



A biotheology of God's divine action in the present global ecological precipice

**Author:**Lisanne D. Winslow^{1,2} **Affiliations:**

¹Department of Biology and Biochemistry, Faculty of Behavior and Natural Sciences, University of Northwestern, St Paul, United States of America

²Department of Systematic and Historical Theology, Faculty of Theology and Religion, University of Pretoria, Pretoria, South Africa

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Corresponding author:Lisanne Winslow,
ldwinslow@unwsp.edu**Dates:**

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Theological discourse surrounding the environmental crisis has rightly brought to the forefront human agency as a primary causal determinant. However, this article explores a theistic divine action position toward an account of the present global precipice that the earth and all its creatures teeter upon. The first section offers a preferred view of divine action theory, *Divine Compositionism*, with explanatory power to account for an ever-changing planet. Furthermore, Divine Compositionism is used to ground the role of God as Creator and sustainer of all things toward a constructive biotheology. The second section accounts for both human culpability and God's divine action, retaining human free will and God's sovereignty within a creation God owns and loves. The final section explores a possible remedy to the environmental precipice through the very elements of human cooperation that ensured the success of our prehistoric ancestors. A cooperative biotheology entails humanity re-claiming its inter-relation with all creatures in a world family while exercising the free will to partner with one another on a spiritual level in accomplishing God's good and wonderful eternal ideas for the next step in human spiritual development toward earth's *physical* evolution.

Contribution: Drawing upon *Divine Compositionism* as a new view of divine action, this article explores God's action in the natural world *as it is now* and offers a biotheology that entails divine-human partnership toward an alternative future outcome.

Keywords: ecotheology; science and theology; divine action; divine compositionism; environment and spirituality; climate crisis; theology of nature.

Introduction

Any theological dialogue regarding the immanent global ecological catastrophe must address the role and culpability of human free will in producing the destruction of habitat and gross misuse of resources. However, in constructive theistic analysis, a theology of God's divine action and purpose must likewise be addressed. What, one wonders, is God up to in the present global ecological precipice that we find ourselves navigating? Has the almighty, sovereign creator of all life given free rein to humankind, kenotically sitting back to watch the human race destroy in less than 500 years what took 13.8 billion years to create? Or, alternatively, might the current global environmental crisis be an ingredient in the evolutionary progression for humanity and the earth?

Toward answering the latter question, a biblically grounded, scientifically valid, and theologically exciting exploration of the crisis humanity is facing is taken up from a theistic divine action perspective. The view of divine action one takes will naturally determine the extent to which God is involved in, and/or in control of, the toxicity and destruction our earthly home is presently suffering under. The question that any divine action view must address is why would the creator God, the one who, according to biblical theology, owns and loves the earth and everything in it, allow such a thing? A concisely developed preferred divine action view, *Divine Compositionism*, is proposed here to account for God's plans and purposes in Christ for the natural world *as it is now* and as it might be in the future. In this account, human culpability is addressed, and a plan for healing the earth through healing the real pandemic of human apathy, greed, consumption, and selfishness is offered. Thus, a biotheology entails humanity re-claiming its cooperative inter-relation with all creatures in a world family by partnering with the Divine in accomplishing God's good and wonderful plans for the next step in human *spiritual* development towards earth's *physical* evolution.

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A preferred view of divine action with explanatory power for an ever-changing earth

Biblical theology narrates a theological position that the earth was made for humans and humans for the earth. The construct instantiating this creational relationship consists of a universe of matter and energy that operates within a set of regularities known mechanistically as natural laws. Extant divine action views such as deism, (mere) conservationism, concurrentism, and occasionalism have dominated theological ways of thinking regarding natural laws and God's divine action in the natural world (Winslow 2020a:54). However, a new view, Divine Compositionism, was proposed more than a decade ago (Schultz 2009; Schultz & Winslow 2014, 2017) as God's moment-by-moment, *compositional*, existence-conferring efficient causation according to God's eternally extant ideas. God creates, not out of an ontological disposition to create, but out of an infinite, eternal, unending fountain of *agape* love for the creation itself, including the human beings created in God's image, to be in a relationship. Divine Compositionism envisions the natural universe manifested compositionally and processually by God's moment-by-moment existence-conferring action.

