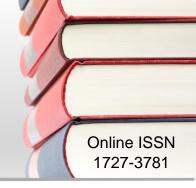
Environmental Stewardship: Confluence of Law and Religion?

F Venter*





Author

François Venter

Affiliation

North-West University South Africa

Email Francois. Venter@nwu.ac.za

Date Submitted

4 May 2022

Date Revised

6 July 2022

Date Accepted

6 July 2022

Date published

2 August 2022

Editor Prof AA du Plessis

How to cite this article

Venter F "Environmental Stewardship: Confluence of Law and Religion?" *PER / PELJ* 2022(25) – DOI https://doi.org/10.17159/1727-3781/2022/v25ia13879

Copyright



DOI https://doi.org/10.17159/1727-3781/2022/v25ia13879

Abstract

Why should we bear responsibility for the degradation of the environment? A wide range of responses is on offer to this question. Common to them all is that they are all rooted in one or the other ontological and epistemic point of departure or set of premises. This raises the question of the relationship between law and religion and linkages of religion with environmental concerns. What emerges, perhaps against the volition of the scientific world, is that the foundational links between environmental law and religion are significant - even where environmentalists shirk from or even denounce religion. Justification of this view is found in a concise survey of the essence of law and religion. The analysis leads to the notion of stewardship, a concept steeped in, but not exclusive to religion in its diverse manifestations. Examples of ecocentric religious attitudes - ranging from the traditions of the North American Anishinabek, aboriginal Australians and indigenous African culture to Buddhism and Hinduism, Judaism and Christianity in its principal manifestations - provide a broad picture of adherence to beliefs in human responsibility to take care of the environment. This widespread conviction of stewardship endures despite awareness of the human inability to create or sovereignly to determine the course of nature (here termed "the hypothesis of incompetence").

Keywords

=nvironmental law; climate change; ecology; anthropomorphism
ecocentrism; earth jurisprudence; moral conviction.

In recent decades it has become generally known that observable climate change is linked to the manner in which we the people of planet Earth exploit natural resources. This is more than a belief or an abstract idea, because the available scientific evidence is virtually impossible to dismiss. Nevertheless, vociferous lobbies actively argue against the evidence. Due not only to the controversies surrounding the causes of the palpable reality of environmental degradation, the issue of responsibility for managing and mitigating the trend gives rise to profound moral and legal questions, often overlooked or fudged over when propounding the tenets of one of a range of schools of thought.

The premise of the international political response to what is recognised as a looming environmental crisis is that the avoidance of an impending catastrophe depends on governmental, industrial and economic intervention,³ much of which requires the creation and application of a body of law composed of elements drawn from various legal disciplines, comprehensively referred to as "environmental law".

Simplified, the point of departure is that we (humanity) are the cause of environmental degradation, so we are responsible for acting in order to avoid global disaster. Asking *why* humanity and its institutions bear this responsibility evokes a moral, philosophical and legal tangle. Any response to the question will inevitably be rooted in one or the other ontological and epistemic point of departure or set of premises. Many of these premises are founded on dogmatic religion, but it is hard to find solid islands of consensus

Francois Venter. BJur et Comm LLB LLD (NWU). Extraordinary Professor, Faculty of Law, North-West University, South Africa. E-mail: Francois.Venter@nwu.ac.za. ORCiD: 0000-0002-6919-5171.

Thus, for instance Edinburgh Professor Thomas J Crowley (Crowley 2000 *Science* 276) concluded: "There are therefore two independent lines of evidence pointing to the unusual nature of late-20th-century temperatures. First, the warming over the past century is unprecedented in the past 1000 years. Second, the same climate model that can successfully explain much of the variability in Northern Hemisphere temperature over the interval 1000–1850 indicates that only about 25% of the 20th-century temperature increase can be attributed to natural variability." An example of more recent assessments is that of Sylvanus 2020 *Journal of Law Policy and Globalization*.

See e.g., Aronowsky 2021 Critical Inquiry.

Paragraph 6 of the *Glasgow Climate Pact* of 2021 (COP26 2021 https://unfccc.int/sites/default/files/resource/cop26_auv_2f_cover_decision.pdf), following COP26 for instance "*Emphasizes* the urgency of scaling up action and support, including finance, capacity-building and technology transfer, to enhance adaptive capacity, strengthen resilience and reduce vulnerability to climate change in line with the best available science ...".

even within the wide spectrum of categories of religious systems, such as Christianity and Islam.

In an effort to gain understanding of the nature of this moral conundrum, the methodological approach followed here is premised on Reformational Christianity.⁴ Moving non-Christian or any other reader to conversion to my religious belief is not the purpose of this paper, but the intention is to provide insight into a perspective on the moral questions surrounding climate change which is seldom articulated, despite its foundations being shared, at least formally, by a significant portion of the world's population.

Firstly the relationship between law and religion must be considered, followed by a reflection on the link between religion and the environment. A brief outline of the essence of the notions of anthropocentrism, ecocentrism and earth system law as major trending categories of environmental thinking is offered as background information before dealing with some religious perspectives suggesting the existence of human stewardship over nature. This survey provides a basis for a conclusion at the end regarding environmental stewardship.

1 Law and religion

Feeling responsible generally, and specifically regarding the environment, is an attitude inevitably rooted in moral conviction. The notions of responsibility and accountability are also close to the core of the law, which is conceived to be an instrument in the hands of authoritative institutions to maintain social order. The law, moral conviction and accountability cannot be disconnected from one's existential perspectives on life and religion, whatever form they may take. Callicott, for instance, holds that "[t]he threat of global climate change has become the greatest moral challenge of the twenty-first century" and then goes on to contrast "[t]he modern monadic moral ontology" which "implies a dreary zero-sum ethic of self-sacrifice for

Zuidervaart Religion, Truth, and Social Transformation 3-4 provides a compact example of a characterisation of this mode of understanding the world: "Reformational philosophy has roots in the Reformed tradition of Protestant Christianity. 'Reformed' refers to a worldwide movement that stems from the Calvinist Reformation in sixteenth-century Europe. Ecclesiastically it includes Presbyterians of various persuasions, Reformed churches in or from continental Europe, and more recent ecumenical formations such as the United Church of Canada and the World Communion of Reformed Churches, the third largest body of Christians in the world, after the Roman Catholic Church and the Eastern Orthodox Church. The term, 'reformational' indicates an intellectual and social current within Reformed Christianity whose main impetus comes from the nineteenth-century Dutch theologian, educator, and politician Abraham Kuyper (1837-1920)."

the sake of each and every one of the nameless and faceless global billions" with a post-modern moral ontology "which implies an inclusive ethic of care and concern for those people, institutions, places, and things that define oneself and give meaning to one's life".⁵

Why humanity, completely incapable of creating anything like a planet, should be held responsible for created nature, is clearly primarily determined by one's *Weltanschauung*, and is therefore a profoundly religious question. Perhaps the most comprehensive instrument for the realisation of human responsibility for the environment and for compelling people to honour their responsibility is environmental law.

The regulation of society requires rules, and the most evident form that social ordering takes is legal and religious norms. Clearly legal and religious rules have distinct forms and purposes: legal regulation is imperative and ideally serves the purpose of promoting justice in society, whereas religious norms are essentially indicative of normative propriety and the regulation of religious structures and rituals.⁶

Historically governmental, legal and religious authority tended to overlap. Thus, for instance, pharaohs of ancient Egypt were considered to be divine rulers, mediators between the gods and the people, Julius Caesar was *pontifex maximus* before and after becoming the Roman dictator, and traditional African chiefs were (and sometimes still are)⁷ simultaneously spiritual leaders. However, in time diversified societies came to require greater dispersal of leadership among the various spheres of social activity. Thus, a "separation between church and state" emerged in Europe in the eighteenth-century giving rise to the notion that reason precedes religion,⁸ and the doctrine of the "separation of powers" was professed by Montesquieu for the purpose of deconcentrating governmental power,⁹ both notions having become typical elements of Western constitutionalism since the eighteenth century.

