¹⁵ Ref. [14], pp. 428-463.

¹⁶ This similarity undergirds the connection Husserl draw between the singularity of the holist earth and singularity of the humanity, as well.

¹⁷ I am very far from proposing an account of the "influences" of Philo on Augustine or Augustine on Husserl, in the style of historical realism. Rather, three different instances of thinking collectively unfold a common foundation (either the one in the past or the one yet to come from that past and towards our future), a foundation which might not have been available to any of these thinkers in a historically "realist" or call it historically "experientialist" sense. This foundation however has everything to do with, and as we will soon see, extend the mereology of this kind, as this mereology is glaringly missing in environmentalism and in approaches to the environmentalist crisis today.

At this juncture, the key is a polemical background, against which Philo' creates a notion (and a neologism): *huparxis*. In his *On Creation of the World*, Philo argues against the so-called a-theists. Unlike modern atheists denying the existence of G-d, Philo's atheists feel abandoned by G-d. They affirm that, because the G-d of the Septuagint is not a part of the world, the G-d cannot affect worldly matters either. Neither a part of the world nor a thing among other things, the G-d must have either withdrawn from the world soon after the act of creation, or was unable to interfere in the matters of the created world from the get-go. The underlying stance was that a non-created G-d, who produced or created the world, cannot care for or get involved with its creations: Only a creature can help a creature, the creator, however, cannot. The stance gave two respective versions of a-theists— G-d has withdrawn from or G-d has never been a part of the created world, and therefore, G-d cannot take care of people in it. Far from denying G-d's existence (a move which could not even occur to them), these "atheists" felt left or abandoned by G-d, who has created the world but cannot help anybody in it. In response, at the end of *On Creation of the World*, Philo invents the new philosophical concept. Literally meaning "under the *arche*" and by extension "under the beginning" or "under the principle" or "under the rule," the concept of *huparxis* suggested that the world is "under the rule" of G-d, even if G-d is not a part of it. Neither a part nor having parts, the G-d is a whole under the sway of which the world stands and from which the world stems in all of its parts. The whole controls and cares about the world, even if this whole is not a part therein, Philo intimates. He thereby defeats the a-theists of his time.

The world "subsists" under G-d, even if G-d is not a part of the world, Philo's innovation further suggests to his Latin adherents. With Marcus Victorinus (fourth century C.E.), Latin theology mirrors Philo's invention of *huparxis* with a Latin one, *existentia*.¹⁸ The notion allows to claim the "existence" of G-d, even if G-d can be neither defined nor fit the grid of genres and species. If in an Aristotelian tradition after Porphyry (268–270) in his *Isagoge* and in the Latin translation thereof by Boethius (c. 477–524 C.E.) "to be" (as opposed "to seem to be") means to be definable in terms of genres, species, differences, property and accident, Victorinus allows for G-d to be without any possible definition of G-d. If essence means a definition of what a thing is, then, after Victorinus, *existentia* or existence comes to mean G-d who *is*, even without essence. This Latin interpretation of *huparxis* as *existentia* features a philosophical notion now distilled from its polemical context. *Existentia* and *subsistentia* provide two Latin renditions for *huparxis*, thus allowing to claim what Philo did not: The G-d of the Bible exists and everything else subsists under G-d. Moreover, and as a consequence of the move, the existing G-d is not a (definable) "what" (essence) but rather the undefinable Who (existence). What we have here is a mereology of G-d as existence without parts and without *whats*: the mereology of the who.

¹⁸ See: Courtine, Jean-François « Essence, substance, subsistence, existence » in Ref. [15], pp. 298–310. On *Huparxis* versus *ousia* and a transition to *existentia* see idem: 301ff. Courtine mentions the polemical context of Philo, but seems to be reading the transition retroactively, as if that polemical context was extraneous to the concept of *existentia*, which as it were, was already in Philo.

In this context, Husserl's "earth" and Augustine "mind" present themselves as versions of Philo's polemical mereology of *huparxis*.¹⁹ Augustine argues against reducing *mens* to a property of any substance; in that, he is similar to Victorinus, for whom G-d exists because G-d has no essence. Husserl arguably continues Augustine move. The result is that Victorinus, Augustin and Husserl, however different from one another, afford a mereology of the whole without parts, focusing as it does in all the three versions on what Augustin characterizes as the memory of the present, Victorinus as *existentia* and Husserl as Earth. Because all the three are versions or interpretations of Philo's mereology of *huparxis*, the question becomes: Does Philo's mereology have yet another *elan*? We will detect this other *elan* of Philo in Palestinian rabbinical schools of rhetoric, which will allow to palpate the limits of the direction the mereologies of Victorinus, Augustin and Husserl are taking.

7. A mereology of divine law: the Palestinian קיום "kiyum" (a suspended testimony/testament to the law as a whole)

The masters and students of rhetoric in Palestinian Rabbinical schools did not consider polemical contexts extraneous to the results of polemics. This general stance of any school of rhetoric found a particular configuration in a mereology of the Divine law the Palestinian rabbinical schools of rhetoric displayed in their extant archives, known today as the Palestinian Talmud or Jerusalem Talmud.²⁰ What pertains to the context of this essay is that the Palestinian's schools developed a mereology of the past as mereology of the divine law. Looking at their mereology sheds a new light on the mereology of *existentia* versus *essentia* in Victorinus, of *mens* as the memory of the present in Augustin, and of the earth as the whole which is not a body, in Husserl.

¹⁹ Heidegger's criticism of *existentia* as *Vorhandenheit*, and his proposed compensation for that criticism in Heidegger's own notion of *Existenz* can be seen as a reconfiguration of the tension already induced and set in place in the process of transition from *huparxis* to *existentia*. In a sense, Heidegger drives closer to Philo, as for the both the who is sharply distinct from the what. For Philo, *huparxis* has to do with the G-d of Septuagint, the G-d under *whose* arche the world is subsisting. For Heidegger, if the Latin *existentia* translates *huparxis*, then the who gets lost in translation and *huparxis* becomes a what, a pure what before any definitions, before essence, to be sure, but a *what*. To compensate for that loss in translation Heidegger retranslates *existentia* as *Vorhandenheit*, the mere being there of a what *before* any definition or meaning, while coining the *Existenz* to introduce the *Who*, human or divine without difference: the Who, who is *not before* definitions or before *essential*, but rather fundamentally *without* definitions or essence. To wit: "Existentials and categories are the two fundamental possibilities of the characteristics of being. The being which corresponds to them requires different ways of primary interrogation. Beings are a *who* (existence) or else a *what* (objective presence in the broadest sense). It is only in terms of the clarified horizon of the question of being that we can treat the connection between the two modes of characteristics of being" (in Joan Stambaugh translation; [„Existenzialien und Kategorien sind die beiden Grundmöglichkeiten von Seinscharakteren. Das ihnen entsprechende Seiende fordert eine je verschiedene Weise des primären Befragens: Seiendes ist ein Wer (Existenz) oder ein Was (Vorhandenheit im weitesten Sinne).“ (*Being and Time*: 45)].

²⁰ The display comes alive, if one reads these archives against the grain of their reception and interpretation in the subsequent tradition, dominated as it has been by medieval reception and interpretation of the Iranian rabbinic rhetorical schools under the name of the Babylonian Talmud.

The Palestinian schools concern with a necessity and impossibility to testify for the divine law of the past. Such testifying, testimony or testament come in two forms: as an exemplary act (*ma'aseh*, deed) or as a procedural rule (*halakhah*) spelling out a contractual obligation.²¹ The both must arrive by way of a *recollection*; more specifically in a recitation of respectively an exemplary act or of a rule of procedural obligation (between Israel, G-d and the nations of the world). The necessity is to recall/cite/testify the divine law that comes from the past;²² for otherwise how can one comply to one's obligation? The impossibility is in the very nature of a recollection and citation: To recall and to cite are to make the past present. That in turn makes the past lost as such, that is to say as past, behind the present of the law cast by its citing. In yet other words, by becoming present (in a testimony of recollection or recitation) the law of the past loses its character and its power of the past.

The conflict of the impossibility and necessity to recall the law of the past is a version of mereology. The past is a whole that has no parts (in this case no fully specified laws/rules of procedure); and the recitations stemming from that past are (to use Husserl's language) separations from the law of the past (just as the planets and other bodies were separations from the bodiless earth.) The paradox is that the characters in the Palestinian rabbinical schools of rhetoric in reciting the law make it present and thereby loosen or weaken its power, the power of the law of the past. This is why the characters in the Palestinian Talmud are often concerned with "what are we to testify to" or "what are we to establish" as the divine law (lit "what are we making stand" [*ma anu mekaymin*]). The characters express such concerns by juxtaposing the recollections and recitations with one another, thereby showing how unstable the grounds of such testifying and establishing are. The resulting tension is that the characters must and cannot testify to the laws of procedure (*halakha*) without making this very testifying and testament suspended between the impossible and the necessary.²³

What does that mean by way of differing versions of mereologies considered heretofore? The Palestinian schools display a mereology of the past, which celebrates uncertainty of one's standing between the impossible and the necessary, rather than committing to the would be false certainty about parts and parcels of the law of the obligation. Whereas this law comes from the past as a whole with no parts thereto, citing and detailing this law threatens its very power. Standing between Scilla of necessity and Haribdah of impossibility, the Rabbis, however, do not refuse to testify. They instead suspend testimony, thereby humiliating their own power of citation. They thereby suspend both the impossibility and the possibility to testify to the Law.

²¹ Such a contractual obligation can pertain to the procedural law of obligation between the descendants of the Biblical Israel (Jacob) and the G-d of the Bible, or within the community of Israel's descendants, between the members of that community and the others.

²² In question is reciting of the law of obligation in counter-distinction from the law already given in the Scripture. The Scripture itself, if considered a divine revelation or coming directly from G-d would not be problematic in this respect. The only problematic part would be in reading and interpreting it, but that belongs to the other aspect of the activity in the rhetorical schools, that of exegesis and eisegesis of Scripture as distinct from formulating the procedural law of obligation which is supposedly coming from the past, which means is not present in the same way in which Scripture is.

²³ This conflict of impossibility and necessity finds an expression in including several parallel and thus competing versions of the same procedural law in the Mishnah, as well and even more so in the Palestinian Talmud.

By comparison with Augustine memory of the present, the rabbis and students in the schools prefer the memory of the mereological past of the law over the recollection of the law in the present. That also means they prefer the memory of the law of the past to a recollection of that law in the form of definitive rules. Yet, facing the necessity of such recollection, they suspend such recollection/citation by committing to no final formulation of the law but only to a provisionally accepted number of recollections/citations. A community living by mutual obligations with G-d lives in suspension of any given recollection about the past of these obligations. Back to Augustine, instead of certainty of the memory of the present, this community lives by the uncertainty of the memory of the past. That celebrates a programmatic uncertainty as an authentic condition versus any certainty that Augustine offers in his “memory of the present.” *Huparxis*, or subsisting under the *arche* of existing G-d means remembering G-d there where G-d cannot be recalled.

What that means, however, is that the mereologies of the bodiless whole without parts in Husserl and Augustine alike find a contrasting parallel in the rabbinic Palestinian mereology of the divine law. If the former strive for a certainty in the foundations of human life in a such a bodiless whole without parts, the Palestinian rabbis in their continuation of Philo’s mereology of *huparxis* display a contrasting standing, that of a human in suspension of her position *vis a vis* the whole without parts.

8. Beyond the environment: a conclusion

To conclude, Husserl’s mereology of the bodiless earth induces reservations about approaching the earth as environment. In its either localist or globalist versions, the notion of environment not only reduces the earth to a body, but also either begins with or stays within the anthropo- and geo-centric element. Husserl gestures toward a way to overcome such centrism: to approach earth as more than a body, that is, as not a body. His mereology of the bodiless earth, however, is as promising as it is also limited by his commitment (shared with Augustin) to finding a *certain* bodiless whole, a whole which can give certainty, in his case that of “one earth and one humanity”. A contrasting sense of programmatic uncertainty in the rabbinic memory of the past, rather than the recollection of the past, and the version of mereology that such past as past is proposing yields a structure to apply in thinking not only about law but also about earth as such a bodiless whole, to which one is better off to relate with a well-structured uncertainty than with being certain about what can or cannot be.

Then what? Ascribing science the sole or even predominant responsibility for creating and resolving the “environmental crisis” needs a radical rethinking in view of the competing mereologies outlined above. For, they collectively put both earth and humanity back into consideration, while letting the Copernican science do what it does best, to work with the bodies. That also means keeping Copernican science apart from what is not a body, that is to say from the humanity and the earth.

The above analysis affords a conclusion that environmentalist thinking needs a sustained critique of its over-commitment to science, including the scientific view of wholes as organisms. Beyond and in addition to organicist holism of the bodies, a mereology of bodiless wholes without parts, in the competing versions thereof outlined above, needs to be brought forth and to claim its role in the understanding of what we do not understand when we lock ourselves into thinking about nature in terms of “environmental crisis” today.

Author note


Preparation of this article for publication was in part supported by Gordon and Gretchen Gross Professorship in Jewish Thought, University at Buffalo, SUNY. I thank Edouard Nadtochii and Elad Lapidot for many conversations and exchanges that contributed to shaping this argument.

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Religious Self and Sustainability Ideation: Islamic Perspective and Indonesian Context

Retno Hanggarani Ninin and Noer Fauzi Rachman

Abstract

This chapter describes the role of the religious self in relation to sustainability ideation. The religious self that can foster sustainability ideation is the genuine religious self. The process is to realize the duty of humans as a caliphate and learn the science of God's creation as part of human obedience to God. The traditional perspective of religiosity that separates the science of religion from the general science, and considers the general science has nothing to do with religiosity, needs to be retheorized. Retheorization is necessary. Thinking about religiosity provides the opportunity to a Muslim who studies the natural sciences and other sciences to carry out the human duties as caliph, namely guarding the earth.

Keywords: self, religiosity, sustainability, eco-theology

1. Introduction

The environment is often excluded from the religiosity discourses which tend to focus on the ritual behavior of “worshiping” or “praising” God, and controlling its follower's behavior through the establishment of rules claimed to be “religious law”. The popular theory of religiosity confirms these limitations. Glock and Stark [1] explained that one's religious system can be differentiated into dimensions of ideology, ritual, experience, intellectual, and consequences. Other theories define religiosity based on its components, namely, religious practice, daily spiritual experiences, and religious/spiritual coping [2], and some focus on aspects of closeness to God, religious orientation and motivation, religious support, and religious struggle [3]. Downgrading religion to the domain of law, which contains guidance of conduct and rules to obey, and that those rules include only (1) the divine domain that governs the way a person perceives God and communicates with or prays to God; and (2) the social domain that governs the way person interacts with fellow human beings, causing humans to lose their opportunity to concern toward nature.

In terms of the risk, human give to nature, the absence of guidelines for behaving toward nature, potentially make humans ignorant of what is needed by nature to maintain its sustainability. The lowest risk exists when a person assumes that nature is none of human's business. This kind of individual cannot be relied on to take care of nature, but at least do not damage nature. At a level in which the risk to nature is

greater, the absence of behavioral guidelines toward nature can potentially lead ones to think that human has the freedom to take the most benefit of natural resources among other beings. Those are humans that potential to destroy nature at a higher scale of damage. At the greatest level of risk to nature are those who master the knowledge of natural resources and how to utilize them, then use that knowledge to utilize nature based on economic motives for the sake of their profits. The way the latter two groups of people behave is considered to be rooted in the anthropocentric worldview of monotheistic religions [4]. Those people are among the most to worry about, due to their extensive knowledge, great ability, and their authority, that is potential to influence nature on a macro/large scale.

Climatologist Paul Crutzen in 2000 introduced formally into the contemporary scientific and environmental discussion the notion that human beings have become the primary emergent geological force affecting the future of the Earth System. He declares a new geological epoch, the Anthropocene, to displace the Holocene epoch of the last 10,000–12,000 years [5, 6]. The Anthropocene represents what has been called an “anthropogenic rift” in the history of the planet. Although often traced to the Industrial Revolution in the late eighteenth century, the Anthropocene is probably best seen as arising in the late 1940s and early 1950s [7]. Recent scientific evidence suggests that the period from around 1950 exhibits a major spike, marking a Great Acceleration in human impacts on the environment, with the most dramatic stratigraphic trace of the anthropogenic rift to be found in fallout radionuclides from nuclear weapons testing [8]. Confirmations that humans are the main cause of environmental damage at the earth scale in turn leads to the development of the psychology of sustainability [9, 10], and then of the Anthropocene psychology. The Anthropocene psychology is a breakthrough, by critically expanding the horizon of psychological knowledge, by seeking to investigate the relationship between the human and more than human worlds, a process that is interrelated with multi-species, multi-cultural, and multi-disciplinary approaches, and with a priority in specific situations [11].

It is a very important development when ecology has a subfield of “deep ecology” science that involves self-aspects as part of nature or the ecological environment. The concept initiated by the Norwegian philosopher Arne Naess [12] believes that only by changing one’s view of their own self, that human is part of nature and not a unit separate from nature, will allow individuals to behave toward nature as if they behave for their own. Rothenberg argues that the idea of involving the concept of self in explaining the human-nature relationship, has already been valued in the tradition of Mahayana Buddhists [13]. In Christianity, the discussion is contained in the concept of eco-theology [14], while in Hinduism known as the concept of *Tri-Hita Karana* [15].

Humans-environment interaction demands humans as an actor who performs actions to the environment. People could choose to plant trees and limiting the use of plastic, or otherwise damage the environment such as throwing garbage out of place or not limiting water use. Whatever the behaviors, it is self-determined and has nothing to do with religion. Quran is a manuscript contains messages, prohibitions, appeals, and models for all Muslims around the world. However, those who are exposed to the exactly similar Quran have different attitudes and behaviors. Some people believe that Quran is true and fully obedient to the values of the Quran, others obey some of the rules and apply some of its values, and there are also groups who do not value Quran as the truth. Therefore it is not Quran’s words that determines human behavior, but human does. Based on this logic, the discourse of environmental conservation in Islam needs to consider the self as a modality that is connected to the environment. This chapter will discuss a Muslim’s self and their relationship to the environment or nature.

2. Muslim religious self

The discourse regarding self in psychology came up with the various concept about self, namely relational self [16], true self [17], and religious self [18]. The main value of the relational self is its connectedness with others, and for true self is the meaning of the self's own individuality. Religious self values awareness of connectedness with God. In the Islamic religious perspective, being Muslim means recognizing that human was created by God to be a servant of God (Qur'an 51:56) to which the caliph values are attached (Qur'an 2:30). Thus, the religious self of a Muslim is the self that recognizes human subordination toward God and believes in his duty to become caliph.

Literally, caliph is a term for someone who takes care of various affairs or a leader. The narration of the verse (Qur'an 2:30) tells of the dialog between God and angels, which hints that before human is created, God mentions a plan of creating a caliph. It means that humans would be the creature of God who is tasked to take care of the earth on which human would live on. Responding to the word of God, in God's dialog the angel expressed his doubts about human's ability to become caliph, even explicitly regarding the existence of humans on earth as a destroyer. The dialog in the narrative ends with the statement that God knows human's capacity (to take care of the earth). Based on the raw material of the human body, questioning human's capacity to taking care of the earth is understandable. The reason comes to the similarities between raw materials of human body with the earth's material, which causing humans to always be eagerly collecting sources on earth for their own needs. However, human has elements other than the body, namely the soul or non-material element on which God presents his (virtual) self on. The presence of God in the soul of the human being is an antecedent factor for the human to work with the qualities of God, namely nurturing (God has an all-nurturing nature) and loving love (Allah has the nature of *rahman rahim*) to nature (man belongs to the part of nature). A Muslim is said to have a genuine religious self when presenting a consistent self-awareness as a servant of Allah (consciousness based on Qur'an verse 51:56) with the main task of prospering the earth (consciousness based on Quran verse 11:61). Once the Muslim religious-self is activated, the orientation of their life will be as caliph, which is to take care of the earth until prosperity is maintained.

Being aware of having the responsibility to manage the earth will drive individuals to do self-preparation such as learning natural sciences, so that comes to their competence of handling nature in the best way in terms of sustainability. From the point of view of the traditional perspective of Islam, studying natural science is not considered as a part of religiosity, due to the fact that it is not directly related to God and is also not commanded by God. It is not true. Quran verse 96:1 narrates the command of God to humans to study God's creation, through the phrase "learn, in the name of your God Who Created". The statement mentioned that studying is commanded to be done in the name of God as a creator. That is, creation is the object of God's command to study. Thus, the science that is commanded to be studied is the science of God's creation, that is, the whole universe, including humans and their ecological environment. Through this understanding, one who studying physics, chemistry, biology, geology, oceanology, and humans, which is intended to be able to manage, utilize, and maintain nature, means has a religious self, because of carries out Qur'an verses 11:61 and 96:1. A person's readiness to become a caliph is an antecedent factor of having the idea of sustainability.

Generate idea involves cognitive behavior. Thus, developing ideas requires a cognitive aspect that is trained to think logically and rationally. Sustainability ideation is related to the ownership of thoughts that connect behavior with nature, i.e. behave

environmentally friendly. A textbook reference confirms the existence of sustainability ideation get benefits from concepts of conservation psychology, environmental psychology, and pro-environmental behavior [9].

Koger and Scott [10] stated that the idea of connecting environmental issues to human behavior is based on a paradigm related to the empirical fact that the main cause of natural damage is the maladaptive behavior of humans toward nature. A person with a religious self and a caliphate consciousness would potentially be willing to put himself to act against ecological destruction, including directly involve with community actions to drive pro-environmental behaviors, or thinking about macro solutions involving stakeholders and policymakers. Both practical perpetrators of pro-environmental actions, as well as strategic initiators of environmental policy, all fall into the category of the caliph.

In the psychological perspective of Islamic religiosity, it is the work of the religious self on a Muslim that performs “maintaining the earth” behavior at any level, which is referred to as carrying out the role of the caliph. The Caliph is the ideal status of a Muslim’s religious self. The religious self with the qualities of the caliph is the one who orients his behavior to maintain the sustainability of the ecological environment, as a form of obedience to Allah, or as a servant of God. Unfortunately, not every individual affiliated with the Islamic religion has such a qualified religious self. It could be that the religious self is artificial or pseudo-religious.

3. Pseudo-religious self

In Indonesia, the pseudo-religious self seems to occur on a fairly massive scale, as a result of systemic processes to focus religion on aspects of sharia (religious law and rules). When religious issues are focused on the legal aspects, then what the individual learns as a religious lesson is the obligation and prohibition, which is done to expect rewards and avoid punishment. Studying religion at this level, psychologically means:

1. Cognitively increase the volume of knowledge in terms of religious knowledge. It consists of the list of behaviors that must be done and not to do. For example, the list of daily obligations such as morning prayers, *dzuhur*, *ashar*, *maghrib*, and *isya*. The list of daily *sunnah* behaviors for example is *rawatib* prayer after *maghrib* prayer, or *Dhuha* prayer in the morning.
2. Affectively presented with punishment for violations of obligations or prohibitions, so much so that one would be afraid to abandon his religious obligations for fear of the punishment. The process of “scaremongering” is often carried out in various learning activities that are claimed to be religious lessons. When a person performs his duty for fear of being punished by God, then it is in that situation that his worship behavior is being done for his own benefit or safety. The behavior is not a genuine obedience as a servant of God.
3. The motives are faced with pressure or insistence to carry out the necessary actions. In a country with relatively interdependent self-construal such as Indonesia, adherence to groups is expected behavior. In groups that claim to be religious, the activity of encouraging each other to perform obligations is already

considered an obligation. If then there are members of the group who perform their worship obligations because they do not want to be ostracized by the group, then in that situation the behavior of worship is to meet his needs so as not to be ostracized by his group.

Psychologically, a person whose religion focuses on the three psychic domains will display worship behavior with a psychic condition oriented to his own needs, namely having the knowledge person needs in order to survive as part of his religious group, and perform worship so that he survives God's punishment, or so as not to be ostracized by his religious group. The second thing is, unfortunately, in Indonesia, in general, religious knowledge that must be learned by school students is dominated by knowledge about performing ritual worship, namely, among others, mandatory prayers five times per day (daily rituals), *berzakat* (periodic rituals of giving according to the income generation system), and fasting (annual rituals for Ramadan and weekly rituals for Fasting Mondays and Thursdays). Through religion at this level, actions against the environment and nature are not "recognized" as part of religious knowledge.

In Indonesia, what is considered as religious education that produces religious science is among others, learning how to pray, how to fast, and how to read the Qur'an. The science of nature is not categorized as a religious issue. Systemically the separation of the two types of knowledge in Indonesia is expressed in the dualism of schools, namely, religious schools and public schools. Religious schools are regulated by the ministry of religion and study "religious knowledge", while public schools have curricula regulated by the ministry of education and studying natural sciences, social sciences, pure sciences (science), and others. Through the separation of religious schools and public schools, religious schools produce graduates who have knowledge of ritual science and are skilled at performing rituals, as well as basing their behavior in general on knowledge of rituals that must be performed and behaviors that are prohibited to be performed. In contrast, public school graduates have general knowledge, with scientific specifications, including physics, chemistry, biology, mathematics, and all derivatives such as the science of technology, agriculture, animal husbandry, and health.

The existence of external factors that systemically separate religious science from general science, and hegemony from religionists who claim religious knowledge as a science that is more "religious" than general science, makes members of the Muslim community who want to become religious then influenced to prioritize the study of religion over general science. Parents who want their children to grow up religiously choose to send their children to religion-related schools rather than in public schools. Based on data from the Ministry of Religious Affairs of the Republic of Indonesia, there are currently approximately 26,975 pesantren (boarding schools to study Islamic religion) with students totaling approximately 4,009,692 people in 2019 [19]. The education produces individuals with a religious self who focus their religiosity on the ritual aspect (ritualistic religious self) without questioning the involvement of reason or thought in their behavior.

To the extent that when the execution of a person's ritual behavior is carried out for the reason of avoiding God's punishment or expecting retribution from God, then the purpose of his behavior is for his own benefit. Is it wrong? Of course not. However, such behavior is not entirely the act of a servant's devotion to God or God-oriented, or for God to be happy, but rather to benefit himself. Such a ritualistic religious self is characterized by a tendency to increase the frequency of its behavior based on the calculations of merit or gifts from God. Even more extreme is when the

worship is carried out only as a ritual, as a result of habituation in the past, so as to cause guilt, feeling something less or uncomfortable, when not performing the usual rituals performed, but not feel guilty when the ritual behavior done with a self-oriented motive.

The ritualistic religious self whose ritual behavior is carried out only as a habit psychologically does not involve cognitive aspects to present meaning in his behavior, either the meaning that the worship is essentially obedience to God or a way to connect to God. The worship behavior is only a mechanical activity of his body, which is accustomed to display such behavior when the time comes. With such a psychological state, when judged based on the understanding of the religious self as a self-connected to God or a self-dominated by the awareness of God, the nature of religiosity of him will become pseudo-religious.

In communities that are systemically dominated by these views, so usually, especially in collectivistic cultured societies, most individual members of the community will have the same views. It is at this stage that internal factors, namely, psychic conditions, will prevent a person from reaching a religious self. The mechanism of occurrence of internal factors begins from the exposure of a person massively and consistently to the view that separates religious science from general science.

The narrowness and inconsistency of exposure is a process of hegemony, which aimed at the dominant group and can instill its ideas in minority groups [20]. Through the process of hegemony, one can have a new ideology that is socialized by the dominant group. The massive penetration of messages in the external environment can obscure the presence of other messages in the environment, so the individual has the potential to see the massive message as the only message or the only truth. In the event that the massive message is the dualism of the sciences, then the individual will become aware that the ideal way or even the only way to be religious is to learn religion in religious schools and students who have studied religious science will consider that carry out religious rules is the most important behavior in life.

In fact, because the ritual is in the domain of behavior, then behaving with the intention of carrying out the ritual will have a different impact compared to behaving with intentions that are based on deep thinking regarding the impact of the behavior. The perpetrator of ritual behavior perceives completing the task when the ritual has been carried out, while the perpetrator of the planned behavior will think about the impact of the behavior that has been done and thinks of ways to improve the behavior so that the impact of his behavior is increased. How does this relate to sustainability ideation?

The behavior of the perpetrator with the religious self is ritualistic, positioning the behavior as a form of adherence to religious rules. With this perception, individual members of the community with ritualistic religious self psychologically will tend to (1) put forward the memory part of the cognitive (remembering knowledge of laws and rules) rather than utilizing rational logic; and (2) regard the behavior of religious rituals as his top priority and duty as a human being. With this psychological tendency, the ritualistic religious self-owner will only perform actions other than ritual worship, including pro-environmental behavior, if there is a law that requires or encourages humans to do so. They are not reliable to develop strategic ideas such as sustainability ideation for two reasons: (1) less of thinking rationally; and (2) tend to exclude environmental behavior from religious behavior due to not mentioned in the Qur'an as a law or rules.

4. Eco-theology and religious self

The dominant human institutions in the Anthropocene epoch, as argued by Pickering [21], are currently trapped in a position of alienation and separation from the Earth system, constantly 'to repress' information on ecological conditions at various scales, and prioritizing economics with narrow and short interests. Sustainability ideation co-evolves with ecological reflexivity, which consists of three behavioral components, namely (a) recognizing the results and impacts of its appearance on the socio-ecological system, and listening carefully to feedback from the system; (b) rethinking critically on the basic values associated with the feedback; and (c) responds adequately by transforming their gait and appearance. The Anthropocene is also an invitation to become aware of the ways in which life continues, and the living space of human generations in a more than human world [11].

The term Eco-theology began to spread when it was realized that the anthropocentric worldview of monotheistic religions was one of the factors that led to the ecological crisis. Their religious references are believed to command humans to dominate nature. This resulted in the emergence of an approach to nature that is instrumental rather than respectful. These beliefs then become fertile fields for the development of science and technology that is destructive to the environment [4].

Quddus continued that criticisms of monotheistic teachings also led to a movement to end the domination of non-ecological ideology, human control, and control over the earth, arguing that human who is part of the earth and the earth does not belong to human. Although there is a rejection mainly from the religious community, there is also a significant role of eco-theological ideas in efforts to formulate and reinterpret the theological and ethical concepts of monotheism to be more environmentally friendly.

The basis of understanding eco-theology is the realization that the environmental crisis is not only a secular problem but also an acute religious problem because it begins with a false religious understanding of life [22]. In the reference, it is also explained that Islamic eco-theology sourced from eco-theology and sacred cosmology can contribute positively as guiding principles of natural management. This contribution is evident in several principles of Islamic eco-theology, namely: the principle of *tauhid* (unity of all creation), the principle of *amānah-khalīfah* (trustworthiness-moral leadership), and *ākhirah* (responsibility) [22]. The caliphs in Islamic eco-theology are principles that intersect with the religious self. While the final principle related to accountability in the life after death, for the behavior carried out when in the world, intersects with the pseudo-religious self. In an ecological perspective, the focus of attention is the willingness to take pro-environmental actions. It does not matter whether the perpetrator commits his pro-environment actions because of his religious self or because of pseudo-religious self. Although the two look the same in terms of their output, namely pro-environmental behavior, but antecedent and its consequences are different.

Either pro-environmental behavior or environmentally-friendly behavior, when its antecedent factor is pseudo-religious self, then psychologically means that the consideration of the behavior is getting rewards or avoiding punishment. Such thinking requires a prerequisite that is, that pro-environmental behavior is a behavior that has rewards. Unfortunately, in the study of religious science in religious schools in Indonesia, pro-environmental behavior is generally not discussed as behavior regulated by *sharia*, and is not addressed as behavior that falls into the category of behavior with rewards or punishments. Because pro-environmental behavior is considered not

included in the behavior that will be rewarded or punished, then Muslim individuals who adopt Islamic values do not feel the need to learn, plan, or display the behavior.

The principle of the caliph contains two words, trust and caliph. Trust means a message that is entrusted and must be fulfilled because it is related to the fulfillment of the rights of other parties, while the caliph means the leader or party who takes care of something. Thus, linguistically the mandate-caliph means that man has a responsibility that must be carried out as a leader because the obligation relates to other parties who have the right to receive it. Refer to the Qur'an verse (2:30) that man is the caliph, then based on the meaning of caliph, every human being is leader. At the end of the verse, it is convinced that man has the capacity or feasibility to become caliph. The next verses (2:31–33) narrated that the eligibility of human to become caliph or taking care of the earth is refer to the high order thinking that human has, put them as the only able being to master knowledge of the workings of the entire system on earth. In terms of religious self, especially about the dualism of religious sciences - general sciences, then eco-theology referring to the Qur'an verses 2:30-33 confirms the importance of building self-religiosity through learning and mastery of knowledge about the universe, or which followers of dualism of science categorize as a general science.

5. Discussion

Religiosity, whose definition focuses only on behavior as a ritual practice without the basis of spirituality, namely self-awareness as a creation assigned to the caliphate, will tend to apply behavioral practices that are not environmentally friendly and not sustainability-oriented. It does not mean that the behavior is bad, but the ecologically oriented behavior becomes not prioritized because it is considered not to contribute to the religiousness of the self. This kind of religiosity is usually adopted by one who believes in the dualism of religious science - general science.

Based on the fact that the Qur'an as the main reference of Muslims does not distinguish religious science from general science, and that the dualism of science is not constructive towards the sustainability of nature, it is important to redefine religiosity and the values of the caliphate. In terms of religious self, redefining religiosity means directing individual to develop genuine religious self instead of pseudo religious self. Referring to eco-theology, attention should be focused on the individual's awareness of his position as part of nature and that there is an interdependent relationship between them. The meaning of the interdependence is that the behavior of a person directed at the environment or nature can intervene in natural processes, so that the working system of nature can change in such a way that it will eventually change the living space of the individual.

In terms of the application of religiosity theory in Indonesia, the main challenge is the number of community groups affiliated with islam and different from each other. Not to mention the challenges that come from Muslim individuals with non-religious self. Indonesia is a country where person grows up in a multifaceted environment, including religion, culture, ethnicity, race, and education. In a multifaceted environment, individuals have a great opportunity to have a self whose the nature of the construal is multiple. **Figure 1** visualizes the self of Indonesians.

Indonesians grow in a multi-faceted context, thus forming a multiconstrual self [18]. Such a self model allows the owner to function based on a certain self at one

time, and at another time using another self. The dominant self can also vary from one person to another. The arrow in the center of the circle in **Figure 1** indicates that one self can be dominant and narrow the function of the other self, even negating it. In addition, the construal is also not only built from the four phases but can be influenced by more phases.

In the self with multiple construals as visualized in **Figure 1**, then intervention to religiosity can play a role in determining the quality of his self only if the religious self is indeed the dominant self in him. Conversely, when a person lives with his cultural self, then the religious self may be irrelevant to him. Especially because in Indonesia religious identity is mandatory for every citizen, so people can have a religious identity without having a religious self. In this group of people, the need to activate sustainability ideation needs to be done through self other than religious self.

6. Conclusion

Islamic religiosity, through the concept of religious self, can be used to develop sustainability ideation in Muslims. Developing the idea of sustainability requires a paradigm shift in religious standards. The original paradigm was that those who were considered religious were those who obeyed religious law (sharia), with indicators of religiosity is the implementation of ritual worship. The paradigm needs to be changed, that is, a person is said to be religious when able to activate self-awareness that man is the caliph. Those who realize that man is a caliph will have the will to use intelligence to master the knowledge of God's creation and use that knowledge to utilize nature taking into account its sustainability.

For implementation in Indonesia, this possibility can be realized through deconstructing the dualism of science between religious science and general science, which has the potential to exclude knowledge about God's creation such as biology,

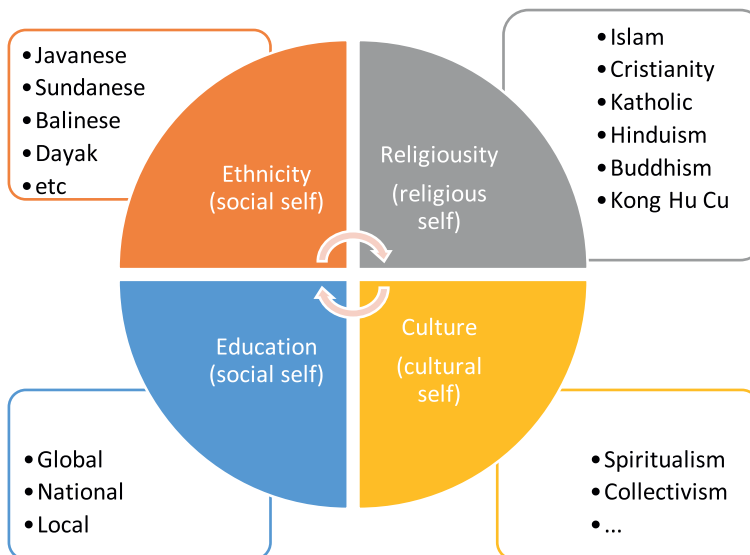


Figure 1.
Multi-construal model of Indonesian self

chemistry, physics, agriculture, forestry, geology, oceanology, and others, from sciences that are considered important according to a religious perspective.

The process is certainly long-term as it leads to fundamental changes in the dualism of science and religion. Another way that can be taken is to establish alternative schools that are not in the dualism. The initiator of this alternative school called it a field school, which is to make the forest and nature as a school. The basic idea is based on the weakness of formal schools that teach a lot of knowledge but lack coherence with the needs of children living around forests, beaches, and mountains to live in such places. Formal schools have a curriculum that prepares a student to become a worker, practitioner, or professional, but cannot be used to live in nature. Then, field school is the solution, which is to keep the village child remains a village person who has knowledge about nature and the village where he grew up and the knowledge of how to live in that place. Children in forest villages learn about forests and how to live by utilizing and maintaining forests. Children in coastal villages learn about the sea and how to live by utilizing the sea and guarding the ocean. Some of the field schools in Indonesia include Lawallu Village, Soppeng Riaja District, Barru Regency, South Sulawesi initiated by the Yayasan Hutan Biru (Blue Forest Foundation) [23], dan Field School held in Marena Indigenous Community, Pekalobean Village, Anggeraja District, Enrekang Regency, South Sulawesi, initiated by the Law and Community Association (HuMa) in collaboration with the Alliance of Indigenous Peoples of the Archipelago (AMAN) South Sulawesi [24].

Acknowledgements

Thanks and appreciation are given to our students in the course of community psychology, and environmental psychology (2020, 2021, and 2022), Faculty of Psychology, Universitas Padjadjaran. In the end of 2019, Retno Hanggarani Ninin, as the head of department of social psychology invited Noer Fauzi Rachman, psychologist and environmentalist to joint to be lecturer, after decades of working as a community and environmental practitioner, and introduced the science of community psychology, conservation psychology, environmental psychology, psychology for sustainability and Anthropocene psychology.

Conflict of interest


The authors declare no conflict of interest.

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Cosmogonies of Alterity: Origin and Identity in Mesoamerican Narrative

Saúl Millán

Abstract

Through a comparative analysis, which uses as references Nahua narrative and Western thought, this chapter examines the relevance of the notion of alterity in different Mesoamerican myths, whose narratives display different ideas regarding origin and identity. In this case, comparative analysis allows us to distinguish between two different narrative traditions, one of which emphasizes the role of continuity and genealogy and another, on the contrary, which reveals the importance of otherness and discontinuous processes.

Keywords: Nahuas, mythology, alterity, origin, genealogy

1. Introduction

Unlike the Western world, where the past defines the preservation of future identities, Indigenous narratives tend to position alterity at the origin and destiny of spirit beings. In Andean myths, in which Tristan Platt [1] has recognized the presence of an “aggressive fetus,” ancestors’ souls are conceived as diminutive, pagan devils that enter the mother’s womb to give life to human embryos, so that pregnancy is regarded as a process of conversion between pagan souls and Christian neonates. Similarly, the ancient Nahuas considered gestation largely equivalent to capturing a warrior on the battlefield, so each birth took the form of a belligerent operation between the midwife and the inhabitants of the underworld [2].¹ Known as *miquizpan*, “time of death,” childbirth alluded to the ontological condition of the fetus, identified as an entity with a cold, dark nature that was still in the zone of *Mictlan*, that imagined underworld that was both the destination of the dead and the origin of future generations. In this way, while birth followed a process that began with the transformation of an enemy fetus and culminated in its integration into the

¹ In the sixteenth century, fray Bernardino de Sahagún recorded that “when the baby had arrived on earth, then the midwife shouted; she gave war cries, which meant that the little woman had fought a good battle, had been a brave warrior, had taken a captive, had captured a baby” (cited by [2]: 650; English from [3]: 167).

earthly world, death set in motion a new process of alteration in which the dead transitioned to a different condition.

Just as the place of origin, the mortuary destination was conceived as an otherworldly realm where the ordinary condition of human beings was altered. Depending on the trajectory marked by the individual's birth, the dead entered a world that was socially analogous to earthly communities, but that differed in principle in the ontological condition of its inhabitants. The variety of scenarios projected by the end of the life cycle, from Mictlan to the legendary kingdom of Tlalocan, offered a panorama of multiple universes that channeled humans to different mortuary destinations, each of which had an owner or lord of the place, local officials, and an undifferentiated group of auxiliary spirits from the earthly realm. According to the claims of the ancient inhabitants of Tlaxcala, commoners turned into weasels and beetles after death, while the leading officials became birds and clouds that aided water gods [4]. Sahagún's informants maintained that the dead were reborn in a state unlike their earlier condition,² which indicated that all beings underwent a discontinuous development that was reproduced with birth and death. If the result of this process was to turn into clouds, animals, or divinities, the modalities of this conversion could be summed up in that mechanism that constantly distinguished earlier states from later ones, in the same way, it discerned between places of origin and places of destination. Hence, fray Diego Durán, interested in the origin of peoples, expressed doubt over the capacity of their members to identify their own genealogy:

There are some people who tell fables about this subject. To wit, some say that the Indians were born of pools and springs; others that they were born of caves still others, that they descended from the gods. All of this is clearly fabulous and shows that the natives themselves are ignorant of their origin and beginnings, inasmuch as they always profess to have come from strange lands ([5]: 4).

Written in the mid-sixteenth century, with the vision of a man who recognized himself in his own lineage, the passage reveals two diametrically opposed conceptions of the origin and identity of the speakers. The idea that human beings came from an otherworldly realm, situated beyond the confines of humanity, clearly contrasted with the notion of a natural genealogy that traced a direct relationship between ancestors and descendants. Whereas Christian thought emphasized the continuity between the former and the latter, emphasizing the connection between origin and final destination, Indigenous thought insisted on marking their discontinuities, affirming that native populations emerged from caves and springs. Conceived as beings of a different nature, with dissimilar habits and dwelling places, the value of those populations was not measured by temporal continuity or genealogical identity, but rather by the alterity that defined their initial condition. More than a linear development between members of the same species, descendants took the form of a heterogeneous process between beings of a different nature, whose otherness made it possible to move between two divergent states. The incorporation of an enemy through gestation, as well as the uncertain origin of the ancestors allude, indeed, to a discontinuous process that made it possible to assert that forebears came from caves and neonates from the underworld. These "strange lands," as Durán referred to them, do not refer to faraway

² "For so was it said: 'When we die, it is not true that we die; for still we live, we are resurrected. We still live, we awaken'"(Sahagún, *Códice Florentino*, book 10, chap. 29; English from [3]: 192)

places, but rather to sites where alterity is possible, based on narratives that marked ruptures there, where Christian thought saw only continuities. Invisible to the Spaniards, another form of time was hidden in caves and springs, privileged places of contact that altered temporal meaning, because “There is frequent mention of peoples’ perplexity upon returning to the earth’s surface in a time period different from the one they had anticipated” ([6]: 78). Just as the figures of alterity could not be identified with a specific geography, those strange lands were not necessarily the product of a fictitious fable or an indifference to the past, but rather were the result of a conceptual process that sought the diversity of beings throughout space and time.

2. Alterity and dualism

The reason why native populations come from caves, neonates from the underworld, and ancestors from strange or foreign lands can undoubtedly be sought in that specular world imagined as the symmetric inversion of the human world. The zone of the universe generally called “virtual world,” “mirror world,” or “realm of the deities” in Mesoamerican studies is referred to as *chalamal* by the Tzeltals, *elja tu'uk et* by the Mixes, and *ocse taltikpak* (“other world”) by the Nahuas. Although on occasions it is conceived as an upper world and on others as a netherworld, its essential feature consists of duplicating earthly life and showing its possible alterity through the inversion of customary processes. According to Holland [7], the life cycle of the Tzotzil is diametrically opposed from the moment when a dead person enters the underworld sphere because the deceased begins a process of rejuvenation that inverts earthly life, passing from old age to infancy. Once the same number of years from the earlier cycle has passed, the spirit is allowed to return to the world of the living, on the condition it is reborn into another community. At the same time, the alteration is also reproduced in the animal kingdom, where souls return to earth and are reborn in the heart of the same species, provided that they modify their former gender [8]. Indigenous thought formulates in this way a recurring idea in Mesoamerican myths, in which the underworld is not only a site where genders and ages are distinguished, inverting their original position but also the place that permits the conversion of beings into the alterity that corresponds to them by nature.