Such a dynamic creation metaphysics was initially proposed by the 18th-century theologian and pastor, Jonathan Edwards, in a four-fold metaphysic that entailed occasionalism, pantheism and idealism, in a continuous creation (Winslow 2020b). Divine Compositionism extends Edwards' view by supplanting his occasionalism with the notion that only *in nature* does God act in an occasionalist manner, enacting every causal relation in *physical* systems. However, in terms of *sentient beings* who have been given free will, God acts in a concurrentist manner. Nature, being in a state of full contingency, does not have free will, but human beings do. This idea was also proposed by Plantinga (2016:144) as 'weak occasionalism' allowing for different modes of divine action in natural events in the universe and among human beings.

Divine Compositionism's notion that the universe operates *compositionally* is underscored by physical theories indicating that the universe is not fundamentally a consideration of objects having certain properties and existing in distinct relational states of a system, but instead the universe is compositional and dynamic. In fact, it is in a continuous and consistent state of flow (eds. Nicholson & Dupre 2018). This is a scientific process ontology where all mechanisms that constitute the natural world in its operations are *processual*, seamlessly unfolding in a complex web of interconnected states of being, leading to the knowable and liveable world we experience. Divine Compositionism operates along this assumption that when God acts in sustaining and providentially guiding the unfolding processes of reality, God confers existence processually and compositionally, rendering an inter-functioning process that we call *a universe*.

As such, this view of divine action reflects a five-category ontology: *God, possible worlds, dispositions, forces, and*

structures. The domain of *possible worlds* is constituted by the content and extent of God's awareness of God's ability *ad extra*. The *ways* God enacts these eternal ideas are subsumed in the latter three categories, where dispositions represent God's commitments to act on condition, forces are God's faithful and consistent acting, and structures (quantum, subatomic, atomic, molecular, cellular, organismal, ecological, planetary and cosmological) are God's coordinated acting. This ontology is carefully derived from the biblical doctrine of God and reflects Scripture's portrayal of God as *speaking* and *willing* (as forms of divine acting) things into existence while also *communicating* and *revealing* (also ways God acts) to creatures who were formed to receive the knowledge of God, thus supporting Edwards' end in creation (Winslow 2020a). Thus, God's compositional acting *is* the world in which we live and move and experience one another, our breath, the chill of a winter's day, the sea spray on our face.

Divine compositionism grounds a biotheology for this present ecological precipice

Divine Compositionism understands all of nature as the creative *act-result* of God, manifesting out of eternally existing divine ideas. This corroborates with Buitendag (2009) who affirmed that God's being and action are correlative with God's immanent creative presence in the world:

In terms of such thinking, what God *is* determines how he *acts*. The natural, physical, human and social worlds are the realm of God's immanent action and therefore the manifestation of his creative presence. (p. 7)

A biblical understanding of God's immanent creative action naturally originates in God's eternal ideas for the created order, which include the changing ecology of plants and animals within a gradually evolving geology and climate, all involved in executing a consequential chronology of life on earth. Divine Compositionism grounds this unfolding of life patterns in a processual biotheology where every step of ecological history serves a vital purpose in executing divine ideas for the next evolutionary step to take place. Seemingly dead-end species and waste serve a purpose, even if not intuitively perceived. In this way, God compositionally creates continuously so that what is perceived is the whole of nature advancing on an evolutionary trajectory of increasing complexity and beauty. Taking up Edwards' pantheistic understanding, the ideas in God's mind for this *sequentia* of biological events becomes manifested processually into this reality, also existing within God (Anderson 1980:97–98). This view spiritually and physically retains God's immanence in the workings of the natural world as posited by Conradie (2020):

Alternatively, many opt for the form of pantheism to ensure God's presence in the evolutionary process, raising further questions around divine action in the natural world. (p. 5)

Toward this understanding, Divine Compositionism undergirds a biotheology derived from the biblical theology of a God who is actively present enacting and unfolding the

earth, its laws, its mechanisms, its creatures and its evolutionary progression, as observed by McFague (2011):

Creation, the gift of the Spirit, could be seen as the action of God in the aeons of evolutionary development, which has resulted in the wonderful life we see about us as well as in ourselves.... (p.122)

Thus, God's action, over the course of evolutionary history, has provided the 'wonderful life we see about us, as well as in ourselves'. This is a lovely theology, except for when it is not. In other words, how do we account for God's acting in a not-so-wonderful world amidst the degradation of biological life and the human activities that got us here?

