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Embodying Theology: Trauma Theory, Climate Change, Pastoral and Practical Theology

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Abstract: Since 2009, the amount of literature focused on the psychological and social dimensions of the climate crisis has increased exponentially. This growing interest in the topic is signaled especially in the American Psychological Association (APA)'s multiple reports on the mental health impacts of climate change. More recently, across different disciplines, links have also been made between trauma theory and the climate crisis. These rich discussions include overlapping concerns, areas of potential fruitfulness and theological implications for all the practical theological disciplines, especially for pastoral theology and practices of care. Given the implicitly existential, theological and spiritual dimensions embedded in the realities of both trauma and the climate crisis, there is an important opportunity for pastoral theology in particular, and practical theology more generally, to engage, learn from and contribute to the interdisciplinary conversation. In this paper, I first offer a brief overview of the literature in pastoral theology related to the climate crisis. Second, I present literature specifically on trauma theory and the climate crisis, outlining several of the key themes emerging across the interdisciplinary discussion. Third, I reflect theologically on the presented content, discussing and drawing forward areas of theological, epistemological and practical fruitfulness for practical and pastoral theology.

Keywords: climate trauma; eco-anxiety; climate crisis; ecological emotions; practical theology; pastoral theology; earth-centered; decolonizing; trauma theory; trauma-informed

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1. Introduction

The literature linking climate change with mental health, psychology and social processes began to proliferate following the American Psychological Association's (APA) first large report on the topic (Swim et al. 2009). Since then, the amount of literature on the topic has increased exponentially. Clayton and Manning identify three primary areas of focus "in somewhat chronological order . . . first, ways in which people perceive and come to understand climate change; second, human behavioral responses to climate change; and third, impacts of climate change on human health and well-being." (Clayton and Manning 2018, p. 5). Policy makers and those involved in risk mitigation and adaptation in relation to future modelling for climate change have also shown interest in the individual and collective psychological dynamics anticipated in the face of natural disasters, the destruction of infrastructures of transportation, power and water, food shortages and threats to global security. (Berzonsky and Moser 2017; Moser 2012, 2020). Additionally, researchers beyond the disciplines of pastoral and practical theology have begun to consider this research in relation to cosmological frameworks, spirituality and spiritual practices (see, for example, B. Roszak 1995; Albrecht 2019; Fisher 2013).

Many terms have arisen within and beyond the field of psychology to describe the kinds of emotions and mental health impacts of the climate crisis on individuals and communities. While this paper focuses specifically on the links between trauma and the climate crisis, it is helpful to locate our topic within the larger body of research around climate emotions. Environmental philosopher, Glenn Albrecht has coined several terms

to identify specific emotional phenomena experienced in the face of different aspects of the environmental crisis. Most notable is the term *solastalgia* to describe the sense of deep homesickness experienced by humans whose home and habitat have been destroyed by climate disasters (Albrecht 2011, 2019). His recent book, *Earth Emotions* (Albrecht 2019), includes some terms well known in the field and others that are new. In large measure, the growing taxonomy for climate related emotions draws from early sources in the Ecopsychology movement of the 1990s with the work of Betty and Theodore Roszak and our own Howard Clinebell, to name a few. For example, terms such as *biophilia* and *biophobia* (Roszak et al. 1995; Clinebell [1996] 2013) are taken up by Albrecht to refer to the phenomena of love, reverence and awe for the earth, on the one hand, and fear, disgust and rejection of the earth on the other. Similarly, *ecoalienation* and *ecobonding* (Clinebell [1996] 2013) have also found new resonance in more recent research (Fisher 2013). These terms both speak to the extent to which a human individual or community is in 'right relationship' with the earth—alienated from or bonded with the earth. *Ecological grief* (or eco-grief) was an area of focus early in the Ecopsychology movement (Clinebell [1996] 2013; Roszak 1995) and recently has been introduced more widely in the work of Cunsolo and Ellis—"the grief felt in relation to the experienced or anticipated ecological losses, including the loss of species, ecosystems and meaningful landscapes due to acute or chronic environmental change." (Cunsolo and Ellis 2018, p. 275).