Indigenous myths indeed seem to indicate that the genealogy of beings is an inherently discontinuous process. More than identity between successive generations, its narratives tend to trace an intermittent line between the sources of creation and the nature of creatures. Instead of establishing an equivalence between both, the narratives try to distinguish between the origin of the creation in such a way that one always produces a different entity. It is as if each creature was the bearer of its own alterity, in which mythological entities are presented as dual figures concurrently masculine and feminine, celestial and telluric. Diverse Mesoamerican myths allude to the native divinity as a split entity, related to the earth and water, which was simultaneously called *Tlalteutl* and *Cipactli*. The origin myth tells of the creation of mundane and divine beings as the result of a process of transformation through which this primordial, at once masculine and feminine being,³ was split into two opposite halves

³ “There was a goddess called Tlalteutl, which is the earth itself, which, according to them, had the shape of [a] man; others used to say it was a woman . . . Later they made the fish Cipactli the earth, which they called Tlalteutl, and they depict it as god of the earth” (*Historia de los mexicanos por sus pinturas* 1941: 18).

to give rise to a segmented universe, divided between the heaven and earth used in myths to explain its diversity, its order, and its movement. A paradigm of duality, *Tlalteuhtl* or *Cipactli* only intervenes in the Nahua cosmogony as the title alluding to the origin, genesis, and the beginning of things, whose fission defines the place of otherness in the overall design of the universe.

In Nahua cosmogony, origin myths not only pose the question of how to produce diversity based on unity, but also the possibility of favoring the former to the detriment of the latter. In proportion to the primordial unity divided into two, its parts are organized into two unequal segments that are as different from each other as light and darkness, drought and moisture, and high and low. Despite its apparent symmetry, several indications suggest that this local conception of dualism is not formulated in terms of peaceful equilibrium. Their myths implicitly proclaim that the poles organizing the universe—heaven and earth, hot and cold, male and female, and so on—are not equivalent in their terms, and they must instead be conceived as a division that emphasizes the predominance of one over the other, thus precluding the possible expression of symmetry in the identity of the opposing segments. According to Jacques Galinier [9], who has set out to examine Indigenous worldviews from the perspective of “asymmetric dualism,” the division of the cosmos responds less to the logic of opposition between concepts and categories and more to a principle of subordination that “encompasses” the lower in the upper segment, although the former may have preeminence over the latter in its overall aspects. Although they may be twins in origin, the parts are gradually revealed as unequal and tend to be ordered in an alternate sequence of domains, so that each segment ultimately gives preeminence to its counterpart.

The tendency to separate what is integrated, dividing unity into differentiated segments is expressed with greater clarity in narratives associated with twins, as frequent in Mesoamerican mythology as in other Amerindian narratives. In origin myths, as Olivier [10] has observed, Pre-Columbian deities are almost always presented as divided entities in that they can integrate their own alterity in the form of a twin that plays the role of alter ego. Formed by the union of two animals, the celestial quetzal and the terrestrial serpent, the name of Quetzalcoatl also meant “Precious Twin” and was linked to the figure of Venus, a heavenly body that is also a twin in its double guise as the Morning and Evening Star. At the other extreme, forming an indissoluble pair, Tezcatlipoca was identified with a two-faced mirror in which men could see the reflection of their inevitable alterity, because it was “an instrument that distorted and amplified the differences between the two twins, one young and the other aged, each reflected in the two faces of the mirror” ([10]: 167). Although this image synthesizes the duality of humankind, including the universe it inhabits, it also reveals what Guilhem Olivier has referred to as an “unstable twinning,” whose primary characteristic consisted of shunning identity between similar entities. Like those Amazonian myths that emphasize the disequilibrium of the parts, considering one twin strong and the other weak, one dark and the other white, Quetzalcoatl and Tezcatlipoca switch their respective positions as their differences increase, in such a way that each alternatively assumed the role of Venus, the Sun, and the Moon, as the cosmogonic cycles evolved. In other words, “the twinning inherent to each deity was found in a state of perpetual disequilibrium” that gave rise to a new solar cycle (ibid.) as if the origin was the result of a constant alteration rather than of a uniform genesis.

On a more general level, Lévi-Strauss had noted that the dualism of Amerindian twins contrasts with the philosophical and ethical sources of Western thought. While

Amerindian mythology sees duality in the form of antithesis, European narratives endeavored to extract a plausible synthesis from them. In Greco-Latin tradition, in which myths associated with Castor and Pollux underscored the similarity of their tastes and thoughts, considering the indivisible union between them, disequilibrium arose outside the identity characterizing the twins. Although born from different parents, one human and the other divine, the Dioscuri formed a unity that gravitated to harmony to the extent that the initial imbalance was suppressed to blur them—“everything occurs as if a constant tendency drove Indo-European thought to erase the difference between twins” Lévi-Strauss [11], promoting unity over diversity through this operation. The narrative from Classical Antiquity thus inverts Amerindian discourse, which begins with unity to seek progressive differences within it. The unstable twinness of the Mesoamerican universe culminates in the negation of absolute identity and it is in this sense divergent from the Indo-European perspective but analogous to that of so many Amerindian myths that organize the world through a series of polar oppositions, without the resulting parts ever taking on a true identity. In this “dualism in perpetual disequilibrium,” as Lévi-Strauss [11] referred to it, it is not only possible to recognize the key to Amerindian thought, but also its propensity to openness, that space that dualism leaves open on the other side of the universe for identity to find its limit, eluding recognition of itself.

Just as the stories of twins, which contain their own alterity, Indigenous narratives propose similar origins and heterogeneous results in the creation process. Just as those who endeavor to avoid their similarities, the gods make an effort to create variations on a standard model and proceed to divide temporal unity into differentiated beings and segments in such a way that the inhabitants of an earlier era no longer correspond to the beings of the subsequent periods. Men and divinities participate in creation in a remarkable way—they are not content to reproduce the same essence that preceded them, instead, they opt to produce a difference within each unity and each work. Although this capacity to produce difference finds its clearest expression in an unstable dualism, its functioning demands that heterogeneous elements form part of the creation, for this to integrate the alterity corresponding to it by nature at its very heart. The conception of an entity will not, therefore, be that of a constant, indivisible identity endlessly reproduced throughout history, but rather that of an origin different from that of its own destiny. Indigenous narratives indeed contemplate the possibility of a foreign origin, external to the local genealogy, whose antecedents are generally situated in distant times and diverse places.

In this context, it is worth recalling that one of the foremost aspects of the conception of time among the ancient Nahuas was the division into eras known as “suns,” alluding to essentially discontinuous periods culminating in later transformations. As López Austin [4] observed, “It was believed that the solar dominion had been given to several gods in succession and that the epoch of each one had ended in an imbalance leading to chaos, making a new creation of human beings necessary.” Myths about the temporary succession, consecrated in the *Leyenda de los Soles*, not only claim that the creations followed an irregular sequence, marked by successive ruptures, but also that each period altered the physiognomy of earlier creatures—the different species of men gave rise to some beings transformed into monkeys, others into fish, and others into birds, through a substantial modification of their bodies and their alimentary habits. In this discontinuous process, subjected to a constant disequilibrium, contemporary humans only originated in the alterity that had characterized earlier generations, generally composed of dwarves or giants who were unsuccessful in transmitting their attributes to future generations.

3. Incorporating the enemy

The transformations that took place over time found similar correspondences in spatial displacement. The story of migrations in Mesoamerica indeed supports the hypothesis that all displacement was conceived of as a form of alterity, in that it modified the initial identity of the protagonists. In Highland Guatemala, the mythical migration toward the east was generally accompanied by an additional value—its meaning consisted of a circular journey of a ceremonial nature, originally undertaken by tutelary deities, who set out from the Quiché region and covered a part of south-eastern Mexico (see **Figure 1**). Through this trajectory, the ancient progenitors successfully legitimated Quiché control over other populations in the highlands, because the circular journey justified the existence of new military techniques, the presence of deities imported from Tula, and the exercise of shamanic powers learned during the pilgrimage. According to the *Título de Totonicapán*, “all the signs of sovereignty were joined and brought by those who were from where the sun rises,” in an extremely broad list of exotic objects that included shells, animal bones, bird feathers, and a variety of musical instruments. These objects, imported from abroad along with the nine tutelary divinities, clearly indicated that the ancient progenitors had assimilated

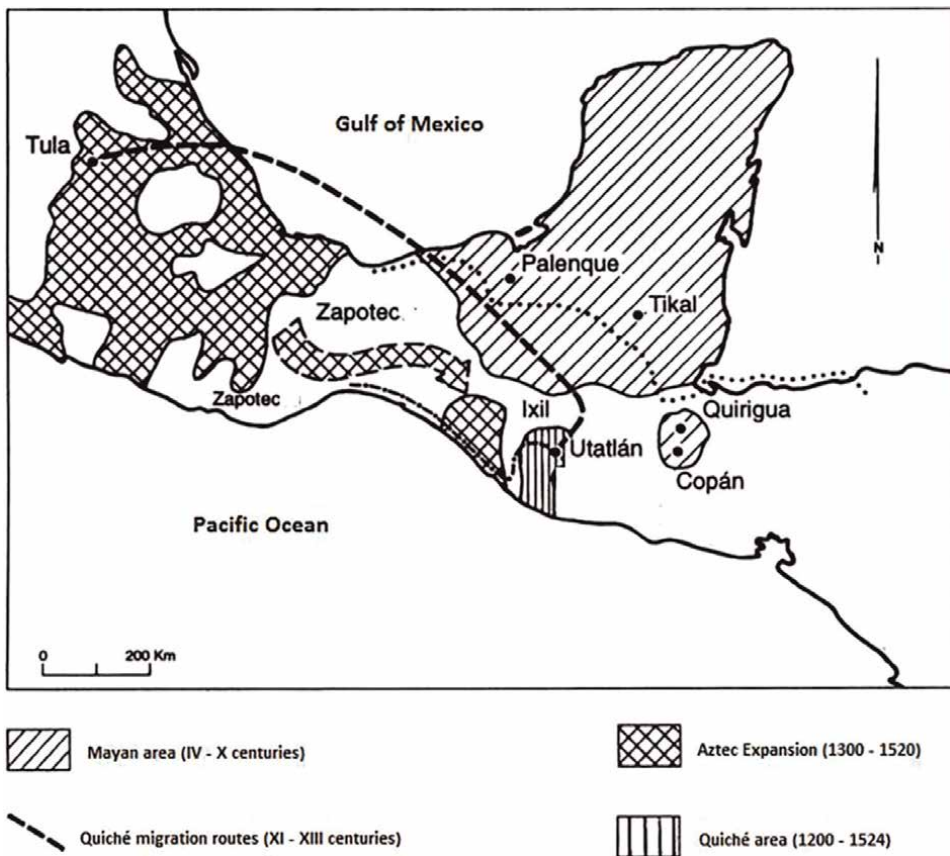


Figure 1. Quiché migration routes (XI–XIII centuries). Source: Piel [12].

shamanic knowledge, in addition to a new political organization, a new spirituality, and a complex ritual procedures alien to local culture.

As Craveri [13] has noted, the assimilation of outsider elements in the very cultural scheme makes it possible to interpret the Mexicanization of Highland Guatemala as “a process actively developed by the very Quiché groups, more than the passive assimilation of cultural patterns imposed by foreign conquerors.” The openness to outsider elements was in fact established in the ancient rivalry between Quichés and Rabinals, whose relations were made explicit in that fifteenth-century document that theatrically narrated the conflicts of *Rabinal Achí*, the antagonist of Quiché territory who ends up sacrificing its ruler. According to the plot of the work, Rabinal Achí not only conceded to his adversary the virtues corresponding to his military posts, such as valor, drive, and wisdom, but also sees in him the presence of an indispensable foreigner. In his *Grammaire de la langue quiché*, published in 1862, Brasseur de Bourbourg reproduces the terms with which Rabinal Achí addresses the sacrificed ruler:

I will recommend to the brave, the warrior that he not make noise, that he not move, that he enter the grand palace, the big house, because there he is esteemed and honored, in the grand palace, in the big house, because he has twelve elder brothers and twelve younger brothers, the guardians of the treasure, of the precious objects. He has not yet manifested his presence, his appearance. Is this the brave [one] who came to complement them, to perfect them, in the grand palace, in the big house? ([14]: 78)

Although it is possible to recognize in this drama an unusual vision of the enemy, whose figure plays a preponderant role, it is possible to identify in the text a general operation that turns alterity into an indispensable mechanism. Between identity and alterity, the text opts for a disconcerting realization—it grants difference with the capacity to forge an identity that remains inherently empty. As those Amerindian myths that grant a place to outsider figures from the moment of their creation, the place of the other was already in some way prefigured in thought that contemplated its existence as a necessity, indispensable for an open dualism of figures that are both alien and familiar. More than a threat, the enemy is presented for Rabinal Achí as a favorable solution, as he perfects and complements the enclosure that receives him, where he is “esteemed and honored” by brothers who have ultimately integrated him into their own lineage. In an ontology in which the other is not only conceivable but also indispensable [15], the outer world assumes a preeminence that can only be measured in the variety of elements it supplies to its counterpart.

Faced with the encounter of the Spanish and Indigenous worlds, historians have noted that neither native resistance nor absolute conversion can fully explain the conquest process. In the Caribbean zone, shortly after the initial contact, the Mayas of Cozumel followed the instructions of the new invaders and kept watch over the images of Christianity, taking part in the encounter with Spanish ships with the figure of the Virgin Mary on board their canoes. Farris [16] has pointed out that even Maya towns not under Spanish control invited Catholic priests to give their blessings to the inhabitants and they maintained Christian crosses at the heart of their own communities. Following this logic, the Mexicas of the highlands asked Cortés to intercede with his god to make it rain, and for this purpose, they placed images of the cross and the Virgin among the idols in the Templo Mayor of Tenochtitlan [17]. None of the chronicles mention reactions of opposition, acts of resistance, or Indigenous responses that denounced the sacrilegious character of those images. Instead of opposing the

profanation of their temples, in the mid-sixteenth century, all Indigenous homes wished to possess an image from the Christian book of saints, just as its members assumed the names and attire of the foreign enemies. Around 1575, as Lockhart [18] has noted, it was rare for an indigenous home to lack Spanish objects or products, from fig trees to crates, metal axes, and knives. Beyond their obvious utility, European apparel was incorporated into Indigenous homes with the same natural ease as the saints that occupied the heart of their communities, where there was usually a “house” to shelter them.

It is significant that the purpose of those constructions, known as *santocalli* (“saint’s house”), was not to perform ceremonies, but rather to provide a residence for foreign effigies, which later became the emblem identifying each community. The data examined by Lockhart indicates, however, that the incorporation of the new figures, represented in saints, archangels, and virgins, was in some way subject to oneiric intentions, through which the nature of the chosen was revealed. According to the legend of Sula, in the vicinity of Chalco, the selection of the patron saint had not been the result of a conscious process, but rather of a dream shared by two elders of the community who assumed the task of seeking the new patron saint of the community on their dream journeys: “Sleeping on the matter, each had a dream in which Santiago appeared in great splendor, declared himself to be from Persia (i.e., far away), and announced that he would be Sula’s saint” ([18]: 236). As many elements benefited communities, and like origin myths, the saints were almost always beings who came from distant places and conferred their name to towns, prompting a change from their ancient identities. While some settlements acquired the status of *santopan* (“where there is a saint”), others conferred the new visitors with the function of granting a new name to ancient towns, modifying the identity that previously defined them.

Accounts from the colonial period tend to insist that the guests in the local church, populated by foreign images and effigies, came from places different from that the enclosures that now housed them. Just as their own parishioners, who were born in caves or springs, the saints came from faraway places and in that sense foreign figures that moved from the outside to the heart of communities in New Spain. In the mid-eighteenth century, the Nahuas of Zitlatla deemed their patron saint had undertaken a journey up from the Costa Grande to the Montaña of Guerrero, choosing their community as his permanent residence [19]. Instead of insisting on his vernacular origin, as in the case of Spanish communities, the Nahuas reaffirmed the value of their images in the distance that separated them, marking in their origin myths the essential difference between sites of origin and destination. The accounts of “traveling saints,” numerous examples of which exist, not only show a constant narrative throughout the colonial period but also reveal that Indigenous thought inverted the process of Spanish identity. While this started from a place of origin, from which it expanded to faraway confines, native identity is shaped by way of an inverse operation, in which it attracts elements and entities of diverse origin, whether exotic apparel or foreign saints, to its center. More than the effect of religious syncretism, the process of assimilation displays a different disposition toward the outer world, given that it ceases to function as a threat to become a necessary source of resources. In the mid-sixteenth century, to paraphrase the brilliant observation of Viveiros de Castro [15] on the Tupinambá of colonial Brazil, the Nahuas were already a consumer society that willingly incorporated readily available objects and images, even when they represented emblems of foreign enemies.

Several researchers have noted that the evangelization of New Spain was practiced on a population that had already been accustomed to syncretic processes and religious condensations for centuries [20, 21], in an interethnic context in which the flow of images, objects, and concepts was no doubt frequent. But this incessant trade, made in daily transactions and reciprocal exchanges, does not explain the value that Indigenous narratives give to external components, whose emblems displace elements from earlier traditions with relative ease. Just as their predecessors, who tended to return to battles with the effigies of defeated towns to employ them for ceremonial purposes, the Indigenous people of New Spain integrated into their core the images of their new enemies, granting them a similar ceremonial value and placing them at the center of their own communities. Incorporating foreign elements indeed seems to be a regular procedure reproduced before and after the colonial period, as if local institutions demanded the establishment of exogenous components. In this process, as noted by Hernández Dávila [22], syncretism ceases to be a failed operation to instead become a logical consequence of cultural contact, because it provided pieces contemplated in space that were inevitably required. If it is possible to identify the common factor of Nahua ontology in this operation, it is also possible to recognize in it the “openness to the other” in which Lévi-Strauss [11] saw the key to Amerindian thought.

4. Foreign souls and local temples

In a recent study, Pedro Pitarch [23] has made the observation that Indigenous souls personify the antithesis of local identities. Instead of prolonging similarities between body and spirit, the Tzeltals of Cancun opt to define their interiority through soul entities that are different from the perspective of corporeal identity. As wild animals, atmospheric phenomena, or anthropomorphic figures that take on the physiognomy of ancient colonizers, souls are defined by being elements that dwell in other bodies, in principle different from the corporeal space containing them. Indeed, despite the fact that the repertoire of possibilities is extremely broad, the common denominator of these spiritual beings is that they do not participate in the Indigenous condition of their bearers. Entities known as *lab*, as well as the soul contained in human hearts, assume the appearance of foreign effigies distanced from the Indigenous model and instead take on the features of their ancient invaders. Whether animals, meteors, or anthropomorphic figures, the *lab* refers to conduct and physiognomies that are typically Spanish and that arose only during the colonial period, as in the case of priests and scribes who ultimately became integrated into the imaginary repertoire of Tzeltal souls.

The Indigenous model thus inverts the Western conception of the person. Not only does it avoid equating the humanity of bodies with the humanity of souls, but it also postulates that the latter form an essentially heterogeneous group that comes from the exterior world. Although the Tzeltals tend to distinguish between the plane of interiority and that of exteriority, the Indigenous response is to affirm their interiority is an external reality, in the sense that souls are deep down foreign entities, and accordingly, intrusive elements in the space containing them. Pitarch suggests that the dualism between the body and soul, marked by the ontological difference of its components, finds its correspondence in a social model common to numerous Mesoamerican communities, where Spanish churches and town halls occupy the center of inhabited space, while the outer perimeter houses the Indigenous component of the town. As is the case of souls within the body, vestiges of colonial history are situated

inside the interior of the place, as spiritual centers that originated in the initial contact with Europeans. The general conclusion does not, therefore, consist of supposing that the formation of contemporary bodies and towns is only the product of a colonial process, but rather of noticing that the “transcendental premise for the constitution of the Indigenous person and society is the interiorized presence of foreign enemies” ([23]: 35). Instead of expressing the cultural continuity of their own past, the center of bodies and spaces is defined by the interior world alien to their development, and thus external to the vernacular traditions that we tend to employ to delimit our own identities and our own genealogies.

Therefore, it is not by chance that ancient constructions functioned by means of similar principles, according to internal legacies composed of elements imported from the exterior, in the form of burials or offerings. Prior to the conquest, in the ancient capital of Tenochtitlan, temples tended to house objects of diverse provenance that were joined with human and animal bone remains, in diverse complexes including figurines and ornaments, ceramic vessels, semiprecious stones, seashells, and pieces produced by earlier societies or from faraway sites. What is striking is the interior diversity of the precincts that contrasts with the relative homogeneity of temples, generally pyramidal structures with ascending stairways and platforms, as well as the fact that most of the offerings originated in radically different settings from the locations that would ultimately house them. According to the estimates of Matos Moctezuma [24], 80% of the offerings from the *Templo Mayor* came from regions other than the Central Highlands of Tenochtitlan, primarily from the modern-day states of Puebla, Oaxaca, and Guerrero, as well as coastal zones of the Pacific and the Gulf of Mexico. Although these products were deposited in the interior of a precinct that represented the center of the universe, situated more than two thousand meters above sea level, it was not a function of their similarities with local nature and culture, because numerous offerings contained fish, birds, and reptiles not native to the environs of the Mexica capital. López Luján [25] has noted that some manufactured objects, such as Olmec and Teotihuacan masks, had been made by cultures and civilizations separated by centuries from the Mexica Empire, which tended to extract offerings from tombs of foreign societies to integrate them into their ritual repertoires (**Figures 2 and 3**).

Some interpretations indicate that the offerings deposited in the *Templo Mayor*, whose structure was conceived as a cosmic mountain, were conceptually equivalent in Indigenous thought to seeds, fulfilling the same regenerative function as bones and ashes [26]. In this regard, it is worth recalling that the ancient Nahuas thought of hills as storage vessels from which new populations were born, so that after birth, peoples emerged and proceeded to build pyramids essentially analogous to fertile mountains [27]. Consequently, in its capacity as a cave or “sacred mountain,” the pyramid of the *Templo Mayor* was a cavity that not only brought objects together but also harnessed symbolic “seeds,” in other words the sources of entities that would come to life after passing through their inevitable transformation. López Austin and López Luján [28] have also proposed that these seeds, simultaneously understood as hearts or inner soul entities, were actually “souls” of the creatures deposited in the heart of the sacred precinct. Alien to the space containing them, their diversity was akin to the strange interior nature in which Pitarch has seen the enigma of Tzeltal souls, whose figures reveal the image of uncommon professions, exotic animals, and foreign enemies.

The explorations conducted in the late 1970s confirmed what colonial sources had indicated earlier regarding the pyramid of the *Templo Mayor* as a dual structure with twin temples at the summit. Although both spaces were west-facing, the southern

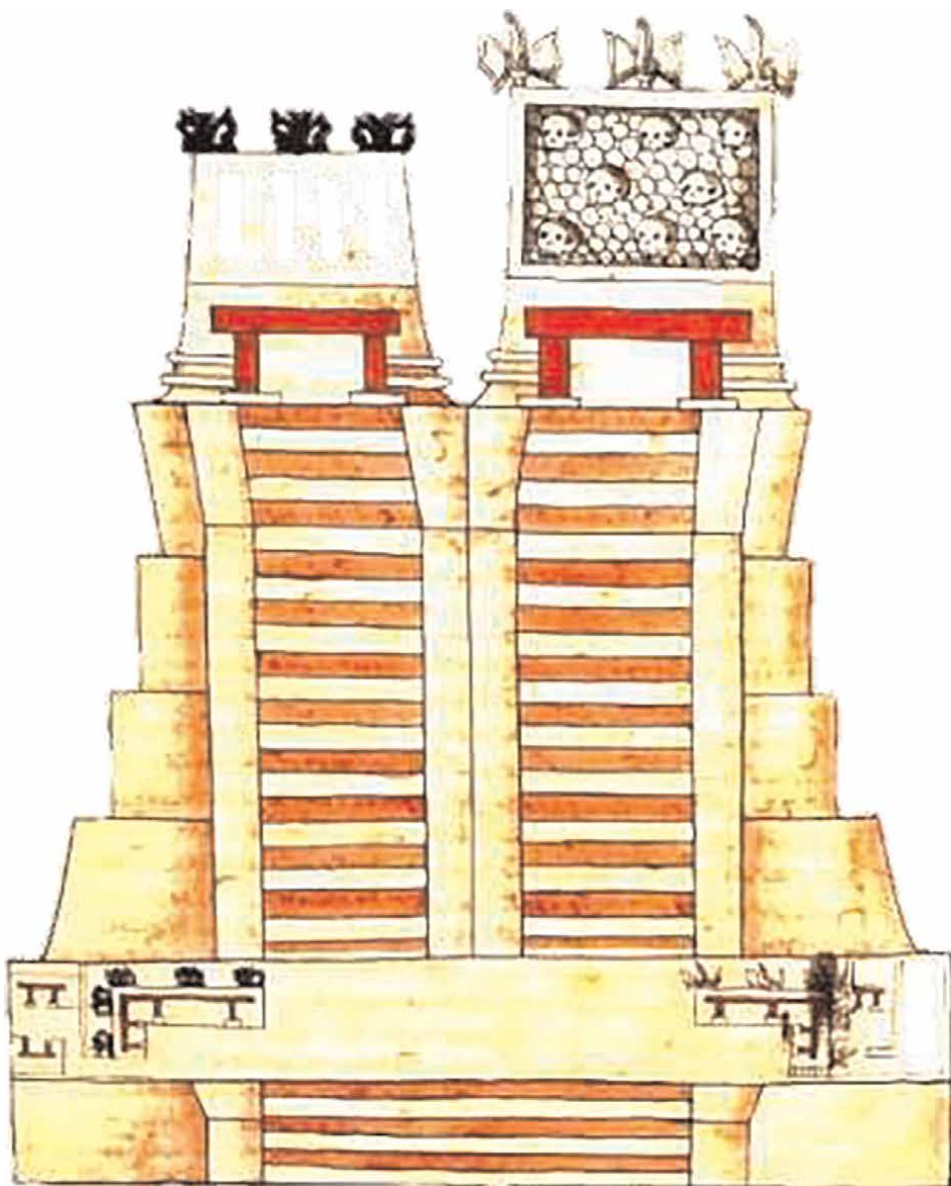


Figure 2.
Templo Mayor of Tenochtitlan Durán Codex (1587).

temple was consecrated to Huitzilopochtli, the deity associated with warfare and hunting that had guided the Mexicas on their long pilgrimages. According to the principle of duality, the opposite side was dedicated to Tlaloc, an ancient local divinity that differed from his counterpart in his agricultural and pluvial character, closely tied to the Olmec and Teotihuacan horizons. As in the case of Amerindian twins, the asymmetry of Mesoamerican dualism granted singular preeminence to the foreign deity, outside the local pantheon, and thus designated the temple with his name (“*Cu de Huichilobos*” or “*Huitzilopochtli Temple*”), granting his chapel greater attributes and dimensions than the space dedicated to the local deity. The preeminence of the foreign



Figure 3. Offering in Templo Mayor with more than four thousand organic remains Source: Gaceta UNAM, Junio 22, 2020 https://www.google.com/search?sxsrf=APqWBvZwmfNB5xd72yggwJO2dt_Su5ug:1646254055321&source=univ&tbm=isch&q=dibujos+del+te+mplo+mayor+con+ofrendas&fir=g8iuw5PZxdp6CM%252CHFMi1ayUzqNdsM%252C_%253BoFISXE_VLTT7LeM%252CHFMi1ayUzqNdsM%252C_%253BNM_HI5jU6EmCcM%252CzahGtipgKD2lQM%252C_%253B4- oekYAifMQAnM%252CzahGtipgKD2lQM%252C_%253BY64nnoS4ixyKlM%252CJwnu89e2FNkLlM%252C_%253BKeDvluT8UEhzwM%252CmztBTConAer3uM%252C_%253B6QJmPV9pn1FOBM%252C_GHsQCr_PDuC4XM%252C_%253Bbsga8zFTYgLWM%252C_MFGmGCOSSPL8KM%252C_%253BfMEb_DjZvoGmAyM%252Crb5GHJAIXQ4niM%252C_%253B32effuyourwXDM%252CAWbfciZuTWaoHM%252C_&usg=AI4_-kT22uJxbMSVMW5aoueqMbpqKuyBxg&sa=X&ved=2ahUKEwinm7Whpqj2AhUDJEQIHjdDhEQjkE egQIBBAC&biw=1600&bih=757&dpr=1

god can also be noted in a document describing incidents prior to the construction of the temple, which tells of the journey of a Mexica explorer in the interior of a spring near the lake zone, where Tlaloc confers the space to the new divinity and confirms his will to grant him a place at the heart of his domains. According to the descriptions in the *Códice Aubin*, the ancient rain god, owner of hills and springs, addressed Axolohuan as follows:

Now my son Huitzilopochtli has come. This is his home. He is the only one to be loved, and he will remain with me in this world (Códice Aubin, cited in [25]: 91).

Through this recognition, Tlaloc not only confirmed the ancient Mesoamerican propensity to convert an outsider into a familiar entity, but it also reproduced in an almost literal way the terms that Rabinal Achí sheltered his enemy in the “grand palace,” as cited earlier. Just as in the story between Quichés and Rabinals, the local deity indeed incorporated into the center of his territory a warrior who came from the outside, calling him “my son,” in the same way that the Maya ruler counseled his adversary to enter the “big house,” where he had “twelve elder brothers and twelve younger brothers,” to “complement them” and “perfect them.” The mechanism of alterity inherently operates in both cases, as outsiders to the local group occupy the interior of precincts and tend to generate an unstable twinness, allowing each unity to successively alternate the sphere of its domains. Ideologically, as López Austin [4] has observed, the predomination of divinities was based on the temporal character of its powers so that a new character could justify his presence by claiming the end of the previous era, as was no doubt the case at that time of the Mexica divinity occupying its new precinct.

The fact that the gods did not have absolute individuality, because they fused and split with the same ease that their attributes shifted reveals an unstable identity that

oscillated between different figures and opened the possibility of identifying themselves, even with their adversaries. Consequently, it was not strange for local authorities to assume the identity of the patron god of their enemies, wearing its emblems and accouterments,⁴ instead of adhering to the affiliation between creatures and creators, exclusive to societies accustomed to monotheism. Accustomed instead to metamorphosis, uncertain origins, and variable identities, gods and creatures periodically practiced change of skin, perhaps with the intention of observing things from the enemy's viewpoint. The custom of covering the body with the skin of captives, common during celebrations dedicated to Xipe Totec, was in this sense analogous to certain narratives whose characters tended to wrap themselves in the skins of jaguars and other predators, because in these cases "the transformation, the barriers of human perception are broken, and he sees in wild animals much more than others perceive" ([25]: 435). In both circumstances, indeed, the main objective consisted of obtaining the enemy's skin and employing it as an instrument of perception, thus fulfilling a function similar to that of body paint and facial perforations, above all if one considers that "drilling with eyes" and "opening up ears" were actions that implied a form of learning.⁵

In this context, the notion of *ixiptla* takes on particular importance, as well as semantic displacements stemming from its essential root. Although the term referred equally to the image of a deity, the human being who represented it, and the sacrificial victim who donned its attributes, its derivations came from the particle *xip* that indicated "skin," "husk," or "covering" [25, 30]. Hence the word was employed to identify the officiants who wore divine attire, alluding to a personification that was covered with the vestments of a being alien to the wearer's condition. According to the translation that Dehouve [29] offers, the notion of *ixiptla* can be understood as wrapping the organs of sight, hearing, and the voice, insofar as it implies covering oneself with the accouterments of a god and seeing, hearing, and speaking as the god. Consequently, the term suppressed the distance between representation and the represented, between the personifying being and the personified entity, given that the former was conceived as the substance of an outer physiognomy that guarded an inner god beneath the skin, like those Teotihuacan figurines that housed in their body a multiplicity of foreign beings, appropriately known as "host figures" (Figures 4 and 5). These figures were indeed hosts of alterity, receptacles of human and animal forms that sheltered within them a variable number of diminutive effigies, turning them into covers of an interiorized collectivity.

What is it that these figures actually contain? As if each character were the carrier of their own underworld, these pre-Hispanic figures do not seem to express the indivisible unity of the person as much as its divisible and fragmentary character. In contrast to deities, which tended to display their interiority on the skin, host figures adopt a human appearance and they display a relatively uniform physiognomy, although they hide within them a multiplicity of inner essences. The variation of forms makes it possible, however, to suppose that each essence had its outer manifestation and that the variable group constituted a true acquisition, in the sense of a

⁴ As Guilhem Olivier has observed, the connections between Mexica identity and that of their enemies are evident in the enthronement of the Mexica *tlatoani*, designated "our beast, our enemy" (*totequacauh*, *toyauuh*), who was also said to speak "in a foreign language." From there "the fact that the Mexica *tlatoani* adopted the identity of the god of his principal enemies to ritually generate Huitzilopochtli-Yaotl" takes on greater meaning ([2]: 652–653).

⁵ According to Dehouve, this proposal is fully confirmed by texts in Nahuatl, from which it can be inferred that "drilling with eyes, opening up ears" meant "to educate" ([29]: 78).



Figure 4.
Host figure of Teotihuacán Classic period (250–650 d.c) Museo Diego Rivera Anahuacalli Mexico.

foreign element whose essence was incorporated into inner powers. Thus, the figures housed in the interior of the bodies are of a nature distinct from that of their hosts, and in some cases, as the first figure displays, they come from faraway regions ethnically differentiated from Teotihuacan culture.⁶ The precedence of interior figures, as well as their variable and heterogeneous character, indicate that Mesoamerican dualism conceived alterity as a constituent part of personhood, generally divided into a recognizable physiognomy and an interiority alien to its condition.

The notion of internal alterity, which in the West appears around the late nineteenth century in the form of an unconscious enemy, designates the configuration of a subject divided into a known exterior and an unknown interior.⁷ However, whereas according to Freudian theory, the unconscious is *the other of oneself* [32], whose

⁶ In a typically Teotihuacan style, the motifs that decorate **Figure 4**, with seated figures at both ends and seen in profile, are instead of Maya origin and thus are different from the outer body that housing them.

⁷ As is known, the critique of the subject was one of the essential reflections in the work of Freud, who considered the principal enemy of the subject was the subject himself. With the idea of the unconscious enemy, as Laplantine [31] notes, “psychoanalysis introduces the contradiction and the negativity of this notion, that cannot have anything to do with identity matters,” because the subject ceases to be owner of himself.



Figure 5.
Host figure of Teotihuacan style Classic period (250–600 d.c) Museo Regional de Antropología Palacio Cantón Mérida.

primordial function consists of betraying the intentions of consciousness, Indigenous souls are presented as instruments of collaboration that always lend weight to the individual, whether as devices of protection or as a means of dialogue with the outside. In comparison to the unconscious, an inexhaustible source of unease and an obstacle to perception, the internal components of the person tend to be instruments of a vision that aspires to be in different places and to perceive the “cosmos” from variable perspectives. Therefore, the Indigenous version of alterity proposes traveling a path parallel to that of psychoanalytic theory; instead of reducing the interior sphere, diminishing its effects on the exterior, the receptor spaces incorporate foreign segments and proceed to multiply their quantity and their source to see things from the viewpoint of their enemies. The “discourse of the Other” is not, in this case, the interpretation that subverts the speaker’s narrative, but rather the necessary condition of dialogue with the underworld, whose inhabitants produce a discourse that is, by nature, distinct. If shamanism and psychoanalysis share a commonality, as Claude Lévi-Strauss [33–36] proposed, that field must be sought beyond the formal operations of myths to decipher, among other things, their inevitable ontology.

Additional information


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An Islamic Perspective on Ecology and Sustainability

Moustapha Kamal Gueye and Najma Mohamed

Abstract

Islam, based on the prescriptions of the Holy Qur'an and the Sunnah of Prophet Mohammad (Peace be upon him), provides guiding principles on the relationship between humans and the rest of the creation. A fundamental aspect of that relationship is that humans are a part of the creation, including known and unknown living creatures. Islamic teaching emphasises the specific ability of humans to act with understanding, compared to the rest of the creation. Such pre-eminence comes with practical obligations to preserve and use natural resources, be it water, land, or animals sustainably and within limits. The article presents the ecological ethics of Islam and describes how it is being revitalised through education. Finally, it presents principles and means to act responsibly on key global environmental challenges such that society can function in harmony with itself and with nature.

Keywords: religion, Islam, ecosystems, environmental sustainability, sustainable consumption and production, nature and humans, distributive justice

1. Introduction

This paper considers how Islam, through the prescriptions of the Holy Qur'an and the Sunnah of prophet Mohammad (Peace be upon him), provides guidance on the relationship between humans and the rest of the creation. Muslims consider the Holy Qur'an as the message from God the Almighty and Creator of the universe, as transmitted to humanity through the messenger and of prophet Mohammad (Peace be upon him). Several verses of the Holy Qur'an speak to the creation of the heavens and the earth, and all that is between them. If applied correctly and concretely, Islamic principles can highly contribute to the protection of the environment and the conservation and sustainable use of natural resources.

This starts with the conceptual understanding of ecological ethics of Islam, according to which Muslims believe that the universe has been created in measure and balance, with and order that humans should refrain from disrupting. As a part of creation, humans stand in a specific state of privilege owing to their ability to act with conscience. Such a situation of privilege of humankind implies an immense responsibility to act as trustee in the preservation of the Creation, including the protection of the environment.

From a more practical perspective, Islam prescribes a behavioural attitude towards all elements of the Creation, based on the trusteeship and the notion that everything in the Creation has an intrinsic value, and that nothing has been created without a purpose. From the consumption of resources, like water and food, to how a Muslim acquires and disposes of his/her wealth, Islam provides practical guidance for behaviour which are not only moral ethics, but religious obligations. Such is the case with the obligation of the practice of Zakat (obligatory tax) and the fasting during the month of Ramadan. Such guidance has relevance in the context of current environmental challenges such as climate change, the loss of biodiversity, pollution and sustainable production and consumption.

The first part of the paper presents the conceptual basis of ecological ethics in Islam and discusses environmental education in Islam. The second part discusses select environmental policy issues facing the world today and how Islamic religious principles and obligations help address them. The paper concludes with insights and suggestions for further research and analysis.

2. The ecological crisis: a planet and a people out of balance

Muslims believe that the universe has been created in measure and balance (*mīzān*) [See The Moon 54: 49]¹. It is mentioned in numerous instances in the Qur'an that humankind should observe the order in Creation and should not cause corruption (*fasād*) therein after it has been set in order. Muslim scholars writing on the ecological crisis regard excesses, both in the unbridled consumption of natural resources and the production of waste, as transgressions of this balance. Most ecoIslamic writers 'interpret' the destruction of the environment as an impairment of this balance for which humanity will be called to account [1, 2]. In the words of Abdul-Matin [3]: "By treating the natural world as though it were our dumping ground, we risk disturbing the delicate balance (*mīzān*) that exists in nature". *Mīzān* when applied to ecological balance—the balance that exists between the different components of our earth system—has a strong correlation with the notion of ecological limits, notably expressed in the concept of planetary boundaries.

For Muslims, there are several key points to extract from the concept of *mīzān*, notably, that the measure in which the world was created was set by the Creator, and "must not be transgressed at any level, whether at that of the harmony of nature or in the spheres of human justice, morality or everyday commerce" ([4], p. 41).

And as to the sky—it is He alone who has set the balance of all things so that you might not transgress the just balance. Therefore, shall you establish weights and measure with justice. And you shall not by fraud diminish the balance. [The All-Merciful 55: 7-9]

The second point which can be gleaned from *mīzān* is that Creation is an inter-related system in which all things, from the delicate butterfly of the Himalayas to the mysterious sea creatures inhabiting the ocean depths, serve a purpose, making "the world one telic system, vibrant and alive, full of meaning" ([5], p. 25). Creation, in addition to providing a means of subsistence to humans, also plays a role in fulfilling

¹ The verses from the Qur'an have been drawn from the Yusuf Ali translation which is included in the references.

the needs of other creatures, in a manner created by Allah² [See The Stone Valley 15: 19–20] and [Tāhā 20: 50].

*And as to the earth—it is He alone who has laid it down for all living creatures.
[The All-Merciful 55: 10]*

Every individual creature exists as a sign of God which He has given form, nature and guidance and to which He has assigned a specific role [6]. The proportion and interdependence of the natural world is set forth time and again in the Qur'an, revealing the connections between all things [7]. The final aspect of *mīzān* relates to its implications for the wise utilisation of the earth's resources since God has created "...everything related to life in a most delicate balance" [The Stone Valley 15: 19]. Yusuf Ali, in his commentary on this verse says that "every kind of thing is produced in the earth in due balance and measure...an infinite chain of gradation and interdependence" ([8], p. 640). Balanced usage of the earth's bounties, and the need to take reasoned actions to preserve this balance should thus be the guiding factors in utilising the natural resources of the earth. Özdemir [6] suggests that the Qur'anic verses pertaining to *mīzān* would be sufficient in developing Islam's ecoethic since they "establish, first, that justice and balance are universal, second, that this universal balance is created by God, and third, that humans must attempt both to comprehend this universal balance and to follow it in their social life as well as in their interactions with the environment." What then is the ecological ethics of Islam, and how is it being applied today?

3. An overview of the ecological ethics of Islam

Muslims own a fair share of the global concern around the earth's health and well-being and religious teachings continue to shape their values, beliefs and attitudes towards life - including the environment. From the *minbars* (pulpits) of Cape Town to the *masājīd* (mosques) in Morocco, Muslims are rediscovering the environmental teachings of Islam and putting these into practice. A burgeoning movement, actively voicing its concern about the ecological crisis; unearthing the ethical teachings of Islam as it relates to the human-environment relationship; and increasingly striving to implement practical initiatives based on the ecological teachings of Islam now exists [9].

Ethics is about the principles which guide our actions, the way we live and behave, including our interaction with the natural world. The ecological ethic of Islam presents an example of liberation theology since caring for the earth and humankind is a religious duty focused on just action in the life of this world. It is an environmental imaginary, based on the sovereignty of God, the responsible and just trusteeship of humankind and the value of all Creation. It also highlights the importance of religion as a vehicle for social and environmental change. Concern for the environment is deeply rooted in all fields of Islamic teaching and culture. The implications of key principles in Islam, such as *tawhīd* and *khilāfah*, the oneness of God and human trusteeship, has profound implications that shape human interaction with Creation (*khalq*).

² The Arabic term Allah, means the One True God is used interchangeably with the word God in this chapter.

Tawhīd is often put forward as the key principle underlying the green ethic of Islam. This principle, which centres upon the Oneness of the Creator, spells out clearly that the Owner, Creator, and Sustainer of the entire universe is Allah. His Oneness infuses the entire environmental worldview of Islam with the recognition that nature originates from Him, is purposive, and functions in accordance with His Will. Khalid [10] calls *tawhīd* the “bedrock of the holistic approach in Islam” as it affirms the interconnectedness of the natural order, the creation of One God. Indeed, it is *the* principle which gives the religion of Islam its distinctive morphology and makes the ecoethic of Islam wholeheartedly theocentric.

Humans have only been appointed as trustees on earth, holding it in usufruct, answerable for the just and responsible discharge of this trusteeship in accordance with Divine Laws. This trusteeship, or *khilāfah* is further shaped by the belief that humans, in their servanthood, are accountable for all their actions. True *khilāfah* (stewardship) is thus not about dominion, mastery or control over any part of creation, but is centred on responsible trusteeship, cherishing and carrying out the capabilities entrusted to human beings with humility and obedience to the laws of the Creator in all human endeavours.

The ethical notion within every human being, the ability to distinguish between right and wrong, is the main reason why humans have been appointed as vicegerents on earth and accorded a central position in the natural order [11]. However, this metaphysical exaltation of humans is linked to a weighty moral burden - to adhere to a code of action reflecting the best social behaviour and highest ethical values [12].

The term *khalīfah* has also been translated as steward, deputy, viceroy, guardian and vicegerent. Vicegerency covers every aspect of life and essentially tests humanity’s just exercise of authority over those within their stewardship. *Khilāfah* is therefore a responsibility and a trial by which human beings will be evaluated in terms of who has done the most good, acted according to Allah’s purpose, served humanity and shepherded those under her care [13]. As the Prophet Muhammad (Peace be upon him) so eloquently uttered, “Each of you is a shepherd and will be answerable for those under his care” (Ṣaḥīḥ [14], p. 1(853), 304).

In her relation to the Creator, a Muslim is thus a *trustee* and *servant* on earth, with the responsibility of living in kindness, compassion and justice with all of creation and caring for the gift of nature in accordance with the guidance of its Bestower – which is found in the Qur’an and in the actions and saying of the Prophet Muhammad (Peace be Upon Him). In relation to creation, humankind enjoys the rights – as do all other living beings, to partake of nature’s bounties, but humans are at the same time a *partner* of Nature, unified in praising and glorifying the Originator of the Universe.

