

Article

Children and Climate Anxiety: An Ecofeminist Practical Theological Perspective

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Abstract: As awareness grows of global warming and ecological degradation, words such as “climate anxiety”, and “eco-anxiety” enter our vocabularies, describing the impact of climate change on human mental health and spiritual wellbeing. Distress over climate change disproportionately impacts children, who also are more susceptible to the broader health, economic, and social effects brought about by environmental harm. In this paper, I explore children’s vulnerability to climate change and climate anxiety through the lens of ecofeminist practical theology. Ecofeminism brings the liberatory concerns of feminist theologies into engagement with those theologies focused on the life of the planet. Drawing on ecofeminism, practical theology must continue and deepen its own ecological conversion, and practical theologies of childhood must take seriously the work of making an ecological home, oikos, in which children are embedded as a part of the wider ecology that includes the more-than-human world. This requires foregrounding religious education with children toward the inhabitation of the earth in good and just ways. However, these theologies also must address children’s lived realities of increased anxiety over planetary changes that endanger life through practices of spiritual care with children that engage and support them in their distress toward participatory empowerment for change.



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1. Introduction

Children today know the earth and all its creatures are in trouble. They are born into life on a dying planet and increasingly demonstrate their awareness of this travesty through heightened levels of anxiety. Their “eco-anxiety” is a global phenomenon, not restricted to a single population of children, although intersectional identities and oppressions may amplify or blunt its effects among particular groups of children as well as its conscious articulation by them (Hickman et al. 2021, p. 106, ital. in original). This paper considers the phenomenon of children experiencing eco and climate anxiety through an ecofeminist practical theological lens. Recent attention to the differential effects of climate change on children calls for a recentring of ecological attention within theologies prioritizing the wellbeing of children.

Climate anxiety and eco-anxiety¹, as used here, refer not only to the self-conscious articulation of angst about the demise of the planet by children of affluence and privilege—children who are genuinely disturbed yet protected from many of the direct effects of climate change. Eco-anxiety also stands as a descriptive category for the lived experiences of precarity faced by children bearing the brunt of climate change in the here-and-now of their lives. Ecofeminist theology brings the liberatory concerns of feminist theologies into engagement with those focused on the life of the planet, meaning that advocacy for children and for planetary solidarity both fit within its purposes.

Feminist practical theologies of childhood must take seriously children’s lived realities of increased anxiety and precarity amid ecological changes that endanger all life. Such

theologies must bear witness to the particular suffering of children caused both by present-day ecological harms and by the erasure of a sustainable future for the earth caused by ecological degradation. My goals in this essay are modest: I first critique the absence of attention to the non-human creation in practical theologies of childhood. I then build on the work of two practical theologians, Jennifer Ayers and Annalet van Schalkwyk, to retrieve *oikos* as a particularly fruitful frame for ecological awareness and for addressing eco-anxiety in theological reflections concerned with the wellbeing of children. I then make a case for attending to children and eco-anxiety, first by identifying the particular vulnerabilities of children to the harmful effects of climate change and then by addressing a few common critiques. I conclude by calling upon practical theologians to take seriously children's experiences of eco-anxiety, and invite us to turn to the work of developing concrete, practical theological strategies to transform it in solidarity with the whole of God's creation.

2. Treating Children as Extra-Terrestrial Beings

Attention to the climate crisis and to children's lived realities of coping with it constitute critical elements for any contemporary theology of childhood. With some recent notable exceptions (see [Hearlson 2021](#)), a focus on children and climate change has been missing from many of these theological accounts, including my own ([Mercer 2005a](#)).² Collectively, those of us working at the intersections of childhood studies and Christian theology have confronted significant concerns in the lives of children, from violence against children to childhood poverty. We seem to have addressed these important matters, however, while inadvertently treating children as extra-terrestrial beings—creatures who reside in families and participate in faith communities that somehow stand outside of the realities impacting the wellbeing of the earth. As Bonnie Miller-McLemore exclaims about her changing consciousness, “Years ago, I argued for the ‘living *human* web’ as a better metaphor for pastoral theology’s subject matter than the ‘living *human* document’... But I seldom imagined its *nonhuman* extension. How did I miss this?” ([Miller-McLemore 2020](#), p. 434, ital. in original).

To think theologically about childhood today requires recognition of this extended web. While I have argued elsewhere for theological anthropology formed around the “inter-relatedness, interreliance, and contingency” of human beings with the non-human creation ([Mercer 2017](#), p. 306), I have not brought these ecotheological interests into conversation with childhood. Pamela [McCarroll \(2020\)](#) critiques practical theology for its silence in the face of the climate crisis. She follows Panu [Pihkala's \(2020a\)](#) work on the dynamics of climate anxiety—which include denial and avoidance—to help explain this silence. In an effort to break through practical theological silence about children and the climate crisis, I first draw upon the work of Jennifer Ayres.

3. Making an *Oikos* for Children

Ayres, a religious educator, makes a compelling case for combatting climate despair through religious education toward what she terms inhabitance. “An inhabitant is a creature who lives well within the context and bounds of its habitation. ... An inhabitant desires and cultivates the wisdom necessary to live in God’s world well” ([Ayres 2019](#), pp. 2, 4). She notes that the root words for ecology, *oikos* (household, home, or habitation) and *logos* (logic or knowledge) render ecology as “the knowledge... of inhabiting” ([Ayres 2019](#), p. 9). This “*oikos*” theme has been engaged by many in general discussions of ecotheology.³ Inhabitance is a way of life conscious of human embeddedness within the non-human extension of the web proposed by Miller-McLemore. Ayres puts forward a vision of an “ecological theological anthropology” that understands the human vocation as “the work of inhabiting God’s world well” ([Ayres 2019](#), p. 9). Children have a “central role in awakening of the whole community to the gifts and responsibilities of inhabitance”, writes [Ayres \(2019\)](#), pp. 120–21). Although she does not develop this point about children, her comment is a recognition that children can manifest ecological awareness inviting adult commitments that might otherwise be absent.

The *oikos* imaged by Ayres is one in which “together, human and nonhuman creatures are members of a household, a site of nurture and a site of obligation” (Ayres 2019, p. 8). Her description evokes constitutive notions of home—nurture and obligation (or responsibility)—that are central to children’s lives. From an ecological standpoint, making a home for children situates them beyond what is generally understood to be a solely human web of connection, to recognize the presence and significance of those others making up the household—not only non-human creatures and plant life but also water, land, and air. These too participate in the nurture of children. Human household inhabitants (including children) have responsibilities to live well with the non-humans constituting their *oikos*. It is insufficient to view a child’s development apart from this wider ecology. Accounting theologically for such expanded anthropology, then, requires adopting an “ecological faith [that] looks for patterns, relationships, and effects from the standpoint of an *embedded member of the habitat*” (Ayres 2019, p. 9).

I find Ayres’ engagement of *oikos* and inhabitance as a theological description of an ecological way of life to be a helpful framework for thinking theologically about children. These guiding metaphors have special significance when brought to bear on childhood because of the power of “home” to so strongly define a child’s world. Inhabitance makes clear that our ways of defining home have been too narrow, causing us to raise up children who think of home as an autonomously human habitation, unaware of their radical interdependence with non-human animals and the rest of the creation, and this ecology’s role in constituting their very being.