Human culpability, so where is God?

In the present climate crisis, we have seen the devastating effects of human consumption and waste disrupting the ecological balance of the planet (Conserve Energy Future 2021).

Resources are significantly depleted. Waste has polluted our land, water and even the outer reaches of our atmosphere. Humans have created a problem of epic proportion. It is astonishing and even unthinkable that some are still denying this reality, despite the overwhelming evidence presented by climatologists, ecologists, forest biologists, marine biologists, and oceanographers. Humans have become an invasive species on the planet and the outcome, as has been historically shown with many invasive species, can result in ecological collapse (Stigall 2012:8).

This underscores the anthropocentric focus on humankind's misuse and destruction of the home in which we all live, jeopardising the stability of our world and even the existence of the human race, as Simut (2020:2) stated: '...nature is being affected by humans to such an extent that the continued existence of the world is seriously called into question'. Meeting basic human needs was supplanted by the spiritual degradation of selfishness, greed, apathy, and dominance, producing the sickness of a consumer society (Simut 2020:3).

However, from a divine action perspective, this reality lies in perplexing juxtaposition to the biblical God of creation:

[I]n [whose] hand are the depths of the earth, and the mountain peaks that belong to him, the sea is His, for he made it, and his hands formed the dry land. (Ps 95:4-5)

Where is *this* God in the midst of our planet's immanent and present global crisis? How could God have let it get this far out of control? The answer may seem to presuppose two alternatives: (1) a deistic, non-present God who set the earth-machine in motion and perhaps hasn't looked in a while or (2) a theistic view where God is present, yet acting in kenotic self-restraint, merely sustaining the current trajectory. Either way, God's divine action is non-action.

Either of these theological positions stands to counter a biblical doctrine of creation. The biblical God loves and owns the creation, cares for it and has filled the creation with the

knowledge and glory of God (cf: Hab 2:14; Is 6:3; Ps 25:1). In the biblical view, God is intimately involved with all environmental activities, moment-by-moment, with no biblical evidence that this will cease to be the case (cf: Ps 104; Mt 6:26). The question then becomes, is it possible to hold together in a coherent account the destruction of our earth's habitat, human free will, and God's sovereignty over a creation that God intimately cares for and loves?

An alternative view would hold that God, sovereign over the natural order since the beginning of creation, is at work in some way, *even in this present crisis*. The question is, can such an alternative *theistic* view uphold 'cosmocentrism' and seek to undercut anthropocentrism by 'suggesting spirit as the way to speak of divine agency' (McFague 2011:118)? In other words, in such a view, can we begin to understand the current environmental crisis in terms of both human culpability *and* God's divine acting *concomitantly* towards a fruitful and blessed future for the earth and all its creatures?

The presupposition of such an alternative theological position is that God is sovereign and active in every physical state of the universe and has been enacting the created order since the beginning of time. If so, what then is happening now if that action has included devastating pollution and degradation of the creation itself at the hands of one species in that creation?

Turning to Divine Compositionism, what we see and experience as we encounter the world is the continual, faithful, *act-result* of God enacting the created order according to God's moment-by-moment existence-conferring action, one that has been ongoing since the very first moment of creation. Therefore, the current crisis that we are in can be viewed *organically*, as devastating as it is. Production of creaturely waste is consistent with a theme that has existed since the beginning of life on earth. All of earth's ecosystems, bar none, has had to deal with creaturely waste. Waste is *always* produced in every sphere of the creation. In fact, evolution is on some level *driven* by creaturely waste, followed by the use and reuse of that waste in order to foster another trophic level of ecosystem construction. There is always a system or an organism that evolves out of the waste products that will serve to recycle and reincorporate the waste towards productive ends.