Nature as the divine book of creation should, in the same vein, be treated with respect and reverence. The early verses of the Qur’an is an invitation to contemplate upon and observe natural phenomenon in a quest for meaning, to look to nature and to observe its perfection and order and from there, to deduce the Oneness of God [6]. Creation (*khalq*), which is a reflection of divinely-arranged structure and order, is deserving of care and respect since it possesses inherent value as the signs of Allah, ecological value as part of the integrated system which He designed, and utilitarian value in sustaining both humans and the rest of creation. Thus, while humans have the right to partake of the natural bounties of the earth, these rights must be tempered with moderation, balance and conservation. When nature is disrupted by evil human forces, such as misuse, destruction, extravagance, greed and waste, corruption (*fasād*) will appear on the earth. Muslims are repeatedly forewarned in the Qur’an against causing corruption (*fasād*) on earth, by exploiting and oppressing

the weak and poor, and misusing, polluting and wasting natural resources, created in measure and for the benefit of all.

Corruption (fasād) prevails in the land and the sea because of all the evil that the hands of humanity have earned—so that He may cause them to taste something of that which they have done—so that they may return in penitence to God.
[The Byzantines 30: 41]

Instead, Islam urges Muslims to observe the rights of others, both present and future generations, human and non-human, and to live in accordance with the teachings of the religion and to return to their *fiṭrah*, the beautiful deepest human nature which has been gifted to humanity. This notion is vividly illustrated in the following verses:

So set thou thy face steadily and truly to the Faith: (establish) God's handiwork according to the pattern [fiṭrah] on which He has made mankind: no change (let there be) in the work (wrought) by God: that is the standard religion: but most among mankind understand not. [The Byzantines 30: 30]

Ethics in Islam seeks to achieve and establish the wellbeing and ensure the welfare of the entire Creation. This ethic is increasingly making its way into the actions and daily life of Muslims – in the building of mosques, in the discharge of charity, in the way that food is being produced. And at the core of this movement lies a mission to raise awareness and educate Muslims about the liberatory and transformative ecological ethic, much needed in this era of climate and environmental breakdown.

Grounded on the ethical basis which guide the behaviours of the believer, Bagader et al. [15] present the relationship between human beings and the universe, as defined in the Qur'an and in the Sunnah, in three ways:

- A relationship of meditation, consideration and reflection on the universe and on what that it contains.
- A relationship where man uses and develops in a sustainable way, to his advantage and in his own interest, the elements of the universe.
- A relationship where man takes care and cares for all living beings and not only human beings, for the Prophet said: “There is a recompense for the good that we do to all living beings. (sahih al-Bukhari).

He planted firm mountains in the earth, (mountains) which rise high above its surface. He blessed the earth and assigned its food resources in four days, according to the needs of those seeking food. (Qur'an 41:10).

The relationships are described above imply many of the principles, norms and practices recognised in modern environmental policy, including for the emergence of sustainable consumption and production systems.

As a custodian rather than the owner of the elements of the creation, human being are entrusted with the responsibility of care, attention, prevention and preservation.

4. Environmental Education: calling Muslims to Action for the Earth

From the cradle to the grave, a Muslim is charged with seeking knowledge—of her Creator, of His Laws, and of the workings of Creation—drawing on all the sources of knowledge placed on planet Earth—in revealed and non-revealed knowledges, through sensory and spiritual experiences, in the Qur'an and in the universe. This wondrous search for knowledge should be visible in her life, and manifested in just action in this world, in good works, which incorporate environmental care. Revitalising ecological ethics in the educational establishment of Islam provides an impetus to not only uncover Islam's environmental tradition, but to affect Muslim awareness and action on the ecological question [16]. If faith propelled the Muslim mind to seek knowledge and to ponder, reflect on, and understand the Creator and the workings of the universe; faith must also, of necessity, be anchored to right and just action in this world, to *amāl ṣālihāt*, as the Qur'an repeatedly affirms.

The definitive purpose of the educational process in Islam is to facilitate the trusteeship of humankind on Earth. With belief in God, comes the mandate of responsible trusteeship on Earth—a life lived in accordance with the Divine laws, discovered in the Qur'an, a Book of Revelation, *and* the Book of Nature. Environmental education, which will assist humankind in 'reading' the Book of Nature and understanding the working of the Universe, of which environmental education is an integral part, is therefore essential in the knowledge-structure of Islam.

Within the Muslim educational landscape, and amid a vibrant culture of lifelong learning, there exists a myriad of institutions which can be harnessed to share knowledge of the workings of the Earth. Boasting an extensive and growing educational establishment, both traditional and modern institutions, the mosque and Muslim school for example, continue to play a vital role in the educational life of Muslims the world over.

Examples of environmental education programmes, premised on the Islamic teachings on the environment can be found in Pakistan [17, 18], in the Philippines [19], in Zanzibar [20], in Indonesia [21] and in the United Kingdom [22]. These programmes have targeted religious leaders, young children and women and men who manage natural resources. Sourcebooks, teaching modules, classroom materials, videos, posters and pamphlets and outdoor educational experiences have been developed to relay the environmental ethic of Islam. Coupled to this has been the intellectual output of Muslim researchers such as the introductory work of Subbarini on Islam and environmental education [23]; Al-Naki's [24] pioneering study on communicating environmental ethics in Kuwait which shows how it is possible to "learn and select from concepts and teaching techniques derived in the West...to help put in place an Islamic environmental ethic appropriate to an Islamic context"; and the work of Haddad [25] who develops an Islamic environmental education framework centred upon faith, knowledge and action.

Haddad's Islamic environmental education framework, as extracted from the Holy Qur'an, is based on a balanced tripod structure. He presents a structure in which God (Allah SWT), is the head (the nucleus) the one and only-creator, represented by the belief in and the application of his rules and directions. The three legs of the tripod represent (a) knowledge/understanding, (b) manifestation/differentiation, and (c) faith/believing ([25], p. 7).

The ecotheology movement, Muslims included, is making its mark on the environmental landscape and is now an established 'interested and affected party' in environmental deliberations. Three areas of commonality between environmentalists

and religious leaders have been identified by Gardner [26]. These could easily be applied to environmental educationists. Firstly, both see the world “from a moral perspective, stressing obligations that extend beyond the individual to other people, distant places, and future generations”; both regard the “natural world as having value that transcends economics” and both “oppose the excessive consumption that drives industrial economies” ([26], p. 8). Religions also possess five sources of power: It shapes people’s worldview; wields moral authority; influences and holds the attention of its adherents; possesses financial and institutional assets; and generates social capital - all of which could be used to build a socially just and sustainable world. Furthermore, a religious view of nature is indispensable since it serves as a rich source of environmental ethics and also knowledge of the order of Nature [27] and “generates strong beliefs which can lead to high levels of commitment in certain individuals or social groups...[offering] the nearest hope to certainty of action in terms of pro-environmental behaviour” ([28], p. 142).

In terms of the environmental question, Islam can thus make both an ethical and educational contribution since it not only possesses ethical reference systems which guide human interaction with Creation, but educational visions which impact upon environmental teaching and learning. It presents a theocentric ecological ethic which is based on the sovereignty of God, the responsible trusteeship of humankind and the intrinsic value of Creation. It puts forward an activist, transformative approach to education, premised upon an integrated knowledge structure and educational objectives which require reflective and critical engagement with all ecological knowledge, responsible environmental action, and social transformation. And it proposes a transformative approach to environmental education to bring the liberatory intent of the Islamic environmental tradition into focus,

5. Acting on sustainability from an Islamic perspective

The position of privilege attributed to humans comes with an intrinsic responsibility to protect, conserve and use sustainably nature and natural resources. The concept of sustainable consumption and production in Islam is not driven by material considerations to sustain the needs of human being. It is a religious imperative, grounded on the relationship between the believer and The Creator, and is indeed an act of adoration.

5.1 Conservation and sustainable use - global common goods

Global commons typically refer to resources, including natural resources such as air, water, forests, and biodiversity which are shared by of people and nations around the world. While such resources might be located in individual countries or territories, their value and benefits accrue beyond such specific countries or territories. Therefore, a key challenge in the management of the global commons is the design of effective governance structures and management systems considering the public and private interests. The very nature of the complexity of managing what belongs to all makes ethical considerations, including faith, an important dimension and driver to orient and shape the behaviour of individuals.

In the context of Islamic belief, humans are not considered the sole beneficiaries of the bounties of nature. Rather, such benefits accrue to the entire creation, including other human beings, living species, including animals and plants. First is to share

among human beings, and the obligation to act positively in favour of others. Prophet Muhammad (may the peace and blessings of God be upon him) said: "If a Muslim plants a tree or sows a field and a human being, a bird or an animal eats what they have produced, he will be rewarded as if he had given to charity. (Sahih al-Bukhari, Sahih Muslim). Several hadiths reaffirmed the benefits accruing to one that performs a deed on nature, which benefits other human and living species, in addition to bringing value to the conservation and sustainable use of nature itself.

An authentic Hadith narrated by Imam Ahmad in his Musnad and by Tabarani in al-Mu'jam al-Kabir indicates that: "Whoever plants a tree, there is no human being or creature of God who will not eat of its fruit without the one who planted it being recompensed as if he had given in charity."

Similarly, another authentic hadith narrated by Imam Ahmad in his Musnad, by al-Bukhari in al-Adab al-Mufrad and by Abu Daoud at-Tayalisi, in his Musnad mentions that: "If the Day of Resurrection comes when one of you holds in his hand a seed that he was about to sow, let him sow it.

The principle of sharing commons goods, in particular those essential for everyone's living and wellbeing has been mentioned explicitly by the Prophet Muhammad (may the peace and blessings of God be upon him) when he said that: "Muslims must share these three things: water, pasture and fire. (Abu Daoud, Ibn Majah, and al-Khallal.). This is clearly stated in the Qur'an: "Teach them that the water will be shared among them..." (Qur'an 54:28).

In addition, the notion of global commons extends beyond human beings. It applies in the relationships between humans and other part of the creation, including animals. Several verses of the Qur'an refer to the notion of sharing of resource between humans and other creatures.

"As for the land, We have spread it out, planted firm and still mountains there, and caused all species to grow there in a balanced way. And We have endowed it with sustenance for you and for other creatures that you are not required to feed. (Qur'an 15:19-20).

The story of the Thamud and the camel, in the Qur'an is a good illustration of this aspect. According to the Qur'an and the Islamic exegetical tradition, the Thamūd were an early Arab tribe who rejected the message of the prophet Ṣāliḥ. God sent down a female camel as his sign, and Ṣāliḥ told his countrymen that they should not harm the camel and allow it to drink from their well. But the Thamūd cut its hamstring or otherwise wounded it. God then destroyed the tribe, except for Ṣāliḥ and a few other righteous men.

According to the Qur'an, the Prophet Muhammad (may the peace and blessings of God be upon him) was sent by God as a... "...mercy to the universe. (Qur'an Surah 21, Verse 107). The Prophet taught how to interact with and take care of the creatures of the earth. It is narrated by Abu Daoud, at-Tirmidhi to have said that "Those who show mercy are treated the same by the Merciful. Show mercy to the living beings of the earth and He who is above the heavens will show mercy to you." According to hadith narrated by Sahih Al-Bukhari and Sahih Muslim the Prophet ordered men to provide for the needs of the animals in their care and warned that anyone who lets an animal die of hunger or thirst will be rewarded with the fire of Hell.

The establishment of protected areas, either land or marine, is considered an approach to conserve nature while meeting the needs of humans. The International Union for the Conservation of Nature and Natural Resources (IUCN) defined

protected areas as “defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values”³. It has been documented that the Prophet Muhammad (may the peace and blessings of God be upon him) himself established protected areas, known as *himās* in Arabic language, for the conservation and sustainable use of rangelands, plant cover, and wildlife. Today, protected areas exist in many countries and contribute to the rehabilitation of forests, marine species and other living species at risk of overexploitation or extinction.

5.2 Inter-generational equity and responsibility to address climate change

The Report of the World Commission on Environment and Development: Our Common Future, known as the Brundtland report of 1987, makes of the notion of intergenerational equity a central dimension of the concept of sustainable development. It defines inter-generational equity, and indeed, sustainable development, as “meeting the needs of the present without compromising the ability of future generations to meet their needs”.

Such an understanding implies a sense of fairness among all generations, present and future, in the use and conservation of the environment and its natural resources. In Islam, it is understood that the administration of natural resources is a shared responsibility of all generations. Each generation must use nature wisely, according to their needs, without compromising the needs of future generations. All people have therefore an obligation not to abuse or make an inappropriate use of natural resources, damage them, or consume without consideration of the needs of others.

Central to inter-generational equity and responsibility is the challenge of climate change. Climate change is considered a defining issue of our time, with compelling evidence from the United Nations’ Intergovernmental Panel on Climate Change (IPCC) that human activities have been a key driver of global warming. The latest IPCC report on the physical science basis noted that emissions of greenhouse gases from human activities are responsible for approximately 1.1°C of warming since 1850–1900, and finds that averaged over the next 20 years, global temperature is expected to reach or exceed 1.5°C of warming [29]. Growing world population, consumption and production patterns increasingly demanding on energy, material, transport and housing all contribute to underlining the prospects of sustainable development for current and future generations.

All the principles of ecological ethics in Islam, and the Islamic principles of balance and measure and prevention of corruption can contribute to behavioural changes in human activity which are indispensable to address climate change and secure a sustainable future for generations to come. In particular, the notion of measure must be applied in all respects, including in the management and control of the individual demands and the collective pressure on natural resources and the generation of carbon emissions. The *Islamic Declaration on Global Climate Change*⁴, which was adopted at a symposium held in Istanbul, Turkey, on 17, 18 August 2015 and gathering representatives of Islamic organisations, decision makers and researchers, note many of the principles derived from the Holy Qur’an and referred to in this paper, as important foundational elements in the fight against climate change.

³ <https://www.iucn.org/theme/protected-areas/about>

⁴ https://www.ifees.org.uk/wp-content/uploads/2020/01/climate_declarationmmwb.pdf

5.3 Resource efficiency

Resource efficiency can be understood as the use of the Earth's limited resources in a sustainable manner, minimising the negative impacts on the environment, and making it possible to create more goods and services with less resource use, and to deliver greater value with less input. Resource efficiency is central to achieving sustainable production and consumption.

While in a market-driven, globalised, and open economy the flow of goods and services is essential to meet the needs of people, there is increasing concerns about the ecological consequences of such a system. It is a fact that the world produces large quantities of food, however, excessive consumption and waste occur in certain parts of the world, whereas hunger prevails elsewhere.

There are several policy principles to manage food production and consumption in a more sustainable manner. Systems of food production, transportation, conservation, and distribution represent logistical and infrastructural challenges in many developing countries. On the other hand, the consumption of food, including fruits and vegetables out of season, is a reason for huge quantities of fruits and vegetables being transported around the world, and systems of production that are highly energy and resource-intensive are employed to produce fruits and vegetable out of season.

It is well accepted among policy circles that changes in consumption and production patterns are indispensable; however, such changes have proven very hard to materialise. Increasingly, in several countries and regions around the world, the notion of local and sustainable consumption is gaining traction. Islam, through the Qur'an, provides insights and teachings which can guide production and consumption more in line with natural cycles and processes.

“It is He Who has brought into being gardens, the cultivated and the wild, and date-palms, and fields with produce of all kinds, and olives and pomegranates, similar (in kind) and variegated. Eat of their fruit in season, but give (the poor) their due on harvest day. And do not waste, for God does not love the wasteful. [Qur'an 6:141].

An important message and learning from this verse concern the merits of local consumption, and the consumption of food that is produced at the right season of the year, following natural cycles, and avoiding food waste which may occur. In effect, each type of fruit and vegetable has its own set of specific natural conditions for ideal growth and quality. For example, oranges are climate-sensitive plants and grow better in places with hot dry summers such as Spain, Italy, and Greece [30].

5.4 The avoidance of waste

The UN Food and Agriculture Organisation (FAO) estimates that one-third of food produced for human consumption is lost or wasted globally, which amounts to about 1.3 billion tonnes per year. Both food loss and food waste, because of systems of production, storage, transportation, but also consumption habits are central to environmental sustainability and sustainable development.

Islamic belief teaches and warns against waste and excessive behaviour.

“Children of Adam! Wear your beautiful apparel at every time and place of prayer and eat and drink. But do not be excessive – verily God does not love the wasteful”. [Qur'an 7:31].

One can consider water as example of Islamic teaching and practice against waste. Water is at the centre of creation and is indispensable for all life. It requires particular attention. The Qur'an teaches that God Almighty made of water the origin of life. Several verses of the Qur'an speak about water, its relation to the creation, life, and religious practice.

"Then We . . . made every living thing out of water. (Qur'an 21:30)

"And We send down purifying water from the sky to revive by it a dead land (of drought) and to give drink to the many beasts and human beings whom We have created. (Qur'an 25:48-49)

"Do you see the water you drink? Are you bringing it down from a cloud? Or do We bring it down? If We wanted to, We would make it bitter. So why aren't you grateful? (Qur'an 56:68-70)

"Say: 'What do you think? If (all) your water were to disappear deep within the earth, who then would bring you a spring of gushing water? (Qur'an 67:30)

UN Water indicates that water is a finite resource having to serve exponentially more people and usages. Therefore, ensuring everyone has access to a reliable supply is crucial to human survival and sustainable progress. Considering the critical importance of water as a source of life, Muslims consider that The Creator has made its use a common right for all living beings, men, plants and animals, and that waste of water is highly reprimanded. It was reported that once the Prophet passed by Sa'd, one of his companions, who was doing his ablutions for the prayer. He tells him: "What is this waste, Sa'd?" "Can we speak of waste even when we do our ablutions for the pray?" asked Sa'd. And the Prophet replied, "Yes, even if you do them by a river." "[2] (Ibn Majah.)

The practice of fasting during the month of Ramadan is an illustration of self-education, discipline and control, which can lead the individual to a more regular behaviour of avoiding waste and appreciating the value of food and water. The Holy Qur'an prescribes fasting in the following terms:

"O you who believe, fasting is prescribed for you as it was prescribed for those before you, that you may develop God-consciousness." (Qur'an 2:183)

During the month of Ramadan, which is the month during which the Holy Qur'an was revealed, Muslims observe a fasting for a period of 1 month. Such a fasting is meant to demonstrate devotion and is an exercise of renouncement oneself, upon the order of God, from drinking and eating, and other body appetites such as intimate relations, from dawn to dusk. By refraining oneself from drinking and eating water and food that one can have at disposal, the practice of fasting is a practical way of putting oneself in the situation of those who lack water and food, and to experience directly and personally thirst and hunger, rather than only reading about it in newspapers and seeing hungry people on television. It helps appreciate the value of water and food, stimulate compassion and generosity vis-à-vis the most deprived people in our societies, and gain a sense of conservation, sustainable use and avoidance of wasting.

5.5 Zakat, distributive justice, and sustainability

Oxfam International estimates that half of the world's net wealth belongs to the top 1% richest people. Inequality and the concentration of wealth represents a key challenge to achieve sustainable development. It is for this reason that Sustainable Development Goal (SDG) 10 seeks to reduce inequality within and among countries. The SDG 10 calls for reducing inequalities in income as well as those based on age, sex, disability, race, ethnicity, origin, religion or economic or other status within a country.

The World Bank has estimated that about 97 million more people are living on less than \$1.90 a day as a result of the COVID-19 pandemic, increasing the global poverty rate from 7.8 to 9.1 per cent. Globally, 3 to 4 years of progress towards ending extreme poverty are estimated to have been lost [31].

The concentration of wealth and the increasing number of people living in poverty have both consequences for environmental sustainability. On the one hand there is a risk of over and excessive consumption, with living standards high and carbon and resource-intensive; and on the other hand, poverty and the sole reliance on fragile ecosystems to ensure a livelihood leading to further environmental degradation.

In this context, systems of wealth redistribution can contribute not only to greater social justice, improve living standards, but also minimise negative impacts on the environment. In Islam, "Zakat" (obligatory tax) is a compulsory charity that Muslims pay yearly on their money and material property. Zakat has been established to rank as the third of the five pillars of Islam is, after faith in God and His prophets, and the accomplishment of daily prayers. Several verses of the Qur'an treat of Zakat matters:

"And establish prayer and give zakat, and whatever good you put forward for yourselves – you will find it with Allah." (Qur'an, Surah 2, Verse 110).

"The Believers, men and women, are protectors one of another: they enjoin what is just and forbid what is evil: they observe regular prayers, pay their Zakat and obey Allah and His Messenger. On them will Allah pour His Mercy: for Allah is Exalted in power, Wise." (Qur'an Surah 9, Verse 71).

As per Islamic principles, every year, 2.5% of wealth is subject to Zakat. In Islamic jurisprudence, if a Muslim owns an equivalent monetary sum of Nisāb, he has to pay 2.5% of surplus wealth above the Nisāb every year. As such, Zakat is an important institution and an instrument for Islamic economic policy for social redistribution, poverty alleviation and economic welfare. It also plays a role in preventing accumulation of wealth and property, including from agricultural yields, animal husbandry, speculation, and corrupt economic and market structures.

Zakat has a significant potential to generate financial resources and goods for social redistribution. Firdaus et al. (2012), cited in [32] estimated the potential of Zakat in a country such as Indonesia by surveying 345 households. Their results show that Zakat collection could reach 3.4% of Indonesia's GDP, which can help in reducing poverty to a large extent. In a number of countries in Africa, farmers pay Zakat through yields and seeds that fall within the part subjected to Zakat, making it possible to redistribute seeds across communities and allowing for subsistence of the poorer and most vulnerable. Shaikh [33] estimates potential Zakat collectible in 17 member countries of Organization of Islamic Cooperation (OIC) to be enough to fund resources for poverty alleviation in all 17 OIC countries combined.

6. Conclusion

This paper has shown that Islam, based on the prescriptions of the Holy Qur'an and the Sunnah of prophet Mohammad (Peace be upon him), provides guiding principles on the relationship between humans and the rest of the creation, which play a central role in the protection of the environment and the conservation and sustainable use of natural resources.

The ecological ethics of Islam demonstrates the importance of religion as a vehicle for social and environmental change, based on the sovereignty of God, the responsible and just trusteeship of humankind and the value of all Creation. It presents a relevant foundation to meet the needs of humans, of current and future generations, living in harmony with nature, and the recognition of the indispensable balance of the universe in the way The Created conceived it.

Beyond the theoretical and conceptual basis, Islamic belief and practice offer approaches that are fully relevant to modern environmental policy and to the achievement of sustainable development, from the management of global commons to social and redistributive justice. Considering that the world Muslim population is currently estimated to be close to 2 billion people, the full and regular practice of the teachings of Islam could contribute to addressing current global and local environmental challenges which relates to the behaviour of people and their way of living. As moral ethics and religious obligation, the practical influence of Islam in the daily lives of people is naturally subjected to the true reality of their faith and its practice as prescribed. The fact that normative rules and obligations in many countries of significant Muslim population are based on laws and regulations not necessarily driven by religious norms means that the practical application of Islamic teaching remains in the domain of individual choices. This poses the broader question of the role of religion in modern societies. However, from a research and analytical perspective, it can also trigger the question of whether or not countries with legal systems based on Islamic values, and for this matter other religions as well, have relatively better environmental performance than others.

Further thinking, research and analysis around such questions can contribute to deepening the knowledge of Islamic principles, teaching and practices and ways to converge spiritual values, ethics and current consumption and production patterns to face local and global environmental problems.

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Section 2

Sustainability and Human Ecology

Chapter 16

Culture: A Pillar of Organizational Sustainability

Clea Beatriz Macagnan and Rosane Maria Seibert

Abstract

Sustainability is a concern that permeates all levels of society and is premised on meeting the needs of the present without compromising the ability of future generations to meet theirs. More recently, policies and research have emerged that guide organizations to align their activities with the broader sustainable development agendas, including cultural issues, not just economic, social, and environmental ones. Culture is the material and immaterial attribute of society. It incorporates social organizations, literature, religion, myths, beliefs, behaviors and entrepreneurial practices of the productive segment, use of technology, and expressive art forms on which future generations depend. Thus, cultural sustainability is a fundamental issue and is configured as the fourth pillar of sustainability, equal to social, economic, and environmental issues, which has to do with the ability to sustain or continue with cultural beliefs and practices, preserve cultural heritage as its entity, and try to answer whether any culture will exist in the future. The importance of cultural sustainability lies in its power to influence people. Their beliefs are in the decisions made by society. Thus, there can be no sustainable development without including culture.

Keywords: cultural sustainability, primary stakeholders, organizations, legitimacy, disclosure indicators

1. Introduction

Sustainability is a paradigm that challenges business organizations and society. Organized society highlights the need to think about environmental sustainability and the responsibility of the business organization toward society. In this perspective, there are also providers of resources that demand a company's governance system, aiming to mitigate the problems configured by the possibility of conflict emergence and information asymmetry, focusing on sustainability.

The problem established by the information asymmetry, which refers to the possibility of the emergence of adverse selection and moral hazard [1, 2], underlies the relationship between managers and the organization's stakeholders whenever the control and owners' resources are different. The adverse selection problem happens before the contract is signed, in which one of the parties involved in the relationship has information that the other does not know. The access to information lacks could be of different types, resulting in losses of supply and organization sustainability

because the uninformed contract part would assume that the object to be contracted is like the average of the others offered in the respective market. On the other hand, moral hazard would emerge in an ex-post contractual situation. It would appear whenever the party to the contract, which represents control, adopted decisions different from the stakeholders' interests. Thus, information asymmetry leads to efficiency loss and organizational sustainability difficulties.

Four categories of information represent sustainability and must be highlighted: economic-financial, environmental, social, and cultural. The economic-financial information is classic, representing the object values constituting the contractual relationship. The demand for information describing the environmental impact derives from organized social movements and information on social responsibility. Finally, where companies are, information representing the culture category is more recent and is related to the cultural preservation identified by the society [3].

As a mitigating mechanism for information asymmetry, the literature recommends organizations show discretionary information that allows stakeholders to know them [4–7]. Furthermore, with the representative information, their sustainability would lead to their legitimation [8–11]. In this sense, communication tools have advanced a lot with the information technology advent and the Internet, facilitating new communication channels and making disclosure cheaper [8, 12]. Thus, the transparency of managers improved as the cost of publishing information was mitigated [13]. However, when studying information disclosure, there are challenges such as the expression of possibilities universe a reality or the fact disclosure is an abstract concept. Faced with this reality, the literature on disclosure recommends the indicators used represent information about a given reality [14–18].

The literature review on information sustainability of organizations has grown in recent years. However, this enrichment focused on the managers' perspective. That means the literature analyzes the disclosure level using indicators constructed from the analysis. On the other hand, research that presents the stakeholder's perspective is much more restricted [12, 19–23]. Also, the study concentrates on the sustainability tripod, namely: economic, environmental, and economic, without including information about cultural sustainability identified as forming the fourth sustainability pillar for organizations.

In this sense, the problem of this study refers to the need to create indicators that make it possible to contribute as a guide for managers to meet the stakeholder's demands for information representing the cultural organization's sustainability. Therefore, this study aims to identify representative information on cultural sustainability to mitigate information asymmetry between organizations and their primary stakeholders. The absence of a standardized perspective on demand for information representing cultural aspects for stakeholders points to the relevance of this study.

For the study, a sample was selected, considering the primary stakeholders' accessibility of different types of public and private organizations with participation in the economy in Brazil, distributed in the most diverse economic activity branches. The research development began with the stakeholders' selection and qualification on the sustainability topic. Subsequently, we sent a survey form asking them to indicate information referring to the cultural sustainability pillar, which they considered necessary for disclosure on the organizations' electronic pages, published on the Internet. As a result, we obtained 220 responses from stakeholders, of which 115 declared themselves to be customers, and 105 declared themselves to be organization

employees were part of the sample. After the research stages were carried out, including rounds with specialists, we created a list of 18 cultural sustainability indicators to disclose support and analyze the information disclosure representing the organizations' cultural sustainability on their Internet pages.

By disclosing sustainability information, organizations increase transparency, increasing the organization's management reliability, reputation, and legitimacy, strengthening the relationship between management, customers, and employees [19, 24]. They can also allow benchmarking against competitors, signal competitiveness, motivate employees, and support information encouraging organizational culture [25, 26]. The identity sense has also recognized reporting information on cultural sustainability as an essential contributing factor to corporate sustainability [3, 27]. Therefore, the topic receives greater attention in organizations and academia.

In this sense, the present study contributes to the organizations by presenting them with an indicators list of sustainability information representatives, enabling them to mitigate the cultural information asymmetry with their primary stakeholders that it uses to establish strategic disclosure policies. It also helps regulatory and supervisory bodies to use the indicators list, proposing disclosure standards for organizations, knowing that these indicators are of primary stakeholders' interest and will consider for the organizations' legitimization in the communities where they operate.

In addition to this introduction, the chapter presents a literature review on the subject, the methodological procedures used, the cultural sustainability indicators survey results, the final considerations, and the references used.

2. Organization's cultural sustainability

Considering the conscious capitalism perspective, they insert that organizations must seek to promote social inclusion, improve income distribution, and reduce poverty through human and ethical values. Those organizations must contribute to the economy and society in which they are an integral part [28, 29]. Organizations establish contracts with society, legitimizing them whenever they act as expected. Organizations, even in a global capitalist context, must move in a way that adjusts to culture in search of legitimacy [30]. In this sense, organizations have been relevant actors in developing initiatives and policies oriented toward the entire community's sustainability [31]. The relationship between organizations and their stakeholders is not limited to business transactions. These organizations must help create value for everyone [32] and engage with ethical and cultural concepts [29], which must be made public.

Even if they try to maintain an independence degree, organizations must follow the uses, customs, rules, and legislation evolution of a standardized development in an eminently capitalist society. That means, in addition to governance structures suited to their constitution and strategic and democratic management form, they need to operate within a capitalist context, or they will be excluded [33]. Thus, the organization is a risky enterprise that depends on capitalist foundations and social construction [34]. However, considering the evolution of the capitalist concept, which migrates from global capitalism [35] to conscious capitalism [28], any organization type must have sustainability as its purpose [30]. This sustainability encompasses four dimensions. In addition to the three dimensions introduced by the

triple bottom line: economic, social, and environmental [36], we included the cultural dimension as the focus of this book chapter [19, 37, 38].

Society is increasingly sensitive to issues related to sustainability. It is one of the modern society principles, valuing technologies, processes, products, and minimal impacts on the ecosystem, that is, organizations operating within sustainable limits [31, 39]. Sustainability is a concern that permeates all society levels and, on the premise that it must develop to meet the present needs without compromising the future generation's ability to meet their own needs. In addition, economic growth must concern the natural environment protection and humanity's social and cultural well-being [36, 37, 40, 41].

The term sustainability expanded over time, starting with the economic perspective in which an organization only views profitability terms, financial results, return on investment, or shareholder value [42]. More recently, the environmental sustainability perspective was incorporated, which considers an organization's environmental impact regarding the environmental resources' consumption, pollutant emissions, solid and water waste, recycling, and materials reuse, among others [43]. The social sustainability perspective was also incorporated, measured by the relationships' quality with employees, health and safety records, community impacts, and human rights in general [44], culminating in the sustainability triple bottom line [36, 45, 46]. That means organizations need to act in a way that provides social benefits, absorbing resources from society and giving social meaning to their existence.

Thus, we consider that these three aspects are respected, with equal importance, allowing the relationship between the organization and society to continue functioning. If one of the pillars is not strong, it compromises the entire system and makes it unsustainable. Therefore, there must be equity between people, the planet, and profit. Profitability must be socio-environmentally and economically correct, a constant challenge for managing organizational sustainability [36, 47, 48]. In this sense, economic and social development is essential, as well as environmental protection and social well-being. Immolating the environment and/or social well-being for economic growth's sake would lead to disastrous consequences for future generations [45, 47, 49]. This context makes the complex relationship between the sustainability pillars [45]. In short, economic, environmental, and social development is aimed at integrating all sustainability dimensions [19, 20].

Recently, policies and research with new demands began to guide organizations, which must align activities with broader sustainable development agendas, including cultural, economic, social, and environmental issues [19, 37]. It is necessary to integrate culture with sustainability because achieving its goals depends on human actions and behaviors that are culturally embedded and rooted [40].

The material and immaterial society attributes define culture. It incorporates social organizations, literature, religion, myths, beliefs, behaviors, social practices and methods, technologies and tools, and expressive art forms. Culture is a human knowledge set that depends on transmitting these characteristics to future generations [19, 26, 50, 51]. Culture understands as a constantly evolving procedure, a lifeway [40]. Therefore, cultural sustainability is a fundamental issue or a precondition to be fulfilled on the path to sustainable development. It made up the sustainability social pillar. However, with the recent development in this field and its growing importance, the creation of the sustainability cultural pillar has become eminent [50]. Cultural sustainability has become a priority in sustainable development agendas [37]. It is now often described as a fourth pillar, equal to the social, economic, and environmental sustainability issues [50]. The information representing the culture

is in family businesses, cooperative organizations, and others that often carry an identity confused with habits and customs.

Cultural sustainability recognizes the need to preserve and transmit culture to future generations, achieved through pluralistic and transformative learning to promote social and ecological changes in the capitalist system [19, 26]. Culture attributes an identity sense and determines the behavior of a society [3]. That is, it has to do with the ability to sustain or continue with cultural beliefs and practices, cultural heritage preservation as its entity, and attempts to answer whether any culture will exist in the future. Cultural sustainability's importance lies in its power to influence people since the decisions made in society are weight by its beliefs [50]. Thus, there can be no sustainable development without including culture [38].

3. Evidence of organizational cultural sustainability

Organizations need to legitimize themselves in the communities where they operate [11, 12], not only making decisions and acting according to the four sustainability pillars but also rendering accounts and making these actions transparent to their stakeholders, demonstrating that they are creating value [52]. That means that organizations must constantly seek to reduce information asymmetry, especially the one established between them and their primary stakeholders. Furthermore, organizations can affect and be more directly affected by primary stakeholders; therefore, their interests must be prioritized [53–58].

By providing information on sustainability, organizations would minimize information asymmetry and demonstrate an appreciation of their stakeholders. According to [1, 2], information asymmetry exists in every contractual relationship and makes it impossible to complete contracts. Therefore, it exists between organizations and their stakeholders. Asymmetry indicates the information level is not the same between the contractual parties, and there is no perfect control possibility by one party over the other [2, 12, 20]. However, organizations can manage this asymmetry by retaining, delaying, or not showing it [2]. The results of this management can lead to greater or lesser exposure to adverse selection or moral hazards and the organization's legitimation or not in the communities where they operate [1, 2, 5, 12].

Organizations can minimize the adverse selection and moral hazard possibilities by establishing disclosure policies to reduce information asymmetry. Otherwise, stakeholders can choose between not working with the organization and reducing the adverse selection possibility for commercialization transactions, services provision, and other negotiations or remain working with the organization and run the risk of not having their interests met, being at the manager's mercy, with moral hazard [1, 2, 24, 59].

However, suppose organizations expect to remain active in the community where they are inserted and legitimized by their stakeholders. In that case, they need to demonstrate they meet that society's principles, values, and objectives [11, 55, 60, 61], that is, cultural issues especially. This demonstration can reveal the organization's cultural sustainability [20, 62], informing stakeholders about their behavior and leading them to legitimize them [9, 20, 62, 63].

Several entities have adopted initiatives for organizations' disclosure guides but lack the cultural sustainability pillar, such as:

- The Sustainability Disclosure Database [64];

- Corporate social responsibility Ethos indicators [65];
- International standard of social accountability 8000 [66];
- Guidance on corporate responsibility indicators in annual reports [67].

These initiatives were built by listening to experts and providing an overview of information. We seek to listen to the demands of stakeholders. That is because we need to listen directly to stakeholders to contribute to the organization's efficiency of the information policy [19, 20].

The reviewed sustainability disclosure studies used one of four methodologies to establish the indicators used as disclosure references. The most used methodology is empirical analysis in the disclosure means, especially in annual and sustainability reports published by the respective organizations [62, 68–74, to name a few more recent ones]. Undoubtedly, organizational reports are important sources, as they allow stakeholders to litigate against organizations whenever interest conflicts, given the information materiality. However, reports are a more restrictive communication channel than electronic pages published on the Internet [8, 12].

Other methodologies used by the reviewed studies to build the indicators list were the empirical literature review, in which the indicators used by some served as a basis for others [10, 75–78]. In addition, some authors used guidelines established by institutions that recommend information on sustainability to be evidenced [61, 79–81]. Finally, we identified the indicators from consultations with experts with the help of the Delphi technique and/or statistical and econometric tools [82, 83].

However, empirical analyses in annual reports and empirical studies on other communication channels, such as consultations with specialists, start from an idealization of the stakeholders' interests demanded in disclosing information about sustainability [12, 63]. In other words, all these methodologies use references without the manifestation of stakeholders. That is because researchers do not apply questionnaires to stakeholders, ignoring their perspectives.

We need to listen to stakeholders, given the diversity of their interests. Listening will allow us to understand their demands and allow the company to establish a better disclosure policy [20, 25]. In this sense, the literature review has only recently made it possible to identify the emergence of a fifth methodology, listening to stakeholders for the indicators' creation. However, it is still incipient [12, 20, 22, 23]. That can occur for three reasons: the difficulty in identifying the stakeholders by disclosure [54, 56–58]; the problem of listening to their interests [12, 19–23]; or the complexity of the concept attributed to organizational sustainability [45], especially the cultural pillar that is still in the process of being inserted into the idea [19, 40].

In addition, to define indicators, represent sustainability information, add the stakeholders' perspective, it is necessary to consider their adherence to some principles: exact definition; straightforward interpretation; applicability; measurability, comparability, relevance, clarity, reality representation reflecting the abstract concept to be analyzed [14–18]. The indicators contribute to the knowledge of reality through expression. They are tools for measuring and monitoring this reality [9, 20, 84]; therefore, the need to listen to the stakeholders' interests in the creating indicators process. The indicators represent information that establishes a legitimacy relationship between the organization and its stakeholders [85, 86].

4. Methodological procedures

For the research, two primary stakeholder groups from Brazilian organizations participate in the economy and contribute to economic development for their accessibility. The sample was selected in two moments. Firstly, from the cooperatives registered with the Organization of Brazilian Cooperatives (OCB) [87]. Through representatives of cooperatives that participated in a specific event, we sent an email requesting interest in participating in the research. Then, for those who showed interest, we offered training (online asynchronous) on the subject and forwarded the survey form (Appendix A) to be answered by employees and cooperative members (cooperatives have a dual role, associates and customers, in this research we call customers). From this stage, 110 answered forms were returned, 58 from customers and 52 from employees. In a second moment, we sent an email requesting interest in participating in the research to companies and universities chosen for accessibility, contacted through the contact channels available on their websites. For those that showed interest, we repeated the procedures performed with the cooperatives. At this stage, 100 responses were returned, 57 from customers and 53 from employees. The sample comprised a total of 220 responses, with 115 customers and 105 employees.

The sustainability training, covering the four pillars, was recorded and made available to these audiences through an online platform and can be watched at any time, lasting 3 hours. Considering our interest in cultural sustainability, the form we created contained only this pillar. We forwarded this form to stakeholders who indicated what information they consider relevant in cultural sustainability terms and which organizations should disclose in their communication channels with their stakeholders.

In the fourth stage, we transcribed the indicators, creating two lists, one from the customers' perspective, which contained 34 indicators, and another from the organizations' employees' perspective, which included 30 indicators. Next, we performed the content analysis [88] to eliminate the same or similar indicators among the responses of each group member. Then, in the fifth research stage, the responses obtained were triangulated, transforming the two lists into one. Again, the content analysis found that some indicators were shared between the two groups, resulting in 57 indicators integrating the cultural pillar of organizational sustainability.

Then, for refinement, as a sixth research stage, two experts analyzed the indicators to similar group indicators and made them clear and easy to interpret. The objective was also to evaluate the indicator's consistency. We divide this stage into two analysis rounds with the Delphi technique application [89]. In the first one, the specialists analyzed the indicators list separately, which resulted in a 30 indicators list. Then, experts analyzed and discussed the indicators in the second round to establish consensus. The results of this stage led to 18 information indicators on the cultural sustainability of organizations. These results showed that the indicators represent the organization's reality and the primary information about cultural sustainability, allow measurement and monitoring, and therefore, are suitable to be considered as a final list [9, 14–18, 84].

Figure 1 summarizes the methodological stages developed during the research.

Below we present the survey results.

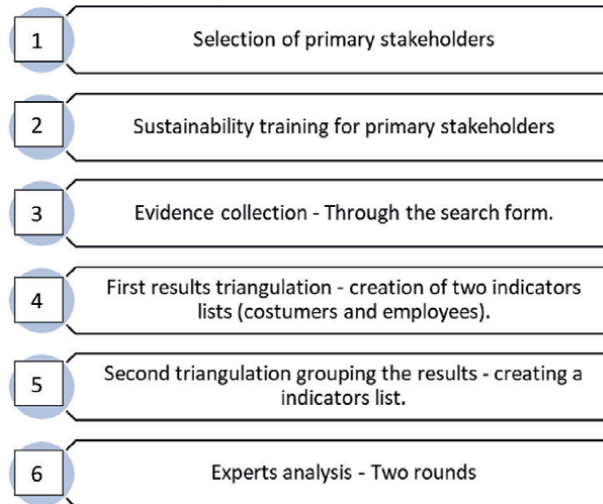


Figure 1.
Methodological stages.

5. Creation of the list of cultural sustainability indicators

After we collected the evidence from two groups of selected primary stakeholders, clients, collaborators, and the training on the organization's sustainability, the form created containing the sustainability cultural pillar was submitted to the primary stakeholders and answered to 220 primary stakeholders; 115 identified themselves as clients and 105 as collaborators of different organizations in Brazil.

In the third stage of the research, we transcribed the indicators considered necessary by stakeholders, creating two lists, one from the clients' responses and the other from the employees' reactions to the organizations. The content analysis aimed to eliminate the same or similar indicators among the responses of the same group members. This stage resulted in 34 and 30 cultural sustainability indicators considered necessary by customers and employees.

For the fourth stage, we carried out the content analysis, triangulating the indicators obtained in the two initial lists and transforming them into only one. Thus, we analyzed the common or similar information and eliminated duplicities. This step reduced the list to 57 cultural sustainability indicators of organizations. **Table 1** contains a summary of these results.

In the fifth stage, we submitted the indicators list to an analysis by two experts on organizations' evidence. These experts, in a first round, were consulted on whether the indicators are cultural sustainability representative and adhere to the principles of exact definition; straightforward interpretation; applicability; feasibility, comparability, relevance, clarity, reality representation, and reflection of the abstract concept to be analyzed [14–18]. We also analyzed whether the information was helpful and whether it served as indicators to measure and monitor this reality [9, 20, 84]. The experts interpreted that some indicators were similar, and others expressed too specific content: many related to investment types and others referring to the resource's availability for cultural activities. These we transformed into global indicators, such as investments (sponsorships) in local and regional cultures. These analyses reduced the list to 30 indicators.

Pillar	Stage 3			Stage 4
	Clients	Collaborators	Total	Total
Cultural	34	30	64	57

Table 1.
Indicators by stakeholders.

Pillar	Round 1	Round 2
Cultural	30	18

Table 2.
Indicators list construction fifth stage summary.

	Indicator
1	Awards and certifications
2	Conduct and or ethics code
3	Cultural actions developed by the organization
4	Cultural education
5	Culture incentive projects
6	Encouraging a local and regional culture
7	Events to strengthen the organization's identity
8	Exchanges for stakeholders
9	Gender and minority policies
10	Grow program for the community
11	Investments (sponsorships) in Local and Regional Culture
12	Library (Physical or Virtual) on entrepreneurship
13	Organization relationship with stakeholders and the community
14	Organization' history
15	Organization's mission, vision, principles, and values
16	Organization's purpose and philosophy
17	Organizational principles
18	Policies for hiring people in the community

Table 3.
Final list of cultural sustainability indicators.

In the second round, the experts worked together, analyzing each indicator, seeking consensus, and meeting the proposed requirements [9, 14–18, 20, 84]. Thus, the indicators became more comprehensive by interpreting that they would adequately express reality and facilitate measurement and monitoring. Thus, the experts' analysis stage resulted in a list of 18 indicators of an organization's cultural sustainability representatives to mitigate the asymmetry of the information existing between organizations and their primary stakeholders, as shown in **Table 2**.

Table 3 presents the list containing the 18 indicators defined by the experts as a subsidy for the evidence and the disclosure analysis of the organizations' cultural sustainability.

This stage demonstrated that the list contains the stakeholders' expectations, covered all the relevant information about the sustainability cultural pillar, and represented the organization's reality, conferring reliability to the indicators list. The social pillar considers many of them [8, 10, 12, 63–65, 69, 84]. Still, others are deemed

necessary in the revised literature on the organization's culture [26, 37, 38]. However, the organization's sustainability cultural pillar is not explicitly. It is noteworthy that culture is fundamental for disseminating its founding principles and values, ensuring continuity in future generations [26, 36, 37, 50, 51].

Finally, organizations need to highlight the information, of interest to their primary stakeholders, on their electronic pages published on the Internet. The evidence is considered an organization's legitimization strategy with its primary stakeholders [6, 9, 12, 20, 61–63, 70]. Notably, the higher the disclosure rate, the greater the probability of legitimizing organizations in the communities where they operate [9, 11, 20, 54, 57, 62, 63].

6. Final considerations

The chapter objective was to build an indicators list of representative cultural sustainability information from the primary organizations' stakeholders' perspectives. Based on the disclosure analysis of the 18 indicators constructed, the organization's disclosure policies can focus on mitigating the cultural information asymmetry and meeting the interests of their stakeholders.