Law and religion do share some common traits. For instance, both legal and religious norms are regulative in nature, and significantly, they have concurrent application to those subject to them. Such concurrent effect

Callicott "Ecology and Moral Ontology" 114.

For some elaboration on this distinction, see Venter *Constitutionalism and Religion* 13-19.

See e.g. Rautenbach "Umkhosi Ukweshwama".

See e.g. Venter Global Features of Constitutional Law 130 et seq and Aguilera-Barchet History of Western Public Law 262.

⁹ Montesquieu Spirit of Laws Book XI, Chapter VI.

frequently gives rise to tension, in the sense that a person wishing to conform to religious norms may be confronted with a situation where the law conflicts with such norms. In an iconic *dictum*, the South African Constitutional Court typified such a clash as follows:

[R]eligious and secular activities are, for purposes of balancing, frequently as difficult to disentangle from a conceptual point of view as they are to separate in day to day practice. While certain aspects may clearly be said to belong to the citizen's Caesar and others to the believer's God, there is a vast area of overlap and interpenetration between the two. It is in this area that balancing becomes doubly difficult, first because of the problems of weighing considerations of faith against those of reason, and secondly because of the problems of separating out what aspects of an activity are religious and protected by the Bill of Rights and what are secular and open to regulation in the ordinary way.¹⁰

Using the same Biblical metaphor to describe how foreign and potentially conflictual Western views are to Islamic doctrine, Wael Hallaq also made this point:

The idea of giving to Caesar what is Caesar's and to God what is God's does not wash in the Muslim world-view, for Caesar is only a man, and men, being equal, cannot command obedience to each other. Obedience therefore must be to a supreme entity, one that is eternal, omnipotent, and omniscient. If modernity has effected profound changes in Islamic culture (and no doubt it has), it has failed in the most important respect, namely, to alter or sever this tie with the divine.¹¹

Law and religion also share the characteristic of being dogmatic in the sense of containing essential tenets held to be fundamentally true and binding. Due to its relationship with notions of truth, the field of dogmatics, both legal and religious, is contentious. Some do hold that law is merely the product of rational thinking, uninterested in morality and values, and that legal dogmatics are concerned merely with posited legal norms. General examples mentioned by Marc Loth include Langdell's legal formalism, Von Savigny's *Begriffsjurisprudenz*, Kelsen's *Reine Rechtslehre*, and Hart's analytical jurisprudence. On these he comments:

These and other movements in (private) law shared an inspiration in science, which manifested itself in the ideals of objective knowledge, a rational method, order and system in law, and a strict separation between law and politics, or law and morals.¹²

¹⁰ Christian Education South Africa v Minister of Education 2000 4 SA 757 (CC) para 34.

Hallaq 2002-2003 *Hastings LJ* 1706.

¹² Loth 2007 Hofstra L Rev 1740-1741.

Such pragmatic positivism is not tenable, however, even rationally, because there is much in legal dogmatics that cannot be maintained based on mere reason. Raul Narits explains this well:

One has to keep in mind that legal dogmatics is not a collection of dogmas as such, but a study of dogmas (regardless of how much those dogmas have to do with history). Dogmatics has different meaning and weight, even function, in different subject areas. What is common with all dogmas is probably the fact that dogmas represent binding, recognised and usable basic knowledge for a certain field, whereas the nature and the degree to which they are binding may differ greatly. Jurisprudence has already since its inception expressed a tendency (even need) to formulate rationally provable basic standpoints We can regard as an axiom of today's jurisprudence of values the argument that a legal judgment is one based on values, and that the first source to look for values is the constitution with its binding catalogue of fundamental rights and liberties. In this context - i.e., applied to law - dogmatics means explanation of fundamental values, solutions to as well as reasons of problems. ¹³

Essentially, legal dogmatics, whatever its form, is inevitably founded upon the worldview of the dogmatist, and it is directly relevant *inter alia* to the moral foundations of justice, fairness and human dignity. To attempt to isolate legal dogma from religion (as being determinant of worldview) is therefore logically not possible: it would require the construction of an artificial wall between a person's basic beliefs and perceptions of reality.

As I have concluded elsewhere,¹⁴ law and religion share certain features. Both have moral connotations, although with distinguishable implications – the one primarily temporal, the other primarily transcendental. Both are expressed in the form of norms that require obedience, law being enforced by the state, and religious obedience primarily being a matter of individual conscience.

When it comes to environmental law, which is inevitably linked to environmental ethics, ontological (and therefore religious) connotations are not difficult to find. To demonstrate: in a rather strident (and often cited) assessment of the journal *Environmental Ethics* in a 1989 review of a book authored by the journal editor, the reviewer famously remarked that

[t]he journal includes articles by and in criticism of animal liberationists, biocentrists, deep ecologists, strong anthropocentrists, weak anthropocentrists, nonanthropocentric holists, neo-pragmatists, ecofeminists, process philosophers and theologians, Taoists, Zen Buddhists, Christian apologists, Muslim apologists, natural and unnatural Jews.¹⁵

Narits 2007 Juridica International 19.

¹⁴ Venter Constitutionalism and Religion 16.

¹⁵ Callicott 1989 *Environmental Ethics* 169.

Finally, the universality of the link between environmental considerations and religion also emerges from the wording of the UN General Assembly's 2030 Agenda for Sustainable Development. This document sought to find a balance between the three elements of sustainable development, namely the economic, social and environmental, and reaffirmed the responsibility of all states to protect human rights without distinction as to any of the human attributes, including religion.¹⁶

2 Religion and the environment

Responses to questions concerning social, political, individual and economic responsibility for the protection of the environment are essentially founded in religion.

This statement may, from the perspective of those who consider religion to be distinct from or incompatible with science and observable reality, be rejected out of hand as objectionable, and even preposterous. Such is a well-established attitude, impossible to "wish away" and the prospects for removing it from the minds of those who profoundly *believe* it to be true are not promising. It seems that in our age reasonableness is a pervasive attitude based on the notions of human autonomy and self-sufficiency. Alberto Artosi explains it as follows:

Reasonable people cease to be fallibilist where common-sense views and science's most well-established claims come into play, at which point they take up all the plain wisdom of the plain man: a combination of 'mere matter-of-fact apprehension of reality' (Geertz); straightforward reliance on 'the sheer actualities of experience'; a preference for simple immediate facts and self-evident claims; a disregard for logic and an endorsement of popular views, habitual judgments, accepted beliefs, received ideas, and 'widely shared' mistakes. At the same time, reasonable people are expected to have a distorting intellectual creed requiring them to believe in science's universal applicability, strict objectivity, ideological purity, uncontroversial tenets, single method, all-embracing principles, indisputable facts, and other pious frauds, and also to accept as 'well established and not controversial' anything falling under the rubric of 'science' and 'scientific'.\frac{17}{2}

Despite the deep penetration of such "intellectual creeds", the word "religion" can be used not only to signify formal, traditional or institutional belief systems, but also to include any and all epistemic views, whether expressed, implied or merely instinctive or sub-conscious. Regardless of the distaste that the notion of "religion" may generate in the minds of some,

UN 2015 https://sustainabledevelopment.un.org/post2015/transformingourworld/publication Preamble para 3.

Artosi 2009 "Reasonableness, Common Sense, and Science" 76 (references excluded).

it is therefore employed here as a comprehensive concept including not only devotional faith and belief, but also extra- and anti-institutional thought systems and attitudes such as Confucianism, animism, scientism, agnosticism and atheism.

I deem this to be a defensible position on the assumption that the life convictions of everyone determine their approach to morality and their considerations of responsibility. Put differently, the assumption upon which this analysis is based is that questions of moral responsibility are inseparably linked to a person's understanding of the nature of being and the manner by which one can acquire knowledge.