This is how ecosystems are consistently built. The waste that humans have produced in plastics, microparticles, hydrocarbons, methane, mercury and other pollutants is yet another form of creaturely waste. Just as speculated in the primordial earth, toxic gasses and emissions from volcanic eruptions and noxious gaseous fusions *were needed* to give rise to first-order conditions for life to exist. The current geological model reinforces that the primordial earth was *polluted* by toxic carbon dioxide, nitrogen gas and carbon monoxide emanating from volatile volcanic eruptions, while early microorganisms evolved to use these components to produce noxious methane gas (Crane 2020:1; Sossi 2021). However,

these pollutants were vital for forming the early earth's atmosphere acting as greenhouse gasses that warmed the earth for other life forms to emerge – and, it did. Approximately, 2.7 billion years ago, photosynthetic cyanobacteria were able to survive in this environment and use the toxic waste of CO₂ with the sun's energy to convert the toxic CO₂ into food – glucose – to live. However, these anaerobic photosynthetic microbes produced a toxic gas as a waste as well – oxygen. This waste accumulated for approximately 500 million years, which then became the substrate for the next level of development: organisms who evolved to use toxic oxygen in aerobic respiration (Blankenship 2010:434; Timeline of Photosynthesis on Earth 2008:1; Soo et al. 2017:1436). As God enacted into being noxious and toxic conditions all along earth's evolution that were necessary for the subsequent levels of life to emerge, we now find the earth in a likewise condition of toxicity. Suppose the entire evolved process of life on earth is moving forward towards some completed end (biblically and eschatologically speaking), out of eternally derived divine ideas that God intended to create. In that case, we must also say that the condition of the earth *as it is now* is also moving towards a new heaven and a new earth: a glorious next evolutionary step.

Perhaps, just as God has used organisms before to solve the problems of waste and toxicity, God will now use the *very animal* that caused the toxicity to solve the problem and propel the earth and its creatures into the next generation of earth's history. In this way, the eschatological writings in the New Testament that point to apocalyptic destruction, such as in the *Book of Revelation*, could be viewed in a similar way to how Scrooge in Dicken's *A Christmas Carol* addressed the Ghost of Christmas future, 'Are these the shadows of the things that *will be*, or are they the shadows of things that *may only be*?' Perhaps such apocalyptic writings warn that humans need to *change their disposition*, again like Scrooge, from selfishness to benevolence. Referring to eschatological writings as a guide, Rossing and Buitendag (2020:5) proposed that 'the "end" these texts envision is not the end of the created world so much as the end of an unjust empire'. Perhaps the current climate collapse is now catalysing the end of this 'unjust empire', towards healing the spiritual sicknesses of human greed and selfishness that have gotten us here.

The next question is, does Divine Compositionism hold the explanatory power to offer a coherent account of God's sovereign causal control over the earth as it is now while acknowledging human culpability and free will within a redemption arc for both humanity and the earth? This question will be answered in the affirmative as we proceed to the next and final section.

The present global environmental precipice may be afforded by a spiritual remedy

Divine Compositionism's explanatory strength resides in the idea that God acts *differentially* in the mechanisms of the natural world and in human sentient beings. By acting out of

a supreme self-regard and an ever-flowing love for the works of creation (Edwards 1989:421; Winslow 2020b), God has the best and highest end in mind for *all* God's creatures toward their ultimate redemption, as stated in Psalm 138:8, 'The Lord will fulfil his purposes; your steadfast love, O Lord, endures forever. Do not forsake the work of your hands'. Divine Compositionism affords God's divine acting in nature at this current ecological precipice as enacting a constructive future regarding creaturely waste, which involves working *within* and through the human species. While humans retain free will, their hearts are the field where the Spirit of God works.