When the customer stops negotiating with a particular organization, he does not identify the possibility of having his interest served. That can happen because the client does not have enough information to make this contractual choice. If customers do not know enough and continue to transact with a particular organization, they may make an adverse choice for their interests. The information asymmetry does not allow the client to identify the value in the organization's cultural sustainability terms and, therefore, does not legitimize it in the environment in which it operates.

Also, the information asymmetry can affect the client's confidence in the respective organization managers because it does not have enough information to identify whether those managers act according to their interests. That is, if primary stakeholders do not have enough information about the organization's performance, managers can exploit this information asymmetry to benefit, which gives rise to the moral hazard problem. In this sense, by being more transparent, organizations reduce the information asymmetry and, consequently, the possibility of adverse selection and moral risk, increasing the confidence of both customers and collaborators, primary stakeholders, and legitimizing organizations.

The information disclosure policy on an organization's cultural sustainability presents weaknesses, which allows us to understand the need for managers' qualifications who aim to legitimize themselves with primary stakeholders and improve the reputation of these organizations. However, it is essential to highlight the research carried out has limitations in sample terms. Therefore, the evidence obtained does not represent the reality of all organizations or the expectations about cultural sustainability disclosure of all stakeholders, which incites future research.

However, it is noteworthy that the research contributes to the organizations by presenting them with a cultural sustainability indicators list to mitigate the information asymmetry with their primary stakeholders. That establishes strategic disclosure policies. This study also helps regulatory and supervisory bodies to use the indicators to develop disclosure standards and monitor sustainability. It is worth noting that these indicators are of interest to stakeholders and will be considered for the legitimacy of organizations in the communities where they operate.

On the other hand, we should consider that the fragility in the manager's communication with primary stakeholders may be related to other problems, such as the lack of training and the existence of an essential guide to better disclosure policy so they can meet the demand for information. That is an aspect to study in new research incursions. Their results and the study presented here contribute to a deepening of the information asymmetry understanding and the business organizations sustainability.

Acknowledgements

We would like to thank all the primary stakeholders who spontaneously responded to the survey by providing the opportunity to carry out this book chapter.

Conflict of interest

The authors declare no conflict of interest.

Appendix A. Survey Form

1 - How do you identify with the organization that is sending you this form?

- Employee.
- Customer.

2 - Considering your knowledge and the content presented in the previous training on cultural sustainability, what information do you think the organization should show in its communication channels with its stakeholders?

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The Sustainability of Islamic Boarding Schools in the Era of Modernization and Globalization

Muthoifin and Surawan

Abstract

The objective of this study is to determine the strategy of the classical Islamic boarding school in maintaining its existence amid the rapid development of the globalization era and also to find out the curriculum formulations used to equip students to face the modernization era. This research is qualitative, using the deductive-interpretive analysis method, with a sociological-phenomenological approach. The research was conducted at the classic Islamic boarding school Tremas, Pacitan, East Java. The research was conducted at the Tremas classical Islamic boarding school, Pacitan, East Java, which is an open institution for modernization and globalization. The results of the study indicate that the pesantren's strategy to maintain its existence and sustainability in the modernization era is as follows. (1) Optimizing the management function of Islamic boarding schools by distributing authority in five aspects, namely ma'hadiyah, ma'arif majlis, anasyathoth, finance, and secretariat. (2) Organizing formal education starting from Kindergarten, Madrasah Tsanawiyah (middle-level school), Madrasah Aliyah (high school), Vocational High School, and Ma'had Aly. (3) Carrying out various non-formal and informal educational activities as a characteristic of salafiyah education. (4) Establishing vocational institutions to equip students with skills. (5) Founding Ma'had Aly as an effort to produce a cadre of scholars. As for the curriculum, this Islamic boarding school assembled its curriculum independently based on the vision and mission of Pondok Tremas, absorbed the aspirations of the community, and adopted some curriculum content from the Ministry of Religion and the Education Office. This curriculum contained several characteristics: (1) implanting faith, morality and enriching Islamic scholarship through the study of kitab kuning. (2) Arabic strengthening. (3) Pesantren adaptation by adding general science lessons. (4) equipping students with skills education. (5) enriching the repertoire of Islamic thought by studying the works of ulama 'Nusantara.

Keywords: Islamic boarding schools, traditional, existence, Islamic education, globalization

1. Introduction

Modernization that is sweeping the world today brings various influences in various fields of human life. Modernization is both a challenge and an opportunity in the field of

education. Educational institutions that can renovate themselves and adapt to the current demands of modernization will be able to survive and develop amid the onslaught of modernization. On the other hand, institutions that are unable to respond to the challenges of modernization will be crushed [1].

The impact of modernization in the field of education includes a shift in the substance of education to teaching. The meaning of education with moral values shifts to teaching as a transfer of knowledge. Another impact is the occurrence of pragmatism in the world of education. Education as a process of hominization and humanization has been pushed aside by pragmatic values to achieve material goals. In addition, modernization also has an impact on the weakening of the important roles of education actors (teachers, parents, leaders) and three education centers (schools, families, and communities) [2].

In terms of educational institutions, modernization has also given rise to various forms of education. The emergence of homeschooling, vocational education, and others are considered capable of responding to current needs [3].

Traditional Islamic boarding schools (hereafter called pondok pesantren) (salafiyah) as classical Islamic educational institutions inherited from the nation which still exists today are also exposed to modernization. Pondok pesantren have inherent characteristics as their trademark, namely the existence of a boarding school (dormitory), kyai (teachers), santri (students), mosque, and kitab kuning (one of Islamic scripture). In its learning aspect, pondok pesantren also have their learning activity models such as bandongan, sorogan, syawir, mudzakah and others [4].

Pondok pesantren Tremas in Pacitan, East Java or Pondok Tremas Islamic College or also known as Pondok Tremas, since 1820 has been consistent with its identity as a boarding school that maintains and preserves cultural values as traditional Islamic boarding schools (salafiyah). This cottage is also part of a classical Islamic educational institution that is in the current of modernization which is always open to modernization and globalization. Modernization is a challenge in education that must be lived because this challenge can have both positive and negative impacts. It is positive if you can take advantage of the potential that exists in technological progress and globalization, negative impact if you cannot take advantage and even get trapped in the freedom that deviates from the rules of religion, state, and society.

2. Research method

This study aims to determine the strategy of the Tremas Pacitan Islamic Boarding School in East Java in maintaining its existence in 2020 and at the same time knowing the formulation of their curriculum to equip students to face modernization [5].

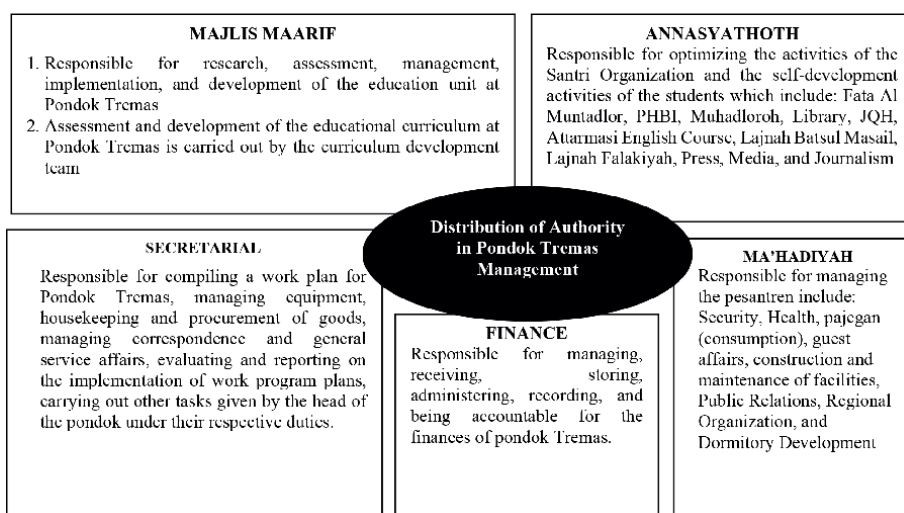
This study uses a qualitative research paradigm with deductive, comparative, and interpretative analysis methods. Based on its scope, this research is categorized as educational research, where the researcher focuses on educational problems in the pondok pesantren Tremas Pacitan, East Java about the phenomenon of modernization. Meanwhile, based on the location, this research is categorized as field research where the researcher digs up data from the field, in this case, pondok pesantren Tremas Pacitan, East Java. Judging from the type of research, this research is categorized as a descriptive study [6].

Respondents in this study were the leaders and administrators of the boarding school, the board of the Maarif council, and the ustadz of pondok pesantren Tremas Pacitan, East Java. Meanwhile, the data sources used were in the form of documents,

namely curriculum documents, santri documents, facilities, and infrastructure documents. Data collection techniques were carried out by observation, interview/ interview, and documentation methods [7].

3. Result and discussion

In maintaining its existence in 2020, pondok pesantren Tremas Pacitan in East Java took several strategic steps, namely: First; Optimizing the implementation of pondok Tremas management through the distribution of authority to all sectors, so that there was no accumulation of authority on the Kyai as the head of the pondok. The distribution of authority in pondok Tremas was divided into five functions, namely Ma'hadiyah, Majlis Ma'arif, Annasyathoth, finance, and secretarial [8]. The implementation of the distribution of authority in the management of pondok Tremas can be visualized as follows:



Second; Carrying out formal education as a response to modernization. Pesantren Tremas currently managed formal educational institutions at the kindergarten level for pre-school children in Tremas village and its surroundings, MTs (Madrasah Tsanawiyah) pondok Tremas which was a formal madrasah under the Ministry of Religion, MTs Salafiyah (Madrasah Tsanawiyah Salafiyah) pondok Tremas which was a typical secondary education institution of pondok Tremas, MA (Madrasah Aliyah) Mu'adalah which was an educational institution that had received recognition and was equivalent to formal SMA (Sekolah Menengah Atas) / MA (Madrasah Aliyah) although it did not fully follow the curriculum of the Ministry of National Education and the Ministry of Religion, a Vocational institution which was the result of collaboration with ITI (Institut Teknologi Indonesia) Tangerang and Ma'had Aly [9].

In this modernization era, education generally faces several challenges. First, namely modernization in the fields of culture, ethics, and morals as a result of technological advances in information and transportation. The second is globalization in the economic sector, namely the imposition of free trade, which means that competition for alumni in the field of work is getting tighter. Third, the results of international surveys showed that the quality of national education was still low. The fourth problem is the low level of social capital and the essence of social capital is amanah or trust [10].

To face the demands of modernization, educational institutions including pesantren Tremas must carry out various innovations and alternative educational models. According to A. Malik Fajar, currently, Islamic education institutions must design an alternative education model that suits their needs and is expected to be able to answer the challenges of changes that occur in people's lives both socially and culturally towards a new Indonesian society. Islamic education is education that is idealistic, namely education that is integralist, pragmatic, and rooted in a strong culture [11].

The formal education in pondok Tremas had advantages and uniqueness, namely: first, the depth of religious education and the values of good morals that were attached, as well as being deeply instilled in the spirit of the students in their daily life; secondly all the values of general knowledge were always associated with divine philosophy, especially Islamic philosophy; the third students could apply their knowledge directly accompanied by a teacher (ustadz) in the daily life of the pesantren; fourth, the realization of the processes of learning to know, learning to do, learning to be, and learning to live together to form the character of the students. Fifth, there were moral exemplary figures from kyai figures who became role models for students, so morality lessons at formal educational institutions at pondok Tremas did not stop at the literacy level [12].

Third; Carrying out non-formal and informal education as consistency of pondok Tremas in the Salafiyah education model. To maintain its characteristics as a salafiyah Islamic boarding school, pondok Tremas consistently carried out non-formal education including Madrasah Diniyah and Tahfidzul Qur'an and informal learning including bandongan/wetonan recitation, sorogan, Bahtsul Masail, and others, all of which were a manifestation of pondok Tremas' consistency as a classical Islamic education institution that was able to survive amid modernization [13].

Fourth; Carrying out vocational education as an effort to answer the challenges of modernization. Pondok Tremas carried out vocational education to equip students with skills in four fields, namely information technology, culinary, automotive, and precious stone crafts so that students were able to answer the challenges of modernization mainly related to the skills sector in the world of work [14].

Modernization is marked by several indicators, one of which is the emergence of free trade; goods that are free to enter and exit do not recognize the territorial boundaries of a country. Even today, the service sector (labor) from abroad is getting easier to enter Indonesia. This indication shows that a workforce with professional qualifications is highly demanded in the world of work in this modernization era [15].

Pondok pesantren Tremas also faced a similar condition. Salafiyah pesantren graduates, who are of productive age, are often considered less prepared to face this competition because they do not have sufficient provisions in the world of work. Indeed, pondok pesantren Tremas was not an educational institution that aimed to produce prospective workers [16].

However, because currently every individual is required to be ready to face competition in the world of work, pondok pesantren Tremas must renovate itself to respond to these conditions. After going through a fairly intense study, finally, pondok pesantren Tremas launched a vocational institution which was a pilot project from the Ministry of Religion [17].

The facts above, seem to answer what was conveyed by Nurcholish Madjid that Islamic boarding schools were obliged by the demands of the life of their students in the future concerning the times to equip them with real abilities that were obtained through adequate education or teaching of general knowledge. In this case too, as is happening now, there must be a choice of majors for students according to their potential. So, the purpose of Islamic boarding school education is the formation of people who have the

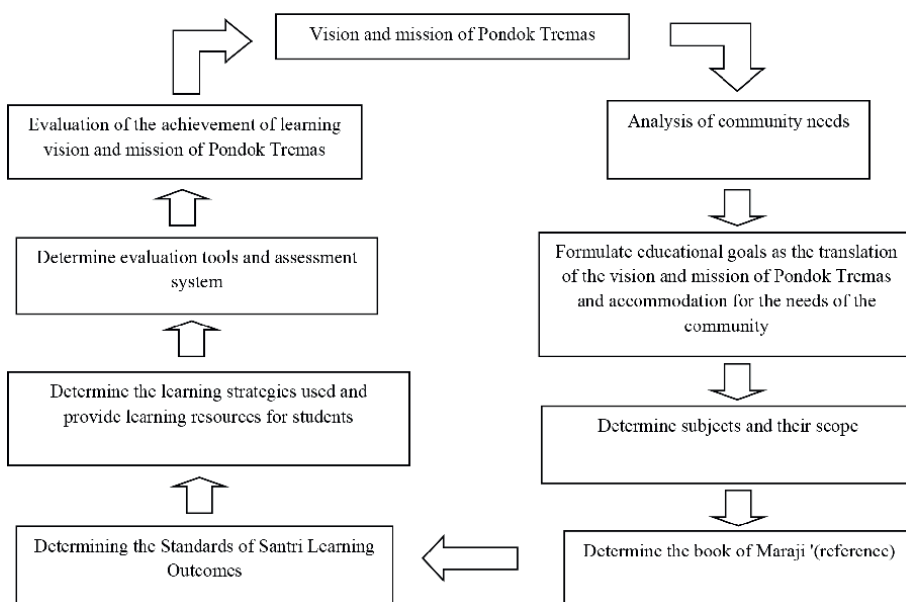
highest awareness of Islamic religious guidance, comprehensive weltanschauung, and are equipped with the highest ability to respond to the challenges and demands of life in the context of space and time that exists: Indonesia and the world today [18].

Fifth; Carrying out Ma'had Aly's starting point as an effort to produce a cadre of future scholars who were able to provide solutions to various social problems in the era of modernization, Pondok Tremas founded Ma'had Aly with a concentration of fiqh and ushul fiqh.

Mahasantri (advanced students) in Ma'had Aly at Tarmasi had a superior character that was formed through life patterns, teaching patterns, education patterns, and culture in pondok pesantren Tremas. These superior characteristics were sincerity, simplicity, and high dedication. This is as stated by Prof. Dr. Musa Asy'ari mentioning that Tremas had character, this character then gave birth to real alumni, namely those who had a high dedication, had a simple life, and was not ambitious in this country. One of the characteristics of Tremas alumni was simplicity and sincere dedication to religion and humanity [19].

3.1 Curriculum of Pondok Tremas Pacitan, East Java

The Pondok Tremas curriculum was prepared by the Pondok Tremas Curriculum Development Team. The preparation of the curriculum regained from the vision and mission of Pondok Tremas and accommodated the needs and aspirations of the community and adopted a part of the curriculum from the Ministry of Religion and National Education for formal educational institutions [8]. So with the combination of these two institutions, it is hoped that from the point of view of the existence and sustainability of the Islamic boarding school, especially from the point of view of a sustainable society, globalization, and issues related to the Islamic boarding school environment, this pesantren continues to advance, develop, and process to provide benefits to the wider community, both for now and in the future. The following is the process of preparing the Tremas Islamic boarding school curriculum which can be visualized in the following chart:



To analyze the content of the pondok pesantren Tremas curriculum, several aspects can be seen, including:

3.2 Cultivating faith and morality and enriching Islamic scholarship through the study of kitab

One of the characteristics of religious learning in Tremas was using kitab kuning as its reference. Every student was required to be able to master these books. The mastery of the santri towards these classical books was carried out by various methods such as the study of wetonan/bandongan, sorogan, syawir (book discussion), and others.

Learning with the kitab kuning at Pondok Tremas had several advantages. First, students learned Arabic indirectly by adding new vocabularies (mufradat) and Arabic grammar. Second, is the strong culture of literacy. With a focus on the kitab kuning, students had a strong literacy foundation [20].

3.3 Strengthening the Arabic language

Arabic as the language of instruction in the Islamic world was very much paid attention to in Pondok Tremas. This could be seen in the curriculum structure of Pondok Tremas, where Arabic subjects were delivered since grade I at Madrasah Diniyah Ula.

Arabic lessons at this pondok not only emphasize the ability to speak Arabic for daily communication but also on Arabic grammar skills. Apart from learning during class hours, Arabic was automatically learned as long as students took the kitab kuning lessons. All the kitab kuning taught at Pondok Tremas were written in Arabic and the students interpreted each syllable in the book. By studying the kitab kuning in all subjects, students would automatically learn Arabic [21].

3.4 Adaptation of Pondok Tremas by adding general science lessons

General subjects got a portion in pondok Tremas curriculum structure. The pragmatic objective of the inclusion of general subjects in the Pondok Tremas curriculum structure was to equip students to take the National Examination so that they can get a diploma from the state and at the same time be able to pursue education at the next level. Meanwhile, the ideal goal was to open the discourse of the students with useful knowledge in the current era of global competition [22].

The addition of general subjects in pondok Tremas curriculum structure was part of the renewal in Tremas pondok education. According to Azyumardi Azra's analysis, changes that have taken place in pesantren in response to the expansion of the education system include two ways, namely: (1) revising the curriculum by including more general subjects or even general skills, and (2) opening educational institutions and facilities for the benefit of general education [23].

3.5 Equipping students with skills education

The opening of the vocational program at Pondok Tremas was a form of its responsibility to the facts about the importance of vocational education for santri. The four study program options were presented to the students not without reason but with in-depth consideration and analysis [24].

The first study program was Information Technology. This study program was very important considering that almost all fields of work today cannot be separated from Information Technology services. The second study program was culinary. Foodservice expertise is also currently very popular. Apart from consumptive societal patterns, natural and cultural wealth in the form of diverse foods in the country was one of the driving factors for choosing a study program in this culinary field. The third study program was automotive. Until now, the field of automotive expertise is still very popular and in demand. The development of the use of motorbikes which is rapidly increasing has made the automotive sector unending. The last study program was precious stone crafts. The precious stone industry, which once dominated the country's creative industry several years ago, with the agate phenomenon seems to be a sign that precious stone crafts still exist [25].

The innovation of Pondok Tremas in equipping students with skills and expertise through vocational institutions was a form of transformation in Islamic boarding schools, as Abdurraahman Wahid's analysis. He stated that from the start, the pesantren curriculum was more dominant concerning religious lessons sourced from the Arabic kitab kuning. Meanwhile, general subjects are hardly studied at all. However, along with the demands of the times, there has been some pesantren that have included general subjects in their curriculum and have tried to equip their students with various life skills as capital to enter the community [26].

3.6 Enriching the repertoire of Islamic thought by studying the works of ulama 'Nusantara'

In addition to studying books by medieval Middle Eastern scholars, at the Ma'had Aly level, mahasantri was also introduced specifically to the works of Indonesian scholars. The purpose of reviewing archipelago ulama texts for mahasantri at Pondok Tremas was first to refresh the treasures of mahasantri thought with Islamic thought from the archipelago scholars, second so that the contents of the book can be transmitted and known by mahasantri pondok Tremas, third encourage appreciation of religious classical texts. To preserve the national culture, the fourth reveal the old culture that contains noble values to re-knit the national culture, the fifth explores other old traditions and models that are upheld and adhered to by society and reveal relevant values [27].

The modernization steps in this cottage are by integrating all elements in the education system, both the vision and mission, objectives, curriculum, methods, teachers, and students, to evaluation. Including classic systems that are still relevant

No	Preserved classic model	New model used
1	Instilling faith in students	Adaptation of Pondok Tremas by adding general science lessons.
2	Pondok classic curriculum and enrich Islamic scholarship through book study.	Equipping students with skills education and enriching the repertoire of Islamic thought by studying the works of Nusantara scholars.
3	Arabic reinforcement.	Strengthening English skills.
4	Cultivating good morals	The cultivation of good character and progressive soft skills.

Table 1.
Steps and tools to maintain the existence and sustainability of the cottage environment.

and well maintained, and modifying new models that are good for use for the sake of the continuity and existence of the cottage (**Table 1**).

4. Conclusion


The existence of the Tremas Islamic Boarding School as a classical educational institution amid modernization is part of a classical Islamic educational institution that is in the current of modernization which is always open to modernization and globalization. The responsibility of the stakeholders at Pondok Tremas towards the phenomenon of modernization and all its impacts will determine the sustainability of Islamic educational institutions that have survived for 2 centuries. Facing the onslaught of modernization, various strategies have been carried out starting from institutional and management, development of formal education units, consistency of classical Islamic education models, skills education through vocational institutions, and a cadre of ulama through Ma'had Aly. So that the potential way of the existing process, especially from the point of view of a sustainable society, globalization, and issues related to the environment, can be seen from the curriculum aspect, where this pesantren continues to conduct studies and developments that depart from the vision, mission, and goals as well as community input. so that the existence of Pondok Tremas continues to provide benefits to the community both now and in the future.

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Enhancing Social Sustainability through Education: Revisiting the Concept of Multicultural Education

Thor-André Skrefsrud

Abstract

The 2030 Agenda for Sustainable Development holds that education is essential to achieving a sustainable future. Thus, many countries around the world have made multicultural education imperative. However, a pertinent question is how multicultural education should be understood and how inclusive teaching and learning approaches should be initiated and integrated within educational systems. In this chapter, I critically discuss the concept of multicultural education and explore how it may contribute to realising the 2030 Agenda for Sustainable Development. First, I give an overview of the main characteristics and goals of multicultural education. Second, I discuss what I see as two major hindrances to realising a sustainable multicultural education: the lack of integrating issues of diversity into everyday school practices and the deficit discourse that still characterises contemporary educational debates on diversity.

Keywords: social sustainability, multicultural education, cultural diversity, multiculturalism, critical multiculturalism, deficit discourse

1. Introduction

In recent decades, there has been worldwide interest in how education can optimise social and academic outcomes for all students, regardless of gender, class, and ethnic and cultural backgrounds [1, 2]. The 2030 Agenda for Sustainable Development, adopted by all United Nations member states in 2015, holds education to be essential to achieving a sustainable future and realising all 17 sustainable development goals. Goal 4 of the agenda is focused on education, aiming to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all” [1]. Against this background, many countries around the world have made multicultural education imperative. However, a pertinent question is *how* multicultural education should be understood and *how* teaching and learning approach that foster diversity should be initiated and integrated within educational systems.

The attention to multicultural education resembles that of the social dimension of sustainability, asking what type of society we want to sustain. As emphasised by Wolff and Ehrström [3], many of the contemporary challenges regarding

sustainability relate to the social dimension: “Risks and vulnerability arise from social polarisation, urban poverty, conflict, terrorism, and natural disasters. Moreover, climate change and its effects have a strong connection to social life”. All these challenges call for a rethinking of education. In particular, the UN agenda challenges schools to find ways of enhancing positive interpersonal relationships between students and to create an inclusive school community that expands opportunities for all students to succeed, both socially and academically.

In this chapter, I critically discuss the concept of multicultural education and explore how it may contribute to realising the 2030 Agenda for Sustainable Development. In the first section, I provide an overview of the main characteristics and goals of multicultural education as outlined by leading scholars in the field. In the remainder, I discuss what I see as two major hindrances to realising a sustainable multicultural education. When practices of multicultural education are treated separately without truly permeating everyday school activities, they may function counterproductively to their aim of inclusion and, paradoxically, reinforce the boundaries they were meant to dissolve. Furthermore, drawing attention to the challenges that emerge from the deficit discourse that still characterises contemporary educational debates on diversity, I argue that well-meaning school personnel may often unintentionally reinforce a deficit discourse, even when applying practices of multicultural education.

2. Multicultural education: main characteristics and goals

Multicultural education is a term that refers to a conglomerate of educational practices used by a variety of educators, researchers, and policymakers in a variety of ways [4, 5]. Therefore, multicultural education as a concept could not be reduced to a single approach or one identifiable course or educational programme. Nevertheless, this does not prevent us from agreeing on some main characteristics and goals of multicultural education. Although the concept encompasses a variety of practices, theories, and understandings and captures multiple definitions and explanations, sufficient similarities in definitions exist.

According to Nieto [5], multicultural education emerged as part of a social movement for equity and social justice and has been a significant part of the strive for equal opportunities in general. Thus, multicultural education started as an attempt to develop an educational system that holds the potential of improving education for all students. In this way, multicultural education represents an idea, an educational reform, and a process [6]. As an idea, multicultural education acknowledges that “all students, regardless of the groups to which they belong, such as those related to gender, ethnicity, race, culture, language, social class, religion, or exceptionality, should experience educational equality in the schools” [7]. Furthermore, understood as a reform movement, multicultural education is a direct challenge to the Eurocentric focus and curriculum that creates uneven outcomes for students whose culture, language, ethnicity, and social class differ from the majority group [5]. Instead of overlooking dominant paradigms and practices, multicultural education should encourage critical thinking and enhance the transformation of schools so that all children and youth have the same opportunities in terms of access and outcome throughout all aspects of school. Lastly, multicultural education should be considered a continuing process, which indicates that the idealised goals, it aims to realise must always be addressed in human society [8]. Hence, as an idea and reform movement,

multicultural education always expands traditional approaches to teaching and learning and is never a completed or concluded project. Rather, it continues as a process, always struggling for equal opportunities in schools.

3. Historical background

Historically, the claim for multicultural education can be traced back to the civil rights movement of the 1960s in the USA [8]. For almost 90 years after the abolition of the forced enslavement of Africans and African Americans, school authorities in the USA continued to embrace state-sanctioned segregation and cultural hegemony in public education. Segregated schools remained lawfully in existence until 1954, when the Supreme Court finally proclaimed that every individual, regardless of race, is entitled to equal protection under the law [9]. During the 1960s and early 1970s, the civil rights movement worked actively against discrimination in the public, demanding that the educational system should respond to a wider range of needs, cultures, and histories [5].

In the European context, the growing awareness of multicultural education has emerged in parallel with the different phases of migration in post-war Europe, as well as, with the major shift in policy following the 9/11 attacks in New York [10]. Migration within and into Europe contributed to changing the composition of students in many classrooms, which led to a greater awareness of the mutual rights and responsibilities of migrants and societies, not least related to language policy. With the terror of 9/11, the beginning of the new millennium brought with it a major shift in policy, making security concerns related to migration a priority. In recent decades, the focus of multicultural education has therefore been on what holds societies together rather than on how diversity and differences divide communities within European countries. Although all EU countries have considerable autonomy in the field of education, EU institutions and the Council of Europe have played a role as major supranational actors in the educational field, providing unifying calls for acknowledging the intercultural dimension in schools and education. An example is an Open Method of Coordination (OMC), which is an intra-European initiative aimed at identifying common multicultural challenges in schools, spreading best practices, and encouraging countries to review their existing national policies.

4. Different dimensions of multicultural education

The concept of multicultural education comprises several dimensions that partly overlap. At its core, multicultural education calls for a curriculum no longer limited to content charted for the majority group. Furthermore, it challenges how education is done, and critically reviews the purpose and outcome of education [5, 8]. Hence, the concept of multicultural education promotes a re-envisioning of education, striving for equal educational opportunities for all students, regardless of ethnicity, social class, and cultural or racial backgrounds.

Such a wide conception thus stands in contrast to how teachers and educators have often thought of multicultural education as primarily related to curriculum content [11]. Although a critical reflection on curriculum is an important dimension, conceptualising multicultural education exclusively as content is problematic because it fails to consider multicultural education as an integral part of all subjects.

When multicultural education is exclusively bound to content related to various cultural and ethnic groups, teachers who cannot see the relevance of the content within their disciplines easily dismiss multicultural education as peripheral to their day-to-day work in the classroom.

The content dimension of multicultural education encourages teachers to use a variety of examples and knowledge from different cultural contexts in all their teaching [10]. For instance, when working with songs and different kinds of folktales in school, teachers should include histories and cultural material from parts of the world other than those of the linguistic and cultural majority. This would also imply letting the students see how cultural motives find their parallel in different cultural and ethnic contexts [12]. By becoming aware of how to expand the curriculum, teachers can draw on multicultural content in all subjects, although it will be easier within social studies, language instruction, arts, and music than in science and mathematics [7]. Nevertheless, advancing the general awareness of teachers on the kinds of knowledge and experiences presented—and therefore made legitimate—in the classroom will help schools better address the diversity of the students.

An important task for teachers is also to present content and knowledge to their students from different perspectives and to discuss the extent to which the world looks different from different angles [4, 6]. This may help students understand how implicit frames of reference and biases within a subject area or discipline influence the way knowledge is constructed. By raising the awareness that narratives are constructed and, in most cases, represent only one perspective out of many, often the majority's perspective, students may critically investigate the often-hidden cultural assumptions that characterise presentations of content in the schools. Nieto [5] draws on examples from the subject of history and illustrates how examinations of the knowledge construction processes may contribute to challenging the narrative of European discovery of America. History can “no longer be about the exploits, conquests, and achievements of Europeans and White Americans” [5]; it also has to include “the study of Brown and Black and working-class people, and of imperialism, colonization, and exploitation” [5]. Thus, the claim for a critical stance against a one-dimensional presentation of history parallels post-colonial studies, for example, Said's [13] work on oriental representations, which challenges the idea of history as a ‘neutral’ and ‘universal’ concept.

Connecting the curriculum to students' lives and identities and fostering a critical awareness of how knowledge is constructed, schools may contribute to reducing stereotypes and prejudice. Described by Banks and Banks [7] as a key dimension of multicultural education, prejudice reduction refers to activities and practices teachers use to help students to develop positive attitudes towards cultural, linguistic, and ethnic diversity. Prejudice and stereotyping are biases that work together to create and maintain inequality in society and schools. Stereotypical beliefs and assumptions that teachers need to address may include prejudicial attitudes towards cultural groups, sexual orientation, gender differences, and social background—diversities that often make up the student body in a plural classroom. Positive intergroup relations may thus develop as students become acquainted with each other through their interactions [14].

Finally, multicultural education comprises an empowering dimension, referring to the organisational and structural changes that the idea of multicultural education requires [4, 8]. Thus, implementing multicultural education in a school means rethinking the culture of the school and reforming its power relationships. Therefore, multicultural education initiatives cannot be reduced to a single activity separated

from the day-to-day work in the classroom. Rather, to realise an empowering school culture through the means of multicultural education, issues of diversity should be integrated into the entire curriculum [15]. As emphasised by May and Sleeter [4], developing empowering school culture, all sides of schools' practices should be examined, including perceptions, attitudes, and behaviours, teacher-student interaction, assessments, evaluation programmes, and extracurricular activities. It is also important that all members of the school staff are involved in reforming the culture and organisation of the school [16]. In this way, multicultural education will be more easily integrated as a strategy that affects all aspects of the school's practice.

5. Multicultural education in light of multiculturalism

Multiculturalism is a concept that has affected the understanding of multicultural education decisively. Arising in the context of what Modood [17] called a "liberal or social democratic egalitarianism and citizenship", multiculturalism is a new political idea that developed in parallel to multicultural education in the last quarter of the twentieth century. For Modood, multiculturalism "presupposes the matrix of principles, institutions and political norms that are central to contemporary liberal democracies" [17]. As a modern political idea or philosophy, multiculturalism advocates equity and equal rights between cultural communities in a plural state.

Modood [17] followed Kymlicka's [18] contextualisation of the concept, defining multiculturalism in close relation to certain norms and political understandings of society. According to Kymlicka [18], multiculturalism has both descriptive and normative aspects. Understood in a descriptive sense, multiculturalism refers to the understanding of society as a patchwork of different cultural and ethnic groups living side by side within the same community or geographical territory. Hence, used in a descriptive way, the concept implies a recognition of the integrity and distinct identities of cultural groups, accepting that groups have their own existence relative to other groups. Normatively, multiculturalism advocates the view that cultural and ethnic groups should receive special acknowledgement of their differences within a dominant political culture. The argument has been that a modern, liberated democratic state should provide equal rights for the different minorities, ensuring their existence and helping them withstand the pressure to assimilate into the majority culture. For some theorists, equal rights have been equivalent to acknowledging a group's contributions to the community as a whole, while others have argued for special protection under the law or autonomous rights for minority groups [18].

With its descriptive and normative perspectives, Kymlicka underlined Modood's understanding of multiculturalism as a liberal, political, and ethical response to the fact that societies have become more diverse and contain some different groups existing within the same society. Furthermore, by framing multiculturalism within this specific political and historical context, the idea can be seen as moral compensation for the former treatment of minorities, aiming to make up for past oppression, violation, exclusion, and discrimination [17]. In both a descriptive and normative sense, multiculturalism is an inclusive philosophy that aims to address the diversification of society in a way that prevents balkanisation and hostile conflicts.

Given that multiculturalism as a political idea finds a parallel in the emergence of multicultural education, there is a close relationship between the ideas and norms within the two concepts. Consequently, several of the early studies in the field of multicultural education focused on issues of recognition, exploring ways that teaching

can better match the home and community cultures of students who are different from the majority. A telling example is Jordan's [19] classical work on the affirmation of Hawaiian children in school, in which she introduced the term "culturally compatible" to underline the responsibility that schools have for creating equal learning opportunities. Jordan [19] discussed cultural compatibility as follows: "Educational practices must match with the children's culture in ways which ensure the generation of academically important behaviours. It does not mean that all school practices need be completely congruent with natal cultural practices, in the sense of exactly or even closely matching or agreeing with them. The point of cultural compatibility is that the natal culture is used as a guide in the selection of educational program elements so that academically desired behaviours are produced and undesired behaviours are avoided." [19].

Jordan [19] addressed the need for schools to affirm the local culture of students in ways that make it a relevant source of knowledge in the classroom. Given that students enter schools with different cultures, teachers should know these cultures and reflect them in their teaching. Finding the right match between the students' cultures and the school, the teaching becomes "culturally compatible"—that is, students' home cultures are recognised as significant contributions to the mainstream.

As Ladson-Billings [20] emphasised, the term "culturally compatible" finds its parallel in terms such as "culturally appropriate" [21] and "culturally congruent" [22], used by pioneers of multicultural education. A common feature of these studies is their concentration on the content dimension of multicultural education, promoting the recognition and affirmation of students' cultures in school through the use of examples and knowledge from different cultural contexts. According to Ladson-Billings, however, these terms included Jordan's [19] cultural compatibility and "seem to connote accommodation of student culture to mainstream culture" [8]. As an alternative, she suggested the term "culturally relevant" [20], which some years later was picked up by Gay [23, 24] in her much-cited work on culturally responsive teaching.

Similar to the other concepts, Gay's [23, 24] work on culturally responsive teaching is closely connected to the ideas of multiculturalism on recognition and equality. Being one of the pioneers of multicultural education, the author was concerned with the recognition of minority students, emphasising dimensions of content integration, and equity pedagogy. It is important for Gay [24] that teachers need to know in-depth the cultural characteristics of the different ethnic groups represented in the classroom. According to Gay [23], the "knowledge that teachers need to have about cultural diversity goes beyond mere awareness of, respect for, and general recognition of the fact that ethnic groups have different values or express similar values in various ways". Rather, a "requirement for developing a knowledge base for culturally responsive teaching is acquiring detailed factual information about the cultural particularities of specific ethnic groups (e.g., African, Asian, Latino, and Native American)" [23]. For Gay [23], "the intellectual thought of students from different ethnic groups is culturally encoded in that its expressive forms and substance are strongly influenced by cultural socialization". Hence, to implement multicultural education in schools, teachers must be able to decipher the codes of various cultures and to use this information to get to know and relate to their students better, exploring the kinds of differences that make communication difficult.

According to Gay, the school's attention to the cultural characteristics of ethnic groups is important because many teachers are hesitant to address cultural differences for fear of stereotyping or making generalisations [23]. Teachers will therefore try to compensate for the fear by ignoring or denying the existence of differences,

and conduct their teaching from an assumed neutral position, which in most cases is equivalent to a majority culture perspective. Nevertheless, Gay's [23] approach has been criticised, an important critique that has targeted the concept of multiculturalism and its versions of multicultural education. Among others, Mason [25] emphasised that multiculturalism presupposes an essentialist conception of culture, reifying the identities and practices of ethnic groups. Therefore, when Gay [23] argued that teachers need to know the "ethnic groups' cultural values, traditions, communication, learning styles, contributions, and relational patterns", she faced the risk of treating cultures as static, bounded, and homogeneous [25].

This conception of cultural affirmation has proven to be problematic for several reasons. First, the diversification of societies has made communities highly differentiated [26]. This implies that a person's identity is rarely bound to one particular group or community; rather, it reflects a range of the communities in which the person is a part. Identity is produced and reproduced in transformative processes of cultural interaction and exchange [27]. Second, seeing people as representatives of certain cultures or groups is a limitation of identity that may potentially put restrictions on who people are capable of becoming in their community. To claim that the intellectual thought of students from different ethnic groups is culturally encoded, or that teachers' should be able to discern specifically cultural traits that are characteristic for a group of people, risk trapping people within a narrow understanding of identity that shuts off identity options for people [28]. Hence, culturally responsive teaching aimed at breaking down walls can paradoxically lead to the reinforcement of cultural borders. For minorities, being seen as a distinct group with certain characteristics may, in turn, lead to psychology of separatism, which isolates minority groups and creates a division between the groups inside a country as well as between the groups and the state [29]. By reinforcing a specific type of difference, newcomer cultures may become even more isolated in schools and society.

6. Multicultural education in light of critical multiculturalism

The problems associated with multiculturalism have led scholars to argue for alternative ways of engaging with questions of difference. In this way, they have provided important corrections to the concept of multicultural education.

In a British context, antiracist educators such as Troyna and Foster [30, 31] have argued that liberal multicultural education has largely ignored the structural racism, sexism, and discrimination that often affect students from minorities. As an alternative, antiracist education requires "eliminating from the educational system any practices which are racist or which indirectly restrict the chances of success of members of a particular racial or ethnic group" [31]. In the United States, the critique of liberal multicultural education has often been framed within a similarly critical approach, a critical race theory [4], which combines a progressive political struggle for racial justice with the critique of what is seen as an oversimplified approach to cultural recognition. Similar critical thoughts can also be found in critical pedagogy, for instance, the classical work of Freire [32], who rejected the idea that education should affirm students' experiences only for motivational reasons. In line with anti-racist education and critical race theory, a critical pedagogy argues for the inclusion of a global critical dimension that transcends the given and even alters the students' experiences, ultimately changing illegitimate hierarchies that are embedded in social practices within education.

However, in recent years, developments in cultural studies, particularly within education, have been influenced by critical multiculturalism, which has taken up the range of concerns offered by critical responses to multiculturalism. As such, critical multiculturalism has confronted the last decades' hegemony of liberal multicultural education more broadly than a single critique [33]. In line with other critical responses to multiculturalism, critical multiculturalism argues for a critical analysis of the conditions necessary to realise social emancipation for all individuals despite race, class, gender, cultural background, or ethnicity [12]. As emphasised by May and Sleeter [4], structural inequalities and discriminatory practices continue to persist, given that schools have adopted multiculturalism as a pedagogical approach. Hence, multicultural education does not seem to have the ability "to tackle seriously and systematically these structural inequalities, such as racism, institutionalized poverty, and discrimination" [4]. This inability is a result of its "continued use of the affirmational and politically muted discourses of 'culture' and cultural recognition" [4], where the cultural background is essentialised, depoliticised, and treated as a set of practices that can be described, labelled, and taught [15]. By contrast, critical multiculturalism seeks to highlight structural inequalities that prevent education from responding to the variety of needs in a diverse student population and to realise optimal learning conditions for all students [4].

Critical multiculturalism is therefore critically concerned with the consequences of multicultural education. When cultural background is treated as something fixed that should be affirmed and recognised, cultural practices and experiences are understood as something that can be categorised and compared [34]. This understanding reflects a conception of cultural background and identities as integral, unified, and related to a specific geographic or ethnic community. Moreover, it undermines the experience that cultural identities are increasingly being deconstructed, altered, and redefined in dynamic processes of change. Although multiculturalism has its roots in the civil rights movement and has highlighted issues of racism in education, it has proven insufficient when it comes to recognising, questioning, and altering structural systems of injustice and embedded power. Thus, from the perspective of critical multiculturalism, there is a need to challenge a multicultural education approach that draws on multiculturalism and stimulate reflexivity, critical thinking, and self-awareness to create opportunities for transformative learning [4].

In the remainder of the chapter, I now turn to what I see as two major hindrances to realising sustainable multicultural education: the reduction of multicultural education to one-off events separated from everyday school activities and the deficit discourse that characterises contemporary debates on diversity.

7. Integrating multicultural education into the curriculum

As we have seen, adopting the concept of multicultural education in schools does not necessarily imply a more inclusive and socially just practice and school environment. When practices of multicultural education are treated separately without truly permeating everyday school activities—for example, reduced to single happenings and one-off events—practices of multicultural education may function counterproductively with regard to their proclaimed aim of inclusion. Hence, structural inequalities and discriminatory practices may continue to persist when schools adopt multiculturalism as a pedagogical approach.

In a study of multicultural education in American schools, Hoffman [35] introduced the notion of “hallway multiculturalism”, which problematises the practice of celebrating cultural diversity without really integrating issues of diversity into the curriculum. According to Hoffman, schools often turn to superficial ways of recognising cultural backgrounds, displaying posters and decorations made up of collages of “ethnic faces” and statements proclaiming “All Cultures are One” and “Diversity for Unity” [35]. Hoffman’s critique corresponds with Troyna’s [36] well-known description of the three S’s of multicultural education: saris, samosas, and steel bands, that is to say, clothing, food, and music, which often characterise practices of multicultural education. By focusing on the exterior of culture, schools avoid a more critical engagement with deeper issues and become examples of superficial ways of addressing cultural differences in schools [12].

Watkins and Noble [37] offered a recent example of such a critique from migrant-based nations, such as Australia, the UK, the USA, Canada, and New Zealand. Taking an ethnographic orientation to the field of multicultural education, Watkins and Noble [37] examined how schools often resist the intellectual task of doing diversity differently. Although integrating multicultural education into the curriculum requires an overall approach in which all sides of education are influenced, Watkins and Noble [37] found that schools’ practices often offer little more than a superficial celebration of ethnic differences. As examples of unreflexive forms of multicultural education, schools entail simplistic understandings of culture. Thus, instead of enhancing social sustainability, which was the intended meaning of the pedagogical initiatives, schools’ practices may reproduce essentialised understandings of difference, providing flawed representations of the complexities in today’s classrooms.

An integrated approach to multicultural education requires that issues of diversity affect all subjects in school and that diversity has ramifications for all sides of teachers’ professional work in the classroom [15]. Such an approach includes a wider conception of content, assessment, learning approaches, and teaching methods. Thus, to enhance the UN agenda on social sustainability in schools, multicultural education cannot be reduced to a single activity. Rather, issues of diversity should be integrated into the entire curriculum, thereby creating an empowering school culture for all students. This implies that knowledge should be presented not as a neutral objective statement but rather as several—and to a certain extent—competing narratives that comprise different perspectives. Understood in this way, multicultural education may create a space for action, intervention, and even transformation that may contribute to enhancing social sustainability as part of the 2030 Agenda for Sustainable Development.

8. Counteracting the deficit discourse on diversity

In this last section, I highlight the significance of counteracting deficit thinking within practices of multicultural education. Within education, discourses of deficit are often used to explain why students misbehave in class and underachieve. From this perspective, students perform badly because of their problematic family background, their communities, and/or their culture. Individuals’ failure in school is thus ascribed to the deficits and problems of people from marginalised communities rather than to inequities in access and opportunities [38]. Minority children and their families are seen as culturally, socially, and linguistically deprived and in need

of repair, and school becomes the cure that should repair the errors and deficiencies. Subsequently, the role of education is to remove the barriers that the student's home culture and resources represent in the encounter with the dominant culture.

