



Beliefs and Actions Towards an Environmental Ethical Life: The Christianity-Environment Nexus Reflected in a Cross-National Analysis

Ruxandra Malina Petrescu-Mag¹ · Adrian Ana¹ · Iris Vermeir² ·
Dacinia Crina Petrescu^{3,4}

Accepted: 16 October 2020 / Published online: 28 October 2020
© Springer Nature B.V. 2020

Abstract

The present study seeks to introduce the European Christian community to the debate on environmental degradation while displaying its important role and theological perspectives in the resolution of the environmental crisis. The fundamental question authors have asked here is if Christianity supports pro-environmental attitudes compared to other religions, in a context where religion, in general, represents the ethical foundation of our civilization and, thus, an important behavior guide. The discussion becomes all the more interesting as many voices have identified the Christian theological tradition as ecologically bankrupt, while others as a source for environmental ethics. In seeking to refute or to confirm the Lynne White's thesis, firstly, we aimed to rediscover the biblical ecological consciousness and the theology of care. Secondly, following the literature evidence on relevant differences between countries and the influence that religion has on approaching environmental issues, we considered the religion-environmental correlation within a particular country context. For this, data from the European Values Study survey were used, by including 20 European countries. One novelty of this contribution is to highlight the influence of the legacy of the former political regime on pro-environmental attitude and religious practices. The study testifies that the search for a common language for environmental stewardship is a difficult task and fundamental to how we behave. Despite this, within this frame of discussion, we argue that Christianity, as a major social actor, co-exists with and can enhance the interest in and respect for nature.

Keywords Christianity · Environment · Perceptions · Lynn White · Ethics

✉ Dacinia Crina Petrescu
crina.petrescu@ubbcluj.ro

Extended author information available on the last page of the article

Introduction

The present study seeks to introduce the European Christian community to the debate on environmental degradation while displaying its important role and theological perspectives in the resolution of the environmental crisis. Following James' (2003) definition of religion as the individual relationship with the divine that sums up experiences, acts, and feelings, it is self-understood that religion becomes the base for social structure and individual behavior (Beck and Miller 2000; Cohen 2009; Felix et al. 2018) in a worldwide context where, according to Diener et al. (2011), 4.6 billion people are influenced by religious considerations in their daily lives. In this way, religion provides subtle influences on beliefs, and daily actions (Uzzell and Rätzzel 2019). Extensive sociological research have already revealed that in the course of history, religions have significantly impacted on cultures (Jochemsen 2018). Many scholars (as per Tucker and Grim, 2003; Chuvieco et al. 2016) argue that, as long as religions, in general, embed a cosmological view on how humans should relate to other creatures, religious beliefs can be judged as an important trigger of environmental concern. Martin-Schramm and Stivers (2003) underline the key player role of the religion and biblical tradition in shaping people's attitudes regarding the environment. That is why the arguments of Lynn White (1967) have become the most cited piece in the whole eco-theological debate and they have been transformed into a provocative stimulus to much theological study (Horrell 2015). White is the first who argued that religion played a fundamental role in the origin of the environmental crisis, and, also, the first who contended that religion may have a role in the settlement of the environmental crisis (Northcott 2018). The longevity and the complexity of the questions brought forth by the Lynn White thesis are visible in the stark contrast in the interpretations of the Bible in that which pertains to its ecological significance and its role in the environmental crisis. White's ideas have such an appeal and relevance even to the present day, as Emily Warde (2011) correctly notes that his ideas offer a uniquely deep analysis of the environmental crisis and he was the first to offer a 'serious, searching analysis of culture and the type of thinking which may have generated a seemingly incomprehensible destruction of nature'.

Prior research focused on the understanding of religion as a key determinant of core values influencing attitudes (i.e., beliefs, feelings, and behaviors) (Hirschman et al. 2011; Minton et al. 2015) which unites holistically the individual, associational, and social experiences (Kilp 2013). Even more important, there is evidence of theological links to the concept of temperance as applied to environmental concerns, thus restricting the consumerism (Petrescu-Mag et al. 2019). Also, the second encyclical of Pope Francis, entitled *Laudato si'* ('Praise Be to You!') has as the subtitle 'on care for our common home' where the consumerism and the chaotic development without considering the environment call people of the world towards a unified action (Pope 2015). Pope Francis provides, thus, an ecological call to action and he speaks that from a Christian perspective preservationism makes perfect sense (Turgeon 2018).

Yet, many ecologists have identified the Christian theological tradition as ecologically bankrupt; some have even demonized Christianity as the proponent of the crisis, as the Lynn White thesis (1967) does. There, he contends that Christian tradition cultivates a 'dominion over nature'. White's thesis had a huge impact within the English-speaking world, blaming Christianity of being the most anthropocentric of the religions (Bourdeau 2004), aiming at protecting the environment for the direct and indirect benefits of mankind and which, of course, led to foster the contemporary ecological crisis (Horrell et al. 2008). Likewise, many Christians since the Reformation have come to disregard the state of our common home (Earth) due to the change in the theological focus placed on the individual salvation of the human soul thus neglecting the biblical importance of natural theology (Hitzhusen 2007). It is in the response to these assumptions and through the possible re-orientation and reintegration of the Christian consciousness of natural theology, lost in the Reformation, that the importance and actuality of this study can be seen.

Ever since Lynn thesis, scientists found a comfortable entry into this multidisciplinary debate on environmental concern (Peifer et al. 2014). Within this context, in seeking to confirm or to refute White's thesis, firstly, the authors of the present study aimed to rediscover the biblical ecological consciousness and the theology of care. For this, we briefly examined the ecological potential of sacred Biblical texts found in both of the Old Testament (Genesis 1:24–30; Genesis 9:8–17; Wisdom Literature) and the New Testament (Romans 8:19–22; Colossians 1:15–20). Indeed, Bible formed over time, and there were Christians before there was a Christian Bible; not a few voices said that what Christians call The Old Testament was already complete in its present form before the birth of Jesus (Barton 2012). However, following St. Augustin's tag 'the new is concealed in the old, the old revealed in the new' which resolves the conflict between the new and the old, it can be argued that both are parts of a single authoritative Christian Bible (Barton 2012).

Secondly, although many theologians and ethicists (Anderson 2005; Barr 1972; Gottlieb 2003; Hiers 1996; Leal Filho et al. 2019) signalled the roots of environmental concerns within the religious sources, Christianity seemed to be linked to environmental degradation. To assess whether this is the case or Christianity–environment relationship should be reconsidered, we analysed environmental attitudes by using survey data for 20 European counties available in the European Values Study–EVS (GESIS 2018). In fact, literature evidences on relevant differences between countries in the influence that religion has in approaching environmental issues (Poortinga et al. 2019; Tjernström and Tietenberg 2008) and, consequently, Morrison et al. (2015) point to a need to consider the religion–environmental issues considering country characteristics. Within this context, the objectives of this study are:

- (i) to investigate the ecological potential of Biblical texts;
- (ii) to find out if Christianity supports pro-environmental attitudes compared to other religions, based on the EVS survey data;
- (iii) to reveal the influence and relationship of demographics and legacy of the former political regime (former communist countries – FCC and old free-market countries–OFMC) on environmental attitudes and religious practices.

The focus on demographics is based on the fact that demographers have always been aware that religion can play a significant role in many ways. One example is the birth rate (Berghammer 2009; Lehrer 2004). Likewise, consideration of FCC is worthy of investigation as the status of religion and religious people has changed in these countries and traditional practices have re-emerged (Hsu et al. 2008).

The next section presents the Study design that highlights the methodological aspects and the theoretical framework of the research. Then, the chapter 'The current state of creation' is devoted to the presentation of the environmental crisis, followed by the section entitled 'Is Christianity really to blame?' where, after the analysis of the ecological potential of the Old and New Testament, the authors investigated attitudes of European citizens towards an environmental ethical life. The Conclusions section summarizes the findings.

Study Design

Regarding the theological analysis of the Biblical texts (Genesis 1:24–30; Genesis 9:8–17; Wisdom Literature; Romans 8:19–22; Colossians 1:15–20), The Holy Bible (Nelson 1982) was utilized in the research. Also, biblical commentaries (WBC, NICOT, ICC, AYBC, BECNT, NIGTC, TNTC, and PNTC) and dictionaries (TDNT and BDAG) were used to gather additional information necessary for the interpretation of these biblical texts.