Problematically, however, home- and household- metaphors contain historical, patriarchal associations with the subordination of women and children. Ecofeminism’s theorizing of the connections between gender oppression and ecological harm is well known, analyzing the gendering of “nature” as feminine, with both women and nature treated as objects to be subdued and brought under control (Merchant 1980; Plumwood 1993). Under conditions of patriarchy, households become primarily consumer units ruled by the paterfamilias to whom other household members are subordinated. In the context of a discussion about ecology, household and home images risk reinscribing such oppressive meanings. Reimagining the *oikos* inhabited by children together with other non-human creatures thus necessitates a feminist retrieval of alternative meanings of *oikos* apart from such patriarchal and capitalist appropriations. In order to be of use in a liberatory ecological theology of childhood, the *oikos* must be reconfigured as an intentional connectional ecology that is life-giving for all.⁴

Feminist theologian Letty Russell pre-figured this contemporary ecological discussion more than three decades ago in an earlier work on feminist theology and authority in which she addressed the Greco-Roman *oikos*, “the arena of wives, slaves, and children ruled over by ‘free’ men” as “a household of bondage” (Russell 1987, p. 26). In place of such associations, Russell invokes “the biblical understanding of God’s *oikonomia*, or householding of the whole earth” for which she uses the metaphor of a “household of freedom” as an “alternative translation of the phrase ‘kingdom of God’” (Russell 1987, p. 26).⁵ In the household of God, the logic of the *oikos* is not the logic of domination. An ecotheological perspective on childhood, drawn from this alternative, divine *oikonomia*, understands children and nurtures children’s understanding of themselves as creatures situated within an *oikos*—part of a much larger ecology of God’s making and delight. This *oikos tou Theou* as a “household of freedom” cannot be freedom for its human inhabitants alone. In fact, one lesson embodied in children’s more obvious creaturely vulnerability is the embedded status of human beings within an ecology (both human and non-human) that is home. Embeddedness means the wellbeing of all *oikos*-dwellers is contingent upon one another’s welfare. Harm or oppression of members of the *oikos* limits the freedom and flourishing of all who dwell therein.

South African ecofeminist theologian Annalet Van Schalkwyk (2012) also draws upon the relationship between *oikos* and ecology in her work, describing the earth as the *oikos* of God. Her “Oikos Cycle of Care” transposes the Deep Ecology cycle of Arne Naess (1990) onto the familiar “Pastoral Circle” of pastoral and practical theology

(Henriot 2000; Wijzen et al. 2005). In the pastoral circle (which can constitute both a template for action in ministry and for the reflective work of practical theology), one moves from experience to questioning, then to commitment, and finally to action. The Deep Ecology movement's cycle describes a process of conversion that "alters one's life orientation from anthropocentric to biocentric" (Van Schalkwyk 2012, p. 106).

Van Schalkwyk connects "experience" in the pastoral circle to the Deep Ecology cycle's initial step of immersion in nature, through which one can experience "God's creative love and God's revelation in and through nature", with the subsequent realization of "coming to understand nature and how humanity is a part of nature" (Van Schalkwyk 2012, p. 108). The immersive experience and the awareness it engenders leads to *ecophilia* (loving nature). Mapping the Deep Ecology Cycle onto the second moment in the pastoral circle, questioning, Van Schalkwyk sees this as a place from which one's *ecophilia* generates a critical interrogation of human disregard for the wider ecology, raising questions such as, "If the ecology works in this wonderful way, why does humanity ignore it, disregard and exploit it, and live in unsustainable ways? What is wrong with our understanding of our faith, if this is the way in which we relate to the ecology? What can be the solutions to these destructive ways? What are the theological alternatives?" (Van Schalkwyk 2012, p. 108).

These two movements issue into a third one that van Schalkwyk names as a "deep commitment to protect and heal the ecology. . . This is also a deep commitment of faith, because one's understanding of the place of the ecology—of which humanity is part—transforms the way one believes in the creator-Saviour God" (Van Schalkwyk 2012, p. 108). Such commitments involve the formation of eco-values, and an "understanding the wisdom of nature", or *ecosophia*. Deep commitments ultimately lead to an ethic of care and eco-justice, "the willingness to change one's actions, and to act with care and justice, so as to alter the way in which humanity relates to the ecology and to the *oikos*. Thus, it leads to a transformation of values and ethics" (Van Schalkwyk 2012, p. 108). Together, then, the experience, wisdom, and questioning bring about a conversion: a profound commitment to the created world that becomes embodied in actions of love toward the earth.

Feminist interpretations of the earth as the *oikos tou theou* resonate with the priority that home has in the lives of children and the need to reconstruct how human adults and children understand their relationship to this *oikos*. Both Ayres and van Schalkwyk offer clues toward the kind of conversion needed from a household of human domination and disregard of the non-human ecology to one of aware embeddedness.⁶ Children are not extra-planetary creatures. They "live and move, and have their being" (Acts 17:28) within a living web of relationships, human and non-human, held within the lands and waters of the earth.

4. Eco-Anxiety in Childhood

As awareness grows concerning the earth's perilous state, words such as "climate anxiety" also called "eco-anxiety" (Clayton et al. 2017), "solastalgia" (Albrecht 2005), "climate/environmental grief", and "psychoterratic syndromes" (Albrecht 2011) enter contemporary lexicons. Such terms seek to depict different dimensions of the impact of climate change on human mental and physical health and spiritual wellbeing. The American Psychological Association (APA) report on "Mental Health and Our Changing Climate" defines eco-anxiety as "chronic fear of environmental doom" (Clayton et al. 2017, p. 68). Within the growing body of psychological research attending to the mental health-related effects of climate change, the concept of eco-anxiety arose in response to the need to characterize the range of human emotional responses that include high levels of worry, fear, despair, sorrow, grief, depression, and existential anxiety felt in relation to ecological destruction and environmentally-related stressors (Ojala et al. 2021; Pihkala 2020a). Eco-anxiety may also include traumatic stress responses, particularly when ecological destruction is more directly experienced, as might be the case among children caught up in an extreme weather event or another climate-related disaster or those who must migrate from their homelands due to environmental factors.

I use eco-anxiety and climate anxiety as general terms to describe this range of bodily, spiritual, and psychological distress related to the effects of climate change. Eco-anxiety refers to emotions that have their origin in concern for the earth itself and for the suffering of non-human creatures. It also references feelings of anxiety generated by one's own experience of the impacts of climate change. In other words, a child might feel eco-anxiety in the form of worry over the ocean's sickness from plastic waste or worry for the Florida panther facing extinction. Another child's eco-anxiety might center more on the impact of climate change on people, such as the worry that their community will run out of fresh drinking water or that poor air quality is harmful to their friend who suffers from asthma. Still, another child, living as part of a household displaced by drought-driven famine, experiences climate anxiety as chronic, existential worry about the threat posed to their family's life and wellbeing by ecological degradation.

Eco-anxiety for children thus may include the "emotional response that can be seen even where there is no immediate physical evidence of impact of climate change on one's own life, a projected and anticipated anxiety into the future" (Hickman 2020, p. 414). The future-oriented aspects of eco-anxiety are characterized by worry, grief, and loss and sometimes by trauma, especially in situations of direct exposure to climate-related disaster events, climate migration, and displacement, in relation to which children may experience post-traumatic stress effects well beyond the event itself (Currie and Deschênes 2016; Garcia and Sheehan 2016; Gislason et al. 2021; Kousky 2016). All of this is to underscore the centrality of eco-anxiety's connection to time in the experience of children: ecological degradation brings harm in the present but is simultaneously tied to threatened harms and the after-effects of trauma extending in the future, creating uncertainty.⁷ The future-related aspects of climate anxiety are born in part out of the stress of not knowing what takes place amid anticipation of catastrophe, alongside the long-term "chronicity" of eco-anxiety (Clayton 2020; Clayton et al. 2017).