Panu Pihkala, a theologian by training and title, has become a foremost researcher on eco-anxiety, often engaging interdisciplinary methodologies, conversations and publications (see Pihkala 2022a, his publication in this *Special Issue*). *Eco-anxiety* describes experiences of "chronic feelings of anxiety, worry and fear" related to the environmental crises (Pihkala 2018a). His recent article (Pihkala 2022b) is a "preliminary exploration of the taxonomy of climate emotions" necessary for future research given the "profound but complex ways emotions shape people's reactions to the climate crisis" (Pihkala 2022b, p. 1). The study is a thoughtful review of the literature relating emotions with the climate crisis.

Particularly since the 2017 report, released by the American Psychological Association (APA) and Eco-America, the amount of literature relating specifically to trauma and the climate crisis has increased across several disciplines. This report found both acute and chronic trauma responses effecting the mental health of an increasing percentage of the population. The acute (or direct) reactions include "increases in trauma and shock, post-traumatic stress disorder (PTSD), compounded stress, anxiety, substance abuse, and depression." The chronic (or indirect) reactions include "higher rates of aggression, violence, more mental health emergencies, an increased sense of helplessness, hopelessness, or fatalism, and intense feelings of loss" (Clayton et al. 2017, p. 7). Beyond psychology, researchers from sociology and the ecological humanities discuss *climate trauma*, making links between trauma theory, the arts and public discourse and the implications for mitigating and managing public anxiety in the face of climate disaster (Kaplan 2016; Zimmerman 2020; Craps 2020). Public policy makers and those concerned with climate adaptation and mitigation are also looking at the psychological, social and political impacts of trauma responses to the climate crisis (Moser 2012, 2020; Berzonsky and Moser 2017).

I share this brief outline to demonstrate how literature in the area is proliferating across several disciplines and to locate the topic of trauma and the climate crisis within some of the larger conversations. All of these discussions include overlapping concerns, areas of potential fruitfulness and theological implications for the practical theological disciplines, especially those of pastoral theology and care. While there is a growing body of literature, sustained focus on the climate crisis has had little traction in the larger field and even less so in the discipline of pastoral theology, the theological discipline most closely connected with psychology and mental health (McCarroll 2020; Miller-McLemore 2020; Swain 2020). In this article, I am particularly interested in examining literature on trauma and the climate crisis as I see much here that is relevant for pastoral and practical theology. Given the implicitly existential, theological and spiritual dimensions embedded in the realities of both trauma and the climate crisis, there is an important opportunity for practical and pastoral theology

to engage, learn from and contribute to the interdisciplinary conversation. In this paper, I first offer a brief overview of the literature in pastoral theology related to the climate crisis, including Storm Swain's invitation to build a postcolonial, post-traumatic pastoral theology. Second, I present literature specifically on trauma theory and the climate crisis, outlining several of the key themes emerging across the interdisciplinary discussion. Third, I reflect theologically on the presented content, discussing and drawing forward areas of theological, epistemological and practical fruitfulness for practical and pastoral theology.

2. Pastoral Theology and Climate Crisis

Other than the pioneering work of Howard Clinebell and Larry Graham in the 1990s (Clinebell [1996] 2013; Graham 1992) there has not been much published in pastoral theology on the environmental crises until 2015. Since then, there has been a steady increase in the number of articles and chapters published in the area.[1] The hope is that this *Special Issue* and the conversations it engenders will be an important step in carving out more sustained focus on the climate crisis within the disciplines represented here and in the field of practical theology as a whole. Within the literature so far, there have been calls for a complete re-thinking of the discipline of pastoral theology from the ground up (Lartey and McGarrah Sharp 2016; Lee and Gibson 2021; LaMothe 2021a, 2021b, 2021c; Swain 2020). Some important preliminary work explores dimensions of what a reconceived pastoral theology might look like, including an intersectional, postcolonial, earth-centered reconstruction of the discipline's theological moorings and a critique of the violence of anthropocentric framings (Swain 2020; LaMothe 2021a, 2021b, 2021c; Miller-McLemore, forthcoming; Pihkala 2022a).

Most notable among those publishing in the area of pastoral theology and the climate crisis is Ryan LaMothe, whose recent articles and book begin to reconstruct theological frameworks for pastoral theology (LaMothe 2016, 2018, 2021a, 2021b, 2021c). His work emphasizes the political dimensions of the topic. LaMothe examines categories of care, human suffering and flourishing in relation to the polis. He challenges pastoral theology to reconstruct the theologies that undergird practice (LaMothe 2021b) and offers a pastoral theology for dwelling in these tumultuous times (LaMothe 2021a, 2021c).

