# EVOLUTIONARY ETHICS AND CHRISTIAN STEWARDSHIP

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## Abstract

Christian stewardship typically involves proper care of capital goods, art, possessions, and property; yet rarely does it involve the call to care for the Earth ... God's Creation itself. One possible origin for this position is an eisegesis of the Scriptures concerning eschatology. Here, we address how evolutionary thought may be used to inform Theology, develop a better understanding of 'last things' and thus result in a better understanding of the proper care of Creation to allow us to cherish the physical world by forming a 'Theology of Nature'. We see evolution as a direct result of the kenotic nature of God that further displays the sacrament of Creation. Through embracing this worldview, we are able to understand our role in ushering in an eschatology that works towards the redemption of all God's Creation.

Keywords: Earth, sacrament, eschatological fulfilment, social justice, theology of nature

# 1. Introduction

One of the ideas hindering the many branches of the Christian Church, particularly for protestants, in providing stewardship and sustainability of the Earth, is the idea that this present Earth will be destroyed during the second coming of Christ through fire and a new Haven and Earth will be created (2 Peter 3.6-13). Only then will full justice be restored through the creation of this new Heaven and new Earth (Isaiah 65.17, 66.22). "It is precisely this preoccupation with the [coming] Redeemer that has led faithful Christians to preside over the devastation of Creation", is how William Wood described what the doctrine of a destroyed earth promoted [1]. Edward Echlin, similarly claimed that Christians have cherry picked their way through the New Testament and popular hymns ("this world is not my home, I'm just a-passin' through" [A.E. Brumley (1905-1977), https://hymnary.org/tune/this world is not my home im just apassi]) to "...soothe the familiar fancy that 'this world', while created by God and therefore good, is transient and must be left....we need not be too troubled about the damage consumerism is doing" [2]. Secularist critic, Lynn White, claimed that religion was at the root of our ecological crisis [3].

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However, even basic science had been a quest for expanding human dominion and exploiting the land when Ecology took its roots in the early 1900's [4]. Christians, secularists, and scientists in these examples all see the Cosmos in dualistic terms opposed to each other: material or physical versus spiritual. And in all cases, something to be exploited rather than cared for. Our position is that seeing the Cosmos as an integrated whole that is loved by its Creator is best achieved through an evolutionary perspective where God grants the whole physical world the fecundity to bring forth on its own creatures to fill it and ultimately a creature that has sufficient sentience to care and tend for it as a representative of God's very own image would. Achieving the likeness of God to fulfil that purpose is still in progress as we look forward to the eschaton.

# 2. Darwinian assimilation

One of the first hurdles in overcoming the dualism that results in an exploitative approach to Creation will be to defuse the fear of engaging Theology with Darwinian thought. John Haught provides a philosophy of incorporating Darwinian thought into Christian theology that can counter this position of Creation exploitation [5]. Borrowing from that philosophy, we will attempt to describe a stewardship model that fully embraces Darwinian evolution in order to integrate what seem to be disparate ideas: kenosis, sacrament, eschatology, Pancosmicism, and Gaia. Together, these will be marshalled into a modern day praxis which people of all faiths may adopt to care for God's Creation. Consequently, throughout this project, evolutionary ideas play a large role in the perception of the spirit of Creation Care.

Authors such as Duane Gish [6], Daniel Dennett [7], and Michael Behe [8] equate evolution with atheism and some Churches have followed suit; arguments for this marriage of thoughts abound on both sides of the camp. Scientific materialists as well as creationists see this battle as won by one side or the other. There has to be either the God of literalist biblical Creation or there is no God at all. Philip Johnson describes Neo-Darwinism as a 'cultural weapon' that is used to 'lock' people into atheism [9]. Stephen J. Gould and others offer the argument that Science and Theology should be separate spheres of influence (e.g. epistemology) [10]. This position is offered as Non-overlapping Magisteria (NOMA) by Gould. Any proximate causal explanation along the lines of a supernatural being would be 'methodologically' excluded by Science. They effectively argue that in the same way that a scientist does not rely on God as an explanation for experimental results, so also must theologians not turn to Science as a means of 'proof' of God (e.g. as in Natural Theology or Intelligent Design). This separation is used to make the laws of natural selection the same as any other scientific law: not a turning point of theological thought, just something to inform the scientific community. Of course theologians are still free to use Science as an interpretive framework for a nature created by God (the two books metaphor) [11].