The linkage of religion (in this expanded sense) with moral responsibility therefore means that the answers to questions concerning environmental obligations do not necessarily and often do not rely on denominational or theological doctrine. It also means that these questions are so fundamental and of such existential import that responses to them are inescapably determined by the responders' *Weltanschauung*, whatever form it might take. This is also a position that is likely to be called into question by those who consider morality to be a function of reason unadulterated by belief. However, observe how those who rely thus on reason in effect elevate their belief in human reason itself to the level of religion in the said expanded sense.

A further complication affecting an analysis of responses to environmental responsibility is the objectively observable reality that the repair or restoration of the global environment to its pre-industrial state is not within the capacity of humanity. Some may argue that it has been proven that climate change, which has no geographical boundaries, has been induced primarily through human agency and therefore that restorative human intervention to reverse the damage should be possible. Consider the obvious, however: for instance that it is impossible for people to prevent changes in the magnetic polarity of Earth, or to avoid the consequences of explosive geomagnetic (solar) storms. How might it then be within our ability to reverse the melting of polar ice or the growing acidification of the oceans? In its authoritative, comprehensive and convincing global warming report

The classic example is Immanuel Kant's "categorical imperative", which is well and concisely explained online in *Kant's Moral Philosophy* (Johnson and Cureton 2022 https://plato.stanford.edu/entries/kant-moral/#NET). A modern exponent of rational morality is Gert: see e.g., Gert *Brute Rationality*.

published in 2019, the Intergovernmental Panel on Climate Change (IPCC) stated, for example, that:

Human activity has warmed the world by about 1°C since pre-industrial times, and the impacts of this warming have already been felt in many parts of the world. This estimate of the increase in global temperature is the average of many thousands of temperature measurements taken over the world's land and oceans. Temperatures are not changing at the same speed everywhere, however: warming is strongest on continents and is particularly strong in the Arctic in the cold season and in mid-latitude regions in the warm season. This is due to selfamplifying mechanisms, for instance due to snow and ice melt reducing the reflectivity of solar radiation at the surface, or soil drying leading to less evaporative cooling in the interior of continents. This means that some parts of the world have already experienced temperatures greater than 1.5°C above pre-industrial levels.¹⁹

Given the admission that humanity is responsible for ecological abuse over centuries, there should be no doubt that we should do whatever is achievable to slow down and repair the environment where possible. Equally, it should be accepted that it is highly unlikely that humankind would, through some miracle of global political, economic and moral cooperation become capable of "saving" the natural world from the ongoing, apparently catastrophic, environmental change. This may for the present purposes be referred to as "the hypothesis of incompetence".

Should human reason and the autonomy of man be the measure, the hypothesis of incompetence would probably be rejected as a religious anomaly: scientific conceit reflects an attitude of "we may not yet know how to resolve the problems attending climate change, but, given time and dedicated application of our inherent abilities evidenced in the astounding scientific progress of our time, we will eventually be able to save the day".

Belief, on the other hand, not founded upon the self-sufficiency of man, but in sovereign deity in whatever form, may produce essentially different responses to the hypothesis, for instance "climate change is due to divine wrath", or "our only hope is to pray for the intervention of the gods of nature", etc. Religious responses of this nature are, however, despite their possible sincerity, not helpful in a quest for an explanation of humanity's ecological responsibility.

Adopting the hypothesis of incompetence should not entail the shirking of responsibility, nor does it justify fatalistic inaction. An appropriate ecological attitude must be sought in the balance between responsibility and realism. Put bluntly, humankind is accountable for the ongoing desolation that we

Hoegh-Guldberg et al "Global Warming of 1.5°C" 282.

are recklessly wreaking upon the environment; we are, however, incapable of controlling nature comprehensively; humankind is nevertheless responsible for doing all it may be capable of to check the devastation while also preparing to deal as best we can with the consequences of our personal and collective blame. We will return below to the foundations of this approach.

Whatever one's religious convictions and whatever one's concomitant attitude regarding environmental responsibility might be, it can hardly be disputed that environmental protection by means of law or any other instrument is essentially a moral issue directly related to religion in its comprehensive sense. Based on their observation that, in the United States, "[d]ebate over environmental policy is increasingly conducted in language with strong religious overtones" and that "[b]oth proponents and opponents of various environmental policies appeal to religious doctrine to support their positions", ²⁰ Andrew Morris and Benjamin Cramer even argued in 2009 that environmentalism should be treated as a religion, thereby making it subject to the American First Amendment's prohibition on making laws that establish religion. Interestingly, their approach is not one of atheism or agnosticism (they also contested White's thesis about Judeo-Christianity as the source of environmental degradation). ²¹ Their argument for disestablishing environmentalism is that it would have "beneficial effects":

First, just as disestablishing religion led to a more diverse set of religions . . . so disestablishing Environmentalism is likely to produce a more diverse set of environmental philosophies among environmental groups. Second, disestablished environmental organizations would have to focus more on provision of direct services to attract members, increasing the supply of environmental goods and services.²²

Sustainable development (environmental protection), biodiversity and pollution are prominent themes in environmental law and the broad range of related disciplines. The literature on these matters tends to categorise environmental views into one of two broad approaches, namely on the one hand anthropocentrism, which places the emphasis on the primacy of humanity, and on the other, ecocentrism, with a primary focus on ecological concerns,²³ although some approaches seek to deny being either anthropocentric or ecocentric.

Morriss and Cramer 2009 Env Law 310.

Morriss and Cramer 2009 Env Law 343-344. See section 3.1 below on White's thesis.

Morriss and Cramer 2009 Env Law 372.

²³ See Du Plessis 2009 SAJELP 133-140.

Different religious systems approach the justification of the sometimes onerous obligations imposed by environmental law in different ways, often with either an anthropocentric emphasis or an ecocentric inclination. Closer consideration, however, reveals that is not so simple: anthropocentrism and ecocentrism may not be the only relevant attitudes.

3 Anthropocentrism, ecocentrism and earth system law

Some of the major approaches to environmental problematics are human self-centeredness, preoccupation with the global ecosystem, and an assumption that nature is an autonomous entity. Anthropomorphic selfishness appears to be a natural human trait, a strong (sometimes panicky) reaction to the dangers of exponential environmental degradation seems to be logical, and appealing (ostensibly in an irreligious manner) to a supra-human natural domain is testimony to a yearning to escape the vagaries of human capriciousness.

It speaks for itself that one's views on environmental considerations, be they positive or negative regarding the various trends, will be determined by the nature of one's beliefs regarding humanity and our individual and collective place in the universe. The views of scholars studying anthropology (inevitably from varying vantage points such as cultural, social, linguistic, and theological) including its related or sub-disciplines (biology, archaeology, psychology, and anthropology) will no doubt be guided by their fundamental insights and cosmological opinions when considering the question of human responsibility for the preservation of the environment. Such responsibility is, however, a consideration not for scientists only. In fact, the state and fate of the environment concerns all. Be it instinctive, taught or reasoned, everyone inevitably has a view on the personal, individual and collective place of people in the world, and therefore relative to the environment. Stated differently, their worldview is the foundation determine everyone's acceptance or rejection anthropocentrism, ecocentrism or any other attitude regarding nature. Only a brief examination of these trends must suffice here as background.