In my review, I found several others who had published research on pastoral theology and the environmental crisis. Robert Saler (2015) explores the art of congregational pastoral care in the face of eco-devastation. Andy Calder and Jan Morgan (Calder and Morgan 2016) share their creative and inspiring earth-centered approach to Clinical Pastoral Education. Philip Helsel (2018) considers pastoral practice in terms of place attachment and loving the world. Rowley (2015) calls for intersystemic attentiveness as an approach to pastoral theology. Additionally, Panu Pihkala (2016, 2018b, 2022a) offers interdisciplinary work on eco-anxiety that intersects a good deal with concerns of pastoral theology. In her 2020 article, Bonnie Miller-McLemore challenges the field to acknowledge how the climate crisis changes everything and bemoans the neglect of the field thus far (Miller-McLemore 2020). However, in her more recent research review (Miller-McLemore, forthcoming), she recognizes that while there has not been a sustained conversation in pastoral and practical theological circles regarding the climate crisis, there is a surprisingly large body of literature on the topic.

In a recent publication on theology and climate change, Storm Swain and Elizabeth Tapia offer chapters (the latter a response to the former) on pastoral theology (Swain 2020; Tapia 2020). Swain seeks to carve out space for an ecological pastoral theology that engages postmodern, postcolonial and post-traumatic approaches to "decentre the human species while recentring the ecological body that continues to suffer" (Swain 2020, p. 616). Tapia's response brings Swain's methodological concerns down to earth. Their call for a postcolonial, post-traumatic approach to climate crisis reflects, in part, the motivation for my article here. Their nod to the traumatic, colonizing ethos of the status quo invites response (see also, Lartey and McGarrah Sharp 2016). I now present interdisciplinary literature on

trauma and climate change in order to examine opportunities, areas of generativity and theological implications for pastoral and practical theology.

3. Trauma and Climate Crisis

As noted, literature on trauma and the climate crisis is located within larger conversations regarding ecological emotions, public discourse, policy, cultural studies and the arts. In the following section, in an effort to acquaint readers with the basic arguments and to highlight areas of potential interest for pastoral and practice theology, I outline several themes emerging in the interdisciplinary literature.

3.1. Flight, Fright, Fight and Freeze Responses to Climate Crisis

Much of the literature on trauma and climate change makes implicit or explicit links between the fight, flight, fright and freeze trauma responses and various recognizable reactions to the climate crisis in larger publics. In general, the climate crisis is understood as the precipitating stressor that triggers protective trauma responses. Studies identify several psychological reactions that function as "defense mechanisms" (Pihkala 2018b; Woodbury 2019), "protective strategies" (Berzonsky and Moser 2017), "defensive psychic processes" (White 2015) and "psychological coping strategies" (Haltinner et al. 2021). While not all researchers listed here use the language of trauma theory, per se, they point to reactions such as denial, skepticism, indifference, rage, anger, fear, addiction, distraction and so on as unconscious reactions intended to protect persons from rising anxiety, from unacceptable thoughts and a sense of overwhelming threat (Pihkala 2022b; Moser 2020; White 2015; Woodbury 2019).

The fight response is observed in "polarized political discourse" (Woodbury 2019, p. 5); in reactive denial of climate change and anger at those who acknowledge it; in practices of blaming and shaming so common in our increasingly polarized society and in perpetuating cycles of violence the expression of which function as a kind of cathartic release valve (see also, Berzonsky and Moser 2017). The flight response can include a proclivity to intellectualize as a means to flee into mental constructs and ideas (Stanley 2019) as well as addictions of various sorts that distract from the stressor (Woodbury 2019). The fright response can include behaviors such as obsessing over the science of climate change (Woodbury 2019, p. 5) as well as eco-anxiety, which can include sleeplessness, sweating, elevated heart rate and anxious thoughts (see Pihkala 2018b). The freeze response is related to dissociation, when "we simply don't feel or don't allow ourselves to feel . . . ". Dissociation makes sense of the "intrapsychic processes . . . that have allowed climate change to emerge and persist."(White 2015, p. 194)[2]. Climate denial and indifference are seen as dissociative responses, a kind of "psychic numbing" (Lifton) or paralysis. However they are categorized, trauma responses are full-body experiences involving our thoughts, emotions, nervous and limbic systems (Woodbury 2019; Stanley 2019; Fisher 2013). All around us and within us we perceive how climate change can trigger any number of these self-protective mechanisms.