At one time, the Catholic Church similarly objected to evolution. As a whole, the Catholic Church has historically been slow in accepting new scientific ideas. Primarily this was stimulated by "fear of innovations" from threats of Protestantism [12]. For example, it placed Galileo on trial before the Inquisition for his 'erroneous faith' message of heliocentrism presented in his book, Dialogue Concerning the Two Chief World Systems. His theory was finally accepted by the Catholic Church over 200 years later when all restrictions were removed from his text in 1835. It was not until 1992 that Pope John Paul offered an apology to Galileo on behalf of the Church [13]. Another example is Pierre Teilihard de Chardin who used a less literal interpretation of Scripture to explain his findings in Science and for the basis of his thoughts on the continuing creation of the Cosmos, including human evolution. His work was initially restricted by the *Humani generis*, a papal encyclical written in 1950, telling the churches that its doctrine should not be neglected for modern ideas such as evolution and polygenisim considering they were "only a hypothesis" and "based on a weak foundation" [Pope Pius XII, Encyclical Humani Generis, some false opinions threatening to undermine the foundation of Catholic http://w2.vatican.va/content/pius-xii/en/ doctrine. Vatican City, 1950. encyclicals/documents/hf p-xii enc 12081950 humani-generis.html]. It was not until 2009, that Pope Benedict XVI praised Teilihard's work on defining the cosmos as a "living-host" [A. John, Pope cites Teilhardian vision of the cosmos National Catholic as а living host'. Reporter, 28 July 2009. https://www.ncronline.org/news/pope-cites-teilhardian-vision-cosmos-livinghost]. Pope John Paul had previously allowed in 1996 that evolution was "more than just a hypothesis". The Catholic Church has certainly improved its assimilation of scientific thought into Theology by responding positively to Darwin's theory of natural selection considerably quicker than it did Galileo.

Most mainline Protestant groups have, today, also responded positively by assimilating evolution into their theological thinking [14]. Unfortunately, what makes news are the last holdouts such as those 'non-denominational' or 'community' Churches who rely on Fundamentalist thinking developed early in the previous century. (Fundamentalism can be traced back to the Niagara Bible Conference in the early 20<sup>th</sup> century that arose as a reaction to doctrinal compromises that were occurring among churches. The Fundamentals contained articles explaining the dangers of non-literal interpretations of scripture and ideas such as evolution [15].) Coupled with this fundamentalist rejection of modern evolutionary science is an adherence to what is called 'creation science' and 'intelligent design'. (The irrational fear of evolution is that children taught such things will lose their belief in God, become evil, and lose their salvation. In thirty years of 'teaching evolution to creationists in Texas' at Abilene Christian University where Brannan shows that 'Darwin is right and I love Jesus' is a noncontradictory statement, the typical comment from students is relief that they no longer have to choose between their understanding of Science and Scripture. Their parents are not always as relieved.) Both of these have been thoroughly exposed in several court cases and publications [16-20; Epperson v. Arkansas,

393 U.S. 97 (1967); Edwards v. Aguillard, 482 U.S. 578 (1987); Kitzmiller, et al. v. Dover Area School District, 400 F. Suppl. 2d 707 (2005); McLean v. Arkansas, 529 F. Suppl. 1255 (1982)]. Here, we will only mention the briefest of highlights. William Paley, in the early 1800s, promoted natural theology as a way to study the 'watchmaker' design of our world [21], Darwin effectively countered this argument. Paley's ideas and today's Discovery Institute in Seattle are of the same pattern where 'intelligent design' describes, what to them, appear to be 'irreducibly complex' aspects of various organisms or organs; this thinking reflects the early 19<sup>th</sup> century thinking based in deistic natural theology. Sandwiched between Paley and the Discovery Institute was the Scopes trial [22] and the efforts by Henry Morris in the 1960's to revive the Seventh Day Adventist 'flood geology' of George McCready Price [23]. (Morris considers evolution as instrumental in establishing communism, atheism, fascism, Freudianism, social Darwinism, Kinsevism and, in religious circles, modernism and neo-orthodoxy. He leaves this non sequitur unestablished, however [24].) All of these movements, via numerous trials and continued legislative efforts, have failed constitutional tests of the first amendment. The latest histrionics have, thus far, avoided court cases and continue with what some have called 'Disney for Christians' at Ken Ham's Ark Encounter in Kentucky.

The Catholic faith, mainline Protestants, and the Orthodox Church [A. Can an Orthodox Christian accept evolution?. Kuraev. 2011. http://silouanthompson.net/2011/02/can-an-orthodox-christian-accept-evolution/; A. Kuraev, Towards an Orthodox View of Creation and Evolution, 2006, http://orthodoxengland.org.uk/towardso.htm; M. Kalyniuk, Orthodoxy å https://souloftheeast.org/2016/05/13/orthodoxy-evolution/] Evolution, 2016, have all assimilated Darwinian thought into reflective theological dialogue. As we advance in Philosophy, Science, technology, and theological reflection, we should be willing to consider how the discoveries of Science (real science in real science journals done by real scientists) might inform us about Divine mysteries (real theology in real theological journals done by real theologians). We should be willing to develop a theology of nature rather than rely on an antiquated natural theology or the strangely fundamentalist and parochial strands of ultraconservative Christian sects uncomfortable with modernism. We will attempt to do this by exploring kenotic theology in light of Darwinian and Process philosophy and see how it might inform our attitude toward Creation Care.