To further understand this complexity, we must first take humanity as a *species*, governed by the biological laws of evolutionary speciation. Here, we refine the word 'evolve' concerning humans. Psychologically, morally, spiritually or ethically, *individual* humans can evolve. However, the human *population*, referred to biologically as the 'human lineage', has departed in crucial systematic ways from the human lineage at earlier evolutionary stages (Dupre & Nicholson 2018:34). Humanity has lost the consciousness of biological interconnection as a species. What is needed is a fundamental shift in human understanding that our existence as a species, *as is true for all biological species*, is fundamentally in harmony with all living ecosystems; we exist only because of the interconnectedness with other creatures (Moltmann 2019:17; Rabie-Boshoff & Buitendag 2020:3). How species persist and develop in relation to the environment is governed biologically by principles that function to maintain coherence and stability in a changing ecology. Due to inheritance factors, populations function processually and developmentally by reacting to, and interacting within, a wide range of causal factors operating in a given environment. Not only do species adapt to these causal factors but they can also modify their environment in a variety of consequential ways, in accordance with their needs (Dupre & Nicholson 2018:35). In terms of human free will, earlier lineages of humans modified the global ecology based on growing technological and societal needs.

The human species is now confronted with how to affect positive environmental modifications as needs have changed. Technological solutions are already being implemented, but what is needed is *global unity toward their uses*, being of one biocentric mind, systematising an infrastructure of sustainable technologies and renewable uses for all forms of societal waste. The remedy is a move for the human species, *as the contemporary human lineage*, to evolve into a unified biocentric mindset that acknowledges and allows for political, economic and cultural differences but holds these as *secondary* to the prioritisation of a sustainable infrastructure avowing its implementation.

However, such a cooperative consciousness of biocentricism requires a societal, *spiritual* evolution of the heart toward a biotheology of valuing humility and love, coming together in unity and peace, compassion for one another and for the earth, for future creatures, human and non-human yet to be. For a heart change of this nature, Philippians 2:1–4 may

provide the guiding spiritual principle necessary to undergird a biotheology of a unified biocentrism:

[M]ake my joy complete by being like-minded, having the same love, being united in spirit and purpose. Do nothing out of selfish ambition or empty pride, but in humility consider others more important than yourselves. Each of you should look not only to your own interests, but also to the interests of others.

This spiritual principle involves a change in human relation, a change in attitude, and a change in heart. This may seem nearly hopeless given the condition of our world. However, the hope lies in the *spirit* of the human species. While biologically speaking, evolution processually advances *anatomically* through populations, this biblical principle involves the spiritual heart-condition of individuals, one that holds the capacity to usher humanity into a higher human lineage through species *spiritual* evolution. This is an intriguing notion because evolution on this scale is not anatomical, but *spiritual, relational, and ethical*.

The aim, then, is for the human world family to rely on the human spirit of ingenuity and cooperation, using *everything we have individually and collectively*, towards the rethinking of human or creature-produced waste, as Rossing and Buitendag (2020) stated:

The climate crisis needs our best science, although it cannot be solved by science alone. It requires courageous and visionary leadership, as well as interdisciplinary dialogue between science and other disciplines. Religious studies can play an important role. (p. 3)

The good news is that such an interdisciplinary and intercultural scientific and societal dialogue has been in effect for several decades, affirming cooperation on a grand scale with a vision of common and universal effort (COP26 2021; Simut 2020:3; The Earth Charter 2020). The theological and spiritual task at hand is not to adjudicate political or economic directives but to seek revelation into the significance of God's action in the world toward the earth's healing in and through the spiritual evolution of the human species.

In such an evolution, we must now take to task God's divine action in the role of human spiritual healing, to effectuate earth's physical evolution. Does Divine Compositionism hold the necessary explanatory power to envision a cooperative change in the divine-human co-creation necessary to bring humanity and the earth crisis together for the next good and right step in our evolutionary history? Let's see how.