Data from the EVS, a cross-national survey conducted between 2017 and 2018 were used. The EVS includes the following 20 EU countries: Austria, Bulgaria, Croatia, Czech Republic, Germany, Denmark, Estonia, Spain, Finland, France, Great Britain, Hungary, Italy, Lithuania, Netherlands, Poland, Romania, Sweden, Slovak Republic, and Slovenia. Ten of them are FCC and ten are OFMC. In total, 37,277 respondents from the above-mentioned EU countries answered questions about their environmental attitudes and religion and their characteristics are described in Table 1.

Nine questions related to values, freedom of choice, religion, attendance to religious services, frequency of praying, environmental attitudes and three socio-demographic ones were selected from the EVS (see "Appendix" for the questions and their answer options). The environmental attitude was measured on five items ("Appendix", question 6), in line with accepted views which considered that the attitude was composed of people's beliefs, feelings, and behaviors (actions) (Rosenberg and Hovland 1960). The selection of the questions used for the analysis was based on the following theoretical considerations mentioned below.

Since Descartes, Leibnitz, and Spinoza, other thinkers adopted ethical positions about environmental issues which range from anthropocentrism to biocentrism and the most radical ecocentrism (Bourdeau 2004). The anthropocentric attitude is described as an attitude that centres solely on the man/human. This attitude can be identified as the summation of all the other attitudes (atomistic, hierarchical, dualistic, and dominant) because they all serve a primary scope, the human being. In this view, the human is singularly intrinsic in value and views all other species in creation as a resource that has been created for the good and

Table 1 Sample characteristics.
Source authors' calculations
based on EVS data

Variable	Frequency	Mean	Standard deviation
Gender (% men)	45.1		
Age (years) (M/SD)		51.0	18.3
Religion (%)			
Christians	59.1		
Muslims	1.8		
Jewish	0.1		
Buddhist	0.1		
Hindu	0.2		
Other	1.7		
No religion	36.8		
Country			
Austria*	5.4		
Bulgaria**	4.2		
Croatia**	5.3		
Czech Rep.**	1.9		
Germany*	13.5		
Denmark*	12.2		
Estonia**	1.1		
Spain*	2.2		
Finland*	4.0		
France*	3.1		
Great Britain*	2.8		
Hungary**	3.1		
Italy*	7.8		
Lithuania**	5.6		
Netherlands*	4.0		
Poland**	5.5		
Romania**	7.0		
Sweden*	3.4		
Slovenia**	2.9		
Slovak Rep.**	4.8		
Type of country (% OFMC*)	58.5		

*OFMC (old free market countries); **FCC (former communist countries)

use of humans. In other words, anthropocentrism propagates that the sole value of creation is based and defined on its utilitarian value (Kopnina et al. 2018) for human use and domination. In contrast, ecocentrism which recognizes the intrinsic value of all lifeforms, broadens the moral community (and ethics) from being just about ourselves (Taylor 1983; Washington et al. 2017). However, Washington et al. (2017) disclaim that ecocentrism is misanthropic.

In the '70 s, the paradigm shift on values connected to the environment, caused by technological discoveries (e.g. pesticides, nuclear power) of the twentieth century (Shrader-Frechette 2003), showed the need for a new sub-discipline of philosophy—that of environmental ethics. Environmental ethics posed a challenge to traditional anthropocentrism by questioning, the moral superiority of humans over other species and by investigating rational arguments for assigning intrinsic value to the natural environment and its non-human contents (Brennan and Lo 2015). The intrinsic value of life and living beings is recognized by biocentrism regardless of their value for mankind, while ecocentrism encourages that environmental ethics give consideration to ecosystems, including their non-living natural objects (Bourdeau 2004). Anna Peterson (2000; 2001) believes that Christian stewardship ethics can moderate this dominion and that there is a real possibility of transforming Christianity into a better anthropology and environmental ethics.

Environmental ethics is a part of applied ethics where the moral basis of our responsibility toward the environment is examined (Bourdeau 2004). Ecological sensitivity, care or kinship with nature are some of the new virtues within the environmental ethics universe; however, it is quite difficult to know which of these are genuine virtues (Lenzi 2017). If we follow Norton (1984), environmental ethics encompasses rules of distributive fairness that guides behaviors related to environment protection and also rules of allocation affecting the long-term preservation of the biosphere as a functioning unit.

Based on this definition, the fundamental question authors have asked here is if Christianity supports pro-environmental attitudes compared to other religions, in a context where religion, in general, represents the ethical foundation of our civilization and, thus, an important behavior guide. Moreover, the influence of demographics and of the legacy of the former political regime (FCC and OFMC) on environmental attitudes and on religious practices was investigated. Several research questions (RQ) were elaborated to respond to this challenge (Table 2).

Then, the answers were looked within the investigation of environmental attitudes within the European community of Christians and other religions, on three layers of analysis: *awareness of environmental degradation, willingness to sacrifice, and the potential of individual contribution to environmental welfare*. Hunter and Toney (2005) study who measured the environmental concerns within a Mormon community was a starting point in organizing the conceptual framework. However, Hunter and Toney's (2005) developed three layers of investigations (on the potential of individual contribution, economic progress vs. environmental quality, and willingness to sacrifice), and the awareness of environmental threats was not considered. Another reference work for developing the present frame of analysis was the contribution of Boylan's (2014). Boylan (2014) considers that everyone initiates the decision-making process based on an established worldview. He defines the worldview as personal consciousness embodying one's understanding of the facts and the values in the world. Consequently, within the debate on environmental ethics, taking into consideration the awareness was of utmost relevance. The question from EVS that addressed the awareness of environmental degradation is included in "[Appendix](#)" (question 6.5). Next, for developing an ethical practical viewpoint, we considered an ethical theory-deontology which implies duty-based ethics. Thus, we explain the

Table 2 Research questions and the research objectives to which they respond

Research questions	Research objectives* to which a RQ responds		
	RO.i)	RO.ii)	RO.iii)
RQ1. Do Biblical texts have an ecological potential?	X		
RQ2. Is there a difference among people belonging to different religions regarding the level of agreement with statements on environmental attitudes?; (where the statements on environmental attitudes are listed in "Appendix", questions 6.1–6.5);		X	
RQ3. Is there a difference between Christians and people belonging to other religions regarding the general environmental attitude (calculated as an average of the scores for the five environmental statements included in question 6, "Appendix")?		X	
RQ4. Is there a difference according to gender within the Christian community regarding the level of agreement with environmental statements?			X
RQ5. Is there a correlation between age and the level of agreement with environmental statements within the Christian community?			X
RQ6. Is there a difference between FCC and OFMC regarding the level of agreement with environmental statements?			X
RQ7. Is there a correlation between the frequency of religious practices performed by people and the level of agreement with environmental statements within the Christian community?		X	
RQ8. Is there a correlation between the perception of the freedom of choice and the level of agreement with environmental statements within the Christian community?		X	
RQ9. Is there a difference between FCC and OFMC regarding the frequency of religious practices performed by people?			X
RQ10. Is there a difference between Christians and people belonging to other religions regarding the importance of work, family, friends and acquaintances, leisure time, politics, and religion?		X	
RQ11. Is there a difference between the importance of religion and the importance of work, family, friends and acquaintances, leisure time, and politics within the Christian community?			X

* RO.i) = to investigate the ecological potential of Biblical texts (where RO means research objective);

RO.ii) = to find out if Christianity supports pro-environmental attitudes compared to other religions, based on the EVS survey data;

RO.iii) = to reveal the influence and relationship of demographics and legacy of the former political regime (former communist countries–FCC and old free-market countries–OFMC) on environmental attitudes and religious practices

need for analysing the potential of individual contribution to environmental welfare, as far as it is useless to hold a belief/value and not to practice it. Then, assuming that most of the people make everyday decisions based upon practical criteria (Boylan 2014), the parse on the willingness to sacrifice for the benefit of environment was introduced for the need to look at the manifestation of psychological egoism, as people are prepared to act according to what they perceive to be their personal self-interest (Boylan 2014) and environmental protection can be seen as not providing personal benefits. Following this argumentation, both beliefs on environmental degradation and declared actions that come after those beliefs were incorporated into analysis ("Appendix", question 6), and all these can be a proof for an environmental ethical life.

Theoretical-Biblical Review

The Current State of Creation—an Environmental Crisis. Is Christianity Really to Blame?