# 2.1. Kenosis as seen in evolution

One approach to accepting an evolved Creation is to engage Darwinian and Process philosophy in hopes of determining if these dialogues can reveal more about our current conceptions of how a self-emptying God acts in Creation [25]. Just as Science has been moving from a focus on the study of specific events (reductionism) to recognizing the importance in studying the whole of systems biology, theological reflection is moving toward "connectedness, collaboration, creativity, community, commitment, and celebration" when it comes to ecology and Creation Care [26]. This procedure of gaining systems knowledge, instead of merely dissecting out the small complexities and details of nature, directs the gaze to the whole Cosmos and life's story in one small part of that Cosmos, Earth. Christian theology has responded by emphasizing the kenotic nature of the Creator in allowing for the continuous and autonomic emergence of new forms of life over the last several billion years. The process allows God even more intimate immanence within this process where God attracts and lures all things to unfold through the naturalistic powers endowed by the Creator (e.g. "let the Earth bring forth" and "let the waters swarm" in Genesis 1.12 and 20).

When we consider the self-emptying nature of God, we realize that God desires freely given love from all of Creation. Within this conception, it is via non-coercive means that God gives all of Creation the opportunity to create itself through evolution. Rather than a divine dictator, we have a lover who attracts and lures all of Creation to become on its own. A world that was created in an instant and in complete perfection would merely be an extension of God, rather than a Creation having complete freedom and separateness to love its lifegiver in a non-coercive way. Looking at evolution as God's freely endowed creative process allows us to gain a new theological perspective on God's character and agency. Assimilation of evolutionary thought into theological thought in light of a kenotic process of ontology allows us to see evidence of God's transcendence and immanence in Creation as it freely moves through species differentiation and evolution into higher-conscious beings. Evolution is the on-going process through which God is constantly involved in restoring Creation; Creation is not just a one-off beginning, but an on-going process. In this unfinished world (Creatio Continua) there is imperfection, suffering, and pain; the plea of Christians is for a continuous restoring power of God. This process will continue until all of Creation is redeemed (Romans 8.19-22). Evolution is the process in which a world that is finite is adapting to the love of a Creator by a progressive self-transcendence of the created.

## 2.2. The sacrament of Creation

It is in this context of respect for the natural processes of evolution endowed by their Creator that Creation care should be considered as sacrament. Creation is a promise to its creatures from God [1], a sacrament in which God reveals Himself to all of Creation which groans and travails in pain together waiting for redemption of the children of God. A sacrament denotes religious rites or symbols that convey blessing and grace. When looking at God through an evolutionary perspective we are able to see that all of Creation is a sacrament [C. Hamilton, The Sacrament of Creation: What Can We Expect from Pope *Ecological Encyclical?*, ABC Religion and Ethics, Francis's 2015. http://www.abc.net.au/religion/articles/2015/03/03/4190521.htm]. He reveals His character through nature. We see the freedom that Creation was given to create itself and we choose to love and nurture it as it comes into the glory of God. In this journey, we more deeply understand how vast the love of God for us as humans is – predicated within the context of *all* of Creation, a nature that has an evolutionary ontology with an outcome of our species becoming aware of the Cosmos and its Creator. We just happened to be the sentient ones blessed enough to recognize it, given His image, and the commission to care and sustain what God created.

Looking at Creation as a sacrament creates a sense of despair when we lose biodiversity and natural areas. This despair is evident in the mourning for the loss of different species or ecosystems by those scientists who studied and cared for them and by those who made memories there. This mourning is not always outwardly evident but is seen in the patterns of grief characterized by psychologists [27]. Once we are able to see Creation as an image of God revealing who the Creator is via the long process of evolution, we understand the devastating effects when we merely use this sacrament for our selfish desires rather than sustaining it to meet its own needs. We should not use up our gift from God without considering how to sustain it for the Glory of God.

The dominion we were given in the Bible is not to be confused with domination; instead, dominion, "in a Hebrew sense, is to be entrusted with a sacred charge", Gonzalez explains [26]. Dominion was used to describe the relationship between the head of an estate and the workers employed in that estate [28]. This is how we are to manage the Earth. We (humans, animals, plants all of Creation) are workers seeking the coming redemption. Humans have been bestowed with the honour to manage and care for Creation in a way that honours Creation and seeks to serve the estate owner's (God's) wishes for his estate. Unless we consider Creation as a way to better understand the love of our Creator and as a sacrament for our self-transcendence, we run the risk of stopping the redemption of all Creation by ending life on Earth.