Divine Compositionism proposes that God is acting *on condition*. What does this mean? It means that God has ordained a range of possible manifestations (m) for every *physical event in nature*, a range that comprises the real set of possibilities for the actual world denoted as $\{m_1, m_2, m_3, \dots, m_n\}$ (Winslow & Schultz 2018). Avoiding the necessity of determinism, God in perfect freedom acts on condition, willing into existence one ' m ' from this set out of a causal

range of start-up conditions based on God's plans and purposes for the creation, in Christ, in every subsequent Plank-scale moment (Schultz 2009).

How this metaphysical construct plays out in *human affairs* is in its explanatory power regarding (1) God's concurrentist mode of action in relation to humans – they are responsible and culpable for secondary causation and human activity – and (2) the role of intercessory prayer. This coheres with both human free will and God's sovereign, providential care. As there are a range of outcomes in any situation, the prayer of the faithful allows humans to partner with the divine, effectuating an outcome based on divine wisdom and love. We are instructed to pray and believe. Thus, the divine action imperative in Divine Compositionism shows that on the one hand, God has sovereign control over all physical and natural events in the creation as in 2 Chronicles 7:13 '...I shut up the heavens so that there is no rain...I command locusts to devour the land... I send a plague among my people'. This scripture affirms that God controls *all* natural events on earth, even the seemingly destructive ones. However, on the other hand, Divine Compositionism yields to a concurrentist modality between God and humanity to effectuate real and significant changes in human lives and in the earth. This is evidenced in the mandate given to Solomon in the very next verse in 2 Chronicles 7:14:

If my people, which are called by my name, shall humble themselves, and pray, and seek my face, and turn from their wicked ways; then will I hear from heaven, and will forgive their sin, and will heal their land.

Divine Compositionism offers a way of understanding a divine-human cooperation where humanity has the ability to transform future events toward the healing of our earth by humility and prayer. The heart-prayer is for God to render a global shift in consciousness from anthropocentrism to biocentrism (Conradie 2020; Howell 2021; Simut 2020) into what Moltmann (2019:12, 113, 121) envisions as an 'ecological spirituality'.

A shift in consciousness into an ecological spirituality opens the possibility for an evolved human lineage that functions *optimally* by being like-minded, by putting the needs of the earth's healing at the centre, in the spirit of cooperation towards the one purpose of not only survival of our species, but the thriving of *all species*. For some anthropologists and theologians alike, the success of *Homo sapiens* is owed in large part to the natural selection of 'cooperation' in our pre-historic hunter-gatherer cousins (Coakley 2020; Coakley & Nowak 2013). Contemporary cooperation seems again to be the answer. In his 1723 sermon entitled, 'Live Peaceably with One Another', the great theologian Edwards (1997) insightfully points out:

We are all made of the same blood. We are descendants of the same Heavenly Father who has made us all; so, we are all brethren of whatever nation, religion, or opinion. (p. 129)

This kind of cooperation with one another and the earth proved successful once in our evolutionary history, and may now again, if a processual evolution takes place where people who by God's loving Spirit are 'united in spirit and purpose'.

Conclusion

The biotheological anecdote to the immanent ecological precipice ascribes Divine Compositionism as a view that accounts for God's divine action, compositionally and coordinately, out of God's infinite love for, and commitment to, the creation and all its creatures. God is acting in the natural world to unfold the processual evolution of the next step in earth's history out of the creaturely waste produced by *Homo sapiens*. The movement towards the next step is truly *biotheological* – God, in and through the prayer of the faithful, reveals to humankind the necessary next steps in the earth's *biological* evolution. The way forward through human creaturely waste is through humanity's *spiritual* evolution in collective cooperation and unified ingenuity to effectuate global infrastructure changes in a healthy ecoplanetary existence. It *can* and must be done. In Psalm 148, we see every created thing praising God, 'Praise the Lord, you from the earth, you creatures of the sea, and all you depths, fire, hail, snow, fog and wind storm that carry out his command'. *Why are they praising?* Divine Compositionism, as a novel, theistic divine action position, would stake the claim that the God who loves and owns the creation is *right now*, actively at work towards the good, fruitful and abundant blessing emerging in the next step of the earth's *biological* history through a redemptive, biocentric *spiritual* evolution in the human heart. This magnificent work of God can only elicit praise.

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