3.2. Distinctives of Climate Trauma

Within the increasingly mainstream work of ecopsychologists, Zhiwa Woodbury tracks the ways *climate trauma* is a distinctive form of trauma in order to develop appropriate psychological frameworks to help individuals, communities and societies (Woodbury 2019). When climate change "is viewed . . . through the lens of traumatology, this deepening existential crisis presents an entirely new, unprecedented, and higher-order category of trauma: Climate Trauma . . . What is unique about this category of trauma is that it is an ever-present, ever-growing threat." (Woodbury 2019, p. 1). Since climate trauma is "superordinate" and ubiquitous, it can compound "past traumas—personal, cultural and intergenerational and will continue to do so until such as time as it is acknowledged" (ibid.). As an existential threat, climate trauma triggers all other traumas and thereby

causes widespread dissociation that distracts people from doing anything about the climate crisis.

Kaplan and Craps consider climate trauma a form of "pre-traumatic stress" wherein images of the future, rather than the past, haunt the present. Pre-trauma "describes how people unconsciously suffer from an immobilizing anticipatory anxiety about the future." (Kaplan 2016, p. xix; Craps 2020, p. 279). Craps' work on climate trauma includes "pre-traumatic stress disorder" or "Anthropocene disorder" to distinguish the phenomena from post-traumatic stress, which is commonly understood. Craps' chapter is generative and in line with critiques of anthropocentrism from across many disciplines. It challenges readers to reconceptualise trauma in non-anthropocentric terms and acknowledges the interconnectivity of human and more-than-human forms of trauma. "A traumatized earth begets traumatized people." (Craps 2020, p. 281). The author proposes "geo trauma" (ibid.) as a term that can help us to reconceptualise suffering beyond human exceptionalism from a post-humanist, materialist perspective—"[disrupting] the dominance of human bodies as the only mournable subjects." (Craps 2020, p. 282, quoting Cunsolo and Landman 2017).

Another important distinction of climate trauma is the way shame and guilt can function. Unlike situations of interpersonal violence wherein "victims" experiencing trauma are not its cause, with climate trauma, many who experience it know that they are also a cause of it. Guilt and shame, therefore, are appropriate in climate trauma in a way that they are not in other forms of trauma. The presence of guilt and shame and even self-loathing in relation to climate trauma can compound the trauma reactive response, further entrenching unhelpful defense strategies.

3.3. Collective and Contagious Trauma and Public Narratives

Climate trauma reactions have become collective, socialized such that whole groups and societies experience elements of indirect or direct trauma. "Socially constructed silence" (Pihkala 2018b, quoting Norgaard) and "normalized denial" (Zimmerman 2020, p. 1) perpetuate collective silence about the elephant in the room. Additionally, we see collective trauma responses in expressions of rage, anger, blaming and shaming between groups of people—where polarized discourse sets one group up against another. Trauma is "contagious", creating a "backdrop of culturally reinforced psychosocial defense mechanisms" that manifest in chaotic "cultural and political expressions of group pathology" (Woodbury 2019).

Both actual experiences of extreme climate events as well as discourse about the climate crisis can trigger trauma responses in various publics. How public narratives regarding climate change are framed and expressed have a powerful impact. When narratives highlight the threat, crisis and catastrophic trajectory of the climate crisis, they can function to harden people into defensive postures (Zimmerman 2020), triggering reactions that result in avoidance of the crisis thereby further perpetuating it (Zimmerman 2020; Moser 2020; Pihkala 2018b; Haraway 2016). It is a vicious and messy cycle. Pragmatically and strategically speaking, then, leaders are called to soften the threat discourse. We can recognize here the deeply political dynamics embedded in the realities of climate trauma.