Environmental issues have gained a permanent role within political, social, and economic debates and theologians have begun to articulate positions on these (Hunter and Toney 2005). The reassessment of the position of religion regarding the moral dimension in the environmental crisis was called by Williams et al. (1998) a 'new genesis'. The environmental crisis must not and cannot be viewed only from a single perspective, because everything, according to the principles of ecology, is interrelated. This interrelatedness affects not only the natural environment and its ecosystems but also human society and its structures. In the context of this interdependence, the hereinafter paragraphs and sub-sections will address RQ1.

The following multi-layered facets of the environmental crisis, some of them referred below, shall be presented in light of the seven degradations of creation presented in the 'An Evangelical Declaration on the Care of Creation' which portrays the present environmental crisis in terms of human degradation, land degradation, species extinction, deforestation, water contamination, global toxification, and the alteration of air quality (Robert J Berry 2000). For example, an estimated 812 million people are undernourished throughout the world (World Health Organization 2018). In other words, approximately one out every nine people in the world suffers from the grim reality of hunger. There is a clear lack of food quantity but also of food quality (Bouma-Prediger 2010; Mylona et al. 2018). In the face of this reality, increased food production prospects do not look too promising (as per Alvaro 2019). The dramatic increase in species extinction rates which has thrust us in the midst of a mass biotic extinction has been identified in the most part with human activity. John Tuxill (1998) makes this point clear when he states that 'unlike the dinosaurs, however, we are not simply the contemporaries of mass extinction—we are the reason for it'. Currently, it is estimated that 25% of Earth's land is degraded, and if agriculture is targeted, the global cost of land degradation is around 500 billion dollars/year (Pacheco et al. 2018). In light of the evidence presented above, we can just agree with Nisbet (1991) who simply concludes that the damage of Earth will become

worse, and this is because of the past and present behavior of humanity and, exactly that is why responsibility should be regarded as a backward-looking responsibility (Fragnière 2014; Zellentín et al. 2012).

As pointed out in the Introduction, the relationship between religion and environment is mediated by social, political, and cultural factors (Rogers and Konieczny 2018) that often testify on the variability of the relation between religion and the environment. Since we are a product of our setting and the particular values of the community we are living in, it is within this concrete experience which we must understand the message of Scripture. Therefore, as shown by Hope and Jones (2014), Christian values towards the environment are diverse. Different traditions bring to light diverse aspects of the creation narratives. One example is the already mentioned White's thesis, grounded on his interpretation that the Bible talks about the supremacy over nature (Genesis 1:26–28). However, White offered no evidence about the behaviors of Christians in relation to the environment. Other traditions, among liberal and Protestant denominations, teach divinely sanctioned stewardship (e.g., Genesis 2:7–15) where humans are put in Eden to care for and till the earth (Boyd 1999; Greeley 1993). In a study published in (1993), Greeley investigated the relationship between religion and concern for the environment in Tulsa, Oklahoma (USA). Only one variable was used, namely willingness to spend money on the environment. He found that Christian fundamentalists were less willing to pay, and Catholics more willing to financially support the environment. This suggests that it is not whether a person is Christian, but rather what type of Christian they are, that influences their behavior towards nature (Greeley 1993). A study of Leiserowitz (2007) found that Evangelical Christians who had a high level of religious observance were more likely to be negative of climate change. The literature points toward a clear link between Protestantism on the one hand and the economic growth on the other hand. It is an economic growth that implies that the goal of humanity moved from a friendly relationship with nature to human physic comfort, valorisation of the individual human self, while nature became a mere collection of resources for human use (Northcott 1999). If we agree that this process of modernization brings a succession of environmental damages (Northcott 1999), it is clear that Protestantism has indirectly contributed to environmental degradation (Jochemsen 2018). All these prove that the way in which Christians have adopted value systems of the culture in which they lived is also relevant. In other words, to use the language of St. Paul, 'the whole creation groans and labours with birth pangs' (Romans 8:22). This reality must deter our thoughts from our optimist view of the state of creation to one that is more realistic. Only when viewing creation in its realistic integrity can we respond to the naturally prompted questions brought forth by the conclusion presented above: How did we get into this ecological crisis? How do we explain the reason why we have overexploited our home planet, Earth? To these questions, we now turn.

One of the most important essays written in the field of ecological theology was first delivered as a lecture by the once unheralded medieval historian Lynn White Jr. in 1966. The impact of this lecture, 'The Historical Roots of Our Ecologic Crisis,' was immense and is still felt today. White's essay, for the proponents of the ecological movement, obtained an authoritative like aura and has been reprinted numerous times and cited whenever environmental and theological issues were discussed. In

other words, it became as if overnight a cultural and theological event with colossal magnitude. Lynn White begins his famous lecture by clarifying the presuppositions that underlie modern science and technology. These forces, he states, are rooted integrally in Occidental/Western cultural values, which are inseparable and indefensible apart from the Christian tradition. White maintained that the exploitative attitudes toward nature originated not in the Scientific Revolution nor in the Industrial Revolution but during the Middle Ages, and were supported by the dominant anthropocentric theology of the time. The author also argues that even though we have entered into a post-Christian age, an era of self-conscious secularism, the theologically informed attitudes remain and continue to impact our culture. In White's (1967) view, to confront the impending ecological crisis efficiently, we are called to rethink our religious foundations of the man-nature relationship expressed through modern science and technology. Thus, he concludes his lecture by turning to the task of proposing a theological revision of the present Christian theology and attitude toward creation.

In White's thesis, in addition to everything else he may have presupposed, the author was affirming the legitimation and necessity of thinking theologically about loving both humanity and nature, from which emerged a paradigm shift. In other words, the primary legacy of the Lynn White Thesis was 'the disclosure of a new paradigm for theological thought about nature, extending our understanding of the love of God to nature' (Santmire 2000). In a historic sense, White's thesis is open to much scrutiny and criticism from a number of points. For example, the idea that Christianity alone has caused the environmental crisis is very suspicious, especially in the face of abundant evidence that states otherwise, and an oversimplification (Nash 1991). Also, most of the pervasive policies and practices that have exploited nature have occurred in the modern era, when society at large has been secularized in light of the Enlightenment and the developing Industrialism, rejecting thus the moral ethos of the Christian tradition (Santmire 2000). Yet, that which most offends White's critics are not necessarily the questionable historical descriptions presented in his lecture, but his ethical resolution and prescriptions (Derr 1975). Should we now save the whale and forget about the starving children?

Next, in this section, we assess to the claims of the Lynn White thesis, which identified Christianity as the leading culprit of the present ecological crisis. To do this, it is necessary to analyse the sacred Biblical texts found in both of the Old Testament (Genesis 1:24–30; Genesis 9:8–17; Wisdom Literature) and New Testament (Romans 8:19–22; Colossians 1:15–20) which display ecological potential. This biblical analysis seeks to offer not only an assessment of Lynn White Thesis, but the rediscovery of a biblical ecological consciousness and the theology of care.

The Ecological Potential of the Old Testament

The Old Testament, in the modern understanding, exemplified in Lynn White's thesis, is seen as the source of the ambiguous anthropocentric empowering of the human creature over the rest of creation. This view could be seen as false as we shall come to understand in the following analysis of the most important sacred texts

present in the Old Testament which portray and are characterized by enormous ecological potential, and they are the creation narrative of Genesis 1:24–30, followed by the rainbow covenant of Genesis 9:8–17 and ending with the Wisdom literature (The book of Proverbs, the book of Ecclesiastes, and the book of Job make up the Old Testament wisdom literature).

The Old Testament passages are the foundation of the Judaic-Christian perspective on ecology. This perspective is not necessarily to be viewed as the source which empowers the anthropocentric domination and abuse of the earthly creation but can be seen as an ecological gem that offers intrinsic value to the natural world. This is powerfully expressed in the divine goodness of the creation narratives of Genesis, where the apex of the divine creativity is not limited to the anthropocentric creation of man in the likeness and image of God but is identified as the Sabbath rest. For it is the Sabbath that manifests the world's identity as creation, sanctifies the creation, and blesses creation (Moltmann 1993). Man is certainly/clearly distinct from the rest of creation through his likeness and image of God and nothing can take away this dignity. But man's special role in creation is not necessarily that of a tyrant and evil ruler but of earth steward as tenant, for God, expressed through the divine command 'to subdue' and 'to have dominion'. Due to the fall, this paradisiac communion with creation and its Creator were obscured by sin, and man's once noble calling became redefined anthropocentrically. In this context, God establishes in Genesis 9:8–17, a cosmic covenant proclaiming shalom, the sabbatical rest, as the divine will for the future of all creation. Thus, the future stability of the cosmos is presented as not only reflecting the once harmonious state at the beginning of creation but also portraying the interest and will of the Divine Creator for His creation. Through time, many papers have emerged to read the Psalms from the unique perspective of the Earth (Habel 2001; Hunt and Marlow 2019). For example, the Earth is main actor in Psalm 104 and here, God is present in Earth as a spirit providing life, blessing, and fertility (Habel 2001). Psalm 104 is a solo hymn of praise, offered in the course of temple worship. It contains reflections on God's mighty power and loving care, to which the poet sees the world bearing witness around him. Nature and society are subordinated to the belief in a transcendent, moral God of order. But the psalmist can combine God's divine transcendence and separateness from the natural world with God's direct involvement in its origin and processes and calls fellow believers to devotion and doubtless to further inquiry.