3.1 Anthropocentrism

At the heart of the anthropocentric approach to the environment lies the liberal concept of property. The development of what has become known as "Western" legal notions during the Enlightenment was strongly influenced by theories about the justification of property and ownership. This was not new in the 17th Century when John Locke laid the foundations for the

approach to property that is still current despite the passage of time, and not the last philosophical word on the subject but, as Jeremy Waldron put it, "Locke's theory is widely regarded as the most interesting of the canonical discussions of property". Waldron cites Locke's "moral defense of the legitimacy of unilateral appropriation" in *Two Treatises of Government* (1689), where he argued that a person's labour gives title to the produce: "Whatsoever then he removes out of the State that Nature hath provided, and left it in, he hath mixed his Labour with, and joyned to it something that is his own, and thereby makes it his Property".²⁴

In her discussion 320 years later of "carbon rights" as a new form of property created by legislation in Australia, Samantha Hepburn argued that over time a static agrarian concept of property entitling the owner undisturbed enjoyment thereof changed in the 19th century to a more abstract notion of title fragmentation, thereby opening the way to the evolution of new forms of property, such as carbon rights.²⁵ She explains:

The holder of a carbon right takes only the incorporeal benefit, whether legal or commercial, of carbon sequestration from the land and nothing more. Carbon sequestration is a process connected with the storage of carbon in the soil and the tree root system and embraces both existing stored carbon as well as potential carbon storage.²⁶

The notion of a commercially valuable "carbon right", despite not being directly linked to the Lockean mixture of nature and labour, confirms the continued link between property and environmental anthropocentrism into the 21st century.

Deckha sharply outlines the essence of legal anthropocentrism as "the normative assumption that humans are subjects, capable of owning property, and nonhumans (excepting corporate bodies) are objects to which property rights attach".²⁷ The law "centres the reasonable human person as a main legal subject".²⁸

Established environmentalists recognise the intrinsic link between ethics and attitudes to nature. Thus, for instance, Donato Bergandi argues that human beings have an innate propensity towards anthropocentricity. He

Waldron 2016 https://plato.stanford.edu/archives/win2016/entries/property/ section 2, "Historical Overview". He went on to point out that property was also an important element in the works of Plato, Aristotle, Aquinas, Hegel, and Hobbes before Locke, and Hume, Kant, Marx, and Mill after him.

²⁵ Hepburn 2009 *Syd LR* 240.

²⁶ Hepburn 2009 Syd LR 262.

²⁷ Deckha 2013 Alta L Rev 787.

²⁸ Deckha 2013 *Alta L Rev* 784.

links this "connatural tendency" to evolutionary history, which progressed from human confrontation with nature to the ability to adapt the natural environment to its own needs: "...at this stage of our history we have available many different ethical options for the development of our societies and our possible relationships with nature".²⁹

The famous article of Lynn White, a professor of mediaeval history, published in 1967 in the journal *Science*, stands out as a challenge to Judeo-Christian proponents of environmentalism. White argued that Christianity as it evolved from Judaism "... is the most anthropocentric religion the world has seen. ... By destroying pagan animism, Christianity made it possible to exploit nature in a mood of indifference to the feelings of natural objects".³⁰

Responding to White, David Nir stated in 2005 that Judaism is not hostile to environmentalism, because *bal tashchit*, which translates as "do not destroy", is the foremost environmental precept in traditional Judaism, and therefore absolutely fundamental in Jewish environmental law.³¹ Others have also pointed out that White's understanding of Christian environmental ethics is incorrect.

Marco Damonte, writing from a Catholic perspective, shows that White's article was based on his understanding of the views of the Puritans who arrived in America in the 17th century with the conviction that, due to Adam's fall, nature was threatening the existence of mankind, while ignoring other Christian traditions:

White's generalizations lead him to individuate the following accusations turned against Christianity: (1) Christians consider humans to be superior to all other beings and this legitimates that all creatures are at the service of mankind; (2) monotheism prevents the possibility of a personal relationship with natural elements; (3) the refusal of metempsychosis aids in depreciating the value of the animal world; (4) the biblical negative conception about deserts and wild places strengthens the tendency to evaluate non humanized landscapes as without any intrinsic value; (5) the appreciation of the transcendent world implies the indifference towards the material one; (6) the apocalypse implicit in the final judgement and the relative annihilation are not compatible with an ethic of environment.³²

Damonte's conclusion is interesting, not only as a retort to White, but also for the purposes of the present discussion. Interpreting the biblical book

²⁹ Bergandi "Ecology, Evolution, Ethics" 23.

³⁰ White 1967 *Science* 1205.

Nir 2005-2006 Geo Int'l Envtl L Rev 336. Also see Van der Walt 2016 In die Skriflig 5-6.

Damonte 2017 Relations Beyond Anthropocentrism 33.

Genesis, he points out that humanity's power over nature should not be understood to be arbitrary or absolute but should "correspond with the order of the creation". Furthermore, "...all Christians have to collaborate to God's project increasing it, and not thwarting it". He argues that other monotheistic religions (Judaism and Islam) would share this view, and that it should also appeal to nonbelievers "insofar as it warns we do not possess nature, but we have received it from past generations, and we have to preserve it for future generations and for the necessities of poor people".³³

A fair consideration of the Reformational perspective also does not support White's thesis of a wholesale blame for anthropocentricity on the Christian faith. Salient tenets of this worldview and religious confession are the following: personal redemption through faith in Jesus Christ; the Bible as God's authoritative revelation of Himself; God, as the only sovereign Creator, revealing Himself not only in Scripture, but also in the whole of His creation; He is intimately engaged in, but lives in eternity beyond His creation; creation as a whole will be fully renewed (cleansed of human sin) when Christ returns at the end of time. Within Christianity in its diversity, these beliefs are usually shared, although the emphases and interpretations do vary, as do understanding of their implications for environmental protection.

Therefore, in view at least of the essential Christian confession of divine sovereignty, White's unnuanced claim that Christian faith is crudely anthropomorphic should not be taken as seriously as it has been for over half a century.³⁴

3.2 Ecocentrism

Where anthropocentric views of the environmental crisis of the present era have their primary focus on the more or less self-centred interests of humanity, ecocentric approaches are essentially concerned with the

Damonte 2017 Relations Beyond Anthropocentrism 41 (references omitted).

lt must, however, be conceded that, where rational deism is confused with essential Christianity, a warped understanding of the Christian faith would be understandable. To demonstrate: in his survey of the leading 17th Century English deists, Wigelsworth *Deism in Enlightenment England* 8 points out that "competing conceptions of God lay at the heart of disputes between deists and their critics", that "Deists accepted neither prophecy nor the active God who imparted it", and "that deists denied God the ability to intervene in the Creation".

demands of the crisis on the global ecology. Ecocentrism is informed by the acknowledgement that human existence is dependent on the natural world.

The essentials of ecocentrism are reflected remarkably similarly across a wide spectrum of ontological convictions. Beliefs explicitly based on religious systems often provide the foundation for ecocentrism.

Due to the closeness to, and close dependence of their societies on nature, ancient belief systems and living tribal traditions found in different locations around the globe often show a tendency to centre on the intimate relationships between the natural world and humanity. Most also acknowledge a universal creator, although mostly as a vague, unknowable power present in the background, not directly observable by believers in their natural surroundings. The nature of such belief systems coincide largely with what may be described as "ecocentric".

An example of such indigenous tradition is that of the Anishinabek Nation, which has inhabited the area around the Great Lakes of North America for thousands of years. According to John Borrows, they hold that the "Earth grows and develops or dies and decays because she is a living being subject to many of the same forces as all other living creatures", and that they "characterize the Earth as a living entity that has thoughts and feelings, can exercise agency by making choices, and is related to humans at the deepest generative level of existence". The implications of this belief system for environmental law are that the use or ownership of elements of the Earth is subject to specific rituals, such as a pipe smoking ceremony: "When one participates in a circle and handles the pipe under the guidance of proper leaders, the Earth's legal personality is acknowledged ... While the smoke is said to ascend to the Creator and demonstrate thankfulness for existence, prayers of thanksgiving are expressed for the rocks, plants, animals, and other humans ...". 36

Another example of traditional indigenous ontological views "irreconcilable with Western legal property law" is that of the Tanganekald-Meintangk people of South Australia. Peter Burdon for instance cites a statement of an elder of this community as follows:

The earth is our mother: this is a relationship that is based on caring and sharing. From birth we learn the sacredness and the connectedness of all things to the creation. Every aspect of the natural world is honoured and respected. And from an early age Nungas learn to tread lightly on the Earth.