3.4. Grief and Climate Crisis

Public responses to the climate crisis such as denial, anger, anxiety and depression are interpreted also through the lens of grief (rather than trauma) over the painful realization of death[3]—the death of species from habitat destruction and climate disasters and the slow death of modern metanarratives and anthropocentric epistemologies (Moser 2012; Berzonsky and Moser 2017). Effective leadership for today includes acceptance of death from the climate crisis. It is through their own journey to acceptance that leaders may prepare to accompany others through grief and mourning. Mourning is a first step to enable action toward climate justice. Collective opportunities to acknowledge and process the pain of loss through mourning nurture a sense of connectivity, gratitude and love for nature

and open up space and energy for action toward climate justice (Moser 2012; Berzonsky and Moser 2017; Cunsolo and Landman 2017).

3.5. Trauma Theory, Climate Crisis and Body Knowing

While the primary focus in literature on climate change and trauma has so far focused on using trauma theory as an assessment lens to interpret what is going on, trauma theory offers much potential for imagining what healing might look and feel like, particularly in relation to the body. The shift to the body has been a central focus in the healing of trauma. "The body keeps the score", as van der Kolk so aptly named his text (van der Kolk 2014), sums up the findings of how intrinsic the body is to the experience of and healing from trauma. In his work on radical ecopsychology, building on the work of Joanna Macy and Gestalt therapy, Andy Fisher focuses on recovering a *felt sense* of the human body as the primary vehicle for knowing. As a kind of resistance to ubiquitous and often unconscious suffering required by the neo-liberal capitalist order, Fisher shares exercises to help us reconnect with our bodies. It is by listening to our bodies, and the many ways they manifest and communicate earth's suffering, that we may discover pathways for earth-bound healing (Fisher 2013). Like Fisher, scholars in other fields critique Western epistemologies that disconnect knowing from being, citing that such epistemologies have contributed to the crisis (Zimmerman 2020; Berzonsky and Moser 2017). Zimmerman comments ironically, "the more we know about the climate crisis, the more we emit greenhouse gases" (Zimmerman 2020, p. 12). Informational "knowledge" does not motivate change. Rather, it is in connecting with our body knowing that epistemologies may emerge that serve rather than hinder the flourishing of the earth.

Robin Wall Kimmerer's exquisite book, *Braiding Sweetgrass*, offers much that is relevant in terms of the deeply embodied ways of being, knowing and loving. As an example, she shares findings of recent research showing "that the smell of humus exerts a physiological effect on humans. Breathing the scent of Mother Earth stimulates the release of the hormone oxytocin, the same chemical that promotes bonding between mother and child, between lovers. Held in loving arms . . . " (Kimmerer 2013, p. 236). Our bodies hold a kind of knowing, the reclamation of which leans towards healing.

3.6. Earth's Trauma Is Human Trauma—Ecosystems Thinking

As suggested, there is an important focus on the deep interconnectivity of human mental and physical crises with the earth's crises—human trauma and earth trauma. Ecopsychologists emphasize the intrinsic organic ways human emotions and bodies are part of the earth and expressive of its distress in specifically human form (Fisher 2013; Roszak 1995; Clinebell [1996] 2013). It is a deep systems way of thinking that re-connects human bodies with the ecosystem processes in which we participate and by which we are a sustained. The increase in depression, anxiety, suicide and even pandemics are seen as bodily expressions in the human species of the trauma of the earth with the destruction of the natural healing processes intrinsic to the earth (Fisher 2013, p. 158ff). The argument goes that humans are so deeply entangled in the ecosystems of the earth, they are completely dependent and emotionally and physically regulated as part of the earth; when the earth is in distress, humans are in distress. Our bodies are the ground of our being, the organism through which the earth manifests and communicates. However, in an effort to deny or overcome the suffering of the earth known in our bodies and emotions, we have cut off from our bodies and are no longer in touch with the rhythms and movement of life within and through us. Indeed, the presence of 'coping strategies' reflects the extent to which humans are cut off from our bodies' intrinsic knowing—a situation required by neo-liberal capitalism in order for humans to adapt to an inherently violent socio-political system bound to its own destruction. (Fisher 2013, p. 74). These arguments identify the need for frameworks to interpret human phenomena as participating in the organic systems of entanglements of the earth's processes. Awakening humans to our intrinsic earthiness is essential for a change of perspective. *Falling in love* with the earth—*biophilia*, *ecophilia*—is

a primary starting point toward healing the trauma (Roszak 1995; Clinebell [1996] 2013; Fisher 2013). We cannot save what we do not love. Love reflects our interconnectivity with other beings. It is a generative energy that builds human and more-than-human communities and can nourish and sustain us even when we face the cataclysmic depths of crisis, and the trauma responses overwhelm us.