5. Children as Especially Vulnerable to Climate Harms

Children are particularly subject to climate anxiety for a reason: climate scientists and mental health experts alike agree that children are among the most vulnerable to its negative effects (Burke et al. 2018; Clayton et al. 2017; Hickman et al. 2021; Sheffield and Landrigan 2011; Stanley et al. 2021). An overarching aspect of such vulnerability that cuts across physical, social, and mental health dimensions concerns the greater proportion of children's lives spent under the conditions of the climate crisis. That is, the young today live their entire lives under its sway. Because they have a longer life expectancy than do the adults coming before them, children risk longer exposure to "newly developing or worsening environmental hazards in the future" (Sheffield and Landrigan 2011, p. 292) in addition to the present-day impacts of such hazards.

Children also experience particular vulnerability to the effects of climate change due to their developmental status (Vergunst and Berry 2021), including their emotional capacities for dealing with stress and distress, which are still maturing. They, therefore, are more vulnerable to the effects of ongoing, chronic stress on the brain's structure, which Wu and colleagues consider a risk factor for mental illness: "As such, the stress of a climate crisis during a crucial developmental period, coupled with an increased likelihood of encountering repeated stressors related to climate change throughout life will conceivably increase the incidence of mental illness over the life course" (Wu et al. 2020, p. e435). Physically, children have "less effective heat adaptation capacity than do adults", and they experience higher exposure of air- and water-toxins per body weight in their still-developing systems (Sheffield and Landrigan 2011, p. 292).

The World Health Organization (WHO) maps what they call the "global burden of disease", a measure of the percentage of the overall morbidity and mortality carried by various population groups around the world. Looking at diseases and risk factors for disease attributable to climate change two decades ago, the WHO held that more than "88% of the existing burden of disease due to climate change occurs in children < 5 years of age in both devel-

oped and developing countries” (Zhang et al. 2007 in Sheffield and Landrigan 2011, p. 292). According to the WHO, 1.7 million children under the age of five died in 2012 from environmentally-related causes, and 2021 WHO information shows that 25% of the “disease burden” in children under five can be accounted for by environmental risks.⁸ This means children as a group bear more effects from diseases related to climate change. That is, they have higher rates of complications and death from diseases that proliferate in response to global temperature fluctuations (e.g., the increase in mosquito-borne illnesses such as malaria or the zika virus that result because warmer temperatures are favorable for the insect carriers) (Burke et al. 2018, pp. 1–2), or to climate disaster-related pathogens (e.g., diseases linked to infectious agents in unclean water) (Currie and Deschênes 2016, p. 4). Nutritional deficits related to climate-related famine have a decidedly greater impact on children’s developing bodies (Garcia and Sheehan 2016, p. 87).

In addition to such physical vulnerabilities, children face an array of socially-mediated effects from climate change (Gislason et al. 2021). They are more dependent upon others to mitigate climate change’s difficult effects (Sheffield and Landrigan 2011, p. 291). Children experience particularly strong consequences from climate-related disruptions to family, community, education, and place because of the limited power they have to negotiate these environments independently. Such disruptions can happen through displacement/forced migration caused by extreme weather events (Kousky 2016). These adverse experiences may result from the need to flee conflicts and war that happen when land, water, and other resources become scarce as tensions are exacerbated by environmental factors (Garcia and Sheehan 2016, p. 86).

A primary climate change-related phenomenon such as a fire, for example, might result in a child’s loss of their home, with the subsequent disruption to their ability to attend school. However, beyond this are many secondary and tertiary effects: the disruption in education brings with it a sudden change in social networks, including not only a child’s peer group but also daily access to a significant group of professionals such as teachers, school nurses, chaplains, food services workers, and others who are suddenly removed from that child’s “relational web”. The destruction of the home represents a significant economic setback for the family, which may impact the child’s access to food, clothing, healthcare, and other resources. If the family is already economically vulnerable, such stressors most certainly are compounded, amplified by intersectional features such as race. On top of these material and relational losses, a child in these circumstances will undoubtedly contend with emotional distress. Climate change thus has the power to create multiple points of impact in the lives of children, including its ability to amplify existing social inequalities as “climate change intensifies and complexifies vulnerability in the lives of children and youth” (Gislason et al. 2021, p. 2). In other words, for children already experiencing existential crises from other sources of trauma and suffering, such as the collective and historical traumas of racism, climate change and the anxieties it engenders only deepen the vulnerabilities already present.

At the same time that children experience vulnerabilities particular to their age, socio-cultural, and geographical contexts, they are not without agency in relation to the current climate crisis (Gislason et al. 2021). It is tempting to paint children as *only* vulnerable and dependent (i.e., having no power or agency, needing others for care) and as *solely* vulnerable and dependent (i.e., the only creatures experiencing vulnerability and dependency). In reality, while children do suffer particular vulnerabilities and dependency, they are more than these elements alone and should not be reduced to them. Climate activism among children and youth is an important source of resiliency (Gislason et al. 2021, p. 9). Children mobilized for climate action comprise a leading voice in the growing acceptance of climate change and of the need for urgent action.⁹ And while I highlight children’s contingent status, this is not to ignore the interdependent and co-vulnerable reality that is a feature of *all* creatureliness. As theologian David Clough puts it, “human beings and other animals are thought of together in Christian scripture. Together they are given life by their creator as fleshly creatures made of dust and inspired by the breath of life, together they are given

a common table in Eden and beyond, “together they experience the fragility of mortal life, together they are the objects of God’s providential care ...” (Clough 2012, p. 40, italics mine). Children’s visible vulnerability and dependency bring home the often-unwanted truth that creatureliness is a precarious state for all who share this status—namely, all but God. Eco-anxiety is but another manifestation of this existential reality.

6. Critics of Eco- and Climate-Anxiety

6.1. Anthropocentrism

Not everyone acknowledges the reality of eco-anxiety, much less its occurrence among children as a problem to be addressed. One critique comes from within ecofeminism itself. While not specifically leveled against climate anxiety, this matter concerns the anthropocentric approach to climate issues within ecofeminist analysis or the tendency to “focus on the consequence to human communities” (Eaton 2021, p. 215) rather than a more expansive engagement of the wider impact beyond humans alone. A focus on climate anxiety admittedly maintains the anthropocentric approach to the climate crisis by directing attention toward the effects of ecological degradation upon humans, rather than on the harm to the earth itself or non-human inhabitants (McCarroll 2020, p. 39).

It is insufficient to look at the climate crisis exclusively in terms of its impact on humans. Here, I do so self-consciously and in full awareness of the partial perspective of such an approach within ecotheology in order to foreground the situations of children as a group among earth’s human population who often find themselves overlooked altogether in contemporary discussions about the planet’s wellbeing. One reason to examine the climate crisis through a focus on human *children* is that until recently, literature on the climate crisis has tended to ignore children just as much as it ignores other-than-human creatures. Another more pressing reason to focus attention on human children in the current ecological situation, though, is that by virtue of children’s greater proximity to the precarity and contingency experienced by other-than-human creatures in the *oikos*, concern for human children can be a way to garner greater awareness and concern for other precariously situated beings. Concern for children may function as a conduit for concern for other members of the *oikos*.