Borrows "Living Law on a Living Earth" 162.

Borrows "Living Law on a Living Earth" 165.

All life forms are related. The law speaks to principles. One is respect. It is a respect for all of creation, not just humanity but the total ecological environment: trees, birds, animals the entire wholeness and oneness of creation.³⁷

In Africa with its wide spectrum of indigenous cultures, similar understandings of the relationship between humanity and nature are found. African attitudes cannot be described in generalised terms, but the worldview of the Berekum people of Ghana, thoroughly researched by Samuel Awuah-Nyamekye, provides us with an example from that continent:

Nana Kwabena Wusu ... observed that because the Berekum worldview is underpinned by its indigenous religion, entities such as land, water, animals and plants are not just materials of production, but also have a place in their religion or spirituality. ... However, ... Kyere Kwame ... also pointed out that whilst respect is accorded all elements of creation in the Berekum worldview, those that constitute the primary life-sustaining elements of creation are accorded more respect than others. For instance, trees, animals and rivers are fundamental or primary sustaining elements for human life and, for that reason, more attention is given to such objects in practice. Corroborating the above view, Nana Okofo Dartey, the Gyasehene of Berekum Traditional Area, observed: 'Humans have a duty to conserve God's creation. That is why one of the duties of a chief is to ensure that the forests in his area are not depleted anyhow. This also explains why we at times earmark a place as a sacred grove...' Millar (1999) and Gonese (1999) have made similar observations. Giving credence to this view of traditional Africans, Mbiti (1991) says that 'living in harmony with nature is so dear to indigenous African peoples that they tend to assign biological life even to inanimate objects...' In the African worldview, the universe is the creation of God, and thus, is itself viewed in religious terms. African peoples strongly believe that they have a duty to protect and conserve the universe for both secular and religious reasons.³⁸

Ecocentrism is also found in various mainstream religious approaches such as Buddhism and Hinduism. Painting with a very broad brush, Fisher-Ogden and Saxer explains that Buddhism "values natural resources as part of all life on earth, and values nature as various deities".³⁹ In his analysis of environmentalism in Thailand, where Buddhism is the national religion, Douglas Tookey quotes an authoritative source on the relationship between Buddhism and the environment where it is stated that "early Buddhist community lived comfortably within nature, and the Buddha included many

_

Burdon Earth Jurisprudence 120.

Awuah-Nyamekye *Managing the Environmental Crisis in Ghana* 62 (citations omitted).

Fisher-Ogden and Saxer 2006 DELPF 84.

examples and similes from nature in his teachings ... Buddhism holds a great respect for and gratitude toward nature".⁴⁰

According to Fisher-Ogden and Saxer, Hinduism builds on the notions of reincarnation and karma to condemn environmental pollution as an offence against the gods, of which there are very many in nature.⁴¹ According to Sudira and Sudantra, "Hindu people in Bali believe that sacred areas such as mountains, hills, lakes, springs, seas, and beaches are symbols of the sources of life. Sustainability and balance of all these places must be maintained to remain immortal". Furthermore:

... the physical environment plays a dominant role as a forming of personality, morals, culture, politics and religion. This view appears inseparably from the assumption that in the human body there are three basic components, namely earth, water, and land which are important elements of the environment. Such an expression is in line with Hindu philosophy relating to efforts to maintain the balance of the universe and its contents, namely *Tri Hita Karana*.⁴²

In the 1970's the idea arose of the imposition of a moral duty on humanity to award legal rights to animals and other elements of the natural environment, and to protect those rights as a means of limiting anthropocentric environmental abuse.⁴³ This approach may perhaps be seen as a precursor to the development of other currently emerging views, especially the "Earth Jurisprudence" discussed in the next section.

Aldo Leopold, widely acclaimed as one of the most important American pioneers of natural conservationism, is also recognised as an early trailblazer for ecocentrism. Although he can hardly be seen as a proponent of a Christian doctrine, he made frequent biblical references in his writings on ecological ethics (perhaps as an element of the literary style of his time). His essay *The Land Ethic*, published in 1949, is considered by many to have provided the ethical platform from which modern ecocentrism was launched.⁴⁴ The essence of Leopold's views is captured in the following statements:

The land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land.⁴⁵

Tookey 1999 *Geo Int'l Envtl L Rev*, quoting in note 251 at 341 Kabilsingh "Early Buddhist Views on Nature" 8.

Fisher-Ogden and Saxer 2006 DELPF 88.

Sudira and Sudantra 2019 *Journal of Law, Policy and Globalization* 38.

⁴³ See e.g., Du Plessis 2009 *SAJELP* 138-139.

⁴⁴ Millstein 2018 Philosophy of Science.

Leopold Sand County Almanac 204.

In short, a land ethic changes the role of *Homo sapiens* from conqueror of the land-community to plain members and citizen of it. It implies respect for his fellow-members, and also respect for the community as such.⁴⁶

That man is, in fact, only a member of the biotic team is shown by an ecological interpretation of history. Many historical events, hitherto explained solely in terms of human enterprise, were actually biotic interactions between people and the land. The characteristics of the land determined the facts quite as potently as the characteristics of the men who lived on it.⁴⁷

Building on Leopold's views of humanity's ethical responsibilities regarding the environment, Roberta Millstein more recently posited the need for a robust understanding of "interdependence":

[I]nterdependence, in the context of views that center on land communities (ecosystems, biotic communities), consists of a web (or network) of direct and indirect 'negative' and 'positive' causal interactions between organisms, populations, and abiotic components, including humans, yielding a variety of vulnerabilities in organisms, populations, and abiotic components (as well as land communities more holistically) with interactions that vary in strength and direction in time and in place.⁴⁸

The close linkage between ecocentrism and religious systems and worldviews makes it clear that it is inconceivable that environmental law can be perceived as an area of "neutral" moral regulation. Since nobody, including "rational" lawyers, can escape ontological bias, expressed or subconscious, this confirms the reality that environmental lawyers' understanding of and approach to their field are embedded in their religious predispositions, regardless of the form those might take.

3.3 Earth system law and earth jurisprudence

An emergent school of thought born of the environmental crisis is known as "earth jurisprudence" or "earth system law". Earth system law and earth jurisprudence are not synonymous, but the first is said to build on the latter. In 2015 Burdon compactly characterised earth jurisprudence as follows:

Leopold Sand County Almanac 204.

Leopold Sand County Almanac 205.

Millstein 2018 Philosophy of Science 1137.

⁴⁹ According to Kim, Blanchard and Kotzé 2022 Earth System Governance 1 (references omitted): "The idea of earth system law is closely linked to earth system governance scholarship, while it also builds on, and moves beyond, existing frontiers in legal research. Earth system law research, for example, draws on the ecological approach to law, especially the work on ecological law grounded in ecocentric ethics as well as wild law and earth jurisprudence. As such, earth system law places Planet Earth (including all its living beings and biophysical processes) more centrally in the circle of law's concern. Earth system law scholarship is therefore considered as

Unlike orthodox legal theories, Earth Jurisprudence is founded in the premise that human beings are one part of a broader Earth community. It also argues that situating human laws within the physical context of the Earth's system enhances the health and future flourishing of this comprehensive community. To this end, Earth Jurisprudence links human law to a 'higher' great law. It also argues that human law is purposive and ought to be directed toward the common good of the entire Earth community and not just human or corporate interests.⁵⁰

Although proponents appear to shy away from being branded as being merely "ecocentric"⁵¹ it is clear that their assumptions prioritise the environment. Interestingly, earth jurisprudence avoids religious connotations, although it seeks guidance from some "higher" law. In 2013 Glen Wright⁵² explained it thus:

Natural Law, classically referring to the notion that human nature contains universal binding rules of moral behavior that can be deduced through reason, is perhaps the most well known in Western cultures. In a similar vein, the Great Jurisprudence 'is what it is'; it is the nature of the world, the 'fundamental laws and principles of the universe.