According to Cummins [39, 40], however, such discourses are never limited to schools and education alone. Rather, a deficit discourse of diversity is interwoven in public debate as an everyday way of speaking and thinking about people, communities, and cultures. Cummins [39] explained that there are certain power relations between dominant and subordinated groups within wider society that directly influence pedagogical practices within the classroom: "Teacher-student interactions within the classroom are a direct function of the choices that teachers make, individually and collectively, about what kind of educators they want to be." [39]. According to Cummins [39], teachers may institute what he calls collaborative relations of power, in contrast to coercive power relations. The relationship between the teacher and the student may counteract and actively challenge oppressive patterns on the macro level: "The choices that define teacher identities also open up or shut down identity options for their students" [39]. Hence, for Cummins [40], teachers always have the opportunity to challenge and counter the deficit discourse that plagues the media and institutions, such as schools. This can happen when teachers empower their students by recognising and affirming their cultural and linguistic background as being relevant to the school community and, therefore, also relevant to the society in which the school exists.

Bourdieu and Passeron [41] remind us that school, as a social system and an integrated part of society, transmits, and maintains the dominant culture. Schools integrate political and social discourses, mirror their communities, and thus may contribute to reproducing inequality. For some students, the content and form of the school correspond to their upbringing—their habitus. The subjects, language, and learning activities at school recapitulate the atmosphere around the dinner table, the discussions being a part of the daily life in the families, and the literature the parents read for their children. For other students, however, school represents something different from daily life, demanding access to social and cultural capital that they do not have or can possess because of the position and dispositions that their family and communities are assigned in society. According to Bourdieu and Passeron [41], to succeed academically in school is, therefore, harder for some students than for others, not because of their intellectual capacities but because they face structural hindrances. In this way, schools may contribute to social stratification, reinforcing the structural discrimination that also characterises other parts of society.

Moreover, according to Bourdieu and Passeron [41], parents from the dominant culture actively seek to give their children part of what can be framed as 'free culture', which supports and strengthens the activities conducted in school. Free culture includes leisure activities, such as travelling, which should not be confused with mass tourism. While tourism is associated with collectiveness, shallowness, and disruption of the environment, travelling—often to remote and expensive destinations—is pictured as a transformative journey that is unique in its duration and the personal commitment of the one who performs it. The traveller discovers new insights, learns about other cultures, and advances his or her individuality and self-development. In contrast to deprived families that do not have the same opportunities, affluent groups of people will thus have an advantage in school. First, they are able to give their children first-hand experience with language and culture. Second, the children are given self-confidence that is strengthened by the school and the content of the curriculum. Third, the 'free culture' may create relations between the families and the teacher in the sense that they share experiences, capital, and even habitus.

Taking Bourdieu and Passeron's [41] analysis of schools and society into consideration, the process of education is never neutral. Scholars such as Mayo [42] and Cummins [40] have emphasised the possibilities that teachers possess to challenge the unarticulated and often hidden mechanisms that reinforce social inequalities. Mayo [42] writes: "There is no such thing as a neutral education process. Education either functions as an instrument which is used to facilitate the integration of generations into the logic of the present system and bring about conformity to it, or it becomes the 'practice of freedom', the means by which men and women deal critically with reality and discover how to participate in the transformation of their world."

As we can see from the quote, Mayo admitted that Bourdieu and Passeron [41] were right to claim that school and education transmit the dominant culture and hence contribute to the reproduction of the power relations and hierarchies within society. By drawing attention to the deficit discourse that often characterises debates on immigration and immigrants in school and society, Mayo illustrated the opportunities that teachers have to challenge marginalisation in school and make education a "practice of freedom" [42]. Becoming aware of the deficit discourse in schools and society—how it works and how it affects students—can help us better perceive the prospects and potentials for multicultural education in the future. Such an awareness reminds us of the political nature of schooling and its relationship to the dominant society. Hence, it may also enhance a critical stance against the perceived neutrality of schools that covers hierarchies, power relations, and other mechanisms that reinforce social inequalities. Counteracting deficit discourses, multicultural education can make a difference by promoting the transformation of societies towards social sustainability.

9. Conclusion

The goal of this chapter is to address the concept of multicultural education and explore how it may support the 2030 Agenda for Sustainable Development introduced by the United Nations. By tracing the concept of multicultural education back to its origin and discussing it in light of multiculturalism and critical multiculturalism, we identified the following main challenges:

First, practices of multicultural education that enhance the aim of social sustainability should be seen as an integrated part of education, not an appendage. Although many countries have embraced the idea that multicultural principles should be incorporated in the curriculum, and for that reason has posed multicultural education as an overall aim in curriculum plans and educational documents, issues of diversity are often treated separately from everyday activities in school. The idea of multicultural education—that all students, regardless of their background, should have an equal opportunity to learn in school—is frequently trivialised, taking the form of superficial practices of cultural affirmation. When this is the case, a majority perspective is often taken for granted, as teaching is charted primarily for the mainstream students and the mainstream classroom.

Second, I have presented the challenges that follow from the deficit discourse characterising contemporary debates on diversity. In this chapter, I have argued that schools and educators—often unintendedly and with good intentions—may reinforce such discourses, even when applying practices of multicultural education. By ignoring the political nature of schooling and its relationship with the dominant society, the process of education is seen as neutral. Consequently, schools run the risk of

overlooking opportunities to address and transform hidden prevailing majority-oriented perspectives and practices. Despite their best intentions, schools may therefore miss the opportunity to challenge the devaluation of identity and background that many students with migrant backgrounds still experience in school and society.

As emphasised by May and Sleeter [4], critical responses to multicultural education “has tended to focus on the theoretical parameters of the debate rather than on their actual application”. Consequently, there is a risk that critical approaches—such as the one presented in this chapter—are more interested in what multicultural education should not be, rather than what it may look like in practice. In response, I would like to emphasise the need for critical studies that challenge our understanding of concepts such as multicultural education. We need a conceptual critique that helps us question hidden and embedded power structures and hierarchies and see more clearly what multicultural education can be as a significant contributor to social sustainability.

Furthermore, the alternative perspectives articulated in this chapter illustrate the centrality of teachers and the way they structure their interactions in the classroom. Cummins [40] reminds us that planned change in educational systems involves choices at different levels. Although choices are constrained by certain factors at each level of decision-making, individual teachers exercise agency in the sense that they determine for themselves how they chose to interact with their students, how their orientation towards the students’ cultural and linguistic backgrounds should be, and the ways they implement the curriculum in their classrooms. Thus, teachers play a key role in implementing multicultural education. Within their classrooms, they can choose to make issues of diversity an integrated part of their teaching by adapting curriculum material to connect to students’ prior knowledge and competencies. By enabling migrant students to use their home language as a powerful tool, teachers can also challenge fatalistic conceptions that reinforce deficit-based thinking. Emphasising what a diverse student population has, and not what they lack, brings attention to the wide array of skills and strengths students bring to the classroom and the community. It is within such an understanding of multicultural education that the ambitions of the 2030 Agenda for Sustainable Development can be realised.

I want to conclude by reflecting on the prospects for integrating a multicultural education approach that transforms education and expands opportunities for all students to succeed. What are the opportunities for realising the high hopes and great expectations of multicultural education?

For teachers working towards creating a positive classroom climate for diversity, there is often a mismatch between the realised and the expected in their daily work. Although diversity issues are high on the agenda in many countries, competing prominent discourses continue to fascinate the minds of educators, politicians, and policy makers [43], which ultimately affects the classroom. Both in European countries and in the USA, a standardisation of education has long been the case. As governments have aimed to raise standards and performances in education, a prescriptive curriculum policy has been introduced, emphasising international comparisons and the assessment of educational outcomes through standardised tests [44]. Hence, attention is increasingly paid to an educational practice focusing merely on ‘what works’ within a standardised curriculum and across different contexts. As Biesta [43] has emphasised, however, the aim to control and predict the outcome of a standardised process of learning draws attention away from issues such as how to chart more equitable educational opportunities for all students. Combined with a narrow focus on the assessment of skills through international comparative measures, there can be little

space for discussions on how students' cultural and linguistic repertoires should be activated in the classroom, or how schools can affirm the value of cultural complexity.


For teachers, it is obviously demanding to balance the tensions between different educational agendas. However, as stated above, all teachers have the possibility to advance multicultural education in their daily encounters with students. By encouraging students to take pride in their cultural, linguistic, or ethnic background, introducing varied and diverse content, and taking an interest in the students' prior knowledge and competencies, teachers contribute to challenging the devaluation of identity that many students experience in school and society. For some, this means that they must overcome a tendency to assume that the dominant culture is the implicit norm. For others who aim to be 'colour blind' and tend to overlook diversities in the classroom, they must reorientate and rather become aware of students' unique needs and abilities. By establishing positive interrelations between students and between themselves and the students, teachers create an inclusive environment in which differences are acknowledged and appreciated. In this way, teachers play a key role in the work towards realising not only multicultural education but also the 2030 Agenda for Sustainable Development.

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Effects of the Changes of Curriculum on the Coverage of Environmental Content in Geography

Sikhulile Bonginkosi Msezane

Abstract

The South African education sector has experienced several shifts in the curriculum since 1994, thus affecting the coverage, teaching and examination of environmental impact topics in the South African Further Education and Training Phase (FET) phase. This chapter evaluates the effects of changes in curriculum on the coverage of education for sustainable development content in Geography. A qualitative research approach using an interpretative paradigm was employed in the documents used by Geography teachers in South Africa. The chapter used Margaret Archers, Realist Social Theory as a theoretical framework that guides data analysis and interpretation. Document analysis was the only method used where policy documents and examination papers were the instruments evaluated. The results show that environmental impact topics are covered in varying degrees in the South African CAPS curriculum. The level of coverage of environmental impact topics in the examination question papers fluctuates, sometimes to levels below those stipulated in the CAPS documents. The conclusion that can be reached is that the variable coverage of environmental impact topics in the examinations may have a negative effect on the way teachers address the topics of Geography. This resulted in an emergence of structural and cultural morphogenesis in the teaching of environmental content in Geography.

Keywords: environmental education, education for sustainable development, geography, realist social theory, CAPS curriculum

1. Introduction

The purpose of this chapter was to analyse the coverage of policy and examination of environmental content EE/ESD in Geography in the Further Education and Training (FET) phase (Grades 10–12) of the South African education system. The study investigated whether there was alignment between policy documents and the Grade 12 past examination question papers' coverage of environmental content, which were written from the years 2005 to 2015 during the United Nations Decade of Education for Sustainable Development (UNDESD). This period was chosen because it covered the

time of the shifts in the school curriculum in South Africa up to the new Curriculum Assessment Policy Statement (CAPS) that was implemented in Grade 12 in 2012. This was also a period of international focus on sustainable development, and this should have had an influence on the school curricula.

The South African education system has undergone several curricula transformations since the dawn of democracy in the country in 1994. In this chapter, curriculum refers to the means and materials used by teachers and learners for the purpose of acquiring selected educational results [1]. Furthermore, [2] states that a curriculum involves learning activities that are fully controlled and implemented by educational institutions and educators, then done by the intended learners individually or in formed groups, inside or outside of the classroom environment. The purpose of the curriculum is to prepare learners to adapt and strive within the society in terms of educational change and growth [1].

In the school system, assessment is one of the most important aspects of a curriculum which determines whether learners have acquired the expertise and skills necessary to practice what they have been taught. In the South African education system, assessment is used to determine whether learners can be advanced to a higher grade. Teachers find themselves compelled to teach what is likely to be examinable at the end of the year examinations, which is part of the curriculum design postulated by [3]. Harris contends that we are living in a volatile global environment that has evolving dynamism in response to impetus [4]. Harris further states that in the last century it has become apparent that humanity has taken control of the planet's ecosystems and biochemical cycles in such a way that human activities are now causing environmental change [4].

More importantly, it was envisaged that due to curriculum changes, there might be a possible disparity between content coverage and actual examination in the Geography syllabi. Hence, this study investigated documents with regard to extent of environmental content in the curriculum. This study used a qualitative research approach, where Archer's Realist Social Theory (RST) was the guiding framework [5]. Supporting this approach, documents and interviews were used as sources of data. This study focused on environmental impact content knowledge rather than the actual teaching practice, hence only documents were used as data.

This study attempts to close a research gap as few studies have investigated the extent of coverage of environmental content in the South African curriculum. This is seen where issues such as climate change are well covered in the policy documents, yet not much has been seen in translating this into the actual practice in the form of examination [6]. Most studies have focused on the effects of policies in teaching and adaptation of teachers to new policies [7].

2. Literature review

The South African education system has frequently changed since gaining independence in 1994 resulting in the curriculum change that was problematic in its implementation. These challenges were caused by the complexity of the implementation programme and the capacity of teachers to adopt new teaching strategies in the classroom. The curriculum has undergone multiple variations, from Curriculum 2005 (C2005) to the Revised National Curriculum Statement (RNCS), to the National Curriculum Statement (NCS) Grade R–12, and then, in 2011 to the Curriculum and Assessment Policy Statements, commonly known as CAPS.

The transformation of the curriculum in South Africa focused on the content, teaching methods and assessment [8].

2.1 Importance of EE/ESD coverage in the curriculum

Currently, the Earth is in the Anthropocene era where human-derived environmental crises have taken centre stage due to their global extent to the point that they can no longer be avoided. Our impact on the environment is threatening not only biodiversity but also the very existence of humankind itself. Climate change and global warming are recent phenomena that were not part of the curriculum in the past, yet we are already feeling the effects of climate change locally and globally. Therefore, it is against this background that environmental impact topics need to be sufficiently covered in the curriculum, in teaching and learning processes and in examinations to ensure that values and principles of sustainable development are encouraged. Natural resources are important to every living organism, and they should be utilised without being depleted to satisfy human livelihood. Unsustainable human exploitation of natural resources, pollution and degradation result in negative environmental impacts that consequently have negative implications on biodiversity, ecosystems, the physical environment and, subsequently, human development and livelihood sustenance. For this reason, it is important to ensure that environmental impact topics are sufficiently covered in the curriculum [9].

Moreover, since the Industrial Revolution, the rapid development of society has resulted in many global environmental problems such as global warming, a rise in sea levels, ozone depletion, air and water pollution, land degradation, destruction of wetlands and deforestation [10–12]. These environmental problems outlined above can be partially addressed through a school curriculum that includes a consideration of environmental impact topics across all levels from policy to implementation. Therefore, teaching of environmental impact topics through EE/ESD and its alignment to curriculum policies is the focus of this study.

The efficient utilisation of the world's natural resources is one of the important themes of AGENDA 21, "A global action plan for environmental impacts into the 21st century" [13]. The precious natural resources of the planet are being depleted and degraded at a rapid rate. Sitarz notes that the Earth's limited supply of natural resources and its inability to recover from degradation were not taken seriously in the past [14]. The rapid increase in population and the accompanying human activities in the last century have placed extreme stress on environmental resources. As a result, Hill et al. [9] point out that, in 1993, a National Environmental and Planning Agency was formed in some European countries to promote EE/ESD activities through environmental impact programmes. In South Africa, non-governmental organisations (NGOs) play an important role in ensuring that the ruling government upholds EE/ESD where, in 1975 for example, the Umgeni Valley Project encouraged the development of EE/ESD practice and theory in the country [15].

It is generally accepted that there are limits to both the Earth's resources and its capacity to handle the environmental impacts caused by humans [14]. Thomas-Hope reveals, for instance, that the environmental impacts of solid waste which is disposed of at landfills and cannot cope with such disposal contribute greatly to land degradation [16]. This human activity is evident in the global arena where the effects of cumulative negative environmental impacts on the environment are experienced. In addition, [12] emphasises that human activity is a factor that has important impact on the environment, even in remote areas, since the onset of the Holocene era. Goudie and Viles further argue that it normally takes some time for the causes of

environmental impacts to become apparent and this makes the causes hard to identify [17]. They also associate environmental changes with human impacts which go together with natural fluctuations to create massive and unpredictable changes in the environment.

Against this background, it is essential that the global resources of land, freshwater, marine, biological, genetic resources and energy are protected [14]. Human development must be achieved in a way that improves productivity to meet global demand for goods and services while sustaining the Earth's natural resources. Educating future generations is important to expose them to environmental issues that are detrimental to the environment, which sustains human existence. Depletion of natural resources through unsustainable resource extraction has often been associated with population growth, which was estimated to have reached 7.9 billion people globally by 2022 [18]. Population growth and development can lead to violence since people affected by shortages of natural resources believe that they are unfairly treated in the distribution of basic needs such as food [19].

2.2 Environmental content aspects in the curriculum

As mentioned earlier in this chapter, local, regional and global environments are being gradually degraded by mostly human-induced (manmade) as well as non-human induced activities. Therefore, it is important to perform research about the coverage of environmental impacts in the curriculum due to the continued lack of realisation of the unsustainability of human actions on the environment and their implications on human livelihood. Hence, it is important to respond to these environmental impacts through education, which should incorporate EE/ESD themes in the curriculum and across all subjects. Coverage of environmental impact topics in the South African school curriculum should be accessible to the younger generations who will have informed knowledge on how they could preserve resources for future usage by acquainting themselves with environmental knowledge embedded in the documents. Therefore, documents such as Grade 12 textbooks, examination papers and CAPS must be aligned to important practices that aim at EE/ESD. This study aims to provide an assessment of what is being projected by policy on environmental education and what is being practised in the Geography subject.

Carvello in her study of an assessment of the role of eco-schools in achieving whole school development through sustainability education highlighted some evidence of EE/ESD in the NCS in subjects such as Business studies, Consumer studies, Life Orientation, Agricultural Sciences, Tourism, Mechanical Technology and Economics [20]. Carvello study was done before the CAPS curriculum was implemented and does not analyse the alignment between policy and practice [20]. On the other hand, [21] in her study of an investigation into issues and challenges in implementing environmental education in special schools in South Africa, states that the constant changing of the curriculum in a very short period confuses teachers. Her findings point to a situation where teachers are unable to cope with the changes that have been affected in the curriculum. Similarly, [7] points out that South African teachers are frustrated by curriculum policy changes, where teachers indicated that since 1994 there have been many curriculum changes where some policies have been repealed before they could be implemented.

In addition, [21] study further reveals that teacher's views about the environment are very superficial, and they confuse EE/ESD with nature studies or nature conservation, which influences the way they teach. Furthermore, [7] reveals that teachers

indicated that they find it difficult to integrate EE into the curriculum because they were not fully trained on how they could use EE concepts in the classroom. Zwelibanzi [21] is of the opinion that an exploratory study could be conducted on how to enhance teacher's pedagogical and content knowledge regarding EE through in-service and pre-service training. She further recommends that survey studies should be conducted on teacher's knowledge and perceptions about constructivism that underpins CAPS. Some studies provided important findings of the integration of EE/ESD in the school curriculum, teachers' discourse, practices, political, economic and social dimensions of EE, different EE approaches, environmental behavioural changes, pre-service teacher training and assessing environmental competency [22–25].

When reviewing literature on EE/ESD in South Africa, most of the studies conducted research on integration, teacher practices, pedagogical and content knowledge, different EE approaches, behavioural changes and assessing environmental literacy [7, 20, 21]. However, none of the studies was about the alignment and extent of EE/ESD coverage in curriculum policy and in the examinations. It is against this background that this study analysed the coverage, teaching and examinations of environmental impact topics in the FET curriculum. In addition, this study analysed how the shift of the curriculum has affected coverage of EE/ESD topics.

The approaches used in South Africa to include ESD in the curriculum are an issues-based approach and a fragmented approach [26]. The extent and depth of coverage of ESD content in the curriculum is dependent on the subject. Some subjects have greater coverage of environmental content than others do [26]. However, the Curriculum Assessment Policy Statement (CAPS) requires teachers to integrate aspects of environment and sustainable development into almost all subjects as seen in **Table 1** for example.

According to the UNESCO Global Action Programme on Education for Sustainable Development, ten SADC countries experienced challenges in integrating and implementing EE/ESD in teacher education. These challenges were:

- ESD is not very obvious in curricula and assessment.
- The school syllabus is too long and hence educators rush over ESD issues.
- Lack of clear policy on ESD integration.
- Lack of teaching and learning support materials.
- Lack of a whole system approach during the implementation and
- Inadequate support from management and financial support.

2.3 Teaching EE/ESD topics in selected countries

This section shows overview of EE/ESD in selected countries. These countries were selected to show how other countries apart from South Africa EE/ESD is integrated into the curriculum.

2.3.1 Taiwan

According to [27], curricula and teaching methods adopted by elementary and junior high schools in Taiwan affected the outcomes of EE. Yang gives the following

Phase and subject	Biodiversity and ecosystems	Sustainable development	Water system and security
FET Agricultural Sciences	Plant studies;– Components of ecosystem; The biomes of Southern Africa; Ecology and agro-ecology; Interactions in ecosystems and ecological farming	Sustainable utilisation of natural resources; Farming systems that use agro-ecological principles	Water quality and management; Sustainable use of water in agriculture; Water use/ irrigation
FET Geography		The concept of development; Effect of development on the environment; Using resources; Effects of using more non-conventional energy sources on the South African economy and the environment; Energy management	Water in the world; The world's oceans; Water management in South Africa; Floods; Drainage systems in South Africa; Fluvial processes; Catchment and river management
FET Life Sciences	Biosphere to ecosystems; Biodiversity; The role of invertebrates in agriculture and ecosystems; Population ecology; Human impact on the environment; Current crises for human survival; Loss of biodiversity		Water (availability and quality)

Source: [26].

Table 1.
Mapping some of the key EE/ESD knowledge areas/themes in the south African school curriculum.

example: at elementary schools, social science and nature and life technology textbooks typically contain and mention nature and environmental issues but fail to teach much beyond natural aesthetic appreciation. Lessons typically focus on students' semantic analysis and rhetoric skills, and the teachers are more concerned with the appreciation of poetry. Yang [27] remarks that the Chinese use nature to understand the beauty of literature, and do not pay attention to nature itself. In Taiwan, social studies, nature and life technology involve a large coverage of geographic and natural environmental content, yet this content is based on knowledge without any real appreciation of environmental issues and rather focuses on the aesthetics of nature. Yang [27] argues that although elementary school learners do not experience substantial academic pressure, environmental awareness cannot be achieved solely by studying the written content of teaching materials.

2.3.2 New Zealand

Irwin and [28] recognise that currently, there is no curriculum requirement to teach EE in Aotearoa, New Zealand. They admit, however, that it is entirely at the discretion of individual schools and their school governing bodies to incorporate EE in their curriculum, although the environmental guidelines recommend using a whole-school approach across multiple learning areas. They indicate that while EE operates both within and outside of the national curriculum. This is done because the vision

and future focus of the curriculum requires all subjects to integrate key socio-cultural and environmental aspects relating to sustainability into the learning process [28].

2.3.3 Australian

'Education for sustainability develops the knowledge, skills, values and worldview necessary for people to act in ways that contribute to more sustainable patterns of living' [29]. In Australia, there is an increased emphasis on sustainability in education supported by a series of government initiatives, policy statements and whole school programmes. This has led to environmental impact topics being embedded in all school learning areas [29]. The increase of environmental impact topics in the curriculum has presented challenges in efficacy and content knowledge.

2.3.4 Namibian

EE in the Namibian curriculum is embedded in all subjects. According to [30] study, environmental learning is integrated across the curriculum where incorporating environmental topics requires knowledgeable teachers to relate these topics to the environment. This is a similar case in South Africa where EE is embedded across the subjects in the curriculum. The analysis of Namibian inclusion of EE in the curriculum revealed that more emphasis is on the Biology syllabus. This is almost the same scenario in South Africa where more emphasis of EE is in Life Sciences.

2.3.5 Zimbabwe

In 1999, the Presidential inquiry into education and training recommended the integration of EE into the school curriculum [31]. This led to EE being developed to influence policy, which then led to the integration of EE in all learning institutions at various levels in the formal and non-formal sector [32]. In the curriculum of Zimbabwe, EE is done in carrier subjects such as Natural Science, which covers only the biophysical aspect of the environment. Curriculum greening was then suggested as one of the platforms that can be used to disseminate EE across the curriculum [32].

2.3.6 Botswana

In Botswana, EE integration in the curriculum traverse's subject boundaries, thus allowing teachers to collaborate on cross-syllabi content [33]. Subjects in the curriculum are interconnected with the intent of infusing integration in the development of schoolchildren's concept of EE [33]. Despite government efforts for curricular integration, it is the responsibility of the teachers to integrate environmental content in their classrooms. Against this background, integration of EE in Botswana is implemented across all school subjects. Velepini [33] mentions that there is misalignment and continuing confusion on what the policy stipulates and how implementation is accomplished in schools.

2.3.7 Zambia

In Zambia, EE is covered in the lower, middle, and upper basics of the schooling system. EE is covered mostly in subjects such as Geography, History, Social Studies and Religious Education [34]. According to [34], EE is covered as components in the

various subjects and that has implications on teacher competence because there are no experts specifically trained in EE as a discipline.

2.4 Integration of EE/ESD in the south African curriculum

In South Africa, the South African National Curriculum Statement (Grade 10–12) mentions that all subjects must contain integrated environment and sustainability content [8]. All the subject areas have a varied extent and depth of coverage of ESD content in the curriculum. Therefore, the (CAPS) requires teachers to integrate aspects of environment and sustainable development into all subjects. This curriculum integration is informed by the 1995 White Paper on Education and Training that stipulated integration of environmental education for sustainable development into all levels and phases of the education and training system [26]. The approaches used in South Africa to include ESD in the curriculum are an issue-based approach and a fragmented approach.

According to the White Paper on Education and Training of 1995, EE/ESD in the curriculum must involve an inter-disciplinary, integrated and active approach to learning (DoE, 1995). EE is a vital element of all levels and programmes of the education and training systems in order to create environmentally literate and active citizens and ensure that all South Africans enjoy a decent quality of life through the sustainable use of resources [8]. From the above statement, it is important to note that EE/ESD in South Africa is implemented in all sectors of education and in the CAPS curriculum; it is embedded across all subjects.

However, the Department of Basic Education is not the only role player in EE/ESD in the country; the Department of Environmental Affairs (DEA) also plays an important role in EE and ESD. For instance, in 1997 the Department of Environmental Affairs (DEA) developed the White Paper on Environmental Management Policy, which consisted of seven strategic goals. Goal 5 is Environmental Education and Empowerment, the strategy being to promote the education and empowerment of South Africa's people to increase their awareness of and concern for environmental issues, and to assist in developing the knowledge, skills, values and commitment necessary to achieve sustainable development (DEA, 2017). Goal 5 is supported by the following objectives based on education and training:

- To integrate EE in all programmes, levels, curricula and disciplines of formal and non-formal education and in the National Qualification Framework.
- To integrate EE into all training and unemployment relief programmes.
- To enhance environmental literacy using forms of media.
- To ensure that EE programmes and projects foster a clear understanding of the inter-relationship between economy, social, cultural, environmental and political issues in local, national and global spheres.

In support of DEA's Goal 5, CAPS principles also emphasise the importance of the inclusion of EE into the curriculum, where one of the principles highlights human rights, inclusivity and environmental and social justice as defined in the Constitution of the Republic of South Africa [8]. CAPS advocates infusing these principles and practices into the curriculum. Therefore, the National Curriculum Statements

Grades R-12 is sensitive to issues of diversity such as poverty, inequality, race, gender, language, age, disability, and other factors [8]. The section below discusses some guiding principles in EE implementation. In the South African curriculum, integration of environmental impact topics is across all subjects as mentioned in this section. As seen in **Table 1**, in Geography the following EE/ESD content is covered, these include the concept of development, effect of development on the environment, using resources, effects of using more non-conventional energy on the South African economy and the environment and energy management, water in the world. Furthermore, environmental topics included the world's oceans, water management in South Africa, floods, drainage systems in South Africa, fluvial processes and catchment and river management.

3. Theoretical framework

Realist Social Theory (RST) is the framework that underpinned this case study research. In this study RST is premised on both theoretical and methodological framework approaches. As [35] and [36] explain, knowledge is socially produced, and it warrants exploration of social interests and the related dynamics of power as individuals seek understanding of the world in which they live and work. The global environmental crisis is a real social problem as evident in its impacts such as depletion of the ozone layer, rising levels of carbon dioxide in the atmosphere, global warming, deforestation, climate change, pollution and improper toxic waste disposal. Hartas [37] suggests that individuals create their own realist meanings of their experiences through interactions with each other and with their surrounding environment. In this study, the interactions studied occurred within school environment and were supported by different structures and agents such as documents, teachers, learners, and external support such as training programmes. The theoretical framework of this study comprised the interactions and roles played by structure, culture and agency in the integration of environmental impact topics in the curriculum (see **Figure 1**).

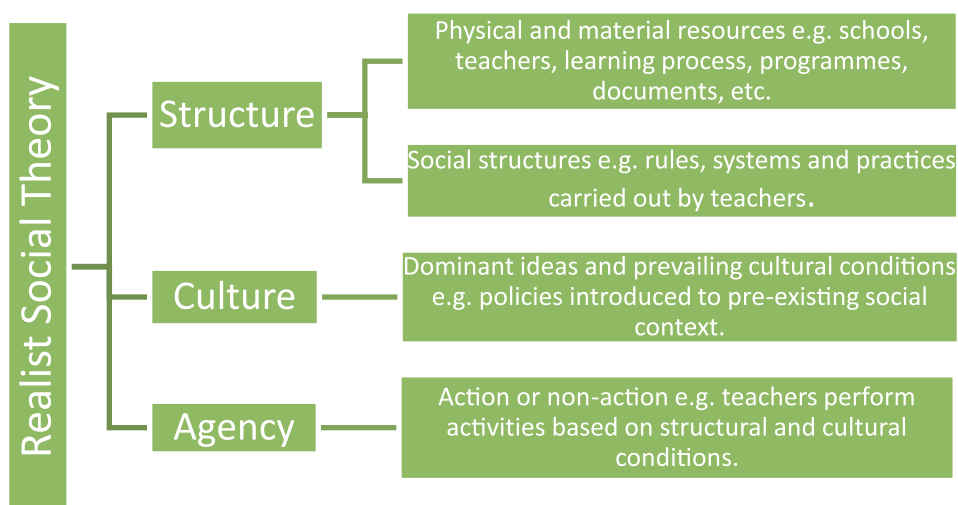


Figure 1.
Realist social theoretical framework used in this study.

The study is premised on the critical realism paradigm where most scholars agree with the ontological claim that social reality is stratified and emergent [38, 39]. For example, one cannot study the coverage of environmental content without analysing all the important documents such as policy statements, examination papers and textbooks.

3.1 Ontological and epistemological assumptions

The researcher adopted a realist orientation towards the research whereby the interaction with educational structures such as documents during the study evoked a new niche and spaces that are deemed necessary in providing ideal solutions to the enquiry being conducted. According to RST, the reality is not an independent construct but is socially constructed and has varied meanings. The RST ontology followed by this study is that there is reality of the world (environmental content), however, the interpretation of reality is in the human mind and is conditional upon individual experiences and interpretations [40]. The research also adopted an epistemological approach where knowledge is considered subjective and constructed by people. In this research, knowledge was accumulated from the FET curriculum (CAPS), teaching and learning support materials, and examination documents.

4. Problem statement

The underpinning assumption in this research is that teachers' views on the content and nature of environmental impact issues are complex and founded upon implicit theories and personal practical knowledge. Environmental impacts have negative implications of global proportions. Negative human impacts on the environment threaten not only natural resources such as water, air and land but also the very existence of humanity itself. The education sector plays an important role in ensuring that younger generations develop appropriate skills, knowledge and principles for sustainable living. Furthermore, the changes in the curriculum can be linked to shifts in content coverage in the examinations, thus the study investigates the extent of such changes for environmental content. Further to this, it is also against the assumption that teachers tend to teach and put more emphasis on topics that are frequently examined at the end of the year examinations, leaving behind topics that are not consistently being examined, thus creating a knowledge gap in the learners.

Le Grange [41] argues that the new language of education involves risk and that the risk is compounded when the environment is added into the equation. According to [41], environmental problems are complex, and today's solutions could become tomorrow's problems. Human civilisation has brought about the current modern era and the associated imbalance between natural resource utilisation and sustainability of the Earth. Le Grange [41] further believes that the complex and contingent nature of environmental problems and their associated risk cannot be captured in a few learning outcomes set out in the curriculum in South Africa. Le Grange [41] states that the previous South African curricula such as the NCS (Grade 10–12) did not include the environment as a key component but created space for EE/ESD processes to be included. In CAPS, assessment is one of the major aspects used to determine whether learners have reached a level of competence to progress to a higher grade and teachers put more emphasis on the content that is likely to be examined at the end of the year. This has led to my investigation of the integration of environmental content aspects in Grade 12 Geography examinations and policies.

5. Research question

To what extent are environmental education/education for sustainable development topics being covered in teaching and learning documents used by teachers and learners in Geography Grade 12 curriculum?

6. Research methodology

Creswell [36] and McMillan and Schumacher [42, 43] state that research methods comprise types of data collection, analysis and interpretations for a study.

6.1 Sampling of documents

Documents such as the Curriculum Assessment Policy Statement (CAPS), and past examination question papers were in the analysis. Documents consisted of the following:

- Past examination question papers (2006–2015): These past examination question papers fall within the decade of education for sustainable development. The question papers were purposefully sampled and only those subjects that were taught in the schools where participating teachers for this research taught were analysed. Geography was chosen due to it being selected by the DBE (2016) as one of the eleven key subjects in the South African education system.
- CAPS documents for the subject mentioned above.

6.2 Analytical study profile

This section shows tables of document analysis profile. These documents analysed involved CAPS policies and Grade 12 exit level past examination papers.

6.3 CAPS policy documents

The content analyses of the study focused on the Geography content in the Grade 12 curriculum. As shown in **Tables 2** and **3**, the source where data was retrieved and the actual data that was required to answer the main research question of this study.

6.4 Grade 12 past examination papers

Table 3 below also shows T1, which is the time during the old curriculum (RNCS) and T2, which is the new curriculum (CAPS).

Document analysis involves skimming, reading and the interpreting the documents [44]. Content analysis in this study involved the identification of meaningful and relevant information on environmental impact topics. The researcher identified important information and separated it from that which was not pertinent (See **Figure 2**) using three stages of data collection, pre-processing and content analysis. In this study, the researcher drew upon [46] and the [47] Environmental Outlook report for the identification of specific EE/ESD content that formed the basis for content analysis. The coverage of EE/ESD topics included the following: ozone depletion,

Subject policy documents analysed	Source	Data required
Geography	Department of Basic education: http://www.education.gov.za/ : Accessed August 2016	Total number of topics, Total number of environmental impact topics. Tuition time allocation for all the topics in the exams (weeks). Time allocation for environmental impact topics (weeks). Percentage time allocation of environmental impact topics (%). Mark allocation of environmental impact topics. Percentage coverage in the examination of environmental impact topics.

Table 2.
CAPS subject policy analyses.

Subjects analysed	Source	Time	Date	Data required
Geography	Department of Basic education: http://www.education.gov.za/ : Accessed August 2016	T1 (RNCS) T2 (CAPS)	2006 to 2015 (Decade of Education for Sustainable Development)	Exam year. Marks allocated for environmental impact topics out of 300 (Paper 1 and Paper 2). Percentage coverage of environmental impact topics. Average (RNCS vs. CAPS)

Table 3.
Comparison between RNCS and CAPS coverage of environmental impact topics.

global warming, energy consumption, acid rain, air pollution, marine pollution, mineral resource depletion, soil destruction, soil erosion, desertification, biodiversity loss, extinction of plants and animals, nuclear reactors and waste disposal, human health and diseases, world hunger, land use, solid waste disposal, hazardous chemicals, habitat destruction, invasive species, water quality and wildlife management. When evaluating documents, it is necessary to establish the meaning of the document and its contribution to the issues being explored [44]. In addition, the researcher determines the relevance of documents to the research problem and purpose. The documents selected for analysis in this research were authentic, credible and contained accurate data. The documents provided coverage of the research topic broadly. Bowen [44] explains that document analysis is a process of evaluating documents in such a way that empirical knowledge is produced and understanding is developed. Moreover, the researcher should strive for objectivity and responsiveness.

The document analysis was guided by the constant comparative method of [48], which is described in four stages, namely: comparing incidents applicable to each category; integrating categories and their properties; delimiting theory; and writing theory. This method involves a back-and-forth interplay with data to cluster ideas and concepts for authentic understanding and analysis of the documents.

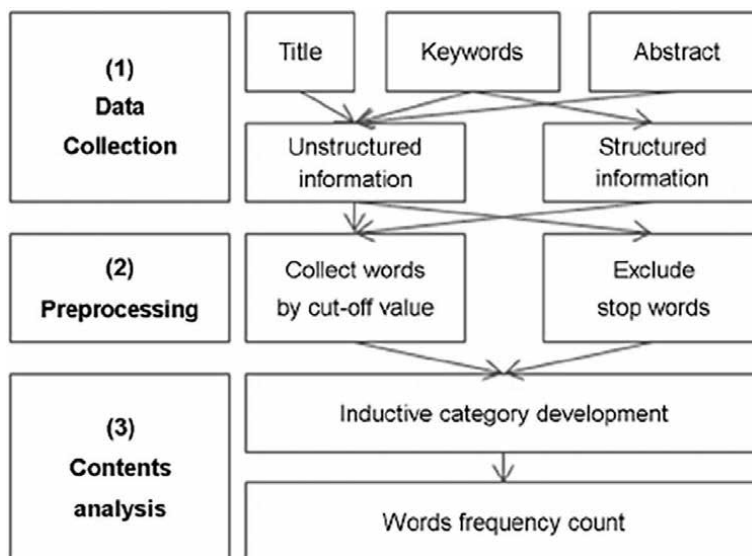


Figure 2.
 Procedure of document analysis. Source: Adopted from Rhie, Lim & Yun [45].

6.5 Trustworthiness, transferability and dependability

The researcher used a multi-method strategy in collecting data to ensure that the study was rigorous one of the methods was document analysis. According to McMillan and Schumacher [42], multi-method strategies allow for the triangulation of data and may yield different insights into a topic of interest, thus increasing the credibility of results. Document analysis schedules were pre-tested in a pilot study before they were used to verify whether they were appropriate.

7. Results and discussion

The results and discussions will start with EE/ESD contents found in the old policy document which is called National Curriculum Statement (NCS). In addition, an analysis of the changes brought by the new CAPS curriculum which affect EE/ESD Implementation is discussed. The effects of the shift of the curriculum from old NCS (Grade 10–12) to new CAPS curriculum are discussed. Lastly, the extent of coverage in the Policies and Examinations of EE/ESD between RNCS and CAPS analysis is deliberated.

7.1 EE/ESD content found in the grade 12 geography old NCS curriculum

Geography was defined as a science that studies physical and human processes and spatial patterns on Earth in an integrated way over space and time (DoE, 2003:9). It examined the spatial distribution of people and their activities, physical and human-made features, ecosystems and interactions between humans, and between humans and the environment in a dynamic context. Some of the aims of Geography which encourage EE/ESD are to (Table 4):

Subject	Learning outcome (LO)	Key EE/ESD themes/concepts
GEOGRAPHY	<p>LO 2: The development of knowledge and understanding</p> <p>LO 3: The application of knowledge and skills</p>	<ul style="list-style-type: none"> • Firstly, Geography studies show how spatial patterns and processes affect the way people live and interact with the environment, how physical and human processes shape the environment, and how humans interrelate with the living and non-living environment. Therefore, learners will be expected to demonstrate a fundamental knowledge of physical and human processes and the patterns which result from them, as well as the interactions between humans and the environment on local and a national scale. • Secondly, Geography seeks to understand human-environment interactions. Human actions modify the environment at different scales. Likewise, the environment and the availability of resources in regions and places shape human activities and lifestyles, and ultimately their well-being. In addition, it is concerned about how people depend on, adapt to and modify environments, and gives consideration to the consequences of human actions. • Lastly, learners will also be encouraged to recognise and appreciate values, attitudes and indigenous knowledge held by individuals and groups, to examine the consequences of their actions, and to make informed, logical decisions. <hr/> <p><i>Climate and weather:</i></p> <ul style="list-style-type: none"> • Human-made climates (urban climate). • Climate hazards and human response to these – risk and vulnerability. <p><i>Fluvial processes and landforms</i></p> <ul style="list-style-type: none"> • Slopes: types, characteristics and significance for human activity. • Mass movements and human responses. <p><i>People and places: rural and urban settlement</i></p> <ul style="list-style-type: none"> • Human-environment interactions in rural settlements: • Settlement issues: rural depopulation, closure of services, ageing of population, political influences, governance of rural settlements (local authorities, Agenda 21). • Human-environment interactions in urban settlements: • Settlement issues: inner-city problems, renewal, urban blight, congestion, pollution and land use conflict, standards of living, political influences <p><i>People and their needs</i></p> <ul style="list-style-type: none"> • Response of people to environmental and socio-economic injustices linked to economic activities • Distribution and supply of water to South African citizens. • Sustainable use and management of water. • Impact of the change of location of economic activities on people

Table 4.
Environmental content found in the grade 12 geography old NCS (grade 10–12).

- Develop knowledge and critical understanding of the changing nature and inter-relatedness of human existence and the environment over space and time.
- Prepare learners to become informed, critical and responsible citizens who can make sound judgements and take appropriate action that will contribute to equitable and sustainable development of human society and the physical

environment. Geography prepares learners to become responsible and competent decision-makers and agents, living and working in a complex world. It encourages them to challenge and address social and environmental injustices.

The scope of Geography was to emphasise the integration of physical and human geography. In the past, these components of Geography had been treated as separate elements. However, a study of physical processes that influence soil erosion, for example, must consider how human activities on the land also contribute to the process. The geographer needs to know why soil erosion is occurring and should understand the social, political and economic circumstances that may cause people to influence the rate of soil erosion in a place or in the broader region [49]. In addition, EE/ESD content in the subject ensures that learners explore possible responses to issues and challenges arising from human and environmental interactions in a local and national context.

7.2 Analysis of the changes brought by the new CAPS curriculum which affect EE implementation

The new curriculum brought the following changes from the old curriculum. These changes have not only affected the structure but also influenced the coverage, teaching and examination of the environmental impact topics in the curriculum (Table 5).

In Geography, the main aim is to make and justify informed decisions and judgements about social and environmental issues. Based on this aim in the subject, EE/ESD topics include environmental impact, human-environmental interaction and environmental quality. The content is based on human and environmental interaction on water in the world, world's oceans, water management in South Africa, floods, drainage systems in South Africa, fluvial processes, catchment and river management.

7.3 The effects of the shift of the curriculum from old NCS (grade 10: 12) to new CAPS curriculum

This section discusses the effects of the changes in the coverage of EE/ESD topics from the old NCS (Grade 10–12) to CAPS. It answers the research sub-questions, which is, “*To what extent are environmental education/education for sustainable development topics being covered in teaching and learning documents used by teachers and learners in Geography Grade 12 curriculum?*” This section discusses general and specific results based on the breadth and depth of EE/ESD coverage in both curricula as seen in Tables 4 and 5.

Subject	EE/ESD Content	Content/Concept
Geography	<ul style="list-style-type: none"> • Environmental impact on development and energy management. • Human- environmental interaction and social impact Environmental quality and quality of life	<ul style="list-style-type: none"> • Any topic in Geography can be explored by applying a conceptual framework that embraces Geography's four Big ideas which are, Human and environment interaction (Water in the world, The World's Oceans, Water management in South Africa, Floods, drainage systems in South Africa, fluvial processes. Catchment and river management)

Table 5. Environmental impact topics and content found in the grade 12 subjects.

When comparing the content breadth structural differences between old NCS (Grade 10–12) and CAPS were evident. As seen in **Tables 4** and **5** CAPS documents were easier to analyse, where the work schedule showed the topics to be covered and it was easier for the EE/ESD topics to be identified compared to the old NCS (Grade 10–12). However, in Geography there was a notable decrease in the depth of EE/ESD content coverage in CAPS when compared to old NCS (Grade 10–12).

In sum, the overall structural presentation of the content in CAPS was clearer than in old NCS (Grade 10–12). The researcher also realised that in some of the CAPS documents, the description and clearer specification of content to be covered in a particular time make it easier for teachers to follow a specific time frame for the topics to be taught and teachers are exposed to clear EE/ESD topics to be covered during the year. From the analyses, it was revealed that CAPS is pitched at the micro-level, where the teacher is the implementer of a developed programme. This is in contrast with the old NCS (Grade 10–12) where the policy was developed at the macro-level and focused on meeting the LOs and ASs. This implies that CAPS provides more structural Geography content support to both novice and experienced teachers because of its prescriptive nature. From analysis of the two curricula, it appears that CAPS was the ideal policy as it was easier for stakeholders to implement compared to the old NCS (Grade 10–12) in the teaching and learning of EE/ESD topics in Geography.