This brief overview of literature on trauma and climate crisis offers much for pastoral and practical theology to consider and engage, an invitation to which I now turn.

4. Trauma and the Climate Crisis—Pastoral and Practical Theology

4.1. Thinking Theologically about Trauma and the Climate Crisis

Whichever way we look at it, when we bring a theological lens to bear on trauma and the climate crisis, one thing is clear. Trauma responses—whether fight, flight, fright or freeze—reflect a human struggle against existential contingency, our creatureliness. The cataclysmic reality of the climate crisis signifies in real time our ultimate fragility, finitude and earth-bound vulnerability and raises questions of existential and theological import. Using the lens of trauma theory enables us to discern a deep-seated fear[4] that lies beneath all the various reactions in response to the overwhelming threat of the climate crisis. It invites us to perceive the extent to which our own self-protective mechanisms guard and distract us from embracing our humanity and, of course, result in the deepening of the climate crisis.

In her work on trauma, Elizabeth Stanley outlines the many ways our body-minds are wired for trauma responses, having developed this way over millennia to support human survival in hunter–gatherer societies (Stanley 2019). Trauma responses can be triggered when one perceives they are powerless, helpless and lack control over whatever is threatening. "The less agency we perceive we have, the more traumatic the experience will be for our body-mind system." (Stanley 2019, p. 16). As a consequence, the need to control, colonize, manage and/or deny that which threatens can reactively come into play. In fact, she argues convincingly that intellectualizing is a form of trauma response—a practice of colonizing and seeking control when we feel threatened (Stanley 2019).

Of course, this phenomenon of seeking to colonize, control and/or deny that which threatens us is a dynamic many of us can sense in ourselves on a micro level. It is part of the human predicament and identified in various ways from the book of Genesis to the myth of Prometheus, from Augustine to Nietzsche and Freud. What trauma theory helps us notice is that beneath the multivalent ways trauma responses manifest and wreak havoc is a deeper fear from which we are desperate to escape—a fear of our own creatureliness, vulnerability, dependence and finitude. Indeed, it is a spiritual crisis writ large—a failure to discern human purpose and meaning in ways that are life-giving. Trauma theory also helps us recognize that reactive responses are not inevitable. Fight, flight, fright and freeze are not the only options for human responses in the face of threat. However, before we get to that, let us consider some of the ways trauma theory brings a different lens to assessing theology.

We can imagine how certain theologies can both represent and feed the *fight* and *flight* responses through intellectualizing—seeking to colonize, control and avoid that which threatens. Such trauma responses may be discerned in theological infrastructures that privilege human-centered control/power while "protecting" us[5] from seeing things for what they are. Theologians of the cross call such infrastructures "theologies of glory"—theologies that lie about what is obscuring creaturely vulnerability and finitude with promises of glory, power and ultimate victory (McCarroll 2014, 2021; Hall 2012). Indeed, Lynn White's scathing critique of Western Christianity as "the most anthropocentric religion the world has seen", a primary cause of ecological devastation (White 1967), still stands as a challenge for Christian doctrine, witness and practice. When deconstructed through trauma theory, doctrines or theological frameworks that privilege colonizing motifs of human and divine power/control may be perceived as trauma reactive responses—intellectual attempts to deny and overcome the realities of existing. Similarly, when deconstructed through

trauma theory, doctrines or theological frameworks that shift our gaze to some far-away god or promise of heavenly bliss and away from the present realities of our earthen material embeddedness may be perceived as trauma responses—attempts to deny and distract from the realities of existing.