In reflection of the creation around Him, the psalmists identify God as the king of heaven, the creator of the Earth, who by his mighty power pushed back the waters of chaos and put the waters to positive use (Psalm 104:1–13). He is the God that provides for both human and animal needs (Psalm 104:14–23), offering sustenance for humans and space for animals, and creating night and day shifts for the acquisition of food. Thus, every creature, be it on earth or in the sea is dependent on God (vs. 24–30). As L.C. Allen (1983) states this Psalm vitalizes the ecological awareness more than any other psalm about Creation and it imprints a theological orientation in terms of divine care.

Psalm 148 in a similar tone is a hymn of praise, which features rhetorical calls to the elements of creation to praise Yahweh their God for his praiseworthiness. What is interesting to note is that the call to praise is not reserved to only humans but all

of creation. This psalm describes the paradigm of how non-human creation, starting with the heavenly hosts and ending with the flying fowls, glorify God in their own right apart from the human creation. Creation's praise of God becomes the model of praise for the human world to emulate. The praise of God should not be limited to the non-human creation but must include the human sphere into the equation. Thus, there exists an important element of interconnectedness between the human and non-human sphere of creation in their common doxology toward their one creator as identified in this Psalm.

Finally, it can be added that the wisdom literature, in its attempt to understand and explain creation as it is identifiable in the natural world, offers its reader an ecological richness rarely seen elsewhere. Through the diverse uses of nature imagery, the authors of the wisdom books present three distinct ecological principals that describe the God-Human-Non-human drama, and they are nature's complex inter-related processes and the interaction of human beings with those processes and with each other and their interaction with the Divine; the well-being and flourishing of all human and non-human life in its richness and diversity; and the sustaining life—the picture of God as creator as well and sustainer (Dell 2010).

The Ecological Potential of the New Testament

To understand the Christian ecological perspective in its integrity, the focus must be placed on the New Testament passages which contain ecological potential: the Pauline corpus of Romans (8:19–22) and Colossians (1:15–20) as well as the Synoptic Gospels. We shall see, as posited by Horrell (2015), the New Testament contributes to a biblical eco-theology and ethics, which through reconciliation that is to be achieved suggests a basic pattern of action.

The New Testament passages exemplified in the Pauline corpus, which stands as one of the earliest writings available of first-century Christianity, display the depth and the richness of the Christian ecological consciousness. Though the passages which can be commented and analysed are limited, it is visible that the Pauline concepts of creation are rooted within the larger context of the Old Testament creation narrative. For example, the Apostle Paul in Romans 8 identifies the non-human creation as subjected to vanity/futility on account of man's sinfulness and groans. This groaning is not to be misunderstood as simply a reaction to pain because of the consequence of Adam's sin but as divine restlessness in anticipation of the future restoration and glory. For the Apostle Paul, the future salvation, anticipated by the elect, was envisioned as affecting and engulfing the entire cosmos and reversing and transcending the consequences of the fall (Schreiner 1998). Thus, creation is ultimately bound to the fate of human creation. This theological concept is continued and developed even further in the letter to the Colossians through the hymn in praise of the Cosmic Christ. In this hymn, the Apostle Paul redefines the Jewish doctrine of monotheism and election in light of the revelation of Christ and his cross. For Paul, it is the Cosmic Christ's death and resurrection that represents, quite literally, the key to resolving the disharmonies of nature and the inhumanities of humankind, for encapsulated in the cross

of Christ is the character of God's creation and God's concern for the universe in its fullest expression (Dunn 1996). Through His cosmic act of reconciliation and peace-making, Christ restores the harmony of the original creation, and brings into renewed oneness and wholeness 'all things'. Thus, Christ is identified magnificently by the Apostle Paul as the means, logic and goal of the created cosmos. It is interesting to note that this cosmic redemptive activity of Christ is implied to be worked out through the Church which is viewed as the focus and means of reconciliation.

Besides the Pauline corpus, the Synoptic Gospels are yet another important writing in which an ecological echo can be heard. Jesus, as noted in the Gospels, had endorsed the creation theology of the Hebrew Bible, which centred on two essential beliefs. Firstly, that God created all things as seen in Matthew 19:9 and Mark 10:6; and secondly, that God cared for his whole creation as the Lord of heaven and earth, presented in Luke 10:21 and Matthew 11:25. It is important to note that within key points of Jesus' theology, creational theology explicitly appears (Bauckham 2010). For example, in Jesus' command to love enemies in Matthew 5:45, the notions of imitating God, the God who is nothing less than the source of all blessings of the natural world, the God who generously and mercifully pours his blessings on all people and everything He created are used. Likewise, Jesus, in both the passages of Matthew 10:29–31 and Luke 12:6–7 reassures His disciples of God's providential care, by asserting God's providential embrace of even the sparrows which were valued so cheaply. Thus, Jesus' words in these passages reflect the reality and view of the Hebrew Bible in which God's caring responsibility embraces not only humans but each and every living creature that he has made. Again, in a similar teaching/lesson about God's providence, Jesus uses the argument from the lesser (wildflowers and birds) to the greater (humans) in Matthew 6:26, 28–30 and Luke 12:24, 27–28 arguing that humans can and must trust in God's provision because they too are members of the community of God's creation for whom he generously provides, though eminent members. It must be noted that the premise of Jesus' argument can only be had if the hearers themselves recognized the reality of God's care for the birds and flowers. Lastly, Jesus' parable of growth (Mark 4:3–8, 26–32 and parallels) would have been understood in terms of the Hebrew Bible creation theology. Within this theology, the growth of plants was not to be identified with an autonomous natural process but with the blessing of God. It is only through the blessing of God that his creation grows, and is fruitful. Thus, this parable compares the God-given growth in the creation and the God-given growth of the Kingdom of God.

It is important to outline that Jesus was not a modern-day ecologist, as Echlin (1999) clearly understands and properly states [*'What emerges from the gospels is a villager within the Jewish tradition of holistic compassion and sustainable organic husbandry with people and animals on the land, working with and not against the ways of nature'* (Echlin 1999)]. This is most clearly pictured in the messianic kingdom of peace, where the broken relationship between humans and other creatures is restored (Mark 1:13) and the final elimination of all forces of destruction is realized (Mark 4:35–41). The glimpse of paradisiacal harmony between humans and non-human creation shows that the Gospels take seriously the Messiah's task of healing the enmity between humans and the rest of God's creation.

As a conclusion for this section dedicated to biblical review, the ecological potential of the Old Testament texts is exemplified even further through their description of the essential goodness of God's intention for Creation and His ever-present interest in the divine creativity portrayed through His sustaining work of the well-being and flourishing of creation in all its richness and diversity. But for a holistic ecological interpretation of the Old Testament, it is essential to understand that the goal and completion of the doctrine of creation is the doctrine of the Sabbath. If viewed in this sense, the apex of the divine creativity becomes redefined and no longer becomes limited anthropocentrically to the creation of man but is unleashed and immersed in the sabbatical rest and shalom. It is through this understanding of the natural world as creation in the sabbatical rest and God as divine creator and sustainer that eliminates any anthropocentric attitudes or interpretations and offers a rich ecological ethic in which man is called to fulfil his special role as earth steward, for God. In what pertains to the New Testament analysis of the Pauline corpus, more specifically Romans 8:19–22 and Colossians 1:15–20, we have observed that the concepts of creation though thoroughly rooted within the larger context of the Old Testament creation narrative, are interpreted in light of the revelation of the cosmic Christ and his cross. This distinctly new interpretation of creation is based on the Apostle Paul's understanding and importance given to Christ's cosmic act of reconciliation and, realized through His death and resurrection. We have observed that for Paul, the cross of Christ encapsulates the character of God's creation and God's concern for the universe in its fullest expression. Likewise, it is through His death and resurrection that the disharmonies of nature and the inhumanities of humankind are resolved, bringing into renewed oneness and wholeness all things. In other words, for Paul, the cosmic Christ becomes the means, logic and goal of the created cosmos. It is in this context that the church, as the body imagery implies, is not only called to partake in the cosmic redemptive activity of Christ but surprisingly is identified as the focus and means of the reconciliation.