In religious history, Christians have pushed away from Creation as a sacrament because it was closely associated with pagan religions. In looking at the sacrament of Creation through an evolutionary ontology we are able to understand that we are not to abandon the true source of Creation. Neither do we look to a pantheistic religion in which Earth is all there is. Instead, we consider the Source of nature from which all things are contingent: God the Spirit who is continuously revealing Himself through the hope of Creation even while it groans in agony waiting for the redeemed children of God to liberate it from its bondage of corruption (Romans 8.20-23). It was in this mystical manner that de Chardin held a 'Mass Over the World' in which he offered all of the Cosmos to God: even in the absence of bread and wine for the Eucharist, the whole Earth still becomes its altar thus connecting the Eucharist with the final glorification of the Cosmos [29]. In the words of Pope Benedict [Benedict XVI, Homily at the Vespers July 24, 2009, in the Cathedral of Aosta, L'Osservatore Romano, English online edition, July 29, 2009] - "The role of the priesthood is to consecrate the world so that it may become a living host, a liturgy: so that the liturgy may not be something alongside the reality of the world, but that the world itself shall become a living host, a liturgy. This is also the great vision of Teilhard de Chardin: in the end we shall achieve a true cosmic liturgy, *where the cosmos becomes a living host*." [http://www.traditioninaction.org/Progressivist Doc/A\_120\_RatzTeilhardl.html]. (See also [30].)

#### 2.3. Evolutionary Eschatology

Evolutionary thought also changes our view of Eschatology. Instead of looking for the destruction of physical Creation by an all-consuming fire, we can look forward to a future and redemption by Christ into an incorruptible state: a *bodily* resurrection in a transformed Cosmos [31]. This state is tied to the idea of a new Earth and a new Heaven (Revelations 21.1). Evolutionary thought challenges us to look forward to a future for this world. We see that evolution is God's luring force for transcendence and for achieving higher states of existence: the lure towards oneness with its Creator. Thus, if we look to the process of evolution as God's beckoning His Creation to realize its own transcendence in a sacrament of grace, we can see that all of Creation has greater value than to be merely used up and cast aside. When we shift our current identity to an identity concerned with who we will become in the transformed new Heaven and Earth, we can see Creation as having a relation to its own fulfilment in the Eschaton. God does not abandon us or Creation for some non-physical realm – instead, God transforms it all through love.

This view agrees with the hermeneutic that throughout Scripture there is no definite verse that proclaims that the entire world will be physically destroyed. Samuel Lee in the 1800s wrote "The Bible is entirely silent in regards to the future geological history of the globe we inhabit. ...the Earth has been in existence probably many millions of years. We know no reason why it probably should not exist forever." [32] While Lee is overly confident in his position, it is clear that the new Heaven and new Earth spoken of in Isaiah 65.17 and 66.22 can instead be seen as images of an Earth and Heaven after evil has been cast aside. The scripture references to fire (II Peter 3) can be viewed as a purification and purging of heavens and Earth via the destruction of ungodly men and their edifices of injustice, rather than the entire Earth. In the same way a baptism of fire is used to illustrate the transformation from the old self into the new one and represents the gift of the Holy Spirit manifesting itself (Acts 2.1-4). Transformation is the nucleus of both of these scriptures: God does not abandon or destroy when God can redeem.

## 2.4. From dualism to a pancosmic relationship

The idea of bodily resurrection (Ezekiel 37, Daniel 12) allows for the interconnectedness of all physical aspects to what is spiritual to be seen. The dualistic view that counters this thought in Christianity (spirit completely separate from the body) is from Greek philosophy rather than Christian theology; that view dooms physical Creation [33]. Instead, all things are interconnected in the Cosmos. The disciplines of Science have allowed us to

understand how life is contingent upon matter and the way it behaves. We, on Earth, are dependent on the Sun for life. Our relative location to the Sun is held in balance by other planets and it is this that allows for our planet to have the correct conditions to sustain life. Life would not exist without all of the different aspects that hold it in a balance of sustainability. To try and describe anything physical, the biotic and abiotic features around it must be considered.

When a person is removed from one's environment, the person does not exist in the same way as they had before. Reality is relational; who we are stems from the physical entities around us. The bodily resurrection draws on this by allowing the recognition that if there is a resurrection for us then all of the physical aspects that surround us must also be resurrected. The physical world will not be abandoned: we are interconnected to it. In this sense, all of Creation was made as much in the image of God as humans were. Barbara Taylor emphasizes this by realizing that humans were not created on their own day, "I do not have the 6<sup>th</sup> day to myself anymore. I am sharing it with cows for God's sake." [34] This realization allows for a deeper relationship with *all* of the Cosmos. We are made of the same materials as all of Creation.