Apparently in opposition to anthropocentrism Wright went on to emphasise the notion that humanity is only one component of the greater, self-regulating earth system from which humanity should glean a universal framework for making its laws. "Certain fundamental laws and principles" need to be gleaned from the natural world as indicators of "the universe functioning as it should" to guide human conduct.

How and by whom the content of "the laws of the universe functioning as it should" may be determined is of course as open and malleable as it has always been with the notion of "natural law".⁵³ Ironically, it is inevitable that "finding" those fundamental laws and principles embedded in the natural world would depend on human reason, abstractly construing a state of nature in which a fictitious, unspoilt humanity may flourish.

being part of the ecological law movement, which aims to advance a paradigm shift that 'internalizes the natural living conditions of human existence and makes them the basis of all law."

Burdon Earth Jurisprudence 101.

Kim, Blanchard and Kotzé 2022 Earth System Governance 2 e.g., hold that "earth system law is intended to be more than ecological law, planetary law, or a systems approach to law, considered separately. It is the confluence of these existing lines of research that makes earth system law unique as a possible new legal paradigm and epistemic framework for the Anthropocene. Earth system law research, for instance, does not aim to build a single unitary legal system or ideology for the entire planet that is either strictly ecocentric or anthropocentric".

Wright 2013 Environmental and Earth Law Journal 41-42 (references omitted).

See e.g., the compact but excellent review of the natural law theory by Grossi *Das Recht in der Europäischen Geschichte* 98-105.

Thus, it may be deduced, the notion of earth jurisprudence is derived from secular rationalism born of the fearful realisation that control over the environment is beyond human ability: the creed is that the extra-(super?)human power on which humanity must rely is nature itself. Nature is the redemptive force (ironically knowable only through the agency of reasonable human observation) that should be respected, and to which humankind should subject itself. This endeavour is said to require a new approach to law and legal research:

The earth system law research endeavour rather embraces diversity and pluralism, as well as innovative out-of-the-box thinking that goes well beyond the strict confines of traditional legal research. Similarly, earth system law is polycentric in its institutional architecture. It is neither state-centric nor non-state-centric: States may play an important role as trustees, but at the same time there is an untapped potential of non-state actors. Earth system law in this sense offers an opportunity to the full range of diverse legal actors operating at all levels to facilitate the confluence of multiple forms of, and visions for, law in the Anthropocene.⁵⁴

In sum, earth jurisprudence amounts to religion without gods, except that human reason is by implication deified to mediate between the (sovereign?) universe and thinking humanity as only one, albeit *the* responsible element in the scheme of nature.

4 Stewardship

In 2019 Emma Lees published an insightful analysis of "stewardship" in the context of property of land related to environmental protection:

Stewardship of land is commonly understood to be an ethical and legal principle (in the sense that it promotes, but does not demand, a particular course of action), invoked to justify the imposition of specific duties onto one with control over a particular resource, so that they utilize and exploit that resource only in such a way as to protect the integrity of the resource. The word 'stewardship,' however, is occasionally used imprecisely as justification for limiting the ability of the right-holder to damage, destroy, or diminish the resource. It is an environmentalist's panacea, a concept which in a single breath has the power to capture how we should be caring for our planetary resources and which would sit at the heart of our private property system, so maligned for its ongoing effects on the natural world.⁵⁵

Citing a publication by Lynton Caldwell of 1974, Lees then went on to argue that the source of stewardship as an ethical duty "is at once semi-religious, mythical, and scientific", and that it is not a justification in itself, but that it requires justification: "it is not a justification for limitation of rights; it is the

Kim, Blanchard and Kotzé 2022 Earth System Governance 1.

⁵⁵ Lees 2019 *Wm & Mary Envtl L & Pol'y Rev* 544.

limitation of rights".⁵⁶ She then construes the justification of stewardship as a "coordination rule", which imposes stewardship on the basis of preventing harm to the group, meaning property owners. While admitting the validity of the criticism that this approach favours the liberal, anthropocentric view of property to the exclusion of those who do not have property, she argues that a similar argument can be made for stewardship that does not depend on the harm principle, and that it can be extended beyond the protection of private property.⁵⁷ By rendering penalties for abuse as a matter to be dealt with in "the court of public opinion" or as a matter of the perpetrator's conscience, she considers the moral obligation to be justifiable "by reference to both anthropocentric and ecocentric considerations, from secular and religious perspectives".⁵⁸

In the major religions the notion of stewardship is much more than mythical or abstractly ethical. Remarkably the monotheistic religions such as Islam and the various forms of Judaism and Christianity founded to a larger or lesser degree on the Bible share the notion of humanity's divinely imposed stewardship of creation. The implications of this stewardship are, however, interpreted and applied in different ways.

The Islamic notion of human stewardship of nature is based on a Quranic text which states that Allah created the heavens and the earth to provide their fruits for humanity's sustenance and to put nature in its service.⁵⁹

Mormons use the New and Old Testaments of the Bible but supplement them directly and indirectly in several ways. ⁶⁰ Micah McOwen explains the Mormon notion of stewardship as being based on Joseph Smith's elaboration of God's covenant with Noah, which entails that this earth will in the end become the new, inherited earth, i.e. heaven, which places a responsibility on mankind to respect and care for it now. ⁶¹

Christianity as a broad and hugely diverse religious category is founded on the Bible, which is statistically probably the most widely revered religious

⁵⁶ Lees 2019 Wm & Mary Envtl L & Pol'y Rev 544.

⁵⁷ Lees 2019 Wm & Mary Envtl L & Pol'y Rev 584-586.

⁵⁸ Lees 2019 Wm & Mary Envtl L & Pol'y Rev 592.

⁵⁹ Fisher-Ogden and Saxer 2006 *DELPF* 94-95 (citing Quran 14:33-35).

According to McOwen 2007 J L & Relig 681 the supplementary texts include Joseph Smith's "re-translated" parts of the Bible, two additional collections of ancient scripture The Pearl of Great Price (consisting of two primary books) and The Book of Mormon: Another Testament of Jesus Christ (consisting of fifteen books) and Joseph Smith's collected revelations published as The Doctrine and Covenants of the Church of Jesus Christ of Latter-day Saints.

⁶¹ McOwen 2007 J L & Relig 682-683.

text foundational to moral attitudes regarding *inter alia* environmental protection. The Reformational confession represents a significant portion of Christianity, and its tenets of environmental stewardship coincide with many other Christian confessions.

The implications of environmental stewardship from a Reformational perspective founded on the authority of the Bible may be construed as follows:

- the God-given stewardship of humanity over the world carries with it
 not only the power, authority and superior capacity of humanity, but
 also the responsibility to respect creation as the divinely ordained
 environment required for human life until the return of Christ;⁶²
- a significant element in humanity's responsibility for the environment as stewards is found in the recognition that it was not only Man who lost perfection by turning against God in sin, but that creation was also subjected to decay due to humanity's disobedience to God;⁶³
- respecting creation does not entail deifying or personifying it or any element or characteristic thereof, but to use it and nurture it in as sustainable a manner as possible exactly because of humanity's position at the pinnacle of creation.⁶⁴

Key Biblical texts on which this view rests are Genesis 3:17-23; Isaiah 44; Hebrews 4:13; Romans 1:19-20 and Revelations 5:13.