A second example of the decrease in Geography, wherein old NCS the coverage of EE/ESD topics was in LO 2: The development of knowledge and understanding, and LO 3: The application of knowledge and skills. Firstly, the content involved learners being expected to demonstrate a fundamental knowledge of physical and human processes and the patterns which result from them, as well as the interactions between humans and the environment at local and national scales. Secondly, Geography seeks to understand human-environment interactions. Likewise, the environment and the availability of resources in regions and places shape human activities and lifestyles, and ultimately their well-being. In addition, it is concerned about how people depend on, adapt to, and modify environments, and considers the consequences of human actions. In summary, the Geography content involves learning about climate and weather, fluvial processes and landforms, people and places and needs as seen in **Table 5**. On the other hand, in CAPS only topics such as environmental impacts of

Geography										
Year 2006 to 2015										
	RNCS					CAPS				
YEAR	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Marks allocated out of 300	34	24	32	38	38	24	52	30	40	23
Percentage coverage	11%	8%	11%	13%	13%	8%	17%	10%	13%	8%
Average (Old NCS vs. CAPS)	10.7%					12%				

Table 6. *Showing coverage of EE/ESD topics in geography examinations.*

development and energy management, human-environmental interactions and social impact and environmental quality and quality of life were covered.

Geography had the following EE/ESD topics which were found in the policy documents: impact of climate change, loss of biodiversity, land degradation, drought, river pollution, air pollution, health hazards caused by mines, soil destruction, improper solid waste disposal, poverty, the negative impact of human activities on wildlife, food security, effects of berg winds on veld fires, negative effects of overpopulation in urban areas, water pollution in the Vaal River, environmental impact of cyclones, high levels of pollution in the outskirts of towns, soil erosion and overstocking. The difference in the coverage between old NCS and CAPS in this subject was that old NCS covered Learning Outcome 1 and 2 that taught learners about the development of knowledge and understanding and Learning Outcome 3 which facilitated the application of knowledge and skills. However, CAPS covered these specific topics, understanding climate change and changing weather patterns, sustainable development principles and practices. Furthermore, CAPS covered urbanisation and land use management and sustainability, management of natural resources.

It is evident that the shift of the curriculum from old NCS to CAPS enhanced the coverage of EE/ESD topics in the new CAPS curricula for Geography as shown in **Table 6**.

In Geography, past examination papers from 2006 to 2015 revealed that the following EE/ESD topics were covered: these are the impacts of climate change, loss of biodiversity, land degradation, drought, river pollution and air pollution, health hazards caused by mines, poverty, negative impacts of human activities on wildlife and food security. The following topics were also identified: effects of berg winds on veld fires, negative effects of overpopulation in urban areas, water pollution in the Vaal River, environmental impact of cyclones and high levels of pollution in the outskirts of towns, soil erosion and overstocking. The information on the past examination was sourced from the DBE website <http://www.education.gov.za/> in 2022. In Geography, the coverage of environmental impact topics in the past examination papers shows an average of 11% over the ten years under research.

7.4 Coverage in the policies and examinations of EE/ESD between RNCS and CAPS

In Geography was observed that the Old NCS and CAPS policies were **not aligned**, and the reason was that in the old NCS only themes and LOs were written while in the CAPS curriculum only the actual content to be taught was stipulated. The vertical alignment of policy and examination content in old NCS and CAPS revealed that the policies and examination content were aligned. Further analysis revealed that both policies had similar EE/ESD topics such as tropical storms causing floods, climate change, soil degradation, water and air pollution, environmental dangers of berg winds' negative impact on human beings, etc. In addition, old NCS also covered topics such as deforestation, negative impact on urban growth, etc. The shift in the curriculum increased the coverage of EE/ESD topics in the examinations. This contrasts with the results on policies that revealed that the content in old NCS was more than that of CAPS. This is shown in **Table 6**, which reveals extensive coverage of EE/ESD topics in 2008. It cannot go without notice that in 2012, under CAPS, the breadth of environmental impact topics was the highest when compared to the other years, with 2011 and 2015 recording the lowest percentages in summative assessment. It was also noted that Geography, when compared with the other eleven subjects analysed,

had the widest coverage of environmental impact topics in both the old NCS and CAPS curricula. When comparing the topics, the old NCS had the widest range of environmental impact topics compared to CAPS. Overall, the shift in the curriculum in Geography decreased content coverage in CAPS policy while it increased environmental impact coverage in the actual Grade 12 examinations when compared to the old NCS. The shift from old NCS to CAPS, therefore, improved Geography EE/ESD topics coverage in practice.

8. Conclusion

In Geography, document analysis revealed that examination of EE/ESD topics in CAPS was **greater** than the coverage in the previous old NCS. In Geography, the analysis revealed a difference of about 4.6%, which showed a **slight misalignment** between the policy requirements and the examination of environmental impact topics. In sum, the researcher is of the view that the shift in the curriculum positively influenced the coverage, teaching and examination of environmental impact topics in South Africa's FET phase. This implies that in the CAPS curriculum, specifically where there was evidence of EE/ESD topics coverage in the subject policies, teachers were able to include the content in their teaching. The researcher believes that learners are **benefiting** more in CAPS than in old NCS in terms of learning about sustaining the biophysical, economic, political and social environment. This resulted in the emergence of a structural and cultural morphogenesis model in the teaching of environmental content in the FET phase. In my view, the increased coverage of ESD topics in the CAPS is one of the **positive impacts** of curriculum change in South Africa. In this subject, teachers will now be exposed to **more content** on environmental education. The researcher believes that this is a good indication that although some subjects did not infuse environmental impact topics coverage into the curriculum, other subjects do adhere to the policies. Significantly, the White Paper on Environmental Management Policy published in 1997, states that establishing good governance in South Africa can only be guaranteed if it is based on a sound socio-economic framework that is **environmentally sustainable** [8]. Payne [50] stated that;

Limited progress in the ability of social theory, environmental philosophy, and geography to inform curriculum developers of how to bridge the dualisms of agency–structure, identity–spatiality, and local–global that, effectively, denied the possibility of plausible empirical insights into the nature of human–environment relations and, therefore, satisfactory explanations of socioecological life needed for the planning of meaningful curricula experiences.

Again, [50] statement signifies the importance and role of curriculum developers to ensure that educational policies infusing EE/ESD into the curriculum are interpreted and applied correctly (put into practice) to enhance progress in the ability of social theory, environmental philosophy, and all subject to inform relevant stakeholders on how to bridge the agency–structure relationship that exists.

The shift from the old NCS to the CAPS curriculum was beneficial to teachers as they were able to engage in reflecting on and assessing their own efforts to **promote inquiry, reasoning, problem-solving and communication** in the classroom. An increase in the coverage of environmental impact topics was found in Geography. The researcher concurs with the findings of this study that integration of EE/ESD topics in the curriculum

documents as well as in practice should be encouraged and it is the responsibility of all structures involved in the education sector. In support of this finding, [51] pointed out that the inclusion of EE/ESD in the curriculum allows for the construction of trans-cultural spaces in which scholars from different localities collaborate in reframing and disseminating their own knowledge traditions. He further states that much needs to be done in terms of research as EE/ESD continues to evolve and transform.

9. Recommendations

Education policy developers and subject advisors should evaluate the documents used by teachers for teaching purposes to ensure that the policy requirements are embedded in all the subject documents. The implication of this misalignment is that teachers tend to focus on the topics that have frequently appeared in the examinations. This could lead to EE/ESD topics not being taught to learners as teachers concentrate on topics that have a higher potential of being examined at the end of the year.

List of abbreviations


FET	Further Education and Training
CAPS	Curriculum and Assessment Statement
EE/ESD	Environmental Education/Education for Sustainable Development
UNDESD	Nations Decade of Education for Sustainable Development
RST	Realist Social Theory
RNCS	Revised National Curriculum Statement
NCS	National Curriculum Statement
DEA	Department of Environmental Affairs

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An Ethnographic Study on Sense of a Community: The “Awramba” Experience

Nassir-Maru Yesuf

Abstract

The study was conducted on “Awramba” Community who are living in “Amhara” region, south “Gondor” Zone, Ethiopia. The general objective of this study was to capture an understanding of sense of community in “Awramba” community. The study tried to answer the following questions: How the community was established? What are the criteria to be part of the community? What are the shared values of social practice that has survived for the test of time? What is the historical background of the “Awramba” Community? The researcher used realist ethnography method to achieve the above objective and to answer the questions. In-depth interview and observational guide techniques were applied to collect reliable data for the study. The observation and in-depth interview data were analyzed qualitatively. The study showed the following themes: Membership criteria of the community are based on adhering to the community norm. They have a strong sense of community based on shared story, cooperative work, marriage and mourning values, religious view, gender equality, commitment to be honest, and solving their problem by themselves. The emotional connection of the “Awramba” community is strengthened by their common celebration of the yearly anniversary of New Year and scheduled meeting.

Keywords: sense of community, membership, influence, integration, fulfillment of needs, shared emotional connection

1. Introduction

One of the leading concerns in community psychology has been to capture the feelings that people have about the communities of which they are part. Following Sarason cited in [1], it is this area of work that has come to be associated with the term “sense of community” (SOC). The concept of SOC is necessarily a multidimensional one, covering various facets of people’s opinions about their communities. There are a number of further complexities to the question, not the least of them being the problem of how people define their communities in the first place. For example, in England, research has suggested that people often refer to their immediate localities when asked to say where they live and where they feel they belong, while at the same time they think in terms of a series of overlapping maps of different sizes, each significant in

different ways. Furthermore, there is a need to come to terms with the fact that while many people may define their communities in territorial or locality terms, others do so in terms of common identity with a social, religious, or ethnic group [1].

Sense of community has been described as “the sense that one was part of a readily available, mutually supportive network of relationships upon which one could depend and as a result of which one did not experience sustained feelings of loneliness” Sarason cited in [2].

Gusfield cited in [3], distinguished between two major uses of the term community. The first is the territorial and geographical notion of community—neighborhood, town, and city. The second is “relational,” concerned with “quality of character of human relationship, without reference to location.” Gusfield noted that the two usages are not mutually exclusive [3].

According to Sarason cited in [3], the basic characteristics of sense of community are: perception of similarity to others, an acknowledge interdependence with others, a willingness to maintain this interdependence by giving or doing for others what one expects from them, the feeling that one is part of a larger dependable and stable structure.

McMillan and Chavis defined sense of community as “a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members’ needs will be met through their commitment to be together.” In this key definition, they identify four major elements required for a sense of community: membership, influence, integration and fulfillment of needs, and a shared emotional connection. By their definition, all four elements must be present to define a sense of community.

Membership referred to the feeling of belonging, of being part of a collective. A major part of membership was boundaries; if one belongs to a particular community, then the implication is that there are those who do not. This concept intuitively seems to be a necessary part of any definition of community; to have a sense of community, one must first belong to a community. Emotional safety derived from membership, the sense of belonging and identification with the community of interest, personal investment in the community leading to stronger bonds, and some kind of common symbol system, which unites a community.

The second dimension was that of influence, a bidirectional concept, as for a group to be attractive, an individual must feel they have some control and influence over it, whereas, conversely, for a group to be cohesive, it also must influence its individual members. McMillan and Chavis stated that pressure of conformity from community members actually comes from the needs of individual members for consensual validation. In turn, conformity serves as a force for cohesiveness.

The third dimension, integration and fulfillment of needs, referred to the idea that for a community to maintain a positive sense of togetherness, the individual group association must be rewarding for the individual members. Some of the more obvious rewards examined in their paper are status of membership, success of the community, and the perceived competence of other members.

The last dimension is that of shared emotional connection. McMillan and Chavis suggested that this was in part based on a sense of shared history and identification with the community. The authors suggested that the more people interact, the more likely they are to form close relationships. As this interaction becomes more positive, the bond becomes stronger. Investment in the community determines the importance to individuals of the community’s success and current status. Those who give time and effort to community organizations and events will be more concerned about seeing the positive effects of these events than are those who have not been involved.

McMillan and Chavis stated that these aspects of community contribute to create each of the dimensions, which in turn work together dynamically to create and maintain an overall sense of community.

Generally, the first element is membership. Membership is the feeling of belonging or of sharing a sense of personal relatedness. The second element is influence, a sense of mattering, of making a difference to a group and of the group mattering to its members. The third element is reinforcement: integration and fulfillment of needs. This is the feeling that members' needs will be met by the resources received through their membership in the group. The last element is shared emotional connection, the commitment and belief that members have shared and will share history, common places, time together, and similar experiences [3].

Knowing how people from diverse cultures form attachments to social groups is important, so general objective of the study is to capture an understanding of sense of community in the “Awramba” experience. Based on this general objective, this study tried to answer the following questions.

- What and how the community was established?
- What are the criteria to be part of the community?
- What are the shared values of social practice that has survived for the test of time?

As far as the researcher knowledge, there is empirical gap in the study of sense of community on “Awramba” community. But there are two research studies conducted related to women right and the nature of group communication under Addis Ababa University, which were: Women's Decision-Making Rights in the Household [4], and a study of the Nature of Group Communication [5].

Solomon [4] found in his study on the community that, “it can be concluded that gender equality exists in most household matters in ‘Awramba’ community. The findings also indicate that the ‘Awramba’ community's culture is women friendly; it respects the equality of every member especially men and women. In this community women are relatively emancipated from cultural domination and traditional patriarchal practices. Most married women in the home life have equal rights with their male counterparts.”

Tilahun [5] also found in his study on the community that, “the community exercises democratic principles in the sense that equal engagement and distribution of resources to the members. Developing brotherhood empathy, helping the misfortune and conflict reduction are basic principles of the community. A significant enhancement has also been made in empowering women. Unlike to the surrounding culture, the community could reshape the traditionally perceived role of women and men. The guiding perceived principle to ensure gender equality in the community is interpreted by assigning tasks regardless of sex, but ability”.

In addition to the above, there are problems of moral value deterioration in everywhere such as in respecting elders, being honest, and the problems of conflict, which is a practical gap. So, finding the answer for how the community is dealing with this problem is another reason for conducting this study.

1.1 Reasons of selecting the community for the study

The reason that sensitized the researcher to select the “Awramba” community for the study is that the shared values social practice that has survived for the test of the

time. An indicator for this can be the following: (1) Women and children right existed in the community; elder care existed in the community, and (2) their commitment and cooperative work.

2. Methods of the study

The method applied to the study of the “Awramba” community was realist ethnography. Realist ethnography is an objective account of the situation, typically written in the third-person point of view and reporting objectively on the information learned from participants at a site. In this ethnographic approach, the realist ethnographer narrates the study in a third-person dispassionate voice and reports on what is observed or heard from participants. The ethnographer remains in the background as an omniscient reporter of the “facts.” The realist also reports objective data in a measured style uncontaminated by personal bias, political goals, and judgment. The researcher may provide mundane details of everyday life among the people studied. The ethnographer also uses standard categories for cultural description (e.g., family life, communication networks, work life, social networks, and status systems). The ethnographer produces the participants’ views through closely edited quotations and has the final word on how the culture is to be interpreted and presented [6].

2.1 Data source and study area

Both primary and secondary data were collected for the study. The primary data were generated from in-depth interviews, while secondary data were obtained from information desk of the community established by the community.

The data sources or the target population of the study that included “Awramba” people living in the village is also the researcher source of data.

This study was conducted on “Awramba” community who are living in “Amhara” region, south “Gondor” Zone, “Fogera woreda,” 72 km far from “Bahir dar” city and 7.5 km from “Wereta” on the way road to “Debretabor.” The exact geographical coordinates of the community place are latitude and longitude – 11.9203453, 37.7868649 [7]. As the interviewees told the researcher, the “Awramba” community started to establish in 1971 around 66 individuals living in different “kebeles,” but after the “Derg” regime came to the position, the leader of the community arrested for 6 days and the member of the community became 48 individuals. In 1987, 13 individuals of the community members migrated to southern nation nationalities and people’s region (SNNPR), “Bonga,” and the rest of the community members migrated to “Bonga” in 1988/89, when the community reestablished in 1999, the community members were 19 individuals (**Table 1**).

2.2 Sample size and sampling techniques

The respondents of this study were “Awramba” people living in the village. In this community, there are a total of 177 households, for this study matter a total of four samples were purposefully selected to participate in the study.

Four interviewees were participated in the study. Out of the four participants of the study, participant 1 was selected purposefully by the researcher, because she was a person assigned by the community as a tour guide, worker in the museum and information desk of the community. The rest three participants of the study were the

Year E.C.	Numbers of the “Awramba” community members		
	Male	Female	Total
2008	196	207	403
2009	198	214	412
2010	211	221	432
2011	250	213	463
2012	232	245	480
2013	235	245	483
2014	240	254	494
2015	252	262	514
2016	253	263	516
2017	254	265	519
2018	257	278	535

Table 1.
 The community members’ progress (source: “Awramba” community information desk established by the community and located in the center of the community).

No	Sex	Age	Code	Position
1	F	30	Participant:1	The community member, tour guide, worker in the community museum and information desk of the community.
2	M	27	Participant:2	Community member
3	M	59	Participant:3	Community member
4	F	53	Participant:4	Community member

Table 2.
 Participants of the study.

community members selected by her, because she assumed that they were knowledgeable about the “Awramba” community (Table 2).

2.3 Data gathering tools

The data gathering tools employed to gather reliable information from sample participants were in-depth interview questions and observation guide.

2.4 Data gathering procedures

First, the researcher prepared the interview questions, go to the community, and explained the objective to the person who assigned by the community to promote and who guides anyone who want to know about the community. Then the researcher conducted the interview with the participants who are selected by the community worker. During the course of the interview, the researcher had note of what has been said by the interviewees and made audio-visual record. And the observation also held simultaneously with the interview through having field note.

2.5 Methods of data analysis and interpretation

The data collected through in-depth interview recorded in audio-visual data changed into written form and the field note together with observation was organized by assembling the responses according to thematically in the result of the study part. The identified themes related to the literatures in the discussion part accordingly. In the interpretation part, the identified themes interpreted according to the objectives of the “Awramba” community and using McMillan and Chavis [3] four elements that define sense of community theory. Original name of participants of the study changed into numbers to keep confidentiality.

3. Results of the study

The analysis of the data showed 13 themes existed in the transcripts in the “Awramba” community. The 13 key themes were:

1. Biography of Zumra and the establishment of the community (theme-1)
2. Membership criteria (theme-2)
3. Means of income (theme-3)
4. Handicraft skill and environmental protection (theme-4)
5. Celebration (theme-5)
6. Marriage and divorce (theme-6)
 - Marriage (theme-6a)
 - Divorce (theme-6b)
7. Mourning value (theme-7)
8. Religious view (theme-8)
9. Gender equality (theme-9)
10. Commitment (theme-10)
 - Commitment to be Honesty (10a)
 - Commitment for the scheduled meetings (10b)
11. Ways of handling conflict (theme-11)
12. Services delivered (theme-12)

- Elders care (theme-12a)
- Preschool and moral education (theme-12b)
- Public library

13. Members who do not share geographical location (theme-13)

3.1 Biography of Zumra and the establishment of the community (theme-1)

3.1.1 Biography of Zumra

The community was established by the now 72-year-old farmer Zumra Nuru. He was born in 1949 in “Este, Gondor.” At the age of 4, he was raised and asked four challenging questions to his family. The first one was, gender equality, he was raised this question for the reason that when he was looking his peasant parents, his father and mother work together at the day time, in the evening his father takes a rest but his mother continues her work in the home without getting any support from her husband, at that time Zumra thought why his father does not support his mother and thought that was not fair.

The second question he was raised was about children right, children were commanded by their parents that was above their capacity, if they fail, insult and physical punishment apply to them, Zumra asks why?

The third question was about the elders, when elder get sick or when they loss their ability to work, no one looks and helps them, Zumra asked, why not they help them?

The fourth one was Zumra’s experience that he faced many times when people attack, rob, talk falsely, and kill another people, he was asked, why people do things to others that they do not want for themselves?

When he raised these four questions, his mother took it as mental disorder and took him to different traditional medicines, but there was no change.

Till the age of 13, he rose in his parent house and his family assumed that “his idea was different from other children and people for the reason that he was born with mental disorder.”

After the age of 13, according to Participant:1, he thought, “If he goes to different places and explain his ideas may be, he would get some people and might understand his ideas,” by considering this, he gone out a journey in different places of “Gondor” and “Gojam” to spread his ideas. At that time most of the time he availed himself in different social gatherings such as social gathering for mourning and so on.

Even though people who listened to his ideas did not consider him as mentally disordered as his family, but they did not take the idea rather they said the ideas are good. He stayed for 5 years to explain his ideas rounding in different places of “Gondor” and “Gojam,” he passes the day time with people and the night time sleeping under the tree, at that time different animals stay with him and leave him at the morning. After 5 years, he thought to go back to home to farm and to help elders and peoples in need, to get mental satisfaction.

Zumra came back to his family after 5 years and told them he wants to marry and to farm the land. His family said according to Participant:1, “the traveling from place to place and the migration taught him so now he became healthy because he is asking

us to provide him a girl for marriage and to farm the land.” After he married and worked as a farmer, he started helping the elders and people in need, his family said according to Participant:1, “we said he is recovered from his mental illness, but he is in the worst condition, because he spent his money for non-relatives or others rather than spending it for family and relatives.”

After this occurrence, according to Participant:1, “he raised the fifth question by saying that he gave his money for his people why his family say, he is giving his money for non-relatives or external bodies? his family replied him ‘if he knows he became mentally ill unless he should know that after seven generation people become non-relatives’ external bodies’ and he said ‘after counting seven generation they said non-relatives or external bodies where did they get this saying from? Whose people, are they? considering people as external bodies results hatred, hatred results conflict, people start to fear people because of this, instead if people ignore picturing people as external bodies, and consider all human being as brother and sister so that people can create earthly paradise and we can live in harmony.”

And he was added “as to him all human being are the sons of Adam and Eve, so he gave to his people.” But still his family said “his idea is strange because of his mental illness’ so; he ignored his family start to use his free time after farm and helping people in need for searching people who can understand and accept his ideas.”

Zumra was traveling in different places for searching people who might understand and accept his ideas.

3.1.2 The establishment of the community

At the time of traveling, he got some peasants who understood and accepted his ideas, they said to him according to Participant:1, “your ideas are good, but how can we establish such like community?” then Zumra thought that “if he moves to this place, they will accept all his ideas” so brought his family to the then place “Awramba” community are living in 1971, and started establishing the community. He did not get all the people who accepted his ideas in the same place because those people are living in different places.

Some of his ideas that explained to the peasants were according to Participant:1, “when we establish the community, we should consider cooperative working, women equality, avoiding bad habits and speech, we bring peace instead of expecting it from others, bad habits and bad attitude are like spiders web it has not root.”

He added “there are two important things, they are bad doing and bad speech, we should avoid bad doing and bad speech that what we do not want to be done for us and to be saying about us, we should avoid anger, insult and bad attitudes. We should do for others what we want to be done for us. If a female works a male work, she is working her father’s work similarly if a male works female work, he is working his mothers work, if we get this it is development, change, if we consider our wives as external body, we are also considering our mothers and sisters like that, so we should avoid such kind of attitudes” some people accepted him still others ignored him.

The people who ignored his ideas replied, when he talks about women right, they said “who is going to bear and who is being bearded” when he talks about child right, they said “child should eat what is provided to him and work what he commanded and should not talk equally with his parents” when he talks about elders care they said “who bear who’s poor” and when he said “we should avoid being liar and captious (‘negeregnanet’)” they also did not accept him. People who ignored his ideas said “he should not take our children” and start working to avoid him, at the time of the

occurrence of political conflict between “Tigray” liberation front (TPLF) and “Derg,” those people who opposed Zumra’s idea reported to the “Derg” officers as the member of TPLF and then he was jailed for 6 days. After that, he and peoples who accepted his idea migrated through “Jimma” to the then South Nation Nationalities and Peoples Region specifically a place named “Bonga.” They stayed there for 5 years and returned in 1992/93 to then place of “Awramba” community members are living.

At this time their land was gone, got a small plot of land, though they asked the government body, they got the answer “wait till 1996 at that time we rearrange the land so you will get on that time.” Even though the community asked on the time, people who ignored the community idea collaborated with the field team who were assigned to the rearrangement of the land said, “if we give them the land the ‘Awramba’ community stay here and live forever but if we ignore to give them additional land, they will leave the area and will migrate to other place” and decided not to give them the additional land. Still the community limited to the only 17.5-hectare land.

The community decided and said that “people who depend on only land income cannot improve; we should create additional income generating activities” the community changed this plan into application; they are getting income from different activities.

Though the community faced many problems during the migration and when they reestablished the community in 1999, after they promoted themselves in 2000/2001, not only Ethiopian but also human being around come and appreciate the community and their ideas. Zumra said “previously I lost a single person who understands my ideas but now I got people around the world that understand and accept my ideas therefore I think, I tread one step forward.”

Now he is saying according to Participant:1, “we should reach our ideas to the educated people, let them decide if they accept our ideas, they took it, or if they think our ideas is not accepted let, they decide to ignore, and we should also pass our ideas to the next generation and we should think about what should we work and pass, if they accepted or not let them decide by themselves is now the main objective of the community.”

3.2 Membership criteria (theme-2)

The major criteria to be members of the community are respecting human being, the great asset in the community is human, money is the second asset. Additionally, there are other criteria one should obey to be members of the community, they are: avoiding being liar, captious, theft, adultery, addiction (chewing khat or drinking alcohol). Avoiding bad doing and speech, collaborating with the community, if anyone interested to be member of the community and fulfill the above criteria can be accepted by the community.

From this it is clear that respecting human being and the norm of the major community are the criteria used to be a member of that community.

3.3 Means of income (theme-3)

As they are limited to 17.5-hectare land, the community used it effectively for market garden and created other sources of income because begging is not accepted in the community.

They work different businesses such as shops, cafe, mill, traditional cloths store, guest house for tourists, and weaving workshops, which produce different traditional raiments.

Currently the community started producing food oil and exports it to different places such as “Bahir dar” (see **Figures 1–4**).



Figure 1.
The community traditional cloth shop (photo of the author).



Figure 2.
The community guest house (photo of the author).



Figure 3.
The community weaving workshop (photo of the author).



Figure 4.
The community is building storage and working place for the production of food oil (photo of the author).

After watching the “Awramba” community members; hard working outputs and the community members’ ethics of the community that is living around, the community started to say according to Participant:2, “please stay here for our children, we hated you unknowingly,” the interviewee added what their leader Zumra said to them before long time ago when the surrounding community members treating the community in bad way, “if they did not talk to you, try to talk them, if they did not salute you try to salute them, because unknown person is like infant, if the infant raise a fire to his mother the mother took the fire from the infant but not reply to him in the same way, like that our neighbor community members treat us badly because of the fail to know our ideas and beliefs one they could understand us and treat us in a good way, now we are looking our patients fruit it enable us to live in a peaceful way.”

The community members work 6 days a week and the remaining 1 day, which is Sunday, is used to do their individual work at home.

3.4 Handicraft skill and environmental protection (theme-4)

The community members have a good handicraft skill and applied it all of their home by working environmentally friendly cooking hearth, which uses small amount of fire wood, and surprisingly most of the materials such as: shelf, table, chair, and even bed made from some amount of wood and mostly through clay soil (**Figure 5**).

The community also made different materials from clay soil but because these materials are produced by the neighboring community, to avoid tender, the community stopped its production for business purposes.

3.5 Celebration (theme-5)

The celebration of the formation of the community and New Year ceremony is the most and well-celebrated ceremony in the community. This is celebrated once a year, at every “Paugume 5 or 6” linking it with Ethiopian New Year. This can strengthen the social network of the community.

As Participant: 4 said, “we celebrate once a year two consecutive days which are the last day of the year and the first day of the new year, we celebrate the last day of the year because of it was the day that our leader Zumra finished founding the



Figure 5.
The community made and shelf with some amount of wood and mostly through clay soil (photo of the author).

community with our fathers, and we also add one day on it as the first day of the new year, so we at those days we stop working, and take a rest but we did not prepare special food for the ceremony we eat what are prepared in our home and gather around a tree which are located at center of the village, the community orchestra come and we pass those time on playing and relaxing.”

The other important issue that uses as a means of strengthening the social network of the community is their wedding value.

3.6 Marriage and divorce (theme-6)

3.6.1 Marriage (theme-6a)

In the community, members believe that, when human being is living, he is better to marry whom he/she wants and replace himself. In the community, wedding has the following steps. Firstly, by the time the boy and girl become emotional attached and become eager to get married, he/she tells the elder near him/her.

Secondly, the elder checks their age whether the boy's age is 20 and above and the girl's age is 19 and above, and their need to be marry each other.

Finally, the elder takes the responsibility and the bride and the groom sign for each other. The amazing thing is that there is no wedding ceremony, after signing for the marriage, the bride and the groom immediately go to their work. Their family gives the ceremony expenditures for the married couples instead of making wedding ceremony.

As Participant:3 explained that, “the marriage should be one to one, before marriage sex is prohibited, after marriage sex is also prohibited out of marriage, if not we are not different from animals, so we should apply the law that we are agreed upon that is the norm of marriage.”

3.6.2 Divorce (theme-6b)

There are three reasons that the community put might enable someone to make divorce, it is not compulsory but it might make the person to divorce and the community may accept it if the reason is real.

If one of them is sterile and if it is checked by diagnosis, the one that has no problem can divorce and remarry.

Between the couple if there is sexual problem that cannot be recovered by treatment, if the problem can be fixed by treatment, and if the couples do not have enough money, the community supports them, but if the problem cannot be treated, they can divorce, because the problem may be a burden to both of them.

If there is Barney that cannot be fixed by advising, if the problem cannot be avoided, the community interference helping them in advice, for the reason that the Barney should not be transferred to the children the couples can divorce.

But other than the above reasons such as because of gossip or attraction of another person cannot be allowed to divorce.

3.7 Mourning value (theme-7)

Mourning value of the community is different from other community members who live in neighborhoods and with other Ethiopian community. The community believes that the mourning should be in lifetime, through sympathy people should help each other, but after death happens, God takes his thing, so only the assigned members of the community go to the mourning place but other community members stay supporting the mourners, only the assigned persons attend the funeral, after the burial, as Participant:1 said, “we bring the mourners with us to work place not assuming that the mourners will do work, but to keep their mental from the side effects of exaggerating mourning. We do this because of three reasons, the first one is, we already lost our person so why we lost our time for the second time, the second one is not to harm our and the mourners mental, the third one is to prevent the mourners from financial crises because of mourning ceremony. Therefore, what we do is helping and supporting the mourner family by any means, if they are elders, we support what they need, if they are children, we give them any care what they need and support to achieve their goal. In general, the community believes in helping and supporting when the individual is alive.”

3.8 Religious view (theme-8)

All of the community members are believers in one god. Even though they believe in one god, they do not have a single mosque or church. Participant:4 said “we believe in one god, and our God is with us and get everywhere so we do not need to build mosque or church.”

Participant:3, said “The community members believes that human belief can be explained by the work of people do on people. We should help people in need, human can be explained by his good did, we all the community members believe in this, we believe in one God, members of the community came from the religions of Islam and Christianity, we believe that we should not dived by race, clan even in religion, as we are human being, we all are brothers and sisters.”

3.9 Gender equality (theme-9)

The community is distinct from the rest of Ethiopian community related to gender role, the first question that made the leader of the community to establish the community is gender equality. In the community, there is no differentiated role for male and female. All males work what females work including work in the kitchen and

females also work all the works that males work including farming outside of the home. So, in the community, male and female participate equally in all things.

3.10 Commitment (theme-10)

3.10.1 Commitment to be honest (theme-10a)

In the community, honesty is one of their assets, if anyone gets any material or money, it is returned to the owner, if the person who gets the material did not meet the owner, he should give to the committee that is already established to do this responsibility.

3.10.2 Commitment for the scheduled meetings (theme-10b)

There are three types of scheduled meetings in the community: the first one is family meeting in every 15 days during the night time, they used it to monitor children ethics and to make solutions if they face, in this meeting all the family members including children participate. The second type of meeting is every once in a month at each working institution to plan and put solutions for problems if they faced related their work. The last kind of meeting is once in every 6 months, this meeting is a general meeting, in which all the community members participate.

3.11 Ways of handling conflict (theme-11)

In the first place to handle conflict, there are the community members who put the coping mechanism at the time of the community establishment in 1964. As Participant:2 said that “The community believe that the great asset is human being, so there should no need to create conflict with this great asset, if we consider this idea, we should do good thing for this our great asset and if we want to create earthly paradise and want to live in harmony, we should avoid bad doing and bad speech.”

If the conflict occurs, the community considers it as ideas conflict rather than taking it as individual conflict, both the individuals discuss on the issue and try to understand each other, most of the time the conflict of the ideas solves at this stage. But if they cannot solve the problem, they take the issue to the grievance listener committee, if the problem is serious and the committee cannot solve it, the issue is taken to the “woreda” court. Participant:1, who works as the promoter of the community, said that, “the entire problem solved at individual level so that even the grievance committee cannot get any case of the conflict.”

As the researcher got information from the community members, there is no a single police station or court in the village.

3.12 Services delivered (theme-12)

The community-built school starting from Kindergarten up to grade 8, health center, cafeteria, and public library were built and still managed by persons selected from the community. These indicate that how the community is motivated to solve their problems.

3.12.1 Elder care (theme-12a)

As a participant said that “we help the elders without any external support for only our conscience satisfaction and because of the community believes that the great asset in our community is human being.” The community supports the elders in two ways: one is in their home, and the second way by preparing dormitory they bring them to elder care center. And the community uses two sources of income to support the elder, the first one is the income collected from the tourists as entrance fee, and the second one is by organizing the community as voluntaries one day a week every Tuesday working for the elder’s care (**Figure 6**).

The elders who supported in the elder care house come voluntarily, they can walk and sit out of the house, and their relatives and family members come and pass time with them (**Figure 7**).

As the researcher got the information from the interview, the community-based organization, which is the so called “aregawuyan maqoya,” in which members and voluntary supporters are only members of the community.



Figure 6.
The community elder care house external picture (photo of the author).



Figure 7.
The community elder care house internal picture (photo of the author).

3.12.2 Preschool and moral education (theme-12b)

The researcher observed the kindergarten or the preschool, which was built by the community before the government built the schools. In the preschool, as Participant:1 said “the children differentiate the Amharic and English alphabet and learn numbers in the pre-school. In addition to this they learn moral education, like avoiding lying, being captious, making conflict between individuals and so on. At the end of every daily lesson the children say the slogan ‘We growing children do not take anyone’s property, if we find s.th lost somewhere we will return to back to the owner. We work collaboratively and sympathetically. Our peaceful life will progress’ this slogan is also applied in the community and have two messages; the first one is we believe that if we work in unity and sympathy we will reach what the other world reached, the second one is that anything that we get by our effort is belongs to us but anything that we get dropped from others should be return to the owner, if we did not get the owner we give it to the committee who organized to do this work, the committee search the owner and return it.”

In the community taking people’s money is a crime; the children also are learning it. The children learn not only in word but also in practice, because the community believe that speech and work should go in the same way, if the adults teach the children and fail to apply, the children give more attention to what is seen than what they listen to. So, the community teaches the children not only in word but also in practice, when the children’s age becomes 7, they are sent to formal school (Figure 8).

There are kindergarten, primary and senior secondary and preparatory schools in the village. The kindergarten and the senior secondary (grade 9 to grade 10) schools were built by the community themselves and the primary school (grade 1 to grade 8) and preparatory school (grade 11 to grade 12) were built by the government, and the community also built public library (Figures 9 and 10).

3.12.3 Heath services

There is one health center in the community and still managed by the board selected from the community.

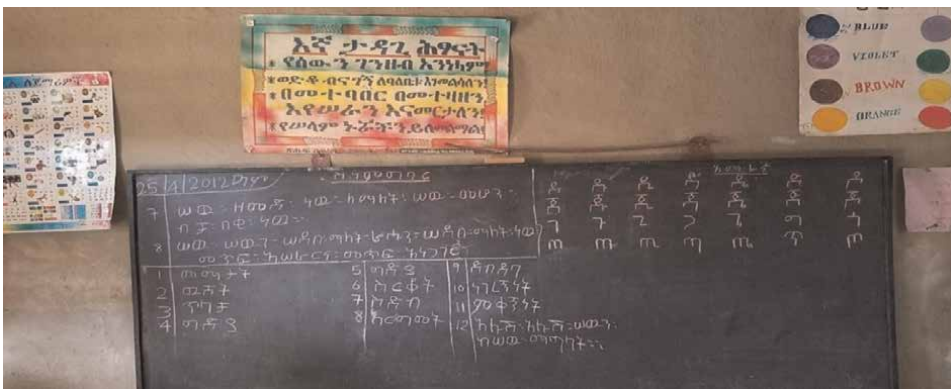


Figure 8. The community preschool, built by the community (photo of the author).



Figure 9.
The community preparatory school (photo of the author).



Figure 10.
The community public library (photo of the author).

3.12.4 Water, electricity, and telephone

The interviewee from the community told us there is no as such challenging problem in these aspects. Water, electricity, and telephone services are available in the residence.

3.13 Members who do not share geographical location (theme-13)

3.13.1 The graduated members

Members of the community graduated students now become 70, some of them are working in the community who got related fields, some of them want working on unrelated fields in the community by saying that “we should serve the community who teach us without learning for themselves” and still others are who did not get their fields are working in governmental and nongovernmental organizations, which are out of the community.

3.13.2 Members from the United Nations

As the community promoter officer Participant:1, said “at the time when the united Nations team visitors come to us and they said ‘we tried to settle peace around the world and different beliefs agreed on ‘do to others what you want for yourself’,

but the community members are doing in practice and living on it” and they bestow our community two gold medals and one trophy, and they also bestow our leader Zumra a medal by saying “you are peace ambassador. Then they asked us if we are voluntary, they want to be members of the community from the place they were living and working. We replied them, the community is the house for anyone wants to make peace, making black or white is our God’s work so you can be the member of the community, so they are members of the community.”

4. Discussion

The general objective of this study was to capture an understanding of sense of community in the “Awramba” context. To achieve this objective, realist ethnography method was applied. From the study result, 13 major themes were found.

The first theme (theme-1) was the causes for the community founder Zumra to establish the community, which were four questions; gender role equality, children right, about helping elders, and fairness. Till the age of 13, Zumra raised and stayed with his parent house, he moved around different places of “Gondor” and “Gojam” to spread his ideas for 5 years. He also raised the fifth question about human brotherhood. At the time of traveling, he got some peasants who understood and accepted his ideas. He brought his family to the current place in 1971 and started establishing the community. People who ignored his ideas started working to avoid him. After that he and peoples who accepted his idea migrated through “Jimma” to the then SNPPR specifically “Bonga.” They stayed there for 5 years. When they returned in 1992/93 to then place of “Awramba,” their land was gone, and got a small plot of land. The community decided to create additional income generating activities rather than depending on the farm. After they promoted themselves in 2000/2001 on different media, Ethiopians and tourists around the world came and appreciated their ideas and way of life.

Regarding (theme-2), which is about membership criteria, the major criteria to be members of the community are respecting human being and adhering to the community norm. Adhering to these criteria, there were members who share geographical location and who do not share geographical location with the community. Members who do not share geographical location with the community (theme-13) were individuals who are members of the community but working in different places of the country and the accepted members from the United Nation, this result is in agreement with the study of [8], which showed that a community can exist beyond geographical borders as long as people share something in common.

Related to means of income in the community (theme-3), the community members cooperated and created different sources of income, such as: businesses, for example, shops, café, mill, traditional cloths store, guest house for tourists, and weaving workshops, which produces different traditional raiments.

Handicraft skill and environmental protection (theme-4), using their handicraft skill, they work environmentally friendly cooking hearth, which uses small amount of fire wood. Most of the materials such as: shelf, table, chair, and even bed made from some amount of wood and mostly through clay soil.

Once a year, the community celebrates the formation of the community on the last day of the year and first day of the Ethiopian New Year (theme-5). They celebrate gathering around a tree that is located at center of the village and pass those time on playing and relaxing.

In the marriage value of the community (theme-6a), there is no wedding ceremony, after signing for the marriage, the bride and the groom immediately go to their work. Their family gives the money for the married couples instead of expending it on wedding ceremony. This result is the same with Tilahun [4] findings about marriage value of the community, which indicated that, "Another distinctive feature in the community is that members do not celebrate any wedding ceremony. They believe that marriage ceremony is an extravagance which demolishes all the accumulated money of parents and couples within a few days. As a result, an informant of the member stated that they do not even make tea for any marriage celebration. The only required thing is that couples should confirm their agreement by putting their signature in front of a witness (the witness might be a female or male). The bride and the bridegroom are never given even a day to enjoy their marriage; they are expected to join the field work very soon."

Related to divorce, there are reasons that the community agreed upon for making divorce (theme-6b), If one of them is sterile, or if there is sexual problem that cannot be recovered by treatment, and/or if there is barney that cannot be fixed by advising, the community may accept the divorce.

The community mourning value (theme-7), the community believes that mourning should be in lifetime, through sympathy people should help each other. If it happened, only the assigned persons go to the mourning place to attend the funeral. After the burial, the community members bring the mourners to work place, not assuming that the mourners will do work, but to keep their mental health from the side effects of exaggerating mourning.

The community religious view (theme-8), the community members believe that they are believers in one god. There is no a single mosque or church in the community. Because they believe God is with them and they can get everywhere. This result is closer to the finding of Solomon [4], which indicated that the community does not have religion, but faith or belief. They believe in the existence of supernatural force or creator of earth and heaven. They do not give a name for this supernatural force ... but, they accept prayer for the creator individually. The result also agreed with the study of Tilahun [5], which indicated that, "They believe that religion means being obeyed to the single super natural force. So, if there is a full consent for the presence of one creator, dividing him and the doctrine by giving different names is wrong of human beings."

Gender equality (theme-9), in the community there is no differentiated role for male and female. All males work what females work including work in the kitchen, and females also work what all the males work including working outside the home. This result agreed with the finding of Solomon [4], which said "in 'Awramba' community the role of men and women is identical."

In the community, honesty is one asset. In the commitment to be honest (theme-10a), if a person finds anyone's lost property, he/she should return to the owner. If he/she did not get the owner, he/she should give to the committee that is already established to do this responsibility. In the community, taking people's money is a crime.

Commitment for the scheduled meetings (theme-10b), the community has family meeting in every 15 days during the night time, meeting once a month at each working institution to plan and put solutions for problems if they faced related to their work. And once in every 6 months, this meeting is the general meeting, in which all the community members participate. The family meeting result was confirmed by the finding of Tilahun [5], which says, "There is a regular discussion program in

which groups of two or more families meet together at every 15 days to evaluate their plan and control the behavior of members. It usually takes place at night when all members come back from their field work and after daily activities are nearly over.”

Ways of handling conflict (theme-11), there is an established committee to solve, if any conflict happens among the community members. If the conflict happens, they consider it as ideas conflict rather as individual, solve on the following way: first, the individuals discuss on the issue, to understand each other and in order to solve the problem. Second, if they cannot, they take the issue to the grievance listener committee and try to solve it. Third, if the problem is serious and the committee cannot solve it, the issue is taken to the “woreda” court. Almost all the problem solved at individual level.

The community elder care (theme-12a), the community supports the elders in two ways: one is in their home, and in the elder’s care center. They use two sources of income to support elders: one is income collected from the tourists as an entrance fee, and the second way is through the community members’ work 1 day a week for this purpose.

Preschool and moral education in the community (theme-12b), in the preschool, children learn moral education, such as avoiding lying, being captious, making conflict between individuals, and so on. At the end of every daily lesson, children say the slogan, which strengthens their moral behavior. This result is closer to the findings of Tilahun [5], which indicated that, “the preprimary school has a potential impact in reshaping students’ attitude. It makes them more ethical and freer to express their ideas according to the established local traditions.”

5. Interpretations of the study

5.1 Objective of the community

The data indicated that the following are the objectives of the “Awramba” community.

- To support each other
- To solve their problem
- To share their joy

Indicators of the above objectives are the following:

1. The indicator of the first objective is the different kinds of supports (financial, emotional, and the like) given to the community during grief time when there exist problems.

For example, in “Awramba” community, there are different community-based organizations such as income generating activity association and elder care house, which serve as means of sources of income and support during the time of old age.

2. An indicator for the second objective can be an effort done to solve problems of school where children acquire knowledge and health center the place where people need to get medical care. Examples of the second objective in the community are the existence of public library, kindergarten, senior secondary (grade 9 to grade 10) school, and one health center built by the community.
3. The celebration of anniversary “Pagume 5 or 6” and New Year ceremony in the community can also be an indicator for the third objective.

The community mourning values (theme-7), religious view (theme-8), and gender equality (theme-9) results are agreed with the study by [4].

As the McMillan and Chavis sense of community theory is a major theory in community psychology, it is cited in more than 2500 different, scholarly publications, the researcher used it for the interpretation purpose.

McMillan and Chavis define sense of community as “a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members’ needs will be met through their commitment to be together.”

In this key definition, they identify four major elements required for a sense of community: membership, influence, integration and fulfillment of needs, and a shared emotional connection. By their definition, all four elements must be present to define a sense of community.

5.2 Membership

As the theory said there needs to be a defined territory or boundary, physical or not, something that shows who is a member and who is not. This can be a geographic marker, or it may involve similar interests, etc. These say who is in and who is out, who belongs here, and who does not. This is related with the “Awramba” community members living in the community village. And in addition to members of the community who share physical boundary, there are also members of the community who do not share geographical location, which is (theme-13).