Karl Rahner explains that through death a person is set free from a shallow existence and is resurrected with all of Creation to exist in a deeper relationship with all matter that reveals our complete identity. This 'pancosmic' relationship, that is achieved in the resurrection, enables us to prepare for death by becoming more interconnected with the environment around us now [33]. Jesus constantly sought out deeper relationships with those who often were seen as unrelational; in this same way we are to seek out deeper relationships with all of Creation to bring it into the redemption that is constantly taking place for all of Creation.

## 2.5. Incorporating the concept of Gaia

In modern ecological philosophy, a co-opted term from the old Greek word for the Earth goddess Gaia is used to indicate the interconnectedness of all life forms and nutrient cycles; James Lovelock suggested that Earth acts as a living being, maintaining homeostasis [35]. This perspective encourages the interconnectedness of all organisms on the planet and with the abiotic features which sustain them. However, the idea leaves unanswered what significance the arrival of sentient creatures such as humans had on the planet. Teilhard de Chardin describes the arrival of humans as the addition of the 'noosphere' (nous, the Greek root for knowledge) to the already present lithosphere, atmosphere, hydrosphere, and biosphere [36]. We humans are a mode of "being in whom the universe comes to itself in a special mode of conscious reflection", Thomas Berry explains [37]. Humans bring consciousness to the Earth. This idea is further expanded by Peter Russell, who claims that, just like individual cells of the brain, each human is an entity capable of carrying out basic functions [38]. As technology increases the communication and connectedness of humans on a global scale, humanity is able to collaborate just as all brain cells collaborate to control the body. This mirrors the illustration of the mystic body of Christ in which all Christians are a part and to which Saint Paul refers (1 Corinthians 12). If humans are in fact the consciousness of all Creation, then those concerns which are an appeal for the care of all life forms of Earth should take precedence over those which only affect humans.

# 3. From Metaphysics to praxis

Ecological concern (or in religious language, Creation Care) is becoming more important as we realize that humans alone can provide the thoughts, voice, and praxis for carrying out the redemption of Creation; we are God's created Cocreators [39]. To reject this responsibility is to contribute to the constant degradation of Creation. The gift from Science has been to reveal this level of connectedness through evolutionary processes and provide a means for collaboration with the Earth in order to take action by participating in its redemption. We are better able to understand the 'alarms' that are sounding around the world: air and water pollution, loss of biodiversity, climate change, and other events that foretell the eventual state of the Earth. We are just one small aspect of the large cosmos that is billions of years old and is constantly being created. As when we celebrate Epiphany, this new Cosmic Epiphany should be celebrated and spread to all people. This allows us to shift from a homocentric view of the Earth to a biocentric way of thinking that encompasses all of life and the natural physical world with which we are in direct and constant relationship. The first step should be a *spiritual* one.

# 3.1. Spiritual ecological exercises

In the early 16<sup>th</sup> century, Ignatius of Loyola wrote *Spiritual Exercises*; today they are popularly directed towards strengthening the layman's spirituality [40]. They can also reveal ecological principles that are ingrained in Christian theology especially if one considers the goal of Spiritual Exercises to be finding God in *all things* [41]. That *all things* are interconnected, is seen in the mutual trust expected from all Christians and those with whom they interact; this includes the trust they have in the good Creation that God has made. Conservation of all resources and living systems is revealed in the search to find and preserve truth. God provides truth by becoming incarnate, taking on physicality, within the very Creation formed from the beginning; it is our duty to preserve that *truth* - to preserve that very Creation! The desire for greater diversity and variation for healthier ecosystems develops from the Christian's desire to empathize and find greater community with others who are different from themselves. Ignatius wrote his Exercises in a time of personal physical crisis while recovering from severe wounds when, as a result of two readings (Ludolph of Saxony's Life of Christ and Jacopo de Voragine's Golden Legend), he states that he found his greatest consolation was "from gazing at the sky and the stars" where he was drawn by "a very strong impulse to serve Our Lord"

[41]. He goes on to declare that his own experience of the Creator was a result of loving him as a creature among all the other creatures made by God in love.