Based on the above, we could agree with Berry (2006) who concluded that Bible is not a book for environmental destruction but a work on the stewardship of creation or with Horrell et al. (2008) argumentation who contend that the biblical texts offer relevant sources for environmental ethics and those anti-environmental theories are based on a distorted interpretation, rather than the biblical texts.

Data: Evidence for an Environmental Ethical Lives—Investigation on Attitudes

Christianity, like any other religion, includes beliefs, practices, and institutions that cross physical borders and time (Haluza-DeLay 2014). From a practical perspective, a research focus on environmental attitudes within a religious community can reveal people's actions and perceptions when facing environmental disturbances and coping with its impacts (Gerten and Bergmann 2011). For example, a study by Minton et al. (2015) testimonies that consumers from the USA and South Korea with higher religious beliefs were more likely to participate in sustainable behaviors such as recycling and purchasing organic foods.

Regarding RQ2, Kruskal–Wallis H test showed that there was at least one statistically significant difference in the level of agreement with each of the statements that assess the environmental attitude between different religious groups (Table 3).

Among the six religious orientations tested, Hindus show the highest willingness to pay and Christians are in the middle, on the fourth place. This finding is in line with that of Haller and Hadler (2008) who contended that Catholics, Protestants, and Christians Orthodox are less willing to make sacrifices for the good of the environment. In a study of Dekker et al. (1997) no correlation was found between belonging to Christianity and environmental concern. The highest difficulty in taking action to protect the environment is perceived by Muslims, while the Christians are on the third place. The lowest importance of environmental protection is perceived by Muslims and the Christians rank in the fourth place. The lowest utility of individual action when it is not accompanied by the action of the others is perceived by the Muslims, followed by Christians. The strongest perception that the claims about environmental threats are exaggerated is held by Muslims, while Christians are on the third place (Table 3). Generally, these results offered a moderate ecological account of the Christian consciousness within the European context. This moderate environmental account of the Christians does not in itself prove that Christianity has not permitted or even promoted nature exploitation which, in turn, could be interpreted that Christianity may not have lived up to the biblical testimony. However, the objective of the present research was not to investigate if Christians live their lives following or not the Biblical precepts, but if they support pro-environmental beliefs and actions compared to other religions. It must not be ignored that this investigation was based on self-reported perceptions and actions of the interviewed people. Many times, there is a gap between what people declare they think and do and what they actually do (Vermeir and Verbeke 2006).

An aggregated indicator was calculated as an average value of the five environmental indicators was calculated (with the first one reversed coded), for RQ3, Man Whitney U test applied between Christian and each of the other religious orientations showed there was a statistically significant difference between Christians and Muslims with Christians holding stronger pro-environmental beliefs; also a statistically significant difference was found between Christians and Buddhists, people of other religion, and people with no religion, with Christians having weaker pro-environmental beliefs.

Regarding RQ4, Man Whitney U test indicated a statistically significant difference between women and men in all cases. Men were more willing to pay part of their income for environmental protection compared to women. For the rest of the items that characterize their environmental attitude, women held stronger pro-environmental attitudes.

In relation to RQ5, no correlations were observed between the age and the level of agreement with the statements of the environmental attitude (except for a very weak correlation that showed that the older the age was, the stronger was the agreement with the idea that it was too difficult for someone like the respondent to do much about the environment).

Man Whitney U test indicated, for RQ6, a statistically significant difference between FCC and OFMC regarding the level of agreement with all statements

Table 3 Results of the Kruskal Wallis test for the difference among people belonging to different religions regarding their environmental attitude. *Source* authors' calculations based on EVS data

EVS questionnaire items that reflect the environmental attitude*	Religion**	N	Mean rank
WTP enviro	Christians	20,354	17,046.75
	Muslims	565	17,426.71
	Jewish	27	15,490.83
	Buddhist	29	10,342.33
	Hindu	68	19,346.18
	Other religion	572	17,969.81
	No religion	12,561	17,107.60
	Total	34,176	
Difficulty to do smth for enviro	Christians	20,526	16,812.84
	Muslims	583	14,219.07
	Jewish	28	18,140.50
	Buddhist	29	23,050.24
	Hindu	71	14,727.54
	Other religion	575	17,990.51
	No religion	12,629	17,986.52
	Total	34,441	
Other more important than enviro	Christians	20,533	16,926.74
	Muslims	585	15,155.44
	Jewish	28	16,214.95
	Buddhist	29	24,676.22
	Hindu	70	15,434.56
	Other religion	578	17,616.33
	No religion	12,668	17,838.39
	Total	34,491	
No point acting alone for enviro	Christians	20,537	17,025.26
	Muslims	583	14,384.64
	Jewish	28	17,555.95
	Buddhist	29	21,193.31
	Hindu	70	17,222.41
	Other religion	577	19,369.99
	No religion	12,668	17,630.57
	Total	34,492	
Enviro claims exaggerated	Christians	20,025	16,494.41
	Muslims	523	15,646.48
	Jewish	28	16,176.54
	Buddhist	29	22,271.05
	Hindu	69	16,601.67
	Other religion	560	18,050.33
	No religion	12,414	17,341.27
	Total	33,648	

Table 3 (continued)Test statistics^{a,b}

	WTP enviro	Difficulty to do smth for enviro	Other more important than enviro	No point acting alone for enviro	Enviro claims exaggerated
Chi-square	25.202	195.365	119.427	117.197	90.511
Df	6	6	6	6	6
Asymp. sig	.000	.000	.000	.000	.000

^a Kruskal Wallis Test^b Grouping Variable: Religion

* WTP Enviro=I would give part of my income if I were certain that the money would be used to prevent environmental pollution; Difficulty to Do Smth for Enviro=It is just too difficult for someone like me to do much about the environment; Other More Important than Enviro=There are more important things to do in life than protect the environment; No Point Acting Alone for Enviro=There is no point in doing what I can for the environment unless others do the same; Enviro Claims Exaggerated=Many of the claims about environmental threats are exaggerated

that assess the environmental attitude. In all cases, citizens of FCC display weaker environmental attitudes. One explanation can be found in Chaisty and Whitefield's (2015) contribution who explained the gap in environmental care between West and East based on two factors: one is the evaluation of environmental issues through a different ideological lens carried over from the Communist period, and two, the lack of a viable connection between environmental issues and the economic and political context. One factor that contributed to breaking this connection was the restrictive regime over private property. The importance in the social and economic life of private property over land and other natural resources was low under the communist regime and private property existence was allowed at very small scale. Most of the property was public property. This reduced people's feeling of responsibility related to the impact of their actions on the natural environment that belonged to someone else (the state).

Related to RQ7, no correlation was found. The finding that there is no correlation between the frequency of religious practices (considered as an indicator of religiosity level) and concern for the environment (reflected by the environmental attitude investigated in question 6, "Appendix") does not support Lynn's thesis. Similarly, in a comparative study on 22 countries, Hagevi (2014) found that religious activity (e.g. church attendance) does not influence environmental opinion. He also revealed that the hypothesis of no correlation between religion and environmental concern was backed up by his study.

For RQ8, no correlation was found within the Christian community between the perception of the freedom of choice and the level of agreement with any of the statements that describe the environmental attitude. In general, religions establish patterns of judgement and conduct, and, therefore, they limit freedom of choice (for instance, by defining what is considered acceptable behavior, what is important and what is not). In fact, Minkov et al (2020), citing Welzel (2013), contrast freedom

of choice to obedience and they point out religion as the most notable authority to which people obey. The fact that the perceived level of freedom is not correlated with environmental attitude (reflected by the agreement with the statements that assess the environmental attitude) shows that offering people more freedom of choice or highlighting the lack of freedom cannot influence their environmental attitude.

For RQ9, an aggregated indicator showing the frequency of performing religious practices was created by calculating the average score between the frequencies of attending other religious events (question 4, "Appendix") and of praying (question 5, "Appendix"). Man Whitney U test revealed a statistically significant difference between the two types of countries, with FCC having a higher frequency of performing religious practices.

As expected, for RQ10, Man Whitney U test indicated a statistically significant difference between people from OFMC and those from FCC. People from the first group believe they have higher freedom of choice in life compared to people from the latter group.