In a community with clear boundaries, members experience emotional safety. This means a physical sense of safety from crime, etc. Relationally, it means a secure place to make friends, a safe space to speak truthfully. As the researcher got information from the community members, there is no a single police station or court in the village. And it also explained by the “Awramba” community’s value of being honest (theme-10a) and ways of handling conflict (theme-11).

A member who feels safe is more likely to make personal investment in the community. Personal investment is made in order to show commitment, and it’s made because one feels wanted by the community and entitled to be there. This idea of the theory also related with the “Awramba” community members’ commitments for scheduled meetings (theme-10b).

5.3 Influence

Related to influence, which refers to how the individual influences the community, and that community influences the views and actions of the person. Participant:2 said “If we miss to adhere to the norm of the community, there is advise in the first place

provided by other community member for that.” This can show how the group influences individual members of that community. It also related to the community members adhering to the norms of the community.

5.4 Integration and fulfillment of needs

Shared values – this refers to deeper shared ideals that can be pursued through community involvement. This can be related with the children’s moral education providing in the school and at home within the “Awramba” community.

Community economy – refers to the exchange of resources within the group – this is what fulfills needs. Members participate in communities because their needs are met (need for status, knowledge, friendship, tools, anything). Needs are met through connections with other members. And individuals have to bring something to the table too, for the community to desire their membership. By taking differences from different people and putting them together, the community grows in value. The result of this trusting exchange is wealth, monetary or otherwise. This also related with the “Awramba” communities’ means of income (theme-3).

5.5 Shared emotional connection

McMillan and Chavis considered this the “definitive element for true community.” It involves a spiritual bond, not necessarily religious, and not easily defined, yet recognizable to those who share it. It’s the soul of the people. It’s hard to define or describe to outsiders. Members of the community know what this deep bond is for them. This last element is sometimes just thought of as love. It’s based on a shared story, a community narrative, the story of my people, and it will have some rituals around that, which remind them why they are together.

These concepts reflected on celebration of the formation of the “Awramba” community and New Year (theme-5), marriage and divorce (theme-6), mourning value (theme-7), and religious views of the community (theme-8) (Figure 11).

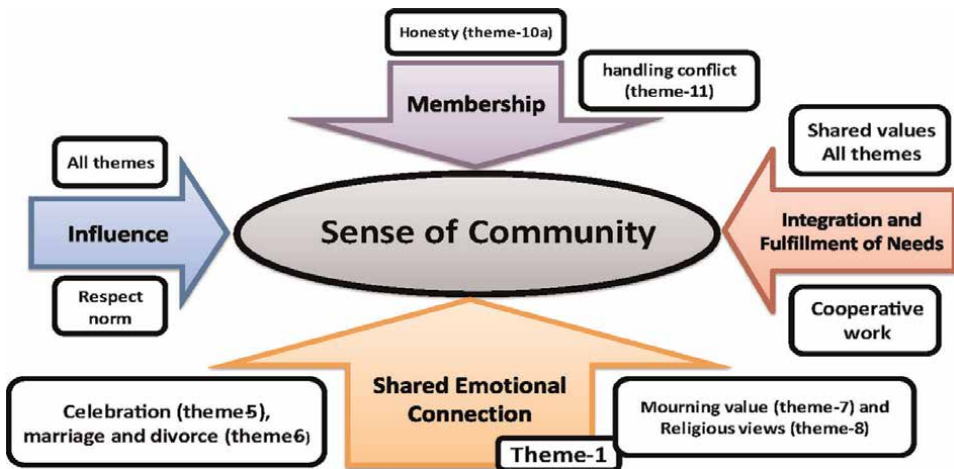


Figure 11. The relationship between all themes and the four elements with sense of community.

6. Conclusion

Based on the information got from interview and observation, the researcher comes up with the following conclusions:

- Membership criteria of the community are based on adhering to the community norm.
- The community has a strong sense of community based on shared story, cooperative work, marriage and mourning values, religious view, gender equality, their commitment to be honest, and solving their problem by themselves.
- The emotional connection of the community is strengthened by their common celebration of the yearly anniversary and New Year and scheduled meeting.
- The moral education is also given in the school and at home meetings and in practice.
- The services of education, health, water, electricity, and telephone are available in the community.

Annex A: In-depth interview questions

Dear participant,

The purpose of this interview is to obtain data for a study of the “Awramba” community lifestyle and culture. You are selected for this study by assuming that you could give enough information on the issue. Therefore, your unreserved cooperation in providing the most genuine information will have a great significance to the study.

Please note that:

- Any information that you give is confidential.
- You are not required to mention your name during the interview.
- The information you give will be used for this research purpose only.
- It is up on your willingness to the interview; you have the right to participate or not to participate on the study and to interrupt the study.

Thank you in advance for your cooperation.

1. Gender _____

2. Age _____

3. Marital status _____

4. Educational status _____

5. Occupation _____

6. What is the name of this place?
 - a. What is the name that the community members call themselves?
7. What is the name of the community?
 - a. By who and when the community was established?
 - b. How many members the community had during the establishment?
Male _____ Female _____ Total _____.
 - c. What were the reasons that you think to increase members of the community?
8. Are you member of the community?
 - a. How many times have you lived in the community?
 - b. What is your role in the community?
 - c. What is your plan for future about living in the community?
9. What do you think about being member of the community?
 - a. How do you see the importance of the community to you and your importance for the community?
10. What are the sources of income of the community members?
11. What it seems culture of the community related to work?
 - a. Is there work classification in the community? And what is it?
12. Is there work motivation in the community members?
 - a. What are the reasons for it?
13. Is there a chance to get a person who does not have motivation for work in the community?
 - a. What will be done for that?
14. How many members of the community do you know?
15. Are there criteria to be member of the community? 15a. What are they?
16. Does the individual influence the community? And does the community also influence the views and actions of members of the community?
 - a. What is it? And how?

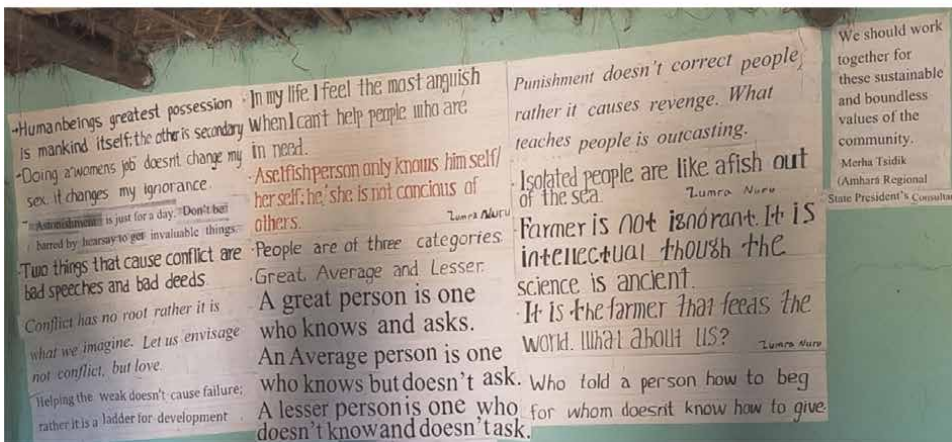
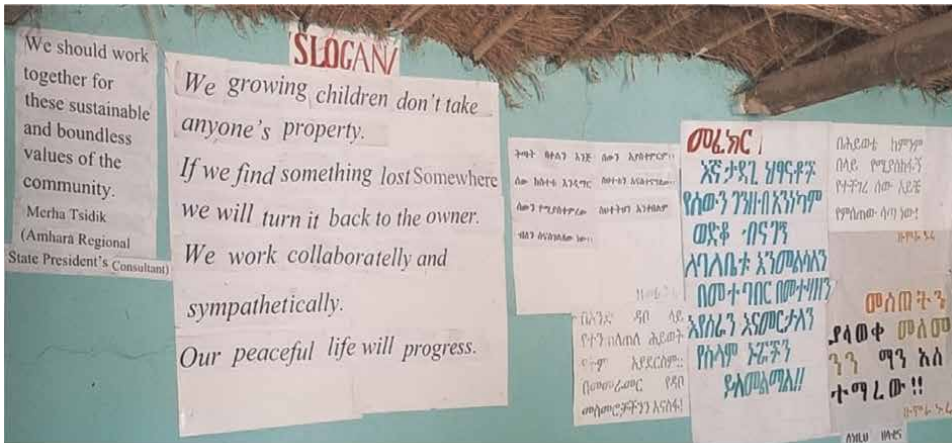
17. Based on the norms of the community, are there things that are allowed and forbidden for members of the community? 17a. What are they?
18. Who manages or controls norms of the community?
 - a. In what way?
 - b. What is the measure during violation of the norm?
19. What is the meaning of cooperation in this community?
 - a. Is there cooperation between members of the community?
 - b. If there is cooperation, what strengthens it in the community?
20. What is the meaning of honesty in the community?
 - a. What it looks like in the community the experience of honesty?
 - b. Is there the experience of teaching related to honesty?
 - c. If there is experience, where does the teaching is delivered?
21. Is there moral education for children in the community? And how is it delivered?
22. Is there a custom that allows participation of all members of the community including children, youth, male, female, and elders?
 - a. If it is there, what is it and in what way is it held?
23. Are there things or experiences shared by all of the community members?
 - a. What are they?
24. What do you think about the safety of the neighborhoods in the community?
25. What is it about the leader follow-ups for the issues of the community?
26. In what way the community prevents crime and deviance?
 - a. Are there police station and court in the community?
27. What is the relationship between government and the community?
28. Are there problems that affect the community directly or indirectly?
 - a. What are they?
 - b. Do the community members cooperate to reduce the problems? And how?

29. What are the marriage customs in the community?
30. What are the customs of mourning in the community?
31. Are there celebrations in the community?
 - a. What are the times for the celebrations?
 - b. In what way are they celebrated?
32. Are there customs or traditions at family or community level held in a fixed way at weekly, monthly, or yearly?
 - a. What are they?
33. Is there a tradition of sharing money or things between the community members?
 - a. How?
34. Are there chances of conflicts that occur between community members?
 - a. What are the conflict resolution methods applied in the community?
35. Does globalization have an effect on the community members?
 - a. What are the effects?
 - b. Do the community members try to cope the effects?
 - c. What are they?
36. What is the meaning of race in the community?
37. What is the religious view of the community?

Annex B: Observation guide

1. Name of the community _____.
2. Place _____ Date _____ Hour _____.
3. Observer _____.
4. General environmental condition of the community _____.
5. Services available in the community _____.
6. Others _____

Annex C: Different slogans that were posted on the community office wall (photo of the author)



Annex D: Pictures of the materials that the community used before 25 years (photo of the author)



Acknowledgements


First of all, my special appreciation goes to the “Awramba” community and all participants who kindly volunteered to be part of the study. I would like to thank my qualitative research methods course instructor Prof. Solomon Melese for the research topic approval and his valuable comments. I also want to appreciate my brother Yusuf Tsegaye who helped me in traveling to the community and during data collection.

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Land Redistribution: A Thorny Issue towards Reconciliation in a Post Apartheid South Africa: A Practical Theological Perspective

Baloyi Magezi Elijah

Abstract

South Africa is a country with a history of racial divides and those divides are still visible today. One of the many issues that characterise such divisions is inequality with regard to land ownership. The bigger part of the land is still owned by the minority white people while the blacks, who are the majority; or previously disadvantaged people, are still landless. This is evident from the escalation of informal settlements in areas surrounding the cities of Johannesburg and Pretoria, which have millions of black people cramped into small areas in shacks while most whites are enjoying large portions of land with few people to live on it. Many black people even lack land for shelter. On the other hand, the message of reconciling the country is being made loud to both who has the land and those who do not have it. Therefore, it becomes a serious challenge to imagine and look for reconciling strategies while these two camps still have this unresolved issue. The dilemma that is faced with is how will the different camps embrace the same message while they remain in these different situations. It is argued in this article that justice on the land issue should be first attended to so that it serves as a door to reconciliation.

Keywords: reconciliation, black people, poverty, informal settlement, landlessness

1. Introduction

The truth is that since the arrival of Jan Van Reibeeck and his people in the Cape to date, South Africa's land issue has never been as it was and it continued to be a big challenge for the majority of black people. From then onwards, the white people's government was ensuring that the black people are alienated from all forms of owning land, as a way of subjecting and putting them under racial control. It was very clear that if the blacks were allowed to have land, their dependency on the western ways of life would be minimized, which would be a problem for colonization and its intended inequalities to perpetually take away the dignity of the black person. This is the correct argument

of Resane [1] when contemplating being stripped of the land when a majority of people were removed and dumped into the designated areas demolished their life meaning, their dignity, civil rights, and respect. The agenda of transformation after many years of racial divisions and the subjection of the black majority in South Africa is one of the biggest but most challenging projects that many people can imagine. It is without any doubt that one of the most debated or discussed issues in South Africa in 2018 is land redistribution. It makes sense to also indicate that the transformation agenda in democratic South Africa for the past twenty-five years had been very slow in this regard; reconciliation of the racially and tribally divided nation is ultimately affected by this as part of the transformation. Moosa has the following to say in this regard: “While the issue of land can be used opportunistically by the politicians and their supporters, it is disingenuous to suggest that South Africans are unconcerned. The relationship of the land issue to reconciliation and inequality is visible for everyone to see.” [2].

This is evidenced by the racial and tribal attitudes that continue to haunt the South African society in churches, government departments, and workplaces. There is enough evidence to allude that the land redistribution program had been hit by delays, inaction, and contested political interest, while the ordinary citizens’ interests are being marginalised ([3], p. 1). It should be understood that the issue of whether the expropriation should be compensated or will not be discussed in this paper, but will argue that the land issue is a hindrance between South Africa and reconciliation.

It is therefore the purpose to argue how the land issue continues to marginalise the already marginalised people and open the gap of inequality even wider. It will be a waste of time if I pretend to encourage the political debates and different views which are embedded in the issue of land redistribution in this article; the discussion will generally focus on indicating how the delays in the land issue are a hindrance to the reconciliation that almost all people of South Africa would like to see between the whites and blacks. Despite the fact that the TRC headed by Desmond Tutu targeted a few people, it also did not do much for the reconciliation of the racially and tribally divided nation. My previous paper was on racism and tribalism and I tried to unveil how tribalism remains a thorn in the flesh of reconciliation. This paper also addresses racism which is raising its ugly head in the workplace, churches, and public square [4, 5].

2. Problem statement

We cannot easily identify our problems relating to any attempt of reconciliation project if we ignore to openly clarify that though the rifts of divisions existed in tribal lines, the focus is on the racial divisions by which apartheid managed very well to install successful laws that ensured that blacks were inferior towards the superior whites in many forms. The factors that are delaying the reconciliation of South African reconciliation for almost three decades are very complex, but for the sake of this specific study, the author intended to identify the slow pace at which the land redistribution is being administered as one issue. In discussing that, it will be noted that the difference that exists between the social groups existing in South Africa are in varying degrees, but the promise of the present democratic government even in the freedom charter gave the impression of equating all people that live in the land and promised this as one of the fundamental issues to play a role in the reconciliation process, for instance, *“All people shall govern”* has no restriction for a particular social group within the borders of the country ([6], p. 1). The gist of reconciliation in this country must be seen from that context, particularly for this article.

The president of the republic, Mr Cyril Ramaphosa said:

“We cannot be a reconciled nation for as long as the majority of the people of South Africa continue to suffer from the injustices of the past. Access to land is a fundamental right of citizenship. It just not just empower communities and workers, it enhances food security, especially for people in the rural areas. Despite a comprehensive land reform programme, we have not made significant progress in this issue. Most of this country’s land remains in the hands of a few people in our country.” [7].

The sentiments of the president above resonate very well with his later statement in his first address as a state president when the ANC adopted the policy of land expropriation without compensation in its 54th Conference as he said:

We will accelerate our land redistribution programme not only to redress a grave historical injustice, but also to bring more producers into the agricultural sector and to make more land available for cultivation ... this approach will include the expropriation of land without compensation. We are determined that expropriation without compensation should be implemented in a way that increases agricultural production, improves food security and ensure[s] that the land is returned to those from whom it was taken under colonialism and apartheid.5 [Emphasis added] (1–2) ([2], pp. 1–2).

These presidential statements and views show the clear direction of the ruling party, which is in line with the Freedom Charter, but the implantation is a different story that is met with contestations from different political parties. That on its own makes South African Reconciliation Barometer a public opinion that no one will be sure when it will come to practice.

According to SAPA ([8], p. 1), Trevor Manuel reported: “South Africa has almost the same number of people living in informal settlements now as it did in 1994. This view resonates with Ramantswana’s [9] articulation when saying:

The landlessness of the black masses is evidenced by the continuous mushrooming of informal settlements... To be landless in South African cities is to live in canals, under bridges, under trees, in parks, and in open spaces in front of buildings or shops. Even worse, to be a landless female is to be prey to slave-traders and sex-traders and to be first in line for endless rape. Landlessness sets up our people for dehumanization and exploitation.

This is even though the government provided three million houses during the period.” The minister went on to argue that in reversing this trend, it must also be known that South African cities were designed for the colonial elite; and it is a challenge to maintain that elitist live style with the challenges that are currently facing South Africa. Malema states as follows:

“The time for reconciliation is over. Now is the time for justice,” Malema told the parliament. “We must ensure that we restore the dignity of our people without compensating the criminals who stole our land.” (Business [10]).

The three statements from politicians above inform me of one main thing: we have a problem to reconcile the divided South Africans who have previously been divided and are still divided with the land distribution issue as one of the biggest stumbling

blocks towards this goal. In other words, the reconciliation of this country will remain a dream that will never come true if the land issue is not dealt with properly. It is therefore the gist of this study to research and argue that land redistribution is essential for the stuck reconciliation programme which is part of the transformation agenda to carry on. If I have to use an understandable metaphor I would say that the bus is stuck. One of its wheels is termed “reconciliation; and this wheel is out because one of its bolts, “land redistribution,” has come out. Therefore, to get the bus moving means that we start with the lost bolts, by fixing them then the wheel (reconciliation) will be fitted to the bus and the bus will then start moving on. It does not matter how small or big the bolts are, they can stop the whole bus from moving. The reality is that South Africa is stuck in its transformation agenda, particularly in reconciliation and it demands theological knowhow, among others to try to make us going forward. The resistance and delays we are experiencing with the land issue undermine the broken black people. If reconciliation and justice go hand in hand, there is a great risk that South Africa will not achieve any reconciliation if the justice on a land issue is not dealt with to the satisfaction of the previously disadvantaged people. Let us face the fact that the landless people have lost human dignity, whose lives have lost meaning ([11], p. 3). Not only for pride’s sake, but without owning a land for African is a biggest humiliation one can imagine. For the author, it is like rubbing salt on the wound to speak about reconciliation between those who have land and those who do not have it. It is important to note that this paper did not intend to discuss politics, but to highlight the issue of land as a stumbling block, although unfortunately, the land issue has already been politicised in the country. This can be checked with the comments just above, which are made predominately by politicians.

3. Relevance of practical theology

Meiring [12] confirms that the problem is current and relevant when he says: “We do have to face the fact that South Africa, 20 years after democracy, is still a fractured and a very divided country. Racism, alienation, xenophobia are still with us, as is the case with corruption, greed and endemic violence.” This basic truth is what according to the author of this article dragged most of the transformational projects very slow, hence, for 25 years it looks like most of the citizen’s lives did not move for an inch from what it was before 1994.

It is important to note the fundamental truth in what Hall [13] warns us against when saying: “When we debate racism that it is important that we don’t only look at racism in relation to land as something that just happened in the past, but as an issue that continues to be felt today.” This argument informs us that as much as theology had tried to fight racism in the past, we need to remain alert that the fight is not over because the fight can only be won if all inhabitants of South African have an equal share in all opportunities, including land ownership. While theology is also caught ball watching, the patience of the people it intends to serve is also tried with by this resistance. The organisation called Landless People’s Movement (LPM) has come to alive because of the delay on the issue of land, as they are demanding answers to the very same issue. For me, inequality and any form of sabotage of human dignity is a concern that theology cannot keep silent about. Turning a blind eye on the situation is an indication of the demise of such a theology. One of the fathers of black theology, James Cone, spent much of his time on writing about this issue, when saying that any theology that does not answer the problems of the people at hand must cease to exist

(Cone's theology). According to Bosch ([14], 32–34), Jesus' message on the kingdom includes God's power that attacks the evils of the society in whatever form they manifest. The church of Jesus did not neglect works of compassion as part of proclaiming God's message in totality; hence, pain, disease, demon and other forms of brokenness were dealt with. In addition, the intention of this paper is not to undermine the South African judiciary system and its procedures on issues of land and reconciliation, but to highlight and to unveil that the slow pace at which the process is taking place is not helpful for many landless people. It is the very same democratic government that made the promise to deliver and it is the same government that must be held to account for their promises. For the government to do things legally and according to the rule of law is what everyone expects, but that does not necessarily imply that things must be as slow as they are with regards to the land issue. It is important for the author to mention that it is the very democratic government that must be held an account on the land issue because it is the one that made a promise to distribute the land at least by 2014 which is seven years back [15, 16]. Part of this article's task is to critically highlight that it is the very same promise that must be kept, of course within the confines of the law that is governing the country. The author is not supportive of anything that is done outside the parameters of the law, urges that the required speed is maintained to distribute the land before things get out of hand as signs are already showing by some land grabbing experienced.

4. Limitations and focus of this research

South Africa is one of the countries with young democracy after many years of colonialism and apartheid, implying that some of the changes taking place are still confusing and not perfectly done. The reality is that the challenges caused by inequality are complex and often intertwined, for instance, poverty, unemployment and other social challenges. It will be too ambitious to want to attend to all these in one chapter, but for the sake of this specific study, the author decided to avoid floating around all these problems, but focus on the land issue as a trap towards reconciliation. This does not however mean that land issue will not affect other social problems or be affected by them, but the other social ills will also get their day in another research. This of course is not intended to claim that land issue will solve all the other existing problems, but it will open opportunities to face other realities, for instance, before one has a land it is difficult to imagine the exposure to issues like drought, storm and pest invasion. These are issues for future research.

Our African forefathers left us an idiom that says: "The best way to eat the elephant standing in your path is to cut it up into little pieces." Slowly and patiently taking each problem at a time we will transform our country for the benefit of all who live in it.

5. Definition of some important concepts

The word land redistribution refers to a way in which the commercial land that has been owned by the whites is transferred to black South Africans. The literary translation of reconciliation suggests that it is a restoration of friendly relations; it can also be used as synonyms for appeasement, reunion, conciliation, harmonising and so forth. It is dangerous to use reconciliation a synonym of forgiveness

because, according to Cornell [17], one can forgive, without providing an immediate reconciliation. Reconciliation is a restoration process whereby trust is deeply broken and it may be a lengthy process at times. The process of reconciliation depends on the attitude of the offender; the depth of betrayal and the pattern of offense. The unrepentant heart is difficult, if not impossible, to reconcile; hence, a line of difference should be drawn between restorative and retaliatory reconciliation.

The study made available by Akinyemi [15] on land ownership and usage for agriculture clearly makes a very good understanding of the link between landlessness and poverty. The author does not of course undermine the fact that there are many factors involved with regards to poverty, but since this is not the main intention of the study, it can be argued that having or not having the land can assist in making the separation between the rich and the poor. The author would avoid making generalisation if the division between the rich and poor for other countries also connects to land, but as for South Africa the research mentioned above makes that connection clear [15]. This however does dismiss the argument that every poverty in every country is alluded to land, that is not what this article is arguing or saying.

6. Background

To make the argument of this study more sounding, the Freedom Charter of 1995, from which all the promises were made by the liberation movements particularly with regards to land and governance will shed very important light for the cause of the frustrations that South Africans are having today. Three specific statements in the Freedom Charter are:

1. All National groups shall have equal rights
2. The land shall be shared among those who work it
3. All shall enjoy equal human rights ([6], pp. 2–3)

The Land Audit Report of November 2017 continued to emphasize by quoting the Constitution of the Republic by saying: “South Africa belongs to all who live in it, united in our diversity” [18]. The gist of this paper may be complicated for some readers without the knowledge of the Freedom Charter, which was a helping tool for the governing party and other liberal movements to gain the support of the majority in toppling the apartheid regime. It is on the background of these initial promises adopted in 1955 that the reactions of people on issues of land in South Africa can be attributed to.

There is a confirmation that the 2017 Land Audit Report stats on land reform were just a beginning of the long journey of redistributing the land by saying: “Finally, this exercise has revealed that we have just taken the first steps upon a long journey towards the goal of the sustainable relationship of South African citizens to one another through the effective management of land as a resource and nation-building”([19], p. 20).

According to ([20], p. 1) the land restitution programme which is based on Section 25(7) of the *Constitution*,¹ points that:

“A person or community dispossessed of property after 19 June 1913 as a result of past racially discriminatory laws or practices is entitled, to the extent provided by an Act of Parliament, either to restitution of that property or to equitable redress.” Some of the claims in this regard were attended to, but many are still outstanding and the landless are not aware of what the update is.

The state of affairs according to “The Borgen Project report” with regards to land occupation as in 2021 indicates that: “White South Africans accounted for less than 10% of the population after the apartheid in South Africa ended in 1994. However, 90% of white South Africans owned the land. In addition, about 72% of white South Africans owned farmland in 2017. Meanwhile, black South Africans owned only 4% of land and Indian South Africans owned about 5%. As such, poverty and land reform in South Africa remain large issues ([21], p. 1). This audit is supported by Phaliso [22] who exactly have the same statistics in his/her report dated 2018. The audit shows that whites owned the majority of land at 72%, followed by coloured people at 15%, Indians at 5% and Africans at 4%.

Until today, South Africa is still one of the countries with the highest levels of inequalities, according to World Bank 2019 statistics [23]. The disparities that exist between the rich and the poor is incomparable to most of the countries. From then onwards, the ownership of the land in the country was transferred into White hands, that continued even during the apartheid period [24]. The Natives Land Act which is regarded as apartheid’s original sin saw thousands of black families being forcefully removed from their land and since then onwards, black South African knew no peace with regards to those removals.

The continued removal of black people from the land went on even when homelands were formed in the late 1960s and became is a crack that has not yet mended even after close to three decades of democracy. The forceful removal of black ethnic groups aimed at giving some land for exclusive use had been and will always be blamed for the current inequalities. There is no doubt that the move to democracy in South Africa is challenged among others by the land reform process. This is because some effects of the apartheid regime were the historical unequal allocation of the land ([25], p. 1). These historical injustices should be dealt with for true reconciliation to surface. The truth which is undeniable, according to De Villiers [26] is that in four countries namely; Zimbabwe, Namibia, South Africa and Australia the historical land issues were characterised by the inequality, colonial dominance and discrimination which led to the indigenous inhabitants being forced off their land to the benefit of white settlers, even the ancestral lands where they buried their loved ones were forcefully taken from them. It is an undeniable fact that by whom and how the land is used has a very direct bearing on the growing unemployment as well as poverty statistics [27].

My background discussion starts with a quote by Butjwana Seokoma [28] who said:

“South Africa’s land reform programme, adopted by the African National Congress (ANC) led government in 1994, has a long way to go in redressing the historical injustice of land dispossession, denial of access to land and forced removals.”

It is evident that the problem about land redistribution in South Africa was caused by the attitude of the racial discrimination of the apartheid government, which most of us accept was inclusive of many policies that wronged our people to a great extent. This is when all tribal laws, tribal divisions and forceful removal of blacks from the areas designated for white use exclusively. The dispossession of land from black

South Africans was a key part of the colonial and apartheid strategy of entrenching superiority over the black population, it rendered the blacks unable to live on their land, forcing them to work for the colonial and apartheid powers. It removed people from ancestral land, disabling them from being able to perform cultural rites, visit graves, bury the umbilical cords of newborns and the deceased on ancestral land [29].

Sol Plaatjie, the first secretary of ANC, was quoted reiterating what the colonial ideology was all about saying: “Where will we get servants if Kaffirs (Africans) are allowed to become skilled? A kaffir with a thousand bags of wheat? If they are inclined to her the pedigree stock, let them improve their masters (colonial settlers) cattle and cultivate for the owner of the land, not for themselves.” (Motsoko [30]). Despite that the statement dealt a blow to the dignity and humanity of black people, this statement was manifested by ensuring that black people do not own land in this country; hence, the outcry today comes a long way.

For me the basic human right was violated just here and not much had been done to reverse it, particularly for ordinary people who lack even a small piece of land to erect a shack. On the other hand, “those who were favoured through legislation to acquire productive and at the expense of the disposed black majority were able to use that asset over a time as a leverage for wealth creation- to get ahead materially, to afford the comforts of life, to take their children to better schools, to build social resilience and to bequeath material legacy for future generations of their kin. The experience of the black majority was the complete opposite” (Daily Maverick, 14 August 2018).

It is the acknowledgement of all these wrongs that were supposed to be accompanied by a confession of guilt from those who intentionally benefited from this wrongdoing. From the inception of democratic government in 1994 this had been one of the slowest projects of transformation, since only a small percentage of land had been taken so far. The resistance and politicising of this aspect caused delays that see us losing lives like in the apartheid regime, for instance people whose shacks are being washed away by floods due to lack of proper space to shelter themselves.

No one can deny that the dawn of the first democratic elections in 1994 was harnessed among others by the hope that the disadvantaged people of this country thought that it would change their lives, even in terms of having land to themselves. The honest response is that very little had been done and this, on its own, does not give courage that the ordinary citizens of this country will have land from the country of their birth. The dignity of the other is continuously delayed and denied.

Mr Petros Nkosi said:

“The land, our purpose is the land: that is what we must achieve. The land is our whole lives: we plough it for food, we build our houses from the soil, we live on it, and we are buried on it. When the whites took our land away from us, we lost the dignity of our lives, we could no longer feed our children, we were forced to become servants, we are treated like animals. Our people have many problems, we are beaten and killed by farmers, the wages we earn are too little to buy even a bag of mealie meal. We must unite together to help each other and face boers. But in everything we do we must remember that there is only one aim and one solution and that is the land, the soil, our world.” (18 May 2017), The constitutional court speaks about land and dignity). This is very similar to SAHRC’s position on land reform when they said: “Land is dignity and the restitution of land rights equals to restoration of dignity.”

This is the kind of the enmity and hatred that had been sowed by the issue of land, among others. We cannot continue blinding ourselves to think Mr Nkosi’s mind is

his alone, since many black landless people are singing the same tune although they might not be very vocal. The dignity of a human being is on the land issue from birth to death. The previous state president Jacob Zuma also sang the same song of saying that it will be very difficult if not impossible to achieve true reconciliation until the land question is resolved ([2], p. 2).

If lack of land affects the dignity of the majority of this country, it means that by delaying and trying to avoid a quick movement towards it is also to deny that these people's dignity must be returned to them. Justice delayed is justice denied. Therefore, how do we expect of the landowner to be reconciled to someone who does not even own a space where his/her shack is situated. It is the dignity of our people that is being tarnished by red ants who are evicting them from one place to the next on a daily basis. If my shack cannot give me enough privacy because there is no space between it and those of my neighbours, while the white farmer has enough space even for his dogs, cats and mice to play around, then the dignity of the one living in the shack cannot be equated to the dignity that the dogs and cats have. How is reconciliation possible? Parker ([31], p. 3) is very correct to mention that returning the land means restoring the dignity of the people. It should however be commended that one of the first steps towards land restitution began after the unbanning of liberation movements during the last days of the National Party's rule in which FW De Klerk's government abolished the Racially Based Land Measures Act 108 of 1991 where in a commission on land allocation was established ([26], p. 47). The situation as at 2019 according to [11] indicates that only 13% of South African is owned by black people while 87% of it is owned by whites.

We have two camps with regards to land issue in South Africa, those who have the land and the landless. Their walks of life, worldviews and life experiences still remain the same as it was more than twenty-five years ago; very opposed to each other and the question is: How do they join 16 December annual celebrations in the same fashion, while they remain in this situation? I am of the opinion that the reconciliation of people must not ignore the life world and levels of lives each person comes from. Some will argue that there are rich black people that own the houses that are on the first and second pictures, but I am fully aware that the majority of our people are still in the life indicated in the pictures below and yet they are not excluded from the discussions of reconciliation. To deal with and overcome the historical injustices of the past, where the land was seized under apartheid it is just imperative not to avoid addressing a land issue. That is what Gibson [24] in his book entitled *Overcoming Historical injustices: Land Reconciliation in South Africa* is trying to argue. The land issue is undoubtedly at the heart of South African politics since it is an important cornerstone towards reconciling the nation that is haunted by racial divisions amongst others.

The first two pictures are of white farmers while the rest portray the living places for most black people living in South Africa.

The safety of the first two houses to natural disasters compared to the shacks in which one lives in fear, should high rainfalls come. This fear has been normalised to be a lived experience in which one is forced to create happiness despite circumstances.

1. Basic services: If one has to walk for kilometres to fetch "unhealthy water" meanwhile someone else's swimming pool is always filled and the water may be healthier than the water the other is going to fetch.
2. Dwellings: The mountainous area is beautified by grass-covered roundavels which cannot even stand the test of some minor storms has become a great home

in which most blacks spend four to five hours to reach and have their happiness there. An area that cannot have any resource at all, but life goes on as usual.

3. The filth and the sewerage smell cutting across shack area has been normalised into black life in the area, which can be a very serious concern for those living in the first two homes.
4. Space: The first two houses have enough space where even the dogs and cats can enjoy freedom while walking around, but that is categorically different from the experiences of the people living in the houses portrayed in third and fourth pictures.
5. In his unpublished paper entitled: “The power of Babel” Kritzinger spoke of the difference that has not disappeared between Jew and Greek, slave and free being language. The metaphor I would use is that of the language in the sense of the content of what people discuss. My opening question will be, What kind of language will be a talk between the people living in these two extremely different environments, for instance, the word water can mean something for the person whose swimming pool is always full of water meanwhile for the other person who is walking four to five kilometres just to fetch drinking water, a basic resource of life the same water may mean something different.
6. As if it is not enough, those find small space to just erect their shacks to live and are evicted by the red ants in the fifth picture, to add insult to injury.

The above pictures confirm what Siviwe Feketa mentioned in his article entitled: ‘South Africa world’s most unequal society report’ when he reported:

The government has expressed disappointment with its track record of transforming the country after a World Bank report showed that inequality has deepened since the dawn of democracy, with the country being the most unequal society. The results of the probe, which assessed poverty and inequality from 1994 to 2015, revealed that only one in four South Africans could currently be stably considered as either middle class or upwards in terms of means [32].

In Collins’ article entitled: “No vacant land in Joburg is safe from occupation,” he quoted one landless person in Alexander Township saying: “The empty stand represents an opportunity for dignity, privacy and a home she can finally call her own. It also represents a waste of something she has never had and is ready to fight for.” [33]. This is one example out of many or even the majority of the people in South Africa, whose dreams to have a land of their own in which they can build houses is a dream not coming true. It is difficult to imagine that for almost three decades after the democratic government which had one of its pillars in the freedom charter as to ensure that all people will access the land.

Many other issues can be raised by just comparing these pictures, but for reconciliation’s sake, there are many issues that would have to be attended to before we embark on the language of reconciling the two groups of people, unless the word reconciliation is only on our lips. Even though it is not the focus of this article, it is important to note that there are also squatter camps where white people are living, for instance, Munsieville in Krugersdorp. But it should however be known that this has been and

is still a home for the majority of black South Africans. This has been part of the long history of inequality that was orchestrated by the elements of injustice and racism, among others. Recently, the very hot land debate was revived between the ruling party (ANC) and EFF where the bone of contention was that the government must be a custodian of the whole land while the ANC believed that they want to be custodians only of certain portions of the land in the country [34]. This of course have a close relationship with the argument of appropriation of land without compensation, which has been a headache for the government for a long time now. Of course, this very long debate is not of much interest in this study, but it is touched upon just to shed light as to where we are in terms of land ownership in South Africa, which has serious and should seriously continue to be one of the determining factors towards reconciling this very divided country.

7. Endangered lives continue to be normalised

I became concerned when even some black people who were supposed to have supported the brother in Mamelodi started criticising him and his family for his lost child when the pipes burst. I am referring to the case where Mike Mshiane and his Wife, Vinolia Sikele, lost a child when the water pipes burst below their five-year-old shack in Mamelodi East [35]. For me this incident took the child's life because of the land problem more than anything else. My argument is that if the land redistribution programme had not been delayed and this couple got the land to put their shack or house on good land, their child would still be alive today. They were left without a choice, but to erect a shack in the wrong place because the land issue is still to take more decades to discuss. I do not want to talk about the Alexandra community, the shacks of whom are always washed away whenever floods come through that Jukskei river. The consistent warnings whenever heavy rains and storms are predicted are made to people living in low-lying areas like Alexander and others because it is known that their houses and shacks will be damaged and even taken away. McCain [36] confirms this in his report entitled "Heavy rain causes flooding in parts of Pretoria, with more rain expected." In 2013 some homes of people were swept away by floods alongside the Tugela River in KZN because that was the only piece of land those people would call a home [37]. The lives of those without land remain at risk all the times. Without denying that these calamities and challenges happen in other countries also, the author's argument is that within the context of landless people in South Africa, these would be avoided for some people if they had proper land to build their houses. Without evading the possibilities of natural calamities and disasters like drought, pests and invasions which the author is aware of, it is important to maintain the focus of this specific study, keeping in mind that the future research must attend to those issues for continuity's sake. These are not the only challenges connecting to the topic, but poverty and unemployment as well, but for the sake of space and focus, the author will carry these into the future research.

It is the lives of the landless black people that are at risk there and yet they are expected to talk about reconciliation to someone who stays on a large portion of land. If we take a count of lives that were lost due to this delay of land redistribution, the statistics will show that the life of blacks is not a problem in South Africa. This level of inequality is also exposed during the lockdown due to the corona virus. Nocuze's [38] picture where people were cuing a very long cure to the very small toilet of a certain Nolusindiso Xaka of Khayelitsha is a practical example. These people's dignity

is compromised while the lockdown measures of isolation are hindered. This cannot only be blamed on the lockdown measures, but also to the lack of land in which everyone could try to at least build his or her own toilet. It was also argued in that report that residents refused to move their shacks to make space for toilets, merely because there is no enough space left to do that ([38], p. 9).

8. Deprivation to basic services

The 06h00 am news on Wednesday 05 November 2019 from Munghana Lonene (SABC Tsonga Radio Station) included a painful story of people who are starting to dig their wells to get water in Hamanskraal, just about 30 minutes-drive northwards of Pretoria. This is an entirely black township. It should be noted that a large inequality across South African provinces regarding basic services such as piped water, toilets, formal dwelling signals how the structuring of this poverty was meant to benefit the white dwelling places. According to Gradin [39], this was structured so that it could also enhance the racial disparities and seriously deprive the black people from economic opportunities. It sounds like a joke to expect someone without a toilet or a bucket toilet to reconcile with someone who has more than five toilets in a house in which only two people live. Practically, there is no equal lifestyle there that can draw these two different families closer to one another. The dignity of the other is undermined from the onset. I will close this section by quoting Gradin: "In summary, the legacy of apartheid and colonisation has left Africans with several drawbacks that make them more likely to be poor, such as living in rural areas or in the poorest provinces, higher fertility, less education, and poorer labour market outcomes, even if it is difficult to determine which of them is more relevant than the others." ([39], p. 194). In one of its broadcasting stations called "Munghana Lonene FM" the SABC indicated that in Merwe, a village outside Malamulele, people are sharing drinking water with their domestic animals (Munghana Lonene News, 06h30 on 11 October 2019). Another report from Limpopo indicated that a young girl, Humbelani Mudzanani was attacked by crocodiles and her body was found floating in the dam. This was because she was supposed to fetch water from the stream since they do not have water in the Tshitomboni village ([40], p. 9). The unfortunate and sad moment for this village is caused by the lack of delivery of one of the basic public services. It should be noted that while some are being killed by crocodiles for fetching water, others are not even fetching water since it is in their houses, and yet, we expect the two kinds of people to reconcile. It is difficult if not impossible to expect the person who sleeps in a linking shack with the one whose dogs are sleeping in a house with ceiling and air conditioner to be on the same level of live, let alone reconciliation. That is in line with what Feely, ([41], p. 1) argues when saying that dignity in every human being is intrinsic and cannot be separated from a human being. There is a clear indication that reconciliation which comes along with justice must not neglect the lost dignity of those who were stripped of the land by those who have the land. Although, the examples given to highlight the lack of service delivery may seem to be of a particular social or ethnic group, the author thinks that these are just examples, but the reality is that all ethnic groups are affected by this delivery. All nine provinces of South Africa have communities that are having such issues as water, sanitation and roads services. The most general one is that of the load shedding, which affects every citizen as well as visitors of the country. This can be summed up by Mazamisa's ([42], p. 213) who called the situation "a devastating effect on many communities and individuals."

9. Fuelling of xenophobic attacks

I am convinced that whenever the land and resources are less than the consumers, the likelihood is a conflict in the form of xenophobia or afroforbia. There is one biblical story that can be used to explain this further. In Mark 6:35–40 the disciples of Jesus Christ had only five loaves of bread and two fishes, while the estimated crowd on the day were about 5000. Since it was humanly impossible for the available food to feed the large number of listeners, the disciples were quoted saying:

“This is a remote place,” they said, “and it’s already very late. Send the people away so that they can go to the surrounding countryside and villages and buy themselves something to eat.” This was a way to evade the responsibility of being a brother or a sister in terms of sharing the resources. (Mark 6, pp. 35–36).

The spirit of Ubuntu of sharing the little we have can often be challenged by the size of the resources we have. There are many ways of trying to evade responsibility when the challenge is that of sharing very limited resources. The current state of affairs in South Africa is characterised by the fact that it is those in the majority that do not have land. It does not mean that it is not a right for everyone to have a piece of land, but the government is in the same corner which the disciples of Jesus found themselves in when confronted by a large crowd with very little food. It is possible to think of solving the problem by sending the crowds home to enjoy the little resources without being faced by hungry people. Hatred among South Africans can also be fuelled by lack of land while others have it in abundance.

One of the reasons given for the xenophobic attacks in South Africa was that the foreigners are taking their jobs because they are ready to be paid peanuts. This is because the locals have trade unions that give the farm owners a tough time and instruct them to pay the workers decent living wages as well as giving them living conditions in their workplaces. Among others, many farm workers have been complaining that they stayed on the farms for many years and yet they do not have the right to own the land on which they can bury their loved ones. The experiences of the clash between residents and municipality law enforcement staff like those reported from Mfuleni has become a normal order of the day because the majority of black people do not have a piece of land just to put their houses or shacks. This is exactly what Merten [3] refers to in her report with sad pictures of the people with their belongings without roofs since their buildings were destroyed, when she said: “Land ownership in South Africa remains a contentious issue, while calls for redistribution grow louder.” Marten also believes that an access to land is one of the keys to uplift unemployment. It is suspected of course, that one of the reasons the land distribution is a very slow issue it’s because the government loves money and they expect people to pay for the land, meanwhile the majority of the poor in the country are poor and unemployed. Veli Hlatshwayo [43] was quoted saying: “The attacks against blacks by South Africans show that there is a need to continue the revolution. Until wealth and land is equally distributed among the citizens, such story will continue.” This is a clear indication that the reconciliation that is being expected in South Africa is still trapped in the web of the issue of land.

Besides xenophobic violence, the black local people often engage in battles over the land issue. In the programme entitled “Tiko axi etleri” the SABC Radio Station Munghana Lonene reported that one man was hospitalized as a result of the shooting that occurred between the two local village leadership over a land dispute outside

Tzaneen. This is the village under the local chief Nkuna and the Mkgolobodo village which fought about a land grabbing until guns were used. The destruction of people's homes and their goods was also mentioned (SABC, Tiko, 19 January 2022: 06h00-07h00).

10. Landlessness must be treated as a violation of the human right

The research by Naidoo and Naidoo [44] entitled "The erosion of human dignity in the New South Africa" explains amongst other things how humanity, particularly black humanity was unjustly robbed of their dignity and yet expected to embrace love. There is no way a land issue cannot be the top of the agenda of all sorts of injustices that put the black people in their adjacent poverty as they are today. Although some want to argue that we keep blaming the pre-1994 government whereas the country is now democratic, the author's argument is that those who are still mourning their loss must be allowed to do so until such time when they realise that the reversal of the wrongs has been done. Butler and Philpott ([45], p. 215) added to this argument by indicating that the very slow pace at which land reform is being done is cause for land grabbing since many are losing patience to the process. For Goolam [46] the foundation of democracy, which is human dignity is attained by the equality of all people's human rights and freedom. This clarifies why the argument that reconciliation is still an uphill to climb when other people's dignity through the stripping of the land is still at stake.

11. Practical theological guidelines on land injustices

Theologically speaking, the God who created the land amongst other things is the same God of justice. Any theology that tries to evade responsibility by not listening to and addressing the cries of its immediate recipients is not only irrelevant, but must also cease to exist. The God of theology that we read about in the Bible is the creator of heavens and earth. He also created human beings in His own image before placing them in the garden, which is part of the land (Genesis 1, pp. 26–28). If God wanted people to be landless He would not have placed them on land and instructed them to subdue it (Gen.1:28). The creation was all perfect when the inclusion of human being placed on the land was part of the creation story. In other words, the statement that it was very good in Genesis 1:31 was vocalised after the placing of human being on land was included as part of the plan of God. The author's interpretation is that the creation story is incomplete or imperfect without the man being given the land to subdue it. For that reason, it became a painful part of history when human beings were expelled from the allocated land after the disobedience of Genesis 3. In practical sense, this implies that it is the very same Creator who has powers to remove from any part of land whoever He placed, not another human being.