6.2. Pathologizing and Depoliticizing

Some critics of the idea of eco-anxiety contend that it “medicalizes” and pathologizes what is actually an appropriate response to a crisis in which real harm occurs (Hickman 2020, p. 414). This assessment holds that using clinical terminology such as “complicated grief” to express how children manifest their sadness over the likely extinction of loggerhead sea turtles seems unlikely to contribute to planetary healing or help children. According to those who hold this concern, a focus on eco-emotions individualizes responsibility for ecological destruction and thereby depoliticizes actions for change. That is, talk of climate grief situates action for change on the griever and on internal healing to help them feel better, rather than on collective responses to address the structures and systems that perpetuate climate destruction and serve the needs of the other-than-human species at risk. Climate anxiety, according to its critics, may be little more than a condition of privileged people who have the luxury to “feel bad about polar bears or talk to therapists”, because the real problems of the climate crisis are more abstract and distant from their actual lives. Pastoral theologian Ryan LaMothe points to global capitalism as a primary culprit, inviting simultaneous care for the internal worlds of people and the systems and structures of harm, as they are co-implicated in the suffering of all (LaMothe 2020, 2021).¹⁰

A related critique specifies that eco-anxiety exists as a phenomenon linked to whiteness and other forms of privilege (noted by McCarroll 2020; Ray 2021a), critiquing eco-anxiety discourse with the charge that the primary people who identify with it are not the ones most vulnerable to its effects (Ray 2021a). Such claims that the children displaced by extreme weather events or who experience environmentally-related health effects are not

the ones labeling their difficulties as eco-anxiety call into question the legitimacy of concern for children's eco-anxiety.

Sarah Jaquette Ray, the author of a popular 2020 book entitled *A Field Guide to Climate Anxiety*, studies the effects of climate change on people. A year after her book's publication, she wrote an opinion column in which she described being brought up short, "struck by the fact that those responding to the concept of climate anxiety are overwhelmingly white", while those most concerned about climate change are people of color who experience more negative effects from it. Ray asked, "Is climate anxiety a form of white fragility or even *racial* anxiety? Put another way, is climate anxiety just code for white people wishing to hold onto their way of life or get 'back to normal', to the comforts of their privilege?" (Ray 2021a, unpaginated text). Ray initially critiqued her own participation in a societal focus on the emotional dimensions of climate change at the expense of seeing it through a social justice lens. Her point was not to invalidate the fact that people have an emotional response to the destruction of the ecosystem. It was, rather, to recognize that "the prospect of an unlivable future has always shaped the emotional terrain for Black and brown people, whether that terrain is racism or climate change. . . . What is unique [about the present moment of response to climate change] is that people who had been insulated from oppression are now waking up to the prospect of their own unlivable future" (Ray 2021a, unpaginated text).

Such critical appraisals of eco-anxiety are important and legitimate; in many ways, they parallel the historical separation between the mainstream environmental movement with its background in the creation of natural spaces for recreational use primarily by middle-class white people, and the environmental justice movement with its focus on such matters as exposing corporate toxic waste dumping in proximity to communities of color, ending colonial land-use policies on indigenous lands, or ensuring that people living in poverty have access to safe drinking water. A focus on climate anxiety may well be used to divert attention away from both the needs of an imperiled ecosphere and of BIPOC (Black, Indigenous, and People of Color) communities who often experience the most direct, negative impacts of climate change upon humans. Some will find in climate anxiety discourse an excuse to expend energy toward alleviating their anxiety and removing their discomfort rather than working to ameliorate its sources through conversion to repair the planet; some will focus on the intrapsychic idea of climate anxiety as a means of avoiding action when existing inequities are only amplified by ecological destruction.

In spite of these legitimate critiques of eco-anxiety discourse, I believe it is important to carve out space for a practical theological focus on children's climate anxiety. I do so critically, aware of the kinds of problems named above, yet equally aware that the search for purity in commitments to justice is a false pathway leading to paralysis. There is no position of innocence from which to address either the subject of the climate crisis' impact on children or the presence of racism in climate change discourse. We need to be concerned about and act to address inequities in which oppressed groups bear the greatest burdens of environmental violence and ecological degradation and to work for justice where environmental racism manifests itself while also attending to the impact of climate anxiety on all children.

It is important to address the question of the relationship between children's eco-anxiety and privilege. It simply is not the case that only privileged children experience eco or climate anxiety (Ballew et al. 2020; Garcia and Sheehan 2016). Children in BIPOC communities and others who disproportionately face the direct impact of climate degradation also experience fear, grief, and worry about the condition of the planet. When this happens, the fact that it adds onto the cumulative impact of existential crises and traumatic stress already present in the historical and contemporary narratives of these communities may mean that climate anxiety takes a less distinct role in their overall experience, not that it is absent. That is, these children too experience climate anxiety which comes as an overlay on top of other forms of struggle with which they must contend (also noted by Ray 2021a).

Seeing eco-anxiety's presence in contexts where it is not always the most salient among multiple stressors has a global dimension. It is important to resist the tendency to attribute

mental health effects of the climate crisis only or primarily to children in the West or global north countries while limiting discussions of the material and physical impact of climate change on children in the global south. First, these broadly-bounded designations include children who do not fit the simple descriptor of “privileged” or “not-privileged”. These social positions are shaped intersectionally. US- and North American BIPOC children living in poverty and children elsewhere living in poverty may share heightened vulnerability to climate effects related to material conditions of economic and social class, while at the same time, some among them will share certain protections with some affluent children, such as greater access to a community of support and care.

Second, for a child who undergoes extreme material and physical deprivation or experiences existential threat in the context of systemic racism’s collective trauma history, these aspects of their life are likely to assume primacy in a child’s everyday life, but the children are not thereby made immune from spiritual and mental health effects of ecological harm. In fact, they may be more at risk since living with chronic stress makes children more susceptible to mental health issues and, I would add, spiritual distress (Clayton et al. 2017; Doherty and Clayton 2011; Hickman et al. 2021; Kousky 2016; Macy 2013; Burke et al. 2018). Third, children whose locations make them more subject to multiple harms may also show considerable resilience and should not be identified as persons without agency or singularly constructed as victims (Davenport 2017; Nissen et al. 2021; Ojala 2012a; Ojala and Bengtsson 2019; Stanley et al. 2021; Verlie 2022; Wu et al. 2020). Thus, with Pihkala (2020b), I maintain that those suffering most directly from climate change “also suffer most heavily from the psychological impacts of environmental problems—including eco-anxiety. Thus the struggle for eco-justice and climate justice is also a struggle for more psychic and psychosocial resilience” (Pihkala 2020b, p. 183).