Our Creation is wounded as well; it is through those same principles of contemplation of Christ's life, passion, resurrection, and God's self-emptying love that we can restore and strengthen the Earth as well as ourselves. The *Exercises* allow us to find the role in Creation that was set before us. By seeking God in every aspect of our daily activities and surroundings we are able to commune on a deeper level with God the Creator and come to a greater consciousness of what to do as part of our sacred care of Creation. We see our sins not as separateness from a God who is above the clouds, but as a personal injury to the God that is in the rocks, trees, and people around us (a panentheistic view, not pantheism). Through the *Exercises* God becomes something that can be seen, heard, tasted, and touched. The Eucharist becomes something that engulfs all of Creation into the redemption of the Cosmic Christ. The Exercises allow the Christian to converse with God as individuals, citizens of humanity and as the voice of all Creation. This allows us to realize how small a part humankind is in the great web of the Cosmos. By applying theology to ecological principles as seen in Saint Ignatius' work we can take action in the healing and redemption that God is presenting for the whole of Creation.

## 3.2. Gaining support for a solution - framing the need

With this changed perspective, how should we put Creation care into practice? The first step is to increase awareness and raise support for ecological practices worldwide as well as encouraging personal efforts at sustainability. For this to have an impact, large groups must become involved and feel passionately enough to stick to the practices even if they are not economically favourable or the easiest option. The religious community is a large seemingly untapped resource for service to Creation. It is religion that can bridge the gap between those seeking social and economic justice and those working for a sustainable environment [M. Tucker and J. Grim, The Greening of the World's Religions, Chronicle of Higher Education, 9 February 2007]. Even if enhancing Creation care seems to be an obvious extension of worshiping God, the battle is not in getting people to change their doctrine and beliefs alone – it is to spur them into action. In the same way that people of different beliefs may have similar morals, ethics and sense of respect even without sharing all worldviews and religious practices, Christians can put sustainability into practice without changing every doctrine they believe. Additionally, many Scriptures speak of Creation care in a way that does not challenge key doctrinal beliefs. Deuteronomy 10.4, Psalms 24.1, and 50.10-12 are examples of scriptures that proclaim God's love and power over all Creation. In I Corinthians 4.2 we are called to be 'faithful' with the 'trust' God has given us. Humans are responsible for the way they practice dominion over the Earth. Scriptures support stewardship and respect for Creation, in a way that reflects preservation and service (Genesis 3.15) [42]. Doctrinal issues and the biblical witness are already in place.

Instead, we turn to the concept of *framing* to motivate parishioners to actions; it is used by advertising and press executives to create a desired perception of an issue. By using symbols, figures, and familiar words to design the wanted emotion behind an issue, people can be persuaded to consider or reconsider the idea being presented [C. McCune, *The Power of Framing: Pitching science in a Mass Media Age*, Science & Spirit, July 2007]. Framing can help gain the support of Christian communities and secular communities alike. Science can become relevant by connecting ecological concerns to moral values. Once a person makes the connection between an issue and their core values, they feel the need to uphold their beliefs and act on the issue at hand. Sustainability and stewardship must be presented in a way that will affect the audience it is being presented to: this is done by framing ecological concern with values the audience will relate to and feel passionate about.

#### 3.3. Framing by an appeal to social justice

One of the more effective framing systems is to present environmental concerns as a social justice issue. By framing environmental concerns as a social justice issue, people are usually drawn to the cause. The Earth is made up of shared 'commons': water, natural resources, and rich soil, according to Garret Hardin [43]. When individuals who share these commons look out for their own interests, the commons are used up and ultimately destroyed. This basic ecological principle applies to effectively any human population in the world. For example, Haitians are starving due to the soil erosion and depletion cause by deforestation and other unsustainable agricultural practices [44]. These people live where their resources are unsustainable. On a global scale, especially as the world's fossil fuel reserves are used up (with the concomitant increase of carbon dioxide), the entire population of the Earth may experience the foreboding future consequences. Hardin's analogy of a lifeboat applies here: developed countries, with the super wealthy, are each in a lifeboat with all the resources to sustain themselves and a little bit more [45]. When those who are drowning in the ocean (the populations of the poor countries) start to pull up on the sides of the boat, do the people in the lifeboat help them in or push them away? The morals in us all urge us to pull in the drowning people, but what if we, in turn, then are the ones without enough resources and we drown as well? Deontological ethics gives way to utilitarianism when the going gets tough for all but saints and saviours.

Although to some it seems hopeless, preserving the Earth's resources is the only way we can even start to make a difference. The very air we breathe is being polluted from greenhouse gas emissions to sulphur dioxide; with respect to water, by 2025 forty percent of the world's population will be living in areas of chronic water scarcity [46]. If we are able to preserve the commons, by using resources more sparingly and sustainably, and by reducing human fecundity (regrettably, the only one of the Creator's original commands we accomplished was 'to be fruitful and multiply' – we can stop now and focus on the other commands), we may be able to pull more people into the lifeboat or even make more lifeboats.