Wilcoxon Signed Ranks Test indicated for RQ11 that the importance of religion differs significantly from the importance of work, family, friends, leisure, and politics, with a higher importance of work, family, friends, and leisure, compared to religion and with religion being more important than politics. From the highest to the lowest importance, the various aspects of their life were ranked by the Christians as follows: family (1.1 points), work, (1.6), friends (1.6), leisure (1.7), religion (2.3), and politics (2.6).

Summing up, while the proof of an environmental ethical life is undeniable mirrored by above discussed theological texts, the results support the idea that much more should be done in terms of pro-environmental attitude within European Christian community, as long as their concern for environment is average compared to other religions. As a limitation of the study, the authors acknowledge that the number of environmental variables is small, but this is because of their limited availability in ESV. Moreover, the comparison of religions must be judged in the context offered by EVS where 59% of the sample is represented by Christians and less than 4% by other religions. Also, EVS data are based on self-reported evaluations which encompasses the risk of differences between the real attitude and the declared one due to social desirability bias (Grimm 2010) and to the attitude-intention gap (Vermeir and Verbeke 2006).

Conclusions

No society can function without a framework of values. Whenever we make references to the Convention on International Trade in Endangered Species of Wild Fauna and Flora or choose between green and fossil energy, between free-from or with palm oil products, we are expressing what really matters to us and what we regard with reverence (Gottlieb 2006). In a world where almost 85% of people claim to follow the precepts of some religion (Zagonari 2020), we strongly believe that religion will continue to influence attitudes (i.e., beliefs, feelings, and actions),

including those towards the environment. That is why religion, in general, can serve as a reminder to assess one's behavior towards the environment and it can guide us toward collective change.

Along the time, many have claimed that Christianity erodes people's sense of responsibility (as per Marx 1978 'Religion is the opium of the people'), including the environmental one. The present contribution tries to show that the Christian cosmology still plays a significant role in the debate of the relationship between environmental ethics and Christian religion, a relation mostly shaped by Lynn White Jr.'s thesis. The Christian environmental theologies needed to offer some responses to White's indictment. It is clear that White's thesis forced for imagining alternatives and exerted pressure for change, and consequently, from that moment, the Christianity environmental task was clear, more precisely, to recover a worldview centred on nature's value rather than human transcendence (Jenkins 2009). One example is environmental justice which is one of the most significant Christian contributions to public environmental deliberation in the United States (Jenkins 2009), where the creation's integrity and human dignity are mutually constitutive (Bullard 2008). Environmental ethics encompasses a broad value-based perspective on issues at the intersection between science and society. Heterogeneous cultures, religions, and motivations impact environmental behaviors, and no matter the justification, the protection of the environment is a human responsibility (Turgeon 2018).

Observations within the study show that the Old Testament forms the foundation of the Judaic-Christian perspective of land and ultimately of ecology. This perspective is not necessarily to be viewed as the source which empowers the anthropocentric attitude of domination and abuse of creation, as some propose, but could be seen as an ecological gem which offers intrinsic value to the natural world that can be readily excavated from the creation narrative of Genesis 1:24–30, the rainbow covenant of Genesis 9:8–17 and throughout the Wisdom literature.

The analyses of the EVS data indicated that the former political regime had a significant impact on the level of environmental attitude because people from the FCC have weaker pro-environmental attitude compared to those from the OFMC. This situation makes FCC more vulnerable to environmental degradation because they will not benefit from the protections of their citizens, who will not take action against existing or potential environmental threats (e.g., buy an electric vehicle to reduce CO₂ emissions, pay to prevent environmental pollution). Consequently, more efforts must be dedicated to building an environmental attitude in FCC through education-information programs that should target all age groups (as analyses did not reveal strong or medium correlations between age and environmental attitude). The political regime influences the frequency of religious practices which are more frequent in FCC. This behavior can be used as a support for strengthening the environmental attitude. Since people attend religious services more often in FCC, these are the occasions when the relevance of environmentally ethical life can be highlighted.

Results also showed that in response to the research objective "to find out if Christianity supports pro-environmental attitudes compared to other religions, based on the EVS survey data", the Christian religion did not provide stronger support for pro-environmental attitude compared to most tested religious orientations. However, Christianity is a major social actor with a considerable reach (Haluza-DeLay 2014),

having, thus, the potential to co-exists with and enhance the interest in and respect for nature. Within this frame of discussion, it can be inferred that Christianity is able to become a significant player for a better-preserved environment.

Overall, the present contribution testifies that the search for a common language for environmental stewardship is a difficult task and fundamental to the way in which we act in the world (Palmer 2006). Whatever we refer to ecocentrism or to anthropocentrism, there remains a truth—we, the humans, are the moral agents with the responsibility to defend the rights of other inhabitants of the Earth, as Nash (1989) nicely noted. Environmental ethics is the result of a reaction to the ecological crisis which we are witnessing, and the traditional way of how human beings relate to nature can be the subject of ethical questions, even by using the distinction between good and evil and qualifying the facts as good or bad (Stoenescu 2016). Thus, why not then consider ecology as an ethical science in the sense that it realizes the transition from a scientific description to a moral prescription (Rolston 2010)? Within this frame of discussion, despite the fact that Christian respondents showed an average level of agreement with environmental statements we argue that Christianity, as a major social actor with a considerable reach (Haluza-DeLay 2014), co-exists with and can enhance the interest in and respect for nature, thus being able to become a significant player towards a better-preserved environment.

Appendix

Questions used in this study selected from the European Values Study (GESIS 2018).

1. Please say, for each of the following, how important it is in your life.

		Very important	Quite important	Not important	Not at all important
v1	Work	1	2	3	4
v2	Family	1	2	3	4
v3	Friends and acquaintances	1	2	3	4
v4	Leisure time	1	2	3	4
v5	Politics	1	2	3	4
v6	Religion	1	2	3	4

2. Some people feel they have completely free choice and control over their lives, and other people feel that what they do has no real effect on what happens to them. Please use the scale to indicate how much freedom of choice and control you feel you have over the way your life turns out?

None at all										A great deal
1	2	3	4	5	6	7	8	9	10	

3. To which religious denomination do you belong to?

Christian	Muslim	Jewish	Buddhist	Hindu	Other	No religion
1	2	3	4	5	6	7

4. Apart from weddings, funerals and christenings, about how often do you attend religious services these days?

1—more than once week; 2—once a week; 3—once a month; 4—only on specific holy days; 5—once a year; 6—less often; 7—never, practically never.

5. How often do you pray outside of religious services? Would you say

1—every day; 2—more than once a week; 3—once a week; 4—at least once a month; 5—several times a year; 6—less often; 7—never.

6. How much do you agree or disagree with each of these statements?

	Agree strongly	Agree	Neither agree nor disagree	Disagree	Disagree strongly*
1. I would give part of my income if I were certain that the money would be used to prevent environmental pollution	5**	4	3	2	1
2. It is just too difficult for someone like me to do much about the environment	1	2	3	4	5
3. There are more important things to do in life than protect the environment	1	2	3	4	5
4. There is no point in doing what I can for the environment unless others do the same	1	2	3	4	5
5. Many of the claims about environmental threats are exaggerated	1	2	3	4	5

*It was considered that the strongest pro-environmental attitude was at the right end of the scale (5 points) for all six statements for the codes included in this table.

**Reversed coding compared to the original version from the EVS. The reverse coding was used in the analyses of this study.

7. Sex of respondent

- 1—male.
- 2—female.