As it turns out, Ray (2021b) revisits her question of whether climate anxiety is found only among privileged white people. In a newer article, she takes into account the global study by Hickman et al. (2021) surveying ten thousand children in ten countries. That study reports that “respondents across all countries were worried about climate change” (p. e863). Ray, noting the study’s finding that “communities of color are more worried about climate change than their white counterparts”, now offers a more nuanced way of looking at the link between privilege and climate anxiety discourse that aligns with my argument here. Ray writes that climate anxiety manifests itself differently among people in different contexts, and “just because [BIPOC communities] aren’t suffering from climate anxiety as it is currently defined doesn’t mean they aren’t deeply attuned to what is happening to the world. ... [I]t is possible to feel climate anxiety even if climate change isn’t the first or worst existential threat of our lives. ... It is possible to have big feelings about other threats that may happen in relation to climate change without ever using the words ‘climate change’” (Ray 2021b, pp. 4, 6).

In the long run, all of this suggests to me that one can critique the presence of diversionary tactics and of racism in the discourse on climate anxiety without abstraction from children’s lived experiences. It is not helpful to pit one kind of oppression against another in the lives of children. The empathy that climate-anxious children express for other creatures communicates children’s distress and has legitimacy as such.¹¹ So does the reality of the pain some children experience from the mental health impact of being continually bathed in a discourse of impending planetary demise. The recognition of the presence of a continual existential threat for children in BIPOC communities from systemic racism’s harms remains in paramount need of transformation even as it does not erase the co-presence of eco-anxiety from the lives of BIPOC children.

Regarding the depoliticizing discourse of eco-emotions, we can generate constructive solutions to the problem of pathologizing or medicalizing what is, in reality, a normal, expectable response to the non-normal event of ecological destruction. For instance, one can add terminology that embraces the generative, life-giving impulses underlying climate anxiety instead of the language of pathology, engaging these motivations in the service of transformation. Several authors have already emphasized that eco-anxiety in-

cludes an adaptive dimension that is linked with motivation and caring (Hickman 2020; Pihkala 2020a; Hickman et al. 2021). However, rather than turning this into a simplistic optimism that ultimately translates into a practice of climate change denial, adults concerned about climate-anxious children can invoke the discursive lens variously termed “critical hope” (Ojala 2016), “active hope” (Verlie et al. 2021, p. 134), or “constructive hope” (Chawla 2020).

All of these terms point to a form of hope grounded in the sense of urgent need for change that is coupled with a vision for change and empowerment to act. In other words, it is not simply a matter of what terms are in use. The framework, cultural or otherwise, that situates *how* they are used also has relevance for the affective experiences of children, which in turn can help to empower their agency in the world.¹²

Christian theology needs to put forward a similarly critical, active, constructive vision of hope—an eschatology that links how humans inhabit God’s *oikos* in the present with bold, imaginative visions of what life as creatures among others embedded in a common home might look like for all to flourish. Eschatology, writes feminist biblical theologian Barbara Rossing, “speaks about hope”, and as such, is an act of imagination in which we picture a counterworld, an alternative vision to the status quo’s ecological destruction. Rossing sees the current planetary crisis not as “primarily a scientific crisis, or even a moral crisis”. Instead, she contends, “our crisis is a narrative crisis: it is a crisis of imagination” with very real results (Rossing 2017, pp. 328–29). The imagination Rossing calls for is active, such as the hope it engenders, as it becomes a new narrative directing our steps toward the earth’s repair and restoration. It envisions what God’s world with all its creatures—the whole *oikos tou Theou*—might be like in an alternative future in which practices of inhabitation promote the flourishing of all. To turn away from children’s lived reality of eco-anxiety is an abdication of the Christian responsibility to nurture the eschatological imaginations of children for the sake of the planet and its many inhabitants.

Latina feminist theologian Nancy Pineda-Madrid writes of eschatological hope in an ecological framework, citing the often-repeated Spanish expression, “*somos criaturas de Dios*” (we are creatures of God). It is, for her, a way of properly locating humans within the whole of creation through a “theological anthropology of creatureliness” that puts humanity in perspective. “Our theological anthropology is doomed to distortion if considered in isolation from a healthy biology, ecology, and cosmology”, she writes. However, framing human beings as creatures of God “furtheres eschatological hope by foregrounding human beings’ common fellowship with all other creatures of God” (Pineda-Madrid 2017, p. 312).

Nurturing an eschatological imagination among children who struggle with eco-anxiety means equipping them and all Christians with critical capacities to re-form theological ideas and practices that have “mis-sized” humanity in relation to our earth-kin. Reimagining humans—not as disproportionately significant and special above all others but as “right-sized”—as one among all of God’s special and beloved creatures is a theological activity for which adults may need to look to children for leadership. Children’s relatively smaller physical size gives them a kind of “epistemological privilege” to see what adults may miss about the disproportionality of human lives within the greater ecology of our inhabitation and the more finely tuned awareness among some children of both their vulnerability and their need for an interconnected, relationally rich place that is their *oikos*, may afford them a clearer view of what can go wrong when humans take an outsized view of themselves in relation to the rest of God’s creatures.

Rossing and Pineda-Madrid help to further flesh out the ecofeminist retrieval of concepts of *oikos* and inhabitation found earlier in the works of Jennifer Ayres and Annalet van Schalkwyk. Such theological resources, in turn, constitute a key element within practical theological strategies for supporting children who experience eco-anxiety. The development of such strategies in their concrete forms is future work that can draw on this article’s establishment of eco-anxiety among children as an important concern for practical theologians.

7. Limitations and Opportunities for Future Scholarship

This article offers a preliminary inquiry into children's eco-anxiety from the perspective of ecofeminist practical theology. Although it contributes to the literature of childhood studies and theology with its attention to eco-anxiety in children, there remains a gap in practical theology's empirical research on the subject. Research is needed with children who experience eco-anxiety. In addition, more work is needed from the perspective of pastoral and spiritual care to better understand what might be unique about climate anxiety as a specific form of distress experienced by children. Such work could provide helpful resources for caregivers regarding the most effective pastoral care interventions with eco-anxious children. Emerging self-help literature exists, addressing how to support children with climate anxiety, as does a small body of work focused upon eco-anxiety and pastoral care in general, but to my knowledge, there is no similar literature directly targeting pastoral care with children facing eco-anxiety.¹³ Further work in this area would constitute a significant contribution to the field of practical theology.

8. Conclusions

Eco-anxiety is a reality in the lives of many children. Given the impact of climate destruction upon children's lives, their anxiety about the threats posed for themselves and other species and for the life of the planet is an appropriate response: *not* responding with anxiety to such grave danger would be highly problematic. However, for individual children and others, living with chronic anxiety also can be harmful. The practical theological turn toward transformation that puts care and justice side by side retrieves the ecotheological theme of the inhabitance in God's *oikos*, to support human children *and* the other-than-human members of the planetary household. Practices of care for children entail nurturing them in awareness of their embeddedness within that ecology toward the kind of deep commitment of faith that issues in wisdom—*ecosophia*—to heal the earth and live well within its diverse ecology. In the end, we are left with the practical theological question of what it would take to attend well to children experiencing eco-anxiety in the world that God created and loves? I am taken by the notion from Pope Francis' environmental manifesto, *Laudato Si* (Pope Francis 2015), that what is needed is nothing short of *ecological conversion* (See especially Ayres 2017; Calder and Morgan 2016; Hanchin and Hearlson 2020; Hearlson 2020, 2021; Helsel 2018; McCarroll 2020; Miller-McLemore 2020; Robinson and Wotochek 2021). Van Schalkwyk's "oikos cycle of care", for example, while not a prescription for "fixing" the anxiety children suffer over climate destruction, does suggest a pattern for the conversion that must take place for ecological justice to take root. Ayres' call for religious education toward inhabitance is not only for children. However, children suffering from eco-anxiety will certainly benefit from a religious education that fosters ecological kinship and invites activism on behalf of the ecosphere that is God's *oikos* (and ours). Plenty of evidence exists today that practical theology and its subfields are in the midst of an ecological turn, increasingly centering concerns over climate change and ecological consciousness in our work. It is time to bring this focus home to children with further theological reflections on childhood, ecology, and climate anxiety.