Water and air are resources all people need, not just those in industrialized countries. When the issues centre on resources so basic as these and the problem could be prevented by sustainable practices, the person wishing to uphold social justice becomes deeply involved. The problem is that *all* of our resources are all being used at an unsustainable rate. Not just water and air but energy reserves and soil needed to grow food; effectively, all the things that produce life. The issue is larger than worrying about having enough gas to travel to the market. Responsible practices are needed for survival not only of humans but all life.

By individually taking less of the commons we can extend that portion to another person and allow them to live. Having this attitude is not just the responsibility of those in wealthier countries. People in developing countries must practice sustainability as well. By harvesting trees near an obscure village in Ecuador in a sustainable way, they are contributing to the health and wellbeing of people worldwide while still making a living. By rotating crops that enrich the soil with ones that have a higher price, farmers in South America can give back to the global community. By harvesting rainwater, communities in India can draw less on the commons and provide relief to those who thirst. Sustainable practices allow more people to have resources for life, whether they are living in a wealthy country or a developing country. Nevertheless, the higher burden falls on us in wealthy countries. Sustainable practices allow for social justice to take effect. If these practices are not adopted we will soon enter the Eremozoic Era – the age of loneliness – a time when most of nature is gone and the humans that are left on the impoverished Earth will be fighting for the basic resources for survival [37].

## 3.4. Framing by an appeal to save one's own

By framing the issue as an issue involving one's family currently and the future generations to come, more people are able to relate to the concerns. Some governments use this approach as their largest push toward environmental care, practices and policies. The EPA promoted health and innovation as the main framework to evaluate environmental issues [https://www.epa.gov/innovation]. They connected water quality, pollution, waste, air quality and climate to the health of people in the community and across the globe. If the loss of nature focuses on the person's family, and the family that is yet to come, the issue becomes more personal and an emotional tie is made to promote action.

An example of this approach regards the drug development resources available in undisturbed natural ecosystems. Plants are a major source of medicines, whether using the plants directly in many populations all over the world or isolating specific compounds from plants that allow pharmaceutical companies to research and produce life-saving drugs. Many of the advancements in diseases such as cancer are found in the world's forests. Plants such as the Pacific Yew, which yields the compound Taxol and is used to treat cancer, are discovered in areas that are constantly being diminished [47]. Each time plant biodiversity is decreased through clearing of forests for agricultural or commercial use, we lose opportunities for cures. It is in these same plants, animals and microorganisms that make chemicals we need for life, enrich soil, protect against erosion and make the air we breathe. In them, we find cures for many medical problems. More than 20,000 species are lost annually: they make up the possibilities for new medicines that are lost each year [M. Tucker and J. Grim, *The Greening of the World's Religions*].

## 3.5. Framing by an appeal to save life itself - biophilia

This framing process can lead people to realize how evolution shows us that all living things share a common ancestry and are interconnected. For some, an evolutionary continuum of humanity with the rest of nature challenges the traditional religious sense that humans are separate from the rest of nature and hierarchically far above other animals. For others, evolutionary processes are evidence of God's continuing creative activity [39]. The evolutionary connection with animals can develop into an emotional tie. This way of thinking shows the connectedness and unity of all Creation; it is described by E.O. Wilson as the love humans experience towards other living things – biophilia [46]. Every person has a time when they felt 'one' with nature through a feeling of peace while looking down a mountainside, the joy experienced on a sunny day, or just the feeling of fresh open air in their lungs. This connectedness with nature is also seen in human love for other animals. People have taken animals in as part of their family. Conservationists use flagship species to gain support for an area, by putting a face people feel more drawn toward at the forefront of a preservation effort. This phenomenon is directly proportional to the evolutionary closeness of the animal species. Large mammals such as whales produce more emotions in people than does a species of fish. Ape and monkey babies produce a sense of compassion in humans, and the babies' similarity to our own species offspring is visual affirmation of the connection between us. Biophilia is a powerful emotion; it is apparent in the symbols in our literature and images on historical artefacts and for companies and organizations today. We use nature to confer certain emotions and feelings because we are connected to it in a way that every person understands: the power of a lion, the peacefulness of a dove, the strength and wisdom of a tall oak tree.

Adults who have had great experiences in nature (family camping trips, hikes, or even just adventures in the fields surrounding their neighbourhoods as kids), want their own children and grandchildren to be able to experience the same thing. They want their children to experience the fun and companionship of a pet and they want their children to be able to experience the thrill of racing down a mountainside, or swimming in a lake while the fish nibble at their toes. When people have a direct connection to nature themselves, they are more likely to want that same connection for future generations.