8. Age of respondent

9. Country where the interview is taking place:

References

- Allen, L. C. (1983). *Word biblical commentary: Psalms 101–150* (Vol. 44). Dallas, USA: Word Books.
- Alvaro, C. (2019). Lab-grown meat and veganism: A virtue-oriented perspective. *Journal of Agricultural and Environmental Ethics*, 32(1), 127–141.
- Anderson, B. W. (2005). *From creation to new creation: Old testament perspectives*. Eugene: Wipf and Stock Publishers.
- Barr, J. (1972). Man and nature—the ecological controversy and the old testament. *Bulletin of the John Rylands Library*, 55(1), 9–32.
- Barton, J. (2012). *People of the Book: The authority of the Bible in Christianity*. London, UK: SPCK.
- Bauckham, R. (2010). *Bible and ecology: Rediscovering the community of creation*. TX: Baylor University Press Waco.
- Beck, R., & Miller, C. D. (2000). Religiosity and agency and communion: Their relationship to religious judgmentalism. *The Journal of psychology*, 134(3), 315–324.
- Berghammer, C. (2009). Religious socialisation and fertility: Transition to third birth in the Netherlands. *European Journal of Population/Revue Européenne de Démographie*, 25(3), 297.
- Berry, R. J. (2000). *The care of creation: Focusing concern and action*. Downers Grove: InterVarsity.
- Berry, R. J. (2006). *Environmental stewardship* (Vol. 56). London, UK: T&T Clark.
- Bouma-Prediger, S. (2010). *For the beauty of the earth: A Christian vision for creation care*. Ada, Michigan: Baker Academic.
- Bourdeau, P. (2004). The man—nature relationship and environmental ethics. *Journal of environmental radioactivity*, 72(1–2), 9–15.
- Boyd, H. H. (1999). Christianity and the environment in the American public. *Journal for the Scientific Study of Religion*, 32(1), 36–44.
- Boylan, M. (2014). *Environmental ethics*. Hoboken: John Wiley & Sons.
- Brennan, A., & Lo, Y.-S. (2015). Environmental ethics. In *stanford encyclopedia of philosophy*. Stanford, USA: Metaphysics Research Lab/Center for the Study of Language and Information/ Stanford University.
- Bullard, R. D. (2008). *Dumping in Dixie: Race, class, and environmental quality*. Avalon Publishing: Westview Press.
- Chaisty, P., & Whitefield, S. (2015). Attitudes towards the environment: are post-Communist societies (still) different? *Environmental Politics*, 24(4), 598–616.
- Chuvieco, E., Burgui, M., & Gallego-Álvarez, I. (2016). Impacts of religious beliefs on environmental indicators: Is Christianity more aggressive than other religions? *Worldviews: Global religions. Culture, and Ecology*, 20(3), 251–271.
- Cohen, A. B. (2009). Many forms of culture. *American Psychologist*, 64(3), 194.
- Dekker, P., Ester, P., & Nas, M. (1997). Religion, culture and environmental concern: An empirical cross-national analysis. *Social compass*, 44(3), 443–458.
- Dell, K. J. (2010). The significance of the wisdom tradition in the ecological debate. In *Ecological hermeneutics: Biblical, historical, and theological perspectives*. London, UK: T&T Clark.
- Derr, T. S. (1975). Religion's responsibility for the ecological crisis: An argument run amok. *Worldview*, 18(1), 39–45.
- Diener, E., Tay, L., & Myers, D. G. (2011). The religion paradox: If religion makes people happy, why are so many dropping out? *Journal of Personality and Social Psychology*, 101(6), 1278.
- Dunn, J. D. (1996). *The epistles to the colossians and to Philemon: A commentary on the Greek text* (Vol. 12). Grand Rapids, Michigan: Wm. B. Eerdmans Publishing.

- Echlin, E. P. (1999). *Earth spirituality: Jesus at the centre*. John Hunt: A. James.
- Felix, R., Hinsch, C., Rauschnabel, P. A., & Schlegelmilch, B. B. (2018). Religiosity and environmental concern: A multilevel and multi-country analysis of the role of life satisfaction and indulgence. *Journal of Business Research*, *91*, 304–312.
- Fragnière, A. (2014). Climate change, neutrality and the harm principle. *Ethical Perspectives*, *21*(1), 79–99.
- Gerten, D., & Bergmann, S. (2011). *Religion in environmental and climate change: Suffering, values, lifestyles*. London: Bloomsbury Publishing.
- GESIS. (2018). European values study-master questionnaire, Final alert version-05. <https://dbk.gesis.org/dbksearch/sdesc2.asp?no=7500>
- Grimm, P. (2010). Social Desirability Bias. *Wiley international encyclopedia of marketing, marketing research*. New York, USA: Wiley. <https://doi.org/10.1002/9781444316568.wiem02057>.
- Gottlieb, R. S. (2003). *This sacred earth: religion, nature, environment*. Abingdon: Routledge.
- Gottlieb, R. S. (2006). *The Oxford handbook of religion and ecology*. Oxford: OUP.
- Greeley, A. (1993). Religion and attitudes toward the environment. *Journal for the Scientific Study of Religion*, *32*(1), 19–28.
- Habel, N. C. (2001). *Earth story in the Psalms and the Prophets* (Vol. 4). UK/USA: Sheffield Academic Press/The Pilgrim Press.
- Hagevi, M. (2014). Religion and the environmental opinion in 22 countries: a comparative study. *International Review of Sociology*, *24*(1), 91–109.
- Haller, M., & Hadler, M. (2008). Dispositions to act in favor of the environment: Fatalism and readiness to make sacrifices in a cross-national perspective 1. Presented at the Sociological Forum, Wiley Online Library, *23*, 281–311.
- Haluza-DeLay, R. (2014). Religion and climate change: varieties in viewpoints and practices. *Wiley Interdisciplinary Reviews: Climate Change*, *5*(2), 261–279.
- Hiers, R. H. (1996). Reverence for life and environmental ethics in biblical law and covenant. *Journal of Law and Religion*, *13*(1), 127–188.
- Hirschman, E. C., Ruvio, A. A., & Touzani, M. (2011). Breaking bread with Abraham's children: Christians, Jews and Muslims' holiday consumption in dominant, minority and diasporic communities. *Journal of the Academy of Marketing Science*, *39*(3), 429–448.
- Hitzhusen, G. E. (2007). Judeo-Christian theology and the environment: Moving beyond scepticism to new sources for environmental education in the United States. *Environmental Education Research*, *13*(1), 55–74.
- Hope, A. L., & Jones, C. R. (2014). The impact of religious faith on attitudes to environmental issues and Carbon Capture and Storage (CCS) technologies: A mixed methods study. *Technology in Society*, *38*, 48–59.
- Horrell, D. G. (2015). *The Bible and the environment: Towards a critical ecological biblical theology*. Abingdon: Routledge.
- Horrell, D. G., Hunt, C., & Southgate, C. (2008). Appeals to the Bible in ecotheology and environmental ethics: A typology of hermeneutical stances. *Studies in Christian Ethics*, *21*(2), 219–238.
- Hsu, B., Reynolds, A., Hackett, C., & Gibbon, J. (2008). Estimating the religious composition of all nations: An empirical assessment of the world Christian database. *Journal for the Scientific Study of Religion*, *47*(4), 678–693.
- Hunt, A., & Marlow, H. F. (2019). *Ecology and theology in the ancient world: cross-disciplinary perspectives*. UK/USA: Bloomsbury Publishing.
- Hunter, L. M., & Toney, M. B. (2005). Religion and attitudes toward the environment: A comparison of mormons and the general US population. *The Social Science Journal*, *42*(1), 25–38.
- James, W. (2003). *The varieties of religious experience: A study in human nature*. Abingdon: Routledge.
- Jenkins, W. (2009). After lynn white: Religious ethics and environmental problems. *Journal of Religious Ethics*, *37*(2), 283–309.
- Jochemsen, H. (2018). The Relationship between (Protestant) Christianity and the environment is ambivalent. *Philosophia Reformata*, *83*(1), 34–50.
- Kilp, A. (2013). Miklós tomka: Expanding religion: Religious revival in post-communist central and Eastern Europe. *Review of Religious Research*, *55*(1), 193–195. <https://doi.org/10.1007/s13644-012-0091-0>
- Kopinina, H., Washington, H., Taylor, B., & Piccolo, J. J. (2018). Anthropocentrism: More than just a misunderstood problem. *Journal of Agricultural and Environmental Ethics*, *31*(1), 109–127.