It is clear that some researchers pointed out that there was a serious role that religion, particularly John Calvin's Reformed theology legitimized the policies of racial segregation that put all the ([47], p. 9). This on its own suggests that as much as the religious and faith communities have played a role in using their doctrines and other influence for this unjust practice to be perpetuated, they are not to be left out when reversing the very same issues they were supporting. The author of this article sees the importance of revising and unteaching that which was taught as an essential tool towards the different that will topple down the inhuman segregation, including

on land issue. In that way the wrong role of the church will be reversed and it is not only about writing of confessing, but also by involving the church into these negotiations. The rebuilding of the community through restoration of human dignity is not only political move, but a moral and ethical obligation for which the church has a part to play [48]. For mobilisation and socialisation of the community faith community must play their part, for example through documents like that of Smith [49] which was circulated in the Dutch Reformed Church Synod around 2002. The document was entitled: Land Reform and the church ([47], p. 12). Such documents do not only influence the community, but they also can be given a chance for suggestions to the policy makers for consideration in rebuilding the nation as the advancement of the land redistribution is called upon. The influence of organisations like SACC is still respected amongst faith-based organisations and that is a positive point, they should use their influence to get involved and not stay back when these negotiations as well as land grabbing are taking place. Using the scriptures the task of advocacy and prophetic voice in challenging the state about this may make the difference. Making of submissions and petitions to portfolio committees and the relevant government ministries falls within the democratic right of every organisation and individuals, these opportunities have not been much exploited.

For ([11], p. 1) besides its political controversies, the land has also emotional and religious attachment to African people, hence theology cannot afford to be left out in the issue of land. It is for this reason that the author's understanding links very well with that of Mlambo when indicating that the struggle for land is a struggle for justice because these two have been tied together ([50], p. 1). Theology is incomplete if it avoids including the issue of land as part of its discourse. The thoughts of the late Prof ([51], p. 2) when he aimed to look at the characteristics of land theology, which is one of the most important catalysts of black theology of liberation. There is no way the colonial justice of cultural domination and oppression that forcefully took the land can be justified. God has and will always been on the side of the poor and the oppressed, hence it is convincing that He cannot be the author of such injustice. If the unjust taking of the land from black people is one of the causes of oppression that demanded a revolutionary struggle, then the very logical argument is that there cannot be a reconciliation without liberation ([52], p. 6). This is very in line with Chimhanda [53] who has seen that black theologians have recognized the connection that exists between achieving authentic peace, liberation and reconciliation. These concepts plus justice cannot be separated in political terms, but they should move together for true reconciliation to be achieved. According to Takatso Mofokeng [54] in his chapter "Land is our mother" the symbolical mother is ready to save her child at all costs. The clear lesson we can learn is of the suffering of the child who is orphaned by the loss of the mother. This is the kind of toleration landless and poor South African had been subjected to for all these years. It only makes sense to understand the land as an integral part of African view of life [51].

There is a need for Liberation theology to play its role. The liberation of Israelites from Egypt was incomplete before the occupation of the promised land; hence, God continued to move with them through deserts into Canaan. This is why God was still actively involved with His chosen nation during the conquest of Canaanites inhabitants under the military leadership of Joshua to ensure that they indeed settle on the land. It is my understanding that the 1994 democratic elections were just phased one of victory, but phase two must still take place where the complete restoration of the land to the black people must happen. God knows not to rest until the land occupation is still not on the side of the black masses who are still landless in South Africa. One of

the fathers of Liberation theology, James Cone [55] wrote much about the liberative message of God where he argues that God is on the side of the poor and the oppressed. In John 10:10 we read: “The thief comes only to steal and kill and destroy; I have come that they may have life, and have it to the full.” It is a contention of the author of this article that life is not in its fullness to those who do not have land, rights dignity and respect they deserve.

If there was a painful part in the history of Israel as a chosen nation of God, it was that period of exile. One of the main reasons why being exiled was a painful experience was that people would be removed from the land of their own into a foreign land. It has always been a prayer and desire for Israelites that would be returned into the land of their own, the land promised to their ancestor Abraham. It was for the reason his ancestral land and its gates were destroyed that Nehemiah (1:1–5) sat down and wept.

From a theological point of view there are clear biblical stories that tell that God the Creator dislike and punishes those who wrongly take the land in support of those who lost it. According to ref. ([1], p. 184) the biblical story of how Ahab's greedy over the vineyards of Naboth makes a lot of relevance here. While king Ahab was insisting that Naboth should sell him his vineyards he continuously indicated to him that it was against his tradition to give away his inheritance. Our theology must teach us that there is a close relationship between the land and what our forefathers left for us. The anger of God on those who forcefully take the land of others was demonstrated when God pronounced a judgement in I Kings 21:19, which was fulfilled in 1 Kings 22:37–38. This judgement can be justified by Deuteronomy 19:14 which says: “Do not move your neighbor's boundary stone set up by your predecessors in the inheritance you receive in the land the LORD your God is giving you to possess.” True theology must teach and confront people of South Africa, including the government with this reality. According to James Cone, God is always on the side of the poor and oppressed, in this context, on the side of those who does not have land meanwhile their forefathers were citizens in the same country. Theologians and the church must be able to inform the government that it is both an abuse of power and against God's will to keep landlessness a normal way of life ([56], p. 53).

There is amongst others, one biblical example of justice towards the issue of the land that was wrongfully taken from its owner. The story of the Shunamite woman whose land was unjustly taken was restored and her dignity was restored in 2 Kings 8:5–6 which says: And while he was telling the king how Elisha had restored the dead to life, behold, the woman whose son he had restored to life appealed to the king for her house and her land. And Gehazi said, “My lord, O king, here is the woman, and here is her son whom Elisha restored to life.”⁶ And when the king asked the woman, she told him. So the king appointed an official for her, saying, “Restore all that was hers, together with all the produce of the fields from the day that she left the land until now.” This is in line with Cone's theology when he says that God is always on the side of the poor and afflicted. The South African situation of the black masses on land issue is not exceptional. If the South African government is serious about reconciling South Africans, their dignity should be looked at also in the lenses of land issue as a matter of urgency. The current South African context demands that we have the kind of prophetic liberative theology like the one we read above. The government should take the lead in ensuring that before the land is grabbed like it was happening recently, justice is done on the issues of land redistribution.

Reconciliation demands that both parties should move from their own comfort zones and meet at the middle point. In other words, readiness of reaching

compromise should be encouraged from both sides, those who have it and those who do not have it. Baloyi ([4], p. 5) argues that reconciliation can be achieved by trying to give more than what one receives. White landowners must come out instead of remaining in the dark and let the politicians only fight their battle. Jacob and Esau met at a middle point for reconciliation to take place. The nature of reconciliation comes with the recognition and confession of the wrongs of the past to embrace a new future. The defence mechanisms that we are seeing in South Africa will never yield the reconciliation that we need to see. Baloyi further indicated that the power of faith, sacrifice and moving from comfort zone into the meeting point of the divided people would help towards reconciliation ([5], p. 6). It is important to note that as difficult as the situation is, there are some people and churches that give land to people as a way of bringing peace and this should be commended. These people are willing to lose what they have to at least play role in bringing peace.

Paul also touched on the issue of reconciliation in his teachings. According to ([57], p. 1), Paul's doctrine of reconciliation involves individual, corporate, cosmic and eschatological dimensions. According to Paul, reconciliation becomes the objective work of God through Jesus Christ in 2 Cor.5:19. In Colossians 1:19–21 it is written:

For God was pleased to have all his fullness dwell in him, and through him to reconcile to himself all things, whether things on earth or things in heaven, by making peace through his blood, shed on the cross. Once you were alienated from God and were enemies in your minds because of your evil behaviour. But now he has reconciled you by Christ's physical body through death to present you holy in his sight, without blemish and free from accusation.

The word reconciliation finds its roots in the Pauline letters in the Bible. The hostilities that existed between the Jews and Greeks are also dealt with in a reconciliatory spirit from Galatians 3:28. He uses the basis of this reconciliation on the work done on the cross. Basically, the important argument he uses is that reconciliation and salvation should move alongside each other [58–60].

Although, it does not necessarily mean that the one will cause the other, I support Louw's ([61], p. 9) opinion that forgiveness and reconciliation should go alongside each other. If the South African societies have not forgiven one another, just like it is being evidenced by racial attacks in churches, workplaces and public squares, it remains very difficult to conceptualise some form of reconciliation. It is just a pity that, according to Volf [62], the churches are presumed to be instruments of the peace we want to see become the enemies of that peace by influencing conflicts. Wielenga ([63], p. 7) suggest that the churches should plan to have story-sharing encounters around a meal or braai in the church regularly.

According to Stamps ([64], p. 1812), the death of Jesus on the cross to reconcile people with God must be a lesson to teach us that the church must stand up and fight for justice and reconciliation. Although forgiveness and reconciliation are not the same things, they should move along [62]. I must add that it becomes difficult, if not impossible, to expect reconciliation and forgiveness where justice did not prevail. To add on this Wielega ([63], p. 9) urges the churches to plan an open space where people can freely express and share their past stories as a healing method.

Lederack's model of reconciliation- From the Algerian unequal context Lederack's proposals can also be discussed in trying to shape how reconciliation in the divided South Africa can be mapped going forward. Without detailing much of what he said, it is important to make use of concepts like "mercy", "peace" and "justice" must be

allowed to play an important role in intensifying reconciliation and unity into a fragmented society like South Africa ([65], p. 30). The author of this paper suggests an inclusive approach when addressing the issue of land redistribution. This is because there are evidences that their processes of land are often frustrated by lack of proper consultation with all the interested parties, from both black and white people of this country. Kgatle [66] indicated in his research entitled.... that racial comments keep on being posted even in our social media, which play a role in frustrating the process since unfounded general labelling can cause resistance from those who can meaningfully contribute to the discussion and process. Although Kgatle [66] argued this in the context of the Faith Mission Church in South Africa, the bigger context of the country is also characterised by what he meant. Instead, the author would advocate for the spirit of accountability towards another human life. The Biblical message of being each other's keepers apply also to this issue. Those with land, particularly unused land should start thinking about other human beings whose shacks and houses are planted along the river beds while others are cramped in a line of shacks without basic service because of being in a small space.

Pastoral leadership can also play a role by influencing the local traditional leaders to call upon people to strategize together towards land reforming instead of participating in unofficial land grabbing. Traditional leaders have an opportunity to raise these issues to the government officials who always come down to seek their influence for political elections.

12. Conclusion

The disparities and inequalities between the previously disadvantaged South Africans and those who were privileged by the apartheid regime are still a visible one today. Not much had been done to close the gap between those who had life and those who did not have it. Therefore, when starting to talk about reconciliation we need to be careful since the two classes of people are practically far from each other. The main item at the centre cannot be ignored, land redistribution which will enable the previously disadvantaged to start climbing the ladder. Ignorance to this issue is like sitting on the wheels of the transformation agenda of reconciliation. The reality is that besides it being a political agenda, there is a strong need for reconciliation to the "still" divided South African nation. It should be noted that reconciliation is part of the bigger transformation agenda which demands the reversal of "all" the injustices of the past. These injustices include the land issue which remains a thorn in the flesh of many South Africans. It is humanly difficult to imagine how the society with such a great inequality can be reconciled without serious consideration of basic issues like land redistribution, which is a serious need for the black majority.

Additional information


This article is a reworked paper delivered in a M&D seminar at University of Pretoria on 28 January 2019.

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Favored Trees of the Maya Milpa Forest Garden Cycle

Anabel Ford, Grace Turner and Hector Mai

Abstract

Comparisons of Maya forest gardens, the economic botany of the Maya forest, and identifications of plant remains in archaeological contexts converge on the value of the Maya forest as the reflection of the selective favoring of useful plants over time and across space. We have evaluated trees conserved in Maya milpas and present here an annotated list of significant categories of uses that transcend the ordinary, and highlight the extraordinary appreciation of plants and their role in the historical and cultural ecology of land use. Recognition of land cover significance, biodiversity, water conservation, erosion management, soil fertility principles, animal habitat essentials, and support for communities are all entangled with the role of plants. With an example of 160 confirmed trees favored in Maya milpa agricultural fields, we provide a window into economic values that dominate the Maya forest.

Keywords: tropical forests, Maya forest, forest gardens, domesticated landscape

1. Introduction

Ancient Mesoamericans, including the Maya, practiced rainfall-dependent agriculture rooted in resourceful ingenuity and the skillful use of stone tools and fire (**Figure 1**). Land use strategies in the Americas emerged without major capital investments in plows or cows. The landscape of the Americas depended on interrelationships among people and their observations of environmental processes. In this sense, Mesoamericans worked with nature, and over millennia of trial and error created their domesticated landscape [1–3].

Cropped fields of annuals cycled across the landscape, integrally creating complexity within the phases of forest regeneration while reducing erosion and maintaining soil fertility (**Figure 2**). For the Maya, it was not a choice between cultivated fields and forest (**Figure 3**), as it often appears to Western eyes. In Europe, *cultivable* has long been equated with *arable*, the original meaning of which is plowable. Maya agriculture was based on intimate engagements with nature that integrated subsistence strategies within the context of environmental management [4]. The Maya, both past and present, have directed exuberant



Figure 1. *Regional Landforms of the Central Maya Lowlands with Major Ancient Maya Centers Indicated. Credit: MesoAmerican Research Center.*

tropical growth towards human requirements, resolving the needs of everyday life with labor, knowledge, and skill [5–10]. Without the field, there could be no useful forest and without a useful forest there would be no productive field. The growth and expansion of Maya civilization across the millennia was based on reliable resource management practices that have left their imprint on the forest itself in the form of its dominant plants, which are all economically useful [1, 11, 12].

For the Maya forest to provide basic household requisites, farmlands must have varying soil qualities, materials for construction and utensils, fibers and spices, resources for food production [13–15], and habitat for game animals [16–19]. The topography and diverse landscape comprise upland ridges and hills interspersed with

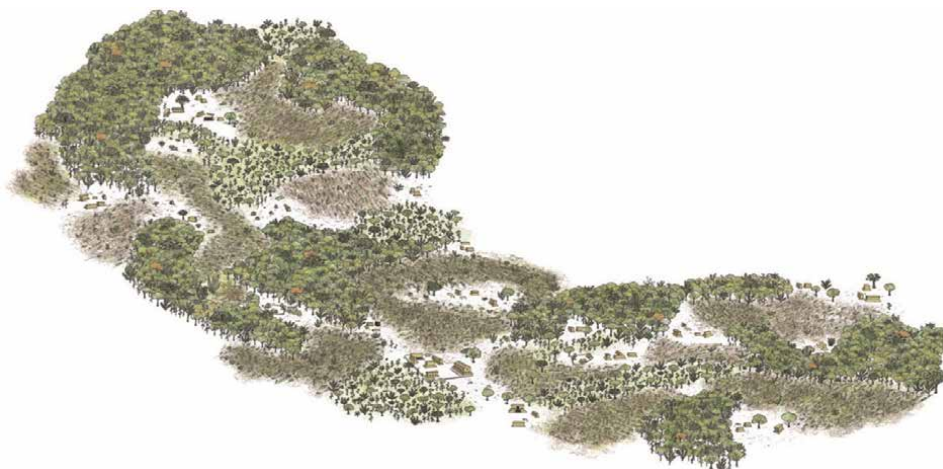


Figure 2.
The Milpa Cycle showing the phases of the cycle of annual and perennial spaces. Credit: MesoAmerican Research Center.

wetlands and transitional zones. This is the essential palette on which the Maya developed strategic land cover designs that not only addressed human needs but mitigated vagaries of rainfall and fire hazards. Ancient Maya settlement patterns reflect a continuum of intensity, ranging from densely occupied upland ridges to sparsely inhabited lowlands. The spatial mosaic formed by the gradation between uplands, lowlands, and wetlands provided access to diverse habitats that facilitated living in and with the Maya forest. The forest today is a product of selection over generations, centuries, and millennia to fulfill everyday needs within the natural forest context [20–25].

2. Cycles from field to forest to field

Popular notions envision Maya populations outstripping their environment. This assumption seems to originate from interpretations of accounts by early conquistadors that eschewed appreciation of the Maya forest as a garden. The Spanish conquistadors' success in provisioning their armies and finding shelter in established towns belies perceptions of an unpopulated landscape. Acknowledging the evident bounty available to the conquistadors during their brutal conquest sets the stage for examining the resources available to support Maya civilization.

The economic value of the trees favored throughout the milpa cycle by Maya households and communities is noteworthy. Not only the dominant plants are useful (**Table 1**); a minimum examination of the literature shows nearly 160 named trees are favored for their utility. Each of these favored trees bear important qualities and fulfill significant purposes while generating habitats and maintaining biodiversity [7, 25–35].

Misunderstood and maligned as “shifting cultivation,” the milpa cycle is a complex web of landscape management inputs embedded in the forest itself (**Figure 4**). Resources were managed as a horizontal matrix with vertical

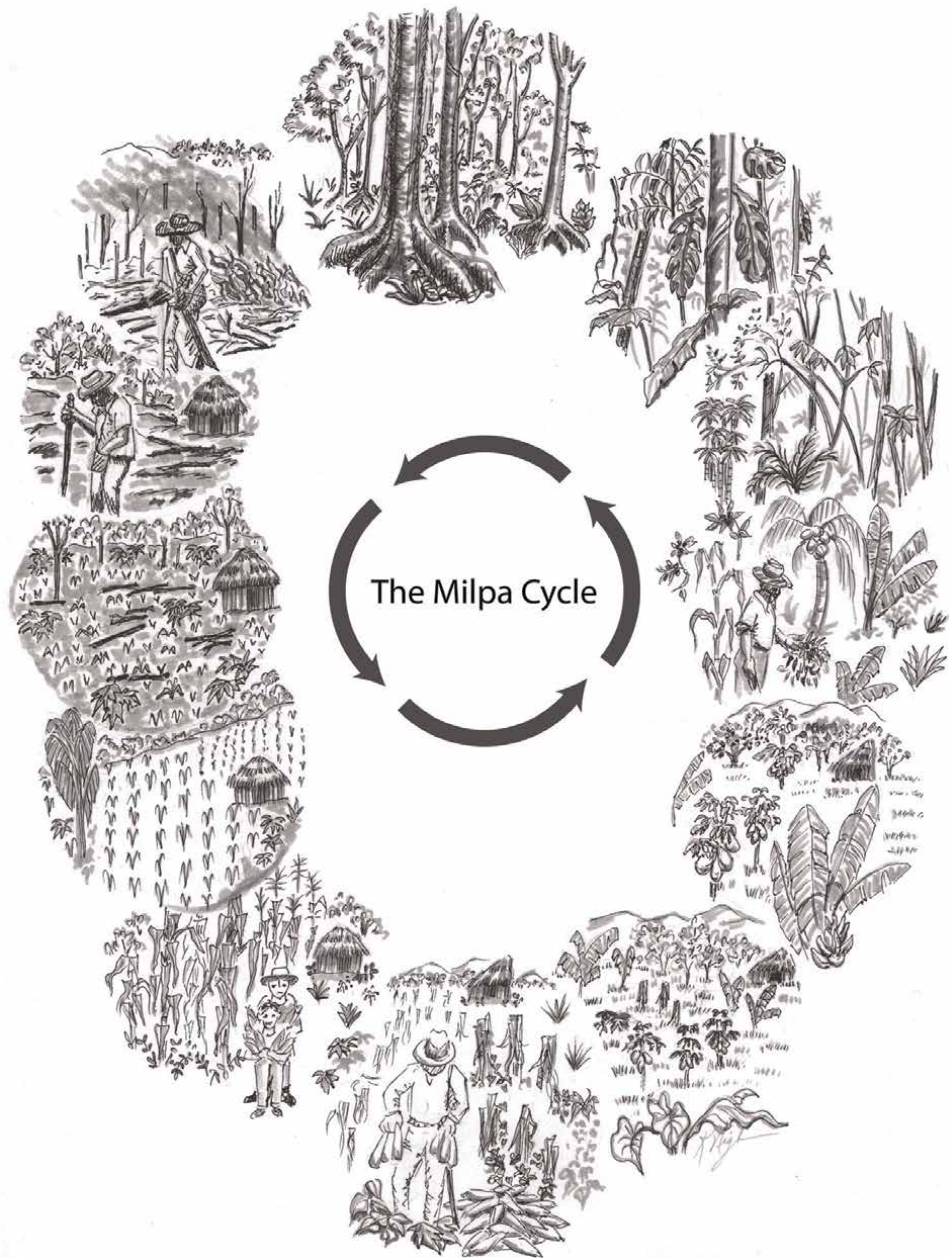


Figure 3.
The Dynamic Relationship of Forest and Field, Changing Over a Year, Decade, Generation, and Centuries. Credit: Kippy Nigh.

variations, forming a complex mosaic created by heterogeneous spatial dimensions of the milpa forest garden cycle based on the opening of a milpa field that averages 1 hectare. At any one time, no more than one-fifth of the cultivated spaces, around 20%, are fields [12, 21]. The remaining lands, a minimum of 80%, are somewhere in the process of transforming from field to forest, and eventually cycling back to fields, in an organized and directed sequence of succession from annual crops to perennials.

Common Name(s)	Scientific Name	Pollinator	Primary Use
Wild Mamey, Mamay Silvestre, Ts'om	<i>Alseis yucatanensis</i>	moths	food
Milady, Malerio, Sa'yuk	<i>Aspidosperma cruentumum</i>	insects	construction
Cohune, Corozo, Tutz/Mop	<i>Attalea cohune</i>	insects	oil
Breadnut, Ramon, Yaxox	<i>Brosimum alicastrum</i>	wind	food
Tourist tree, Gumbo limbo, Chaca	<i>Bursera simaruba</i>	bees	medicine
Give-and-take, Escoba	<i>Cryosophila stauracantha</i>	beetles	production
Monkey Fruit, Monkey Apple, Succotz	<i>Licania platypus</i>	moths	food
Black Cabbage Bark, Manchich, Manchiche	<i>Lonchocarpus castilloi</i>	insects	construction
Zapodilla, Chico Zapote, Hach-ya	<i>Manilkara zapota</i>	bats	food
Wormwood, Jamaican Dog Wood, Jabin	<i>Piscidia piscipula</i>	bees	poison
Yellow Zapote, Mamey Cireula, Canistel,	<i>Pouteria campechiana</i>	insects	food
Zapotillo, Hoja Fina	<i>Pouteria reticulata</i>	insects	latex
Bay leaf palm, Guano, Xa'an	<i>Sabal mauritiiformis</i>	insects	production
Redwood, Palo Colorado, Chakte	<i>Simira salvadorensis</i>	moths	instruments
Hogplum, Jobo, Hobo	<i>Spondias mombin</i>	insects	food
Mahogany, Caoba, Chacalte	<i>Swietenia macrophylla</i>	insects	construction
Mayflower, Maculiz, Hokab	<i>Tabebuia rosea</i>	bees	construction
Kinep, Guaya, Wayah	<i>Talisia oliviformis</i>	bees	food
Fiddlewood, Blue Blossom, Flor Azul, Yax-nik	<i>Vitex gaumeri</i>	bats	construction
Drunken Baymen, Paragua, Tamay	<i>Zuelania guidonia</i>	bees	medicine

Table 1.
 The top twenty dominant plants of the maya forest.



Figure 4.
 Lacandon Milpa showing Regeneration of Fields and Forest. Credit: James Nations.

This complex of interrelated plots is the Maya forest garden [36]. Tree fruits and animals inhabiting diverse habitats are an integral part of the Maya forest garden system. Drawing from ethnohistoric and contemporary accounts, the interspersed fields of the dynamic cycle is repetitive across space and time, consistent with traditional swidden sequences from around the world [37–39]. Building value through experimentation over generations, this regenerative cycle was as well-known to the Maya of the past as it is to their descendants today [40]. Our documentation of favored trees is a representation of the remarkable cultural impact of the Maya on this biodiversity hotspot [41, 42] and is an example of how interactions between humans and their environment can be constructive.

3. Daily needs in a tumpine economy

Transport in the Americas was primarily by foot and, in Mesoamerica, the tumpine was a dependable asset in transporting goods [43]. Reliance on human-powered

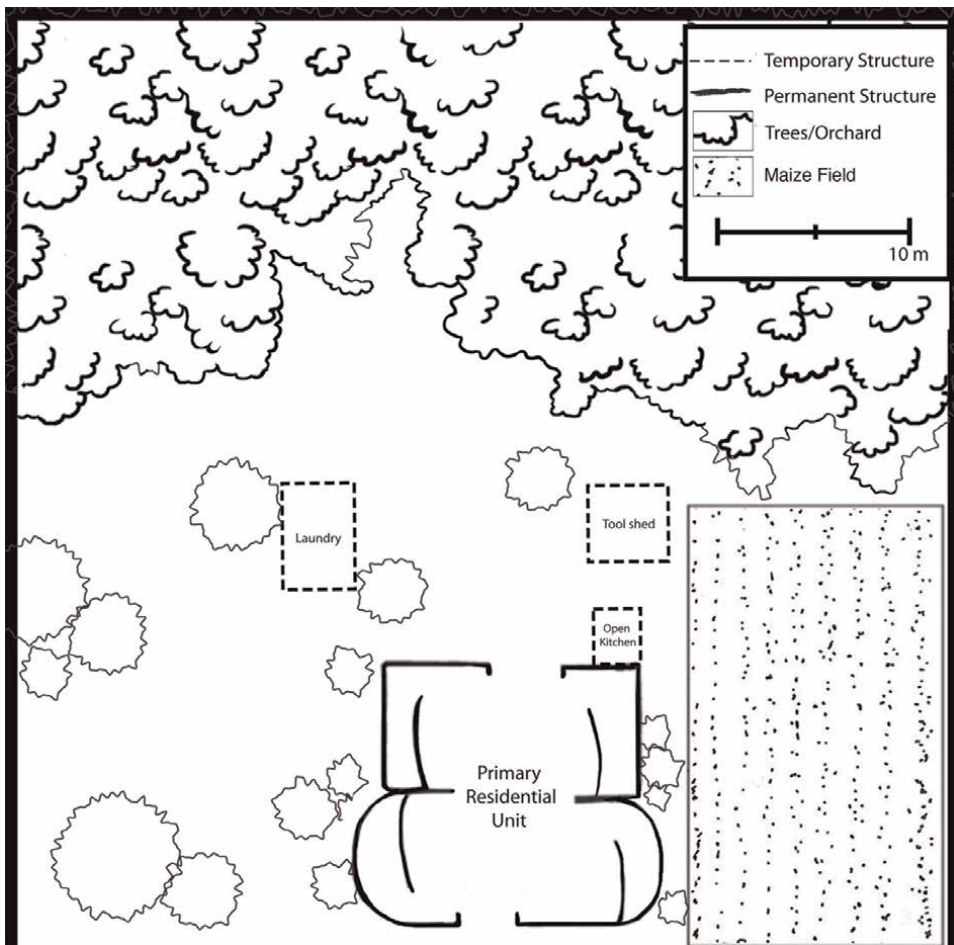


Figure 5. Home Garden Infield with Domestic Structures, Milpa, and Forest Garden. Credit: MesoAmerican Research Center.

transport technology meant household necessities would have to be accessible along a gradation of distance according to frequency of need: daily requirements would have to be most proximal, periodic needs would be at short range, while annual needs could be located farther afield. Still, a household's requisites could not be acquired from a distance farther than a day's round trip, nor something that would take much more than a household's extended network of resources to marshal.

Daily necessities, apart from food, would include firewood for cooking, ceramic production, production [35, 44, 45], and smoking foods. Meat protein from the diverse habitats of the milpa cycle [17, 18] and water from collection systems on the landscape were important [46, 47]. Managed home gardens infields are on average half a hectare (**Figure 5**) and extended habitats of the infield and the milpa cycle (**Figure 6**) would cover at least 5 hectares and provide periodic access to medicine and fruits, household products and furnishings such as baskets, utensils, containers, toys, and maintenance materials for leaky roofs, damaged posts, and floors. Annual schedules of maintenance would include refurbishing structures, orchard pruning, and construction of new buildings. All these would be the stock and trade of daily life.

Investments in the future are an important component of the favored trees we present here, with many attaining maturity in eight years and thriving over decades. Planting and nurturing these trees for the food, wood, latex, and fibers they provide would need to be scheduled to ensure routine access. Trees for fruit, spice, fodder, and fumigants would require preparation for dependable use. These could be developed in the annual field and cultivated as the field gives way to perennials. If you want an avocado, your tree might need to be 4 years old before it produces fruit, so forethought is required to ensure supply. Wood for construction varies in size, shape, and the component it is used to build; many trees will be not much larger than saplings for the construction of ordinary houses. Not all trees need attain significant girth—it is the properties that are amenable to the task. For example, only heartwood can be used in posts, while supporting cross members are gauged by the size of the structure, specific branching patterns are needed for roof supports, and so on with every facet of building. Knowledge of the properties of woods is held collectively and based on communities' needs, where the favoring of

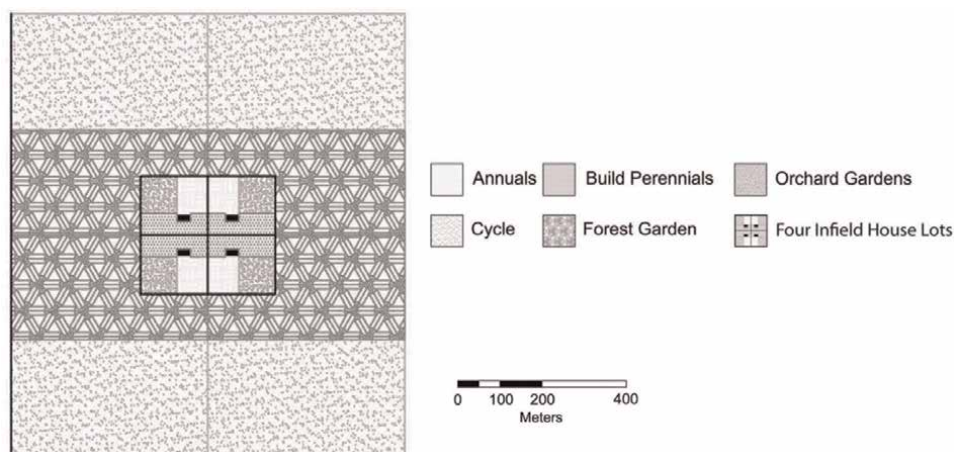


Figure 6. Infield-Outfield of the Milpa Cycle Land Use Model. Credit: MesoAmerican Research Center.

specific trees would be essential. Latex for gum and glues must be managed to meet the myriad household uses that depend on sticking substances, including bandages, medicine, and mastication. Fibers are important for several household products, including weaving for clothing, mats, and walls, as well as hangers, hooks, and more expedite needs. In every case, knowledge of the trees, their multiple properties, and the skill in their propagation and use would be a vital component of household economies.

The remnant of the Maya forest today reflects past cycles of investments and decisions made annually by families over generations. The specific decisions made to enhance living needs, carried out over centuries, were destined to provide diverse resources. Decision making aimed to minimize risk and vulnerability to the whims of weather and the capriciousness of the rains. Every investment in the trees was designed to increase options and to hedge the challenges that were a daily fact of life.

4. Significant Maya forest products

Forest products derive from the landscape of the Maya lowlands, the same landscape that supplied the Spanish conquistadors with the necessities to support an invading army. The Maya derived their immediate needs for food, fodder, and fuel from the landscape, which they managed to conserve water, maintain access to goods and provide services. The importance of food and fuel is paramount in the Maya forest. Management skills and knowledge maintains soil fertility to enhance production from orchards and to increase field crop yields as well as habitats for hunted animals.

Cooking is intimately related to food consumption. Fuel woods are excluded from most economic botanical lists, yet data on the Maya show they are very selective in what they use for firewood [35, 48]. Not just any burnable material will do; fallen branches and logs are used but do not suffice. Ethnographic records show special preferences for size and burn qualities, such as strength, speed, flame size, and smoke. The nature of use—in hearths or kilns, or for smoking, charcoal production, and as kindling—is factored into fuel selection. Of 50 trees recorded for the Lacandon [35] that were used for tools, utensils, furniture, weapons, and house construction, twenty-two doubled as fuel sources, and many are the same woods recognized in archaeological middens [49]. Our discussions with forest gardeners reveal strategies developed to ensure consistent fuel availability, which is reflected in evidence from the archaeological record. Preferred fuel trees that respond well to re-sprouting can be coppiced to generate sprouted limbs of the appropriate size for cooking in hearths (Tzul personal communication) [50].

Household items of all sorts can be grown in home gardens and fields, and they can also be extracted from regenerating second growth and mature forests. Many forest products find their use in Maya houses as such varied items as bowls, colanders, cups, mixing utensils, baskets, brooms, and containers. Weaving required spindles, spindle whorls, and looms fabricated from forest materials. Fibers were of great importance for many household items, including strings, cordage, shoulder bags, hammocks, baskets, trivets, and covers. Colorants and dyes were also important resources from the forest. Children's toys include dolls, spinning tops, and rattles. Adornments for necklaces and head bands use a variety of seeds, not to mention feathers. Musical instruments were made of special woods, gourds, seeds, and fibers.

Today, as in the past, many plants have multiple uses, and medicine is among the most often identified (see [11]). Remedies derived from plants cover most ailments encountered in the household. Forests and gardens are the pharmaceutical commons, and familiarity with healing properties of plants, while a specialty of some, was shared among the community. Medicine/poisons are managed carefully and prescribed in doses scientifically refined by trial and error through time. Plants from the home garden and milpa, regenerating plots, and closed canopy forest all contribute to the pharmacopeia of the Maya.

Palms are abundant in the Maya forest; they are economically useful, providing resources, food, and products. They occupy the understories of closed canopy forests, respond as pioneers to the sun, and can be propagated for uses including building materials, cosmetics, food, fuel, materials for handicrafts, medicines, oils, rituals, roofs, and improvised shelters. Palms proliferate in response to human activities [51]. Cutting and burning, one of the most common of human interactions with the environment, result in a novel and domesticated landscape [52].

Much is made of hardwoods, the staples of international exotic wood markets. Mahogany and Spanish cedar, extensively harvested since the 19th century, were noted for their large height and diameter as well as their immense buttress supports. A product of ancient Maya forestry, trees reached these large sizes *only* in times of depopulation when the landscape went untended, particularly after the Spanish conquest when native populations plummeted [20]. With the neglect of the forest gardens, trees once harvested on a regular basis were left to grow for centuries before the lumbering industry exploited them in the 1700s. Mahogany is now on the CITES list [17], not because it is extinct, but because the time of growth is short. Given the way the lumber industry exploits forests today, it is unlikely they will ever achieve those enormous sizes again [45].

The utility of the Maya forest is rooted in Maya knowledge of products and the diverse habitats that can enhance availability of animals. We know that the Maya were habitual meat eaters based on the protein signature in human bones [53], and it has been demonstrated that there are no appreciable changes in the consumption of animals over time [16]. The same animals continue to be hunted from the same composite habitat of home gardens, regenerating perennials, mature forest, and ecotones from the earliest times of Maya settlement [17].

Forest habitats were also useful for honeybees and the Maya were expert beekeepers [54–56]. A forest with beehives has its own name in Mayan: *K'axil kab*. The scale of beekeeping must have been noteworthy at the time of European contact, as the Spanish colonists collected tribute in the form of honey and beeswax. Beekeeping artifacts and iconography are also evident in the archaeological record. It is worth noting the contribution of bee pollination as well, an important ecological service for the majority of the forest trees (see **Table 1**).

In this complex and dynamic process the ancient Maya cultivated their landscape in ways that prioritize usefulness and complement natural forest cycles. Collaborations with contemporary Maya farmers reveal a sophisticated knowledge base that contributes to the continued maintenance of the forest as a garden and is the base of our list of favored trees (Supplementary Appendix A). The average 20-year cycle is bound to the infield home gardens that are the hub of the outfield mosaic of annuals and perennials [57–60]. The cycle is characterized by a rotational system with consequences for nature and culture: open fields for traditional agricultural crops, secondary growth of perennials for household products, and completing the circuit with a closed canopy orchard forest covering the original cleared area. The land is then ready to repeat the cycle again.

5. Favored trees: management skills embedded in the Maya forest

Built on the diversity of the milpa cycle, tree selection required opening gaps in the forest as part of swidden practice. This is not indiscriminate slashing and burning—skilled forest gardeners will select and grow with future investment in mind [57]. Burns are conducted with care and planning: a cleared trace is established at boundaries, cut saplings are encouraged to resprout, and specific trees will be favored and carefully tended to avoid the fires [36]. With a gap prepared for annuals over approximately four years, the favored trees will be managed to hasten the regenerative perennial component.

Succession comes with the building of perennials [36]. Many of the core trees destined for immediate use will be culled from these fields: firewood, medicine, house maintenance, and new animal habitat are benefits of this phase. Far from abandoned, these are the spaces that demand the most attention. Much time and investment is spent in building the perennial component of forest gardens. Nurturing trees for construction, culling poorly developed plants, identifying pests, and indeed hunting would be dominant activities in these developing landscapes. After eight years, forest gardens take on a more mature form, and tree production becomes the new focus. This is the time for investment in pruning, developing, and harvesting assets in the managed forest and enjoying fruits of the tended garden.

Lands cultivated in intense management cycles require skill, often in short supply, and labor investment, yet the advantage is the conservation of useful forest stands. These habitats are subject to the selection process emphasizing the needs of the populace and the conservation of the lands [36]. The advantage of this system is the accessibility of resources, it involves skill and knowledge for the prime returns. This means valuing the sophisticated abilities of Master forest gardeners and celebrating a community of good farmers. Care is taken to maintain valued trees in both intensively managed plots and native stands of trees. The objective is to balance short term requirements with long term needs. The challenge in contemporary settings is that the emphasis is on long-term stability and reducing risk as opposed to short term profit.

This time honored systems' greatest advantage is that the practice promotes food sovereignty and is action for environmental justice. The methods, strategies, and practices can best be learned as an apprentice, yet the Master forest gardeners are few and far between. These principles that are practiced by the Master forest gardeners confer benefits that builds soil fertility, reduces erosion, lowers temperature, conserves water, enhances biodiversity to care for people and our planet.

6. Developing a list of favored trees

Considering the literature on favored trees in the clearing of milpas, we built a list to identify the uses, ecological service, and values inherent in these choices ([12], pp. 187–207). This article builds on that foundation with additional research by Grace Turner and validation of tree species at the Belize Herbarium with collaborator Hector Mai. We also worked with the encyclopedic knowledge of Master Forest Gardeners Narciso Torres and Alfonso Tzul and checked data with personal records of the first director of the *Vigilancia* of Tikal, Felipe Lanza [46]. We also verified references to favored plants in Balick and et al. [28], Cook [48], and Roys [61] and cross-referenced data with the Tikal ordination [62, 63]. Our collaborative effort has resulted in a master table of scientific and common names, herbarium references for validated

species, and generic uses of trees, which we present as a work in progress (Supplementary Appendix A).

Our research focuses on woody plants native to the Maya forest of the central Maya lowlands from El Pilar to Tikal (**Figure 1**). In our discussions with Master forest gardeners, we learned that plant identification could involve the smell, the sound of fruit dropping, the shape of leaves, the texture of bark, variation in buttresses, and even taste. We aimed to describe general uses, although multiple uses characterize many plants and medicine was a common theme. An exhaustive list of specific uses, while valuable, would require a more comprehensive inventory and will be considered for future research. Our presentation highlights the variety of the favored trees, their habits, and their general utility.

7. The Maya forest is a garden

Confusion about the value of the landscape, with milpa infields and dispersed outfields within the forest, has led to misrepresentations of the milpa cycle and its connection to natural forest regeneration. The preparation and use of fields within the forest, which forms the basis of a land cover matrix that once sustained large populations, has gone mostly unrecognized. The misinterpretation of the dynamic relationship of forest and fields further confounds this issue [36].

The milpa forest garden cycle has continuity from the conquest and colonial times to the present [12]. The landscape created by the milpa cycle embraces infield home gardens and diverse, accessible outfields interspersed among secondary growth, mature forest gardens, and closed canopy forests [64, 65]. The patchwork created by the field-to-forest cycle of the ethnohistoric and contemporary reports demonstrates how available resources were used to fulfill daily requisites of food, condiments, fiber, oils, fuel, gum, furnishings, supplies, medicine, toys, construction materials for buildings, household utensils for cooking, spinning, baskets, and habitat for animals. In short, all the everyday requirements of life. These resources can be projected back in time: the entire landscape with its soil characteristics, geological assets, and minerals were part of the environmental interaction to meet human needs in the past, and these have implications for the future.

To develop and maintain a landscape that reliably and dependably provides for everyday needs requires observation, skill, and knowledge. The Maya intensive agricultural and forestry system is based on dynamic engagement with natural processes, which minimized risk over time and maximized effects of labor and skill across space. Land cover practices engaged with natural processes ensured a vibrant conversion from annual crops to perennial trees. Forest garden practice mitigated effects of rainfall variation and built soil fertility with each phase of the high-performance cycle. The land cover provided by the forest-field mosaic conserved water and managed biodiversity, all while providing necessities for the populace (cf. [65]).

The milpa cycle, as a subsistence system, retains significant complexity and depends upon every aspect of the landscape, from the open forest gap through secondary growth gradients to the closed canopy forest. Without clearing to initiate the annual milpa, there would be no opportunity to select and stock the regenerating forest. This managed landscape results in integral perennial investments and creates the forest garden [26, 66, 67]. The horizontal and vertical distributions of forest products are sustained by the management of the milpa forest garden cycle, which depends on the knowledge and skill of the forest managers.

The Maya forest today is the cumulative result of selection across millennia, the product of trial and error experimentation, which demonstrates masterful long-term interactions with nature and the cultivation of biological “capital.” In the ancient world, managing forests for daily requisites was based on proximity to essential resources that fulfilled the diversity of daily, weekly, seasonal as well as ceremonial needs. Understanding the forest as a spatial composite is key to appreciating how the Maya managed and used resources.

The Mesoamerican and Maya forest, with 24,000 indigenous plants and associated habitats, has persisted as a hotspot of conservation today [42]. The biodiversity recognized in the contemporary Maya forest is the outcome of consistent and regular attention to selection emphasizing resources that sustained Maya life. With the imposition of ecological imperialism, the inappropriate and unsustainable “conventional” farming of cattle ranches and plowed fields is expanding at the expense of the forest to maximize short-term profits. All the while, the greatest threat to the value of the Maya forest is the loss of the active management of traditional Maya farmers.

Key Websites for Tropical Plants

https://www.tropicos.org
http://www.worldfloraonline.org/
https://www.cabi.org
https://plants.sc.egov.usda.gov/java/
http://www.maya-ethnobotany.org
https://www.backyardnature.net
http://powo.science.kew.org
http://swbiodiversity.org/seinet/
https://www.fnps.org
https://www.wildflower.org/plants/
https://www.regionalconservation.org
https://www.inaturalist.org
https://www.rareflora.com
https://www.itis.gov
https://toptropicals.com/catalog
https://www.rainforest-alliance.org
http://www.palmpedia.net/wiki/Main_Page
https://www.cicy.mx/sitios/flora%20digital/indice_busqueda.php herbario@cicy.mx
https://mayaforestgardeners.org/

Acknowledgements

Our foray into the favored trees of the Maya has demonstrated how little we know. Our list, compiled and discussed with Master Forest Gardeners, is woefully incomplete and barely captures the essence of the values we have glimpsed. The compilation

starts from the literature, not from our citizen scientists, consequently it can only be a reflection of what researchers, not Master Maya Forest Gardeners, can identify. Narciso Torres and Alfonso Tzul literally spent hours across many days with us discussing the compilation of names we had gathered. Can you imagine if we began with their list? It is a world of possibilities and we must thank them for their magnanimous nature to share what little we may grasp. We must also thank our research team, especially Sherman Horn, for their salient comments and suggestions.

Appendix A: Favored Trees

The Maya forest is a garden supplying all the requirements of everyday life. A search through the literature on Maya land use, the milpa cycle and plant characteristics, reveals a conservation ethic that bears on a world of uses that include the following: beverage, construction, dye, fiber, food, foraging, fuel, fumigant, furniture, gum, latex, medicine, oil, ornament, poison, products, resin, ritual, smoking, spice, tannin. The dominant trees of the Maya forest are show in bold.

The online link for the supplementary table Appendix A: <https://cdn.intechopen.com/public/docs/266251.xlsx>

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Edited by Levente Hufnagel

Ecotheology - Sustainability and Religions of the World gives a very interesting overview of the frontiers of scientific research in this important multi- and transdisciplinary area. Its chapters use ecotheological approaches to discuss the multiple aspects of an environmental crisis from almost every segment of our planet. This book will be very useful for everyone – researchers, teachers, students, or others interested in the field – who would like to gain some insights into this aspect of our culture.

Published in London, UK

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