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Notes

- ¹ Some writers such as Pihkala distinguish between eco-anxiety as "any anxiety related to the climate crisis" with climate anxiety as its most common form, defined as "anxiety that is significantly related to anthropogenic climate change" (Pihkala 2020a, p. 3). Many authors use the terms interchangeably even with such distinctions. In this essay I use climate anxiety specifically in relation to climate change and planetary impacts, and eco-anxiety as the more general term.
- ² Many practical theologians working on other topics that include substantive attention to ecology do relate their ecological concerns to children within the broader focus of their work. See for example (Ayres 2019; Helsel 2018; LaMothe 2021; Moore 1998; Rimmer 2020).

- 3 Louw (2017) provides a survey of theological meanings *oikos* in his consideration of a “practical theology of home” in the face of contemporary realities of displacement and migration. He brings these *oikos* meanings into conversation with the Zulu notion of Ekhaya, or “yearning for home.” Conradie (2007) identifies “household of God” as a “theological root metaphor” with multiple uses. He considers the metaphor’s limitations as well, particularly in patriarchal contexts where it may be used to legitimize various forms of oppression. Clifford (2006) examines biblical texts connecting Divine creation and redemption. Critiquing the exclusive focus arising during the Enlightenment on humans as the object of God’s redemptive work in Christ, she writes: “[A] careful look at the biblical sources shows that the neglect of *oikos* overlooks the ways in which God’s work of creation provides the cosmic purpose behind God’s redemptive activity” (Clifford 2006, p. 250). Larry Rasmussen (1996) offers a theological ethics of *oikos* in relation to ecology, mining the term for its meanings of what he calls ‘the story of the earth as a single, vast household’ (Rasmussen 1996, p. 44). Elsewhere he defines *oikos* as “a world house” (Rasmussen 2013, p. 163) in which the *oikeloi* (household dwellers) are to “build the community and share the gifts of the Spirit for the common good... Such care requires intimate knowledge of community structures and dynamics. It requires knowing the household’s logic and laws, which is exactly what ‘ecology’ means (*oikos* + *logos*), knowledge of relationships that build up and sustain” (Rasmussen 2013, p. 164).
- 4 Pastoral theologian Ryan LaMothe (2020) offers different language with his psychoanalytic exploration of “dwelling” that also attends to political, economic, and cultural dimensions of “experiences of being unhoused”, inclusive of the reality “possibility that climate change, which human beings have caused, is likely to unhouse millions of species, including human beings” (p. 124).
- 5 Such work finds contemporary support in the decolonial biblical interpretation of Rohun Park’s (2009) East Asian reading of the Parable of the Prodigal Son. Park explores the polemic of *oikos* meanings in the Gospel of Luke, in which Jesus deconstructs colonial notions of the *oikos-nomos* bound up in the imperial household with the emperor as paterfamilias. In its place, Park lifts up the *oikos tou theou* proclaimed by Jesus as an alternative economy of God constructed not for the accumulation of wealth but instead, as I would engage Park’s thought for my purposes, for the wellbeing of children (and other creatures) who dwell there.
- 6 The theme of ecological conversion, while not new in ecotheology, has gained renewed prominence because of its engagement by Pope Francis in his recent ecological encyclical, *Laudato Si’* (Pope Francis 2015). See, for example, Elizabeth A. Johnson who bluntly admonishes humanity to repent of our harmful practices, as she asserts that “we need a deep spiritual conversion to the Earth” (Johnson 2014, p. 258).
- 7 Hence Rob Nixon’s description of climate change as “slow violence”, or “a violence that occurs gradually and out of sight, a violence of delayed destruction that is dispersed across time and space, an attritional violence that is typically not viewed as violence at all” (Nixon 2011, p. 2).
- 8 See their website for a number of resources related to children and the environment: Available online: https://www.who.int/health-topics/children-environmental-health#tab=tab_2 (accessed on 6 January 2022).
- 9 Ojala’s (Ojala 2012a, 2012b; Ojala and Bengtsson 2019) research on how children and adolescents respond to climate change distinguished between three coping patterns. Among them, the one she calls “meaning focused coping”—using beliefs and values to help foster positive emotions in relation to the source of stress—yielded the best result in terms of diminishing negative emotions along with enhancing pro-environmental engagement. This fits with other findings (see below) that participation in youth movements around environmental activism mitigated negative mental health effects of climate anxiety. A fuller discussion of children’s climate activism is beyond the scope of this essay. Current scholarship emphasizes how such activism can be an important antidote to the “climate despair” that can fuel eco-anxiety among children (Bowman and Pickard 2021; Davenport 2017; Nissen et al. 2021; Stanley et al. 2021; Trott 2021; Wu et al. 2020).
- 10 Elsewhere I too have interrogated the role of capitalism in constructing children into identities as excellent consumers, calling for practices with children that draw upon Christian faith as a counternarrative to consumer culture (Mercer 2004, 2005a, 2005b).
- 11 But see Wendy Mallette’s critique as an interesting counterpoint (Mallette 2021).
- 12 See Susan Wardell’s excellent exploration of the “names and frames for ecological distress” (Wardell 2020). She considers critiques from within the psychotherapeutic community against the framing of ecological distress in established psychological categories that can pathologize it: “eco-anxiety discloses not the disorder of the individual, but a dis-order of ecological systems; not the madness of the individual, but the madness of the political, social, and economic systems that have brought us to this point” (Wardell 2020, p. 196). Wardell also reflects on the implications of how constructions of ecological distress, situated as they are in their own cultural histories, relate to activism. Ursula Heise addresses similar themes in her work. See (Heise 2016).
- 13 For an examples of popular literature focused on children, see (Shugarman 2020). For an example of literature on pastoral care and eco-anxiety that is not specific to children see (Pihkala 2022).

References

- Albrecht, Glenn. 2005. ‘Solastalgia’. A new concept in health and identity. *PAN: Philosophy Activism Nature* 3: 44–59.
- Albrecht, Glenn. 2011. Chronic environmental change: Emerging ‘psychoterratic’ syndromes. In *Climate Change and Human Well-Being*. Berlin and Heidelberg: Springer, pp. 43–56.
- Ayres, Jennifer R. 2017. Cultivating the “unquiet heart”: Ecology, education, and Christian faith. *Theology Today* 74: 57–65. [CrossRef]
- Ayres, Jennifer R. 2019. *Inhabitation: Ecological Religious Education*. St. Waco: Baylor University Press.