See Romans 8:18-25: "18 For I consider that the sufferings of this present time are not worth comparing with the glory that is to be revealed to us. 19 For the creation waits with eager longing for the revealing of the sons of God. 20 For the creation was subjected to futility, not willingly, but because of him who subjected it, in hope 21 that the creation itself will be set free from its bondage to decay and obtain the freedom of the glory of the children of God. 22 For we know that the whole creation has been groaning together in the pains of childbirth until now. 23 And not only the creation, but we ourselves, who have the firstfruits of the Spirit, groan inwardly as we wait eagerly for adoption as sons, the redemption of our bodies. 24 For in this hope we were saved. Now hope that is seen is not hope. For who hopes for what he sees? 25 But if we hope for what we do not see, we wait for it with patience."

Deuteronomy 20:19-20 (English Standard Version) is an important reference in this regard: "19 When you besiege a city for a long time, making war against it in order to take it, you shall not destroy its trees by wielding an axe against them. You may eat from them, but you shall not cut them down. Are the trees in the field human, that they should be besieged by you? 20 Only the trees that you know are not trees for food you may destroy and cut down, that you may build siegeworks against the city that makes war with you, until it falls." For a treatment of this passage, see e.g. Van der Walt 2016 *In die Skriflig* 3-5. Also see Psalm 95:1-7 and Job 38.

On a proper analysis, it should be clear that this perspective is neither ecocentric nor anthropocentric.

If the emphasis were to be primarily on the ecology, the environment, or creation, it would have implied an inconsistent negation of the unceasing determination by the Creator of the maintenance and destination of the world – not only of planet Earth, but of all creation within and outside the rational and sensory grasp of humanity.

If, on the other hand, an anthropocentric emphasis on the responsibility, i.e. the stewardship, of humanity over the earth were to characterise the Reformational perspective, it would, contrary to its essential tenets have amounted to a substitution of God's sovereignty with human predominance over creation.

In sum, Reformational Christianity must in terms of its foundational beliefs inevitably deem both ecocentrism and anthropocentrism as a disavowal of the sovereignty of God.

This can easily be misunderstood to amount to fatalistic resignation to the inevitability of environmental degradation, a denial of human responsibility regarding the environment, and a utopian, pie-in-the-sky hope that God will somehow intervene and save and restore the deteriorating ecology because Christ will soon return to establish a new heaven and a new earth. Such a misunderstanding does not account for the divinely imposed obligations of stewardship, namely "it is required of stewards that they be found trustworthy". People as stewards of Earth cannot know when Christ will return to restore creation to its original perfection, and are therefore obliged to contribute whatever they can to protect, restore and use sustainably what has been entrusted to them in created nature, always living, however, with the joyful knowledge that not only nature and all of creation, but life itself will be fully restored by God when the time determined by Him alone comes.

Another common misunderstanding of the Christian belief is that it amounts to a fatalistic submission to the unknown will of an unknowable God. This may not be the place to counter this misunderstanding with an exhaustive

1 Corinthians 4:2. The nature and demands of trustworthiness of stewards were elucidated by Christ in the parable of the rich man who entrusted his property to servants, found in Matthew 25:14-27 and Luke 19:11-27.

Such a misplaced understanding may be based on a narrow interpretation of the prophetic vision of John in Revelation 21:1: "Then I saw a new heaven and a new earth, for the first heaven and the first earth had passed away, and the sea was no more", and the following verses, which resonate with Isaiah 60 and 65.

biblical exegesis. Suffice it to reiterate that Reformational belief is based on the knowledge of God as revealed by Himself in Scripture *and* in nature,⁶⁷ that He is not distant and impersonal,⁶⁸ and that His love for humanity lies at the root of what he has revealed of Himself.⁶⁹

5 Conclusion

From this compact review of religious (in the expanded sense adopted here) attitudes concerning the environmental responsibility of humanity, a remarkable measure of overlap and confluence emerges. This unfortunately does not suggest that there can be hope for global unanimity on the reasons for people to accept a common accountability and effective collaboration of effort, but the commonality of considerations is striking. Across the spectrum, from earth jurisprudence and primeval animism on the one hand to rationalism and confessional faith systems on the other, stewardship appears in some form, if in some cases only by implication.

There are good reasons for the people of this planet to experience increasing fear, growing expectations of disaster and reaching for ingenuously conceived scientific and legal means to appease anxieties. The most irresponsible response to the realities of environmental degradation is denial and unremitting exploitation of natural resources; more responsible, although sorely lacking in assurance, are intellectual constructions based on a denial of the hypothesis of human incompetence. The most responsible and realistic response to the realities of the tormented state of the earth is a faith-based internalisation of the responsibility of personal and collective environmental stewardship.

The Reformational perspective on environmental matters, including environmental law, is founded upon the acknowledgement of the exclusive sovereignty of God. By implication, therefore, the hypothesis of the incompetence of humanity to save the world, as it were, is valid, but the Reformational belief simultaneously postulates the manifest duty of humanity to serve as responsible managers (stewards) of an imperfect world, including the environment, the ecology, and indeed humanity itself as an integral component of creation.⁷⁰

⁶⁷ See e.g., Romans 1:18-23.

See e.g., Psalm 139 and Matthew 5:45.

^{69 1} John 4:7-21.

⁷⁰ Palms 115:15-18.

Bibliography

Literature

Aguilera-Barchet *History of Western Public Law*Aguilera-Barchet B *A History of Western Public Law* (Springer Cham 2015)

Aronowsky 2021 Critical Inquiry

Aronowsky L "Gas Guzzling Gaia, or: A Prehistory of Climate Change Denialism" 2021 *Critical Inquiry* 306-327

Artosi 2009 "Reasonableness, Common Sense, and Science"
Artosi A "Reasonableness, Common Sense, and Science" in Bongiovanni
G, Sartor G and Valentini C (eds) *Reasonableness and Law* (Springer Dordrecht 2009) 69-78

Awuah-Nyamekye Managing the Environmental Crisis in Ghana Awuah-Nyamekye S Managing the Environmental Crisis in Ghana: The Role of African Traditional Religion and Culture with Special Reference to the Berekum Traditional Area (Cambridge Scholars Newcastle upon Tyne 2014)

Bergandi "Ecology, Evolution, Ethics"

Bergandi D "Ecology, Evolution, Ethics: In Search of a Meta-Paradigm – An Introduction" in Bergandi D (ed) *The Structural Links Between Ecology, Evolution and Ethics – The Virtuous Epistemic Circle* (Springer Dordrecht 2013) 1-28

Borrows "Living Law on a Living Earth"

Borrows J "Living Law on a Living Earth: Aboriginal Religion, Law, and the Constitution" in Moon R (ed) *Law and Religious Pluralism in Canada* (UBC Press Vancouver 2008) 161-191

Burdon Earth Jurisprudence

Burdon PD Earth Jurisprudence: Private Property and the Environment (Routledge Abingdon 2015)

Callicott 1989 Environmental Ethics

Callicott JB "Book Review - Eugene C Hargrove: Foundations of Environmental Ethics" 1989 Environmental Ethics 169-177

Callicott "Ecology and Moral Ontology"

Callicott JB "Ecology and Moral Ontology" in Bergandi D (ed) *The Structural Links Between Ecology, Evolution and Ethics: The Virtuous Epistemic Circle* (Springer Dordrecht 2013) 101-116

Crowley 2000 Science

Crowley TJ "Causes of Climate Change Over the Past 1000 Years" 2000 Science 270-277

Damonte 2017 Relations Beyond Anthropocentrism

Damonte M "God, the Bible and the Environment: An Historical Excursus on the Relationship between Christian Religion and Ecology" 2017 Relations Beyond Anthropocentrism 27-46

Deckha 2013 Alta L Rev

Deckha M "Initiating a Non-Anthropocentric Jurisprudence: The Rule of Law and Animal Vulnerability Under a Property Paradigm" 2013 *Alta L Rev* 783-814