We surround ourselves with cities of concrete and think we can ascend from Nature, be above it all, escape from the natural disasters. Yet, our spirits long for the ascension to nature, the deep connection we feel while immersed in Nature's wild beauty and all of our senses engaged. Unfortunately, the 'wild' which we think we can visit occasionally is becoming covered with trails, there is no tranquil alone time, we are loving our parks to death. Rest stops, lodges, and cafes are placed in the wilderness for convenience and the 'wild' we once knew is disappearing fast [48]. (Edward Abbey went so far as advocating limited access to national parks to only the hale and healthy; his polemic against industrial tourism in the parks is a classic.) The woods that were once a childtime haunt become a shopping centre and parking lots. Even though often not called grief, people show the symptoms of grief for the loss of nature [27]. Losing the places that helped make us who we are – the places that once were the setting of precious childhood memories – saddens us by their loss. This is why stirring up emotions and memories of certain natural areas can help preserve the ecosystem there. Rallies to save parks and recreation areas succeed when they have stories of human connectedness to the location. We need that connection to become emotionally involved and to fight for preservation.

## 3.6. A call to action

We have minimized our connection to nature. Biologists, scientists, environmentalists and ecologists will be needed to study and understand the Earth, its biodiversity, and the resources needed for preservation and sustainable use. Unfortunately, we have not inspired enough youth to take up this calling. We have fewer Biophilia experiences; our youth lack exposure to the outdoors. To counter this and create a generation that will be able to unite to seek answers for the difficult times ahead, we must raise 'Naturalists'. Rachel Carson tells of a wish that all children would be filled with "a sense of wonder so indestructible that it would last throughout life, as an unfailing antidote to boredom and disenchantments of later years, the sterile preoccupation with things that are artificial, the alienation from the sources of our strength" [49]. She understood the strength we as humans draw from the earth and the need for a child to explore Nature and live in a connected state with it.

These experiences help prevent Nature-Deficit Disorder, a term Richard Louv coined to explain the increase in obesity, ADHD, and illnesses that plague modern children thought to be caused from a lack of outdoor activity and the sense of adventure and health it provides to children [50]. It also promotes the interest in Nature needed to produce the scientists and leaders for saving the Earth. In allowing children to explore nature and drawing out a sense of excitement at the organisms in their natural environment, we in turn are preparing the leaders of tomorrow for the battle to save Creation. By engaging people at a young age, environmental issues become more real to them and they are more likely to understand the problems with biodiversity loss and the destruction of natural resources. By spurring on interests in the sciences at an early age, we provide children with the curiosity needed to become researchers and the passion needed for future environmental policy makers and leaders.

Using all of these arguments to gain people's support for environmental concerns, whether in the Christian community or the secular community, the push becomes for action, not just on a large scale level, but on an individual level. An important step in Creation care at the individual level that will develop respect for the environment is to live simply. Living simply will use fewer resources per person and allow the commons of the Earth to be shared more reasonably. An important way to live simply is to reduce energy use. John Holdren and Alan Leshner hold that the best option immediately available to us for slowing climate change and harm done to the Earth is to choose more efficient energy sources [J. Holdren and A. Leshner, Open Forum: Time to Get Serious About Climate Change, San Francisco Chronicle, 30 July 2006]. This philosophy of simplicity goes with the Christian message of loving thy neighbour. By living simply and sharing items like lawnmowers, cars, appliances, and anything not needed on a daily basis, it becomes, in fact, a means of loving the neighbours around you; it is also a means of loving your fellow non-human beings and even the abiotic factors of Creation. By living simply, the idol of money is displaced from purchasing the disposables that our materialistic culture has endowed us. Pride is another god which industrialized countries often worship; it is displaced by the dependency on others when living simply. Growing food and cooking meals together to conserve resources, enables a sense of community within neighbours. Asking for help and sharing resources reduces pride; it allows for the development of humility. This process requires one to differentiate between needs and wants [51]. The life that involves only the needs produces abundant life for others and praises our maker for the Creation.

## 4. Conclusion

Through understanding the perspective that Evolution shines on Creation and formulating a theology of nature we are able to better understand Kenosis and the sacrament of Creation. Expounding upon these ideas by re-examining spiritual practices and the dualistic roots seen in eschatology, we are then able to reach out to the Christian community for support. Framing allows this perspective to be understood and creates empathy for the ecological crisis. By raising passion and sponsorship around the social justice and Biophilia aspects of the issue a culture that strives to live more simply and sustainably can arise. The overarching ethos is seen in the way Creation care sparked an idea in science and then found a voice in philosophy; perhaps religion will be the microphone magnifying the message around the globe to provide unity of the secular world and communities of faith in the Redemption of Creation. Thomas-Clapp & Brannan/European Journal of Science and Theology 14 (2018), 2, 13-29

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