- Ballew, Matthew, Edward Malbach, John Kotcher, Parrish Bergquist, Seth Rosenthal, Jennifer Marlon, and Anthony A. Leiserowitz. 2020. Which Racial/Ethnic Groups Care Most about Climate Change? In *Yale Program on Climate Change Communication: Climate Note*. New Haven: Yale University and George Mason University.
- Bowman, Benjamin, and Sarah Pickard. 2021. Peace, protest and precarity: Making conceptual sense of young people's non-violent dissent in a period of intersecting crises. *Journal of Applied Youth Studies* 4: 493–510. [\[CrossRef\]](#)
- Burke, Susie E., Ann V. Sanson, and Judith Van Hoorn. 2018. The Psychological Effects of Climate Change on Children. *Current Psychiatry Reports* 20: 1–17. [\[CrossRef\]](#) [\[PubMed\]](#)
- Calder, Andy S., and Jan E. Morgan. 2016. 'Out of the Whirlwind': Clinical Pastoral Education and Climate Change. *Journal of Pastoral Care and Counseling* 70: 16–25. [\[CrossRef\]](#) [\[PubMed\]](#)
- Chawla, Louise. 2020. Childhood Nature Connection and Constructive Hope: A Review of Research on Connecting with Nature and Coping with Environmental Loss. *People and Nature* 2: 619–42. [\[CrossRef\]](#)
- Clayton, Susan. 2020. Climate anxiety: Psychological responses to climate change. *Journal of Anxiety Disorders* 74: 102263. [\[CrossRef\]](#) [\[PubMed\]](#)
- Clayton, Susan, Christie Manning, Kirra Krygsman, and Meighen Speiser. 2017. *Mental Health and Our Changing Climate: Impacts, Implications, and Guidance*. Washington: American Psychological Association and ecoAmerica.
- Clifford, Anne M. 2006. From ecological lament to sustainable oikos. In *Environmental Stewardship: Critical Perspectives—Past and Present*. London: T & T Clark, pp. 247–52.
- Clough, David L. 2012. *On Animals: Systematic Theology*. London: A&C Black, vol. 1.
- Conradie, Ernst M. 2007. The Whole Household of God (Oikos): Some Ecclesiological Perspectives Part 1. *Scriptura* 94: 1–9.
- Currie, Janet, and Olivier Deschênes. 2016. Children and climate change: Introducing the issue. *The Future of Children* 26: 3–9. [\[CrossRef\]](#)
- Davenport, Leslie. 2017. *Emotional Resiliency in the Era of Climate Change: A Clinician's Guide*. Philadelphia: Jessica Kingsley Publishers.
- Doherty, Thomas J., and Susan Clayton. 2011. The psychological impacts of global climate change. *American Psychologist* 66: 265. [\[CrossRef\]](#) [\[PubMed\]](#)
- Eaton, Heather. 2021. Ecofeminist Theologies in the Age of Climate Crisis. *Feminist Theology* 29: 209–19. [\[CrossRef\]](#)
- Garcia, Daniel Martinez, and Mary C. Sheehan. 2016. Extreme weather-driven disasters and children's health. *International Journal of Health Services* 46: 79–105. [\[CrossRef\]](#) [\[PubMed\]](#)
- Gislason, Maya K., Angel M. Kennedy, and Stephanie M. Witham. 2021. The Interplay between Social and Ecological Determinants of Mental Health for Children and Youth in the Climate Crisis. *International Journal of Environmental Research and Public Health* 18: 4573. [\[CrossRef\]](#)
- Hanchin, Timothy, and Christy Lang Hearlson. 2020. Educating for ecological conversion: An ecstatic pedagogy for Christian higher education amid climate crisis. *Religious Education* 115: 255–68. [\[CrossRef\]](#)
- Hearlson, Christy Lang. 2020. Ecological conversion as conversion to the child: Becoming caregivers, becoming childlike. *Horizons* 47: 232–55. [\[CrossRef\]](#)
- Hearlson, Christiane Lang. 2021. Converting the Imagination through Visual Images in Ecological Religious Education. *Religious Education* 116: 129–41. [\[CrossRef\]](#)
- Heise, Ursula K. 2016. *Imagining Extinction: The Cultural Meanings of Endangered Species*. Chicago: University of Chicago Press.
- Helsel, Philip Browning. 2018. Loving The World: Place Attachment and Environment in Pastoral Theology. *Journal of Pastoral Theology* 28: 22–33. [\[CrossRef\]](#)
- Henriot, Peter J. 2000. *Pastoral Circle: A Strategy for Promoting Justice and Peace*. Harare: Kolbe Press Harare.
- Hickman, Caroline, Elizabeth Marks, Panu Pihkala, Susan Clayton, R. Eric Lewandowski, Elouise E. Mayall, Britt Wray, Catriona Mellor, and Lise van Susteren. 2021. Climate anxiety in children and young people and their beliefs about government responses to climate change: A global survey. *The Lancet Planetary Health* 5: e863–e873. [\[CrossRef\]](#)
- Hickman, Caroline. 2020. We need to (find a way to) talk about... Eco-anxiety. *Journal of Social Work Practice* 34: 411–24. [\[CrossRef\]](#)
- Johnson, Elizabeth A. 2014. *Ask the Beasts: Darwin and the God of Love*. London and New York: Bloomsbury.
- Kousky, Caroly. 2016. Impacts of Natural Disasters on Children. *The Future of Children* 26: 73–92. [\[CrossRef\]](#)
- LaMothe, Ryan. 2020. On being at home in the world: A psychoanalytic-political perspective on dwelling in the Anthropocene era. *The Psychoanalytic Review* 107: 123–51. [\[CrossRef\]](#) [\[PubMed\]](#)
- LaMothe, Ryan. 2021. Social and political freedom: A pastoral theological perspective—Part I. *Pastoral Psychology* 70: 255–71. [\[CrossRef\]](#)
- Louw, Daniel J. 2017. Ekhaya: Human displacement and the yearning for familial homecoming. From Throne (Cathedral) to Home (Oikos) in a grassroots ecclesiology of place and space: Fides Quaerens Domum et Locum [Faith Seeking Home and Space]. *HTS: Theological Studies* 73: 1–11. [\[CrossRef\]](#)
- Macy, Joanna. 2013. *Greening of the Self*. Berkeley: Parallax Press.
- Mallette, Wendy. 2021. Questioning Empathetic Responsiveness to Nonhuman Animal Vulnerability: Noninnocent Relations and Affective Motivations in the Animal Turn in Religious Studies. *Journal for the Study of Religion, Nature & Culture* 15: 177–203.
- McCarroll, Pamela R. 2020. Listening for the Cries of the Earth: Practical Theology in the Anthropocene. *International Journal of Practical Theology* 24: 29–46. [\[CrossRef\]](#)
- Mercer, Joyce Ann. 2004. The child as consumer: A North American problem of ambivalence concerning the spirituality of childhood in late capitalist consumer culture. *Sewanee Theological Review* 48: 65.