Du Plessis 2009 SAJELP

Du Plessis A "Perceptive Approaches to the Interpretation and Realisation of South Africa's Constitutional Environmental Right" 2009 *SAJELP* 129-156

Fisher-Ogden and Saxer 2006 DELPF

Fisher-Ogden D and Saxer SR "World Religions and Clean Water" 2006 DELPF 63-117

Gert Brute Rationality

Gert J Brute Rationality: Normativity and Human Action (Cambridge University Press Cambridge 2004)

Grossi Das Recht in der Europäischen Geschichte

Grossi P *Das Recht in der Europäischen Geschichte* (Gerhard Kuck translation) (CH Beck München 2007)

Hallaq 2002-2003 Hastings LJ

Hallaq WB "'Muslim Rage' and Islamic Law" 2002-2003 Hastings L J 1705-1719

Hepburn 2009 Syd LR

Hepburn S "Carbon Rights as New Property: The Benefits of Statutory Verification" 2009 Syd LR 239-271

Hoegh-Guldberg et al 2019 "Global Warming of 1.5°C"

Hoegh-Guldberg O et al "Impacts of 1.5°C of Global Warming on Natural and Human Systems" in Masson-Delmotte V et al (eds) Global Warming of 1.5°C. An IPCC Special Report on the Impacts of Global Warming of 1.5°C Above Pre-Industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty (Intergovernmental Panel on Climate Change Geneva 2019) 175-311

Kabilsingh "Early Buddhist Views on Nature"

Kabilsingh C "Early Buddhist Views on Nature" in Badiner AH (ed) *Dharma Gala: A Harvest of Essays in Buddhism and Ecology* (Parallax Press Berkeley 1990) 8-13

Kim, Blanchard and Kotzé 2022 Earth System Governance Kim R, Blanchard C and Kotzé L "Law, Systems, and Planet Earth: Editorial" 2022 Earth System Governance 1-4

Lees 2019 Wm & Mary Envtl L & Pol'y Rev

Lees E "Property in the Anthropocene" 2019 Wm & Mary Envtl L & Pol'y Rev 541-594

Leopold Sand County Almanac

Leopold A A Sand County Almanac (Oxford University Press New York 1949)

Loth 2007 Hofstra L Rev

Loth MA "Limits of Private Law: Enriching Legal Dogmatics" 2007 *Hofstra L Rev* 1725-1751

McOwen 2007 J L & Relig

McOwen MJB "An Earth Used with Judgment, not to Excess: Distilling a Mormon Approach to Environmental Law" 2007 *J L & Relig* 673-723

Millstein 2018 Philosophy of Science

Millstein RL "Understanding Leopold's Concept of 'Interdependence' for Environmental Ethics and Conservation Biology" 2018 *Philosophy of Science* 1127-1139

Montesquieu Spirit of Laws

Montesquieu, Baron de (Charles de Secondat) *The Spirit of Laws* (Cosimo New York 2011)

Morriss and Cramer 2009 Env Law

Morriss AP and Cramer BD "Disestablishing Environmentalism" 2009 *Env Law* 309-396

Narits 2007 Juridica International

Narits R "Principles of Law and Legal Dogmatics as Methods Used by Constitutional Courts" 2007 *Juridica International* 15-22

Nir 2005-2006 Geo Int'l Envtl L Rev

Nir D "A Critical Examination of the Jewish Environmental Law of *Bal Taschit*" 2005-2006 *Geo Int'l Envtl L Rev* 335-353

Rautenbach "Umkhosi Ukweshwama"

Rautenbach C "Umkhosi Ukweshwama: Revival of a Zulu Festival in Celebration of the Universe's Rites of Passage" in Bennett TW (ed) *Traditional African Religions in South African Law* (UCT Press Claremont 2011) 63-89

Sudira and Sudantra 2019 *Journal of Law, Policy and Globalization*Sudira M and Sudantra IK "The Control of Spatial Utilization in the Tourism Areas Oriented to Public Welfare and Justice" 2019 *Journal of Law, Policy and Globalization* 35-42

Sylvanus 2020 Journal of Law, Policy and Globalization

Sylvanus A "A Survey of the Threats / Impacts of Accelerating Climate Changes and Global Warming in the Light of the 2019 Report of the World Meteorological Organization and Other Available Data Documenting Physical Signs of Climate Changes in around the Global Environment and Rising Temperatures in Nigeria" 2020 *Journal of Law, Policy and Globalization* 38-44

Tookey 1999 Geo Int'l Envtl L Rev

Tookey DL "Southeast Asian Environmentalism at Its Crossroads: Learning Lessons from Thailand's Eclectic Approach to Environmental Law and Policy" 1999 *Geo Int'l Envtl L Rev* 307-362

Van der Walt 2016 In die Skriflig

Van der Walt C "Humanity's Perceived Right to Life and the Impact Thereof on the Environment: A Perspective from Deuteronomy 20:19-20" 2016 *In die Skriflig / In Luce Verbi* 1-8

Venter Constitutionalism and Religion

Venter F Constitutionalism and Religion (Edward Elgar Cheltenham 2015)

Venter Global Features of Constitutional Law

Venter F Global Features of Constitutional Law (Wolf Legal Nijmegen 2010)

White 1967 Science

White L "The Historical Roots of Our Ecologic Crisis" 1967 *Science* 1203-1207

Wigelsworth Deism in Enlightenment England

Wigelsworth J Deism in Enlightenment England: Theology, Politics, and Newtonian Public Science (Manchester University Press Manchester 2009)

Wright 2013 Environmental and Earth Law Journal

Wright G "Climate Regulation as if the Planet Mattered: The Earth Jurisprudence Approach to Climate Change, Environmental and Earth Law" 2013 Environmental and Earth Law Journal 33-57

Zuidervaart Religion, Truth, and Social Transformation

Zuidervaart L Religion, Truth, and Social Transformation: Essays in Reformational Philosophy (McGill-Queen's University Press Montreal 2016)

Case law

Christian Education South Africa v Minister of Education 2000 4 SA 757 (CC)

Internet sources

COP26 2021 https://unfccc.int/sites/default/files/resource/cop26_auv_2f_cover_decision.pdf

United Nations Climate Change Conference (COP26) 2021 *Glasgow Climate Pact* https://unfccc.int/sites/default/files/resource/cop26_auv_2f_cover_decision.pdf accessed 24 July 2022

Johnson and Cureton 2022 https://plato.stanford.edu/entries/kant-moral/#NET

Johnson R and Cureton A 2022 *Kant's Moral Philosophy - Stanford Encyclopedia of Philosophy* https://plato.stanford.edu/entries/kant-moral/#NET accessed 24 July 2022

UN 2015 https://sustainabledevelopment.un.org/post2015/transforming ourworld/publication

United Nations 2015 *Transforming Our World: The 2030 Agenda for Sustainable Development* https://sustainabledevelopment.un.org/post2015/transformingourworld/publication accessed 24 July 2022

Waldron 2016 https://plato.stanford.edu/archives/win2016/entries/property/ Waldron J 2016 *Property and Ownership - Stanford Encyclopedia of Philosophy* https://plato.stanford.edu/archives/win2016/entries/property/accessed 24 July 2022

List of Abbreviations

Alta L Rev Alberta Law Review

DELPF Duke Environmental Law and

Policy Forum

Env Law Environmental Law

Geo Int'l Envtl L Rev Georgetown International

Environmental Law Review

Hastings LJ Hastings Law Journal
Hofstra L Rev Hofstra Law Review

IPCC Intergovernmental Panel on

Climate Change

J L & Relig Journal of Law and Religion
SAJELP South African Journal

Environmental Law and Policy

of

Syd LR Sydney Law Review

UN United Nations

Wm & Mary Envtl L & Pol'y William and Mary Environmental

Rev Law and Policy Review