- Leal Filho, W., Dahms, L. M., & Consorte-McCrea, A. (2019). Sustainability and religion: Past trends and future perspectives. In W. Leal Filho & A. Consorte McCrea (Eds.), *Sustainability and the Humanities* (pp. 611–619). Cham: Springer.
- Lehrer, E. L. (2004). The role of religion in union formation: An economic perspective. *Population Research and Policy Review*, 23(2), 161–185.
- Leiserowitz, A. (2007). Communicating the risks of global warming: American risk perceptions, affective images, and interpretive communities. In Susanne C. Moser & Lisa Dilling (Eds.), *Creating a climate for change: Communicating climate change and facilitating social change* (pp. 44–63). Cambridge: Cambridge University Press.
- Lenzi, D. (2017). Relativism, ambiguity and the environmental virtues. *Environmental Values*, 26(1), 91–109.
- Martin-Schramm, J. B., & Stivers, R. L. (2003). *Christian environmental ethics: A case method approach*. NY: Orbis Maryknoll.
- Marx, K. (1978). Contribution to the critique of Hegel's philosophy of right: Introduction. *The Marx-Engels Reader*, 63.
- Minkov, M., Welzel, C., & Schachner, M. (2020). Cultural Evolution Shifts the Source of Happiness from Religion to Subjective Freedom. *Journal of Happiness Studies*. <https://doi.org/10.1007/s10902-019-00203-w>
- Minton, E. A., Kahle, L. R., & Kim, C.-H. (2015). Religion and motives for sustainable behaviors: A cross-cultural comparison and contrast. *Journal of Business Research*, 68(9), 1937–1944.
- Moltmann, J. (1993). *God in creation: A new theology of creation and the Spirit of God*. Minneapolis, USA: Fortress Press.
- Morrison, M., Duncan, R., & Parton, K. (2015). Religion does matter for climate change attitudes and behavior. *PLoS ONE*, 10(8), e0134868.
- Mylona, K., Maragkoudakis, P., Miko, L., Bock, A.-K., Wollgast, J., Caldeira, S., & Ulberth, F. (2018). Future of food safety and nutrition-Seeking win-wins, coping with trade-offs. *Food Policy*, 74, 143–146.
- Nash, J. A. (1991). *Loving nature: Ecological integrity and Christian responsibility*. Nashville: Abington Press.
- Nash, R. F. (1989). *The rights of nature: A history of environmental ethics*. Madison: The University of Wisconsin Press.
- Nelson, T. (Ed.). (1982). *Holy Bible. The New King James Version*. Nashville, USA: Thomas Nelson Inc.
- Nisbet, E. G. (1991). *Leaving Eden: To protect and manage the Earth*. Cambridge: Cambridge University Press.
- Northcott, M. S. (1999). The environment and Christian ethics. *Pro Ecclesia: A Journal of Catholic and Evangelical Theology*, 8(3), 375–377.
- Northcott, M. S. (2018). Reformed protestantism and the origins of modern environmentalism. *Philosophia reformata*, 83(1), 19–33.
- Norton, B. G. (1984). Environmental ethics and weak anthropocentrism. *Environmental Ethics*, 6(2), 131–148.
- Pacheco, F. A. L., Fernandes, L. F. S., Junior, R. F. V., Valera, C. A., & Pissarra, T. C. T. (2018). Land degradation: Multiple environmental consequences and routes to neutrality. *Current Opinion in Environmental Science and Health*, 5, 79–86. <https://doi.org/10.1016/j.coesh.2018.07.002>
- Palmer, C. (2006). Stewardship: A case study in environmental ethics. In R. J. Berry (Ed.), *Environmental Stewardship* (pp. 63–75). London, UK/New York, USA: T&T Clark.
- Peifer, J. L., Ecklund, E. H., & Fullerton, C. (2014). How evangelicals from two churches in the American Southwest frame their relationship with the environment. *Review of Religious Research*, 56(3), 373–397.
- Peterson, A. L. (2000). In and of the world? Christian theological anthropology and environmental ethics. *Journal of Agricultural and Environmental Ethics*, 12(3), 237–261.
- Peterson, A. L. (2001). *Being human: Ethics, environment, and our place in the world*. California: Univ of California Press.
- Petrescu-Mag, R. M., Petrescu, D. C., & Robinson, G. M. (2019). Adopting temperance-oriented behavior? New possibilities for consumers and their food waste. *Journal of Agricultural and Environmental Ethics*, 32(1), 5–26.
- Poortinga, W., Whitmarsh, L., Steg, L., Böhm, G., & Fisher, S. (2019). Climate change perceptions and their individual-level determinants: A cross-European analysis. *Global Environmental Change*, 55, 25–35. <https://doi.org/10.1016/j.gloenvcha.2019.01.007>

- Pope, F. (2015). *Laudato Si': Encyclical letter of the Holy Father Francis on care for our common home*. Nairobi City: Paulines Publications Africa.
- Rogers, M., & Konieczny, M. E. (2018). Does religion always help the poor? Variations in religion and social class in the west and societies in the global south. *Palgrave Communications*, 4(1), 1–11.
- Rolston, H. (2010). *Philosophy gone wild*. New York: Prometheus Books.
- Rosenberg, M., & Hovland, C. (1960). *Research on Communication and Attitude, Coated in Triandi 1971. Attitude and Attitude Change*. New York: Jhon Wiley Publishers.
- Santmire, H. P. (2000). *Nature reborn: The ecological and cosmic promise of Christian theology*. Minneapolis: Fortress Press.
- Schreiner, T. R. (1998). *Romans (BECNT)*. Michigan: Baker Academic.
- Shrader-Frechette, K. (2003). Environmental ethics. In H. LaFollete (Ed.), *The Oxford handbook of practical ethics* (pp. 188–218). New York, USA: Oxford University Press.
- Stoenescu, C. (2016). Etica mediului. Argumente rezonabile si intampinari critice. [*Environmental ethics reasonable arguments and critical findings*]. Iasi, Romania: Institutul European Publishing House.
- Taylor, P. W. (1983). Defense of biocentrism. *Environmental Ethics*, 5(3), 237–243.
- Tjernström, E., & Tietenberg, T. (2008). Do differences in attitudes explain differences in national climate change policies? *Ecological Economics*, 65(2), 315–324.
- Tucker, M. E., & Grim, J. (2003). *Series foreword. In Islam and Ecology*. Cambridge: Harvard University Press.
- Turgeon, M. (2018). Christianity and Environmentalism. *Markkula Center for Applied Ethics*. <https://www.scu.edu/environmental-ethics/environmental-activists-heroes-and-martyrs/lynn-white.html>
- Tuxill, J. (1998). *Losing strands in the web of life: Vertebrate declines and the conservation of biodiversity*. Washington DC: Worldwatch Institute.
- Uzzell, D., & Rätzhel, N. (2019). Labour's hidden soul: Religion at the intersection of labour and the environment. *Environmental Values*, 28(6), 693–713.
- Vermeir, I., & Verbeke, W. (2006). Sustainable food consumption: Exploring the consumer “attitude–behavioral intention” gap. *Journal of Agricultural and Environmental ethics*, 19(2), 169–194.
- Warde, E. (2011). Christianity and the environment: The Lynn White controversy. *Ex Post Facto*, XX, 45–62. https://history.sfsu.edu/sites/default/files/EPF/2015/2011_Emily%20Warde.pdf.
- Washington, H., Taylor, B., Kopnina, H., Cryer, P., & Piccolo, J. J. (2017). Why ecocentrism is the key pathway to sustainability. *The Ecological Citizen*, 1(1), 35–41.
- Welzel, C. (2013). *Freedom rising*. New York: Cambridge University Press.
- White, L. (1967). The historical roots of our ecologic crisis. *Science*, 155(3767), 1203–1207.
- Williams, T. T., Smart, W. B., & Smith, G. M. (1998). *New genesis: A Mormon reader on land and community*. Salt Lake City: G. Smith.
- World Health Organization. (2018). *The state of food security and nutrition in the world 2018: building climate resilience for food security and nutrition*. Rome: Food & Agriculture Organization.
- Zagonari, F. (2020). Comparing religious environmental ethics to support efforts to achieve local and global sustainability: Empirical insights based on a theoretical framework. *Sustainability*, 12(7), 2590.
- Zellentin, A., Heyward, C., & Meyer, L. (2012). Introduction: Responsibility in international political philosophy. *Ethical Perspectives*, 19(4), 613–625.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Affiliations

Ruxandra Malina Petrescu-Mag¹  · **Adrian Ana**¹ · **Iris Vermeir**²  ·
Dacina Crina Petrescu^{3,4} 

Ruxandra Malina Petrescu-Mag
malina.petrescu@ubbcluj.ro

Adrian Ana
adrianana@hotmail.com

Iris Vermeir
iris.vermeir@ugent.be

- ¹ Faculty of Environmental Science and Engineering, Babes-Bolyai University, 30 Fantanele Street, 400294 Cluj-Napoca, Romania
- ² BE4Life, Department of Marketing, Innovation and Organization, Faculty of Economics and Business Administration, Ghent University, Tweeckerkenstraat 2, 9000 Ghent, Belgium
- ³ Faculty of Business, Babes-Bolyai University, 7 Horea Street, 400174 Cluj-Napoca, Romania
- ⁴ Department of Marketing, Innovation and Organization, Faculty of Economics and Business Administration, Ghent University, Tweeckerkenstraat 2, 9000 Ghent, Belgium