- Mercer, Joyce Ann. 2005a. *Welcoming Children: A Practical Theology of Childhood*. St. Louis: Chalice Press.
- Mercer, Joyce Ann. 2005b. Spiritual Economies of Childhood: Christian Perspectives of Global Market Forces and Young People's Spirituality. In *Nurturing Child and Adolescent Spirituality: Perspectives from the World's Religious Traditions*. Lanham: Rowman & Littlefield Publishers, pp. 458–71.
- Mercer, Joyce Ann. 2017. Environmental activism in the Philippines: A practical theological perspective. In *Planetary Solidarity: Global Women's Voices on Christian Doctrine and Climate Justice*. Edited by Grace Ji-Sun Kim and Hilda P. Koster. Minneapolis: Fortress, pp. 287–307.
- Merchant, Carolyn. 1980. *The Death of Nature: Women, Ecology, and the Scientific Revolution*, 1st ed. San Francisco: Harper & Row.
- Miller-McLemore, Bonnie J. 2020. Trees and the "Unthought Known: The Wisdom of the Nonhuman (or Do Humans "Have Shit for Brains"?). *Pastoral Psychology* 69: 423–43. [CrossRef]
- Moore, Mary Elizabeth. 1998. *Ministering with the Earth*. Nashville: Chalice Press.
- Naess, Arne. 1990. *Ecology, Community and Lifestyle: Outline of an Ecosophy*. Cambridge: Cambridge University Press.
- Nissen, Sylvia, Jennifer H. K. Wong, and Sally Carlton. 2021. Children and young people's climate crisis activism—a perspective on long-term effects. *Children's Geographies* 19: 317–23. [CrossRef]
- Nixon, Rob. 2011. *Slow Violence and the Environmentalism of the Poor*. Cambridge: Harvard University Press.
- Ojala, Maria, and Hans Bengtsson. 2019. Young people's coping strategies concerning climate change: Relations to perceived communication with parents and friends and proenvironmental behavior. *Environment and Behavior* 51: 907–35. [CrossRef]
- Ojala, Maria, Ashlee Cunsolo, Charles A. Ogunbode, and Jacqueline Middleton. 2021. Anxiety, worry, and grief in a time of environmental and climate crisis: A narrative review. *Annual Review of Environment and Resources* 46: 35–58. [CrossRef]
- Ojala, Maria. 2012a. How do children cope with global climate change? Coping strategies, engagement, and well-being. *Journal of Environmental Psychology* 32: 225–33. [CrossRef]
- Ojala, Maria. 2012b. Regulating Worry, Promoting Hope: How Do Children, Adolescents, and Young Adults Cope with Climate Change? *International Journal of Environmental and Science Education* 7: 537–61.
- Ojala, Maria. 2016. Facing anxiety in climate change education: From therapeutic practice to hopeful transgressive learning. *Canadian Journal of Environmental Education (CJEE)* 21: 41–56.
- Park, Rohun. 2009. Revisiting the parable of the prodigal son for decolonization: Luke's reconfiguration of oikos in 15: 11–32. *Biblical Interpretation* 17: 507–20. [CrossRef]
- Pihkala, Panu. 2020a. Anxiety and the ecological crisis: An analysis of eco-anxiety and climate anxiety. *Sustainability* 12: 7836.
- Pihkala, Panu. 2020b. Theology of "eco-anxiety" as liberating contextual theology. In *Contextual Theology*. London: Routledge, pp. 181–204.
- Pihkala, Panu. 2022. Eco-Anxiety and Pastoral Care: Theoretical Considerations and Practical Suggestions. *Religions* 13: 192. [CrossRef]
- Pineda-Madrid, Nancy. 2017. ¡Somos Criaturas de Dios!—Seeing and Beholding the Garden of God. In *Planetary Solidarity: Global Women's Voices on Christian Doctrine and Climate Justice*. Edited by Grace Ji-Sun Kim and Hilda P. Koster. Minneapolis: Fortress, pp. 311–24.
- Plumwood, Val. 1993. *Feminism and the Mastery of Nature, Opening Out*. London/New York: Routledge.
- Pope Francis. 2015. *Laudato si': On Care for Our Common Home*. Vatican City. Available online: http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.pdf (accessed on 8 August 2021).
- Rasmussen, Larry L. 1996. *Earth Community Earth Ethics, Ecology and Justice*. Maryknoll: Orbis Books.
- Rasmussen, Larry L. 2013. *Earth-Honoring Faith Religious Ethics in a New Key*. Oxford: Oxford University Press. [CrossRef]
- Ray, Sarah Jaquette. 2021a. Climate anxiety is an overwhelmingly white phenomenon. *Scientific American*. Available online: <https://www.scientificamerican.com/article/the-unbearable-whiteness-of-climate-anxiety/> (accessed on 21 January 2022).
- Ray, Sarah Jaquette. 2021b. Who Feels Climate Anxiety? *Cairo Review of Global Affairs* 43: 1–7.
- Rimmer, Chad. 2020. Ecology and Christian education: How sustainability discourse and theological anthropology inform teaching methods. *Consensus* 41: 10.
- Robinson, David S, and Jennifer Wotochek. 2021. Kenotic Theologies and the Challenge of the 'Anthropocene': From Deep Incarnation to Interspecies Encounter. *Studies in Christian Ethics* 34: 209–22. [CrossRef]
- Rossing, Barbara R. 2017. Reimagining eschatology: Toward healing and hope for a world at the Eschatos. In *Planetary Solidarity: Global Women's Voices on Christian Doctrine and Climate Justice*. Edited by Grace Ji-Sun Kim and Hilda P. Koster. Minneapolis: Fortress, pp. 325–47.
- Russell, Letty M. 1987. *Household of Freedom: Authority in Feminist Theology (The 1986 Annie Kinkead Warfield Lectures)*, 1st ed. Philadelphia: Westminster Press.
- Sheffield, Perry E., and Philip J. Landrigan. 2011. Global climate change and children's health: Threats and strategies for prevention. *Environmental Health Perspectives* 119: 291–98. [CrossRef]
- Shugarman, Harriet. 2020. *How to Talk to Your Kids about Climate Change: Turning Angst into Action*. Gabriola Island: New Society Publishers.
- Stanley, Samantha K., Teaghan L. Hogg, Zoe Leviston, and Iain Walker. 2021. From anger to action: Differential impacts of eco-anxiety, eco-depression, and eco-anger on climate action and wellbeing. *The Journal of Climate Change and Health* 1: 100003. [CrossRef]
- Trott, Carlie D. 2021. What difference does it make? Exploring the transformative potential of everyday climate crisis activism by children and youth. *Children's Geographies* 19: 300–8. [CrossRef]

- Van Schalkwyk, Annalet. 2012. Welfare, wellbeing and the oikos cycle: An ecofeminist ethical perspective of care. *Journal of Theology for Southern Africa* 142: 98–119.
- Vergunst, Francis, and Helen L. Berry. 2021. Climate Change and Children's Mental Health: A Develmental Perspective. *Clinical Psychological Science*. [CrossRef]
- Verlie, Blanche, Emily Clark, Tamara Jarrett, and Emma Supriyono. 2021. Educators' Experiences and strategies for responding to ecological distress. *Australian Journal of Environmental Education* 37: 132–46. [CrossRef]
- Verlie, Blanche. 2022. *Learning to Live with Climate Change: From Anxiety to Transformation*. Milton Park: Taylor & Francis.
- Wardell, Susan. 2020. Naming and framing ecological distress. *Medicine Anthropology Theory* 7: 187–201. [CrossRef]
- Wijsen, Frans, Jozef Servaas, Peter Henriot, and Rodrigo Mejia. 2005. *The Pastoral Circle Revisited. A Critical Quest for Truth and Transformation*. Nairobi: Paulines Publications Africa.
- Wu, Judy, Gaelen Snell, and Hasina Samji. 2020. Climate anxiety in young people: A call to action. *The Lancet Planetary Health* 4: e435–e436. [CrossRef]
- Zhang, Ying, Peng Bi, and Janet E. Hiller. 2007. Climate Change and Disability–Adjusted Life Years. *Journal of Environmental Health* 70: 32–38. [PubMed]