An excellent chapter by eco-theologian Heather Eaton argues that the very architecture of Christian theology normalizes denial and indifference as a response to worldly plights and feeds anthropocentrism. Christian theologies that emphasize world-denying ontologies; promise other-worldly salvation and offer doctrines that locate G-d "outside" creation all feed denial and ultimately are a cause of the species extinction and crises at hand (Eaton 2017). "Christianity has developed an extreme opposition to, even refusal of, the conditions of life . . . As a result, Christianity supports attempts to escape, resist, or control life's requisites . . . because of the refusal to accept the conditions of life, Christianity . . . is involved in domination." (Eaton 2017, p. 33). In line with Eaton and others, theologies that image G-d[6] as powerful and in control and those that locate G-d/the Sacred elsewhere in some disconnected realm outside of earth may be interpreted to both reflect and feed trauma reactive responses. By distracting our gaze from life as it is and placing our sense of the sacred in an other-worldly "person" or place, we not only reject the earth as sub-standard, we are also unable to learn from it and perceive its sanctity. So too, with theologies that emphasize human exceptionalism— for example doctrines of *imago dei* (Deifelt 2017)—such theological architecture could well be deconstructed through the lens of trauma theory. By placing human beings at the center of our conceptions of reality, of the divine and of history we are unable to perceive the wisdom of the earth and its processes, to acknowledge our deep dependence and to discover our meaning and purpose as earth-formed creatures.

Eaton goes on to say, "if domination [is] considered to be the result of refusing the conditions of life—meaning vulnerability, mortality and finitude—then a way forward is to embrace them, difficult as that is." (Eaton 2017, p. 34). My argument in many ways follows Eaton's line of argument, though it offers the clarifying lens of trauma theory, which helps us to perceive that, beneath the human opposition and resistance to the conditions of life, lies a deep fear of being human. The difference is slim but significant in terms of contemplating a way forward. With the lens of trauma theory we are able to perceive the powerful role played by spiritual, emotional and psychological fear that quickly co-opts human attempts to "embrace [our] vulnerability, mortality, finitude," throwing us into trauma reactive ways of being. Instead, trauma theory invites us first to acknowledge the fear, to move toward it and be present to it in a spirit of compassion. As we are present to the fear within ourselves and with others the power of the threat can be unhinged and stranglehold of fear released. By perceiving the root problem as fear (rather than resistance and refusal, for example) and tapping into compassion, we can break the cyclical hold of trauma reactivity in our relating and existing.

Interestingly, in my review of the literature on trauma and climate crisis, I found no reference to the *window of tolerance* (or *optimal zone)*.[7] I believe it is a helpful concept for considering the options for responding in the face of threat and its relevance for theology and practice. Conceived and mapped out by Daniel Siegel, *the window* offers a helpful phenomenological description of the psycho-spiritual-relational dynamics present when human persons are at our best in a context of threat. It refers to the optimal zone in the face of crisis—a state of equilibrium "beyond" the hyperarousal zone of the fight, fright and flight responses and the hypoarousal zone of the freeze, dissociative response (Siegel 1999). When in this zone, humans are able to recognize the threat but do not seek to escape it. Rather, by moving toward our sense of fear with openness, compassion and curiosity, the power of the fear is loosed. When humans are in this zone, we are able to both think and feel; we are connected with our bodies and to the present moment; we can hold paradox and ambiguity, and we are open, compassionate, curious and present both to ourselves and to others. Mindfulness and somatic-based practices common in trauma care support people to move from trauma reactive states into this state of equilibrium within their window (van der Kolk 2014; Stanley 2019). Long-term goals for trauma care often

focus on *widening the window* such that self regulation is enabled through mindfulness and body-based awareness and practices (Stanley 2019). The window of tolerance describes a way of being present in the face of threats and highlights specific practices to support this process. Again, this is not about denying the threat or fighting or overcoming it. Rather, such practices support human people to acknowledge our fear and sense of threat and invite ways to live compassionately and courageously amidst these realities.

How can we, as a discipline and a field, retrieve and develop theological frameworks, practices and epistemologies that do not reinforce the denial of or escape from our earth-entangled human condition? How can we retrieve and develop theological frameworks, practices and epistemologies that support humans to embrace our humanness in all its earth-formed vulnerability? How might theological frameworks, practices and epistemologies enable us to lean into and widen our window—to live courageously as creatures in the here and now within the givens of the earth's claim on us? I turn now to explore some of these questions.

4.2. Toward an Earth-Centered, Decolonizing, Trauma-Informed Approach

From the discussion above, we can discern the centrality of bodies and the focus on the present materiality of existence in terms of theology, practice and epistemology. Of course, practical theology as a whole, more than any other theological field, is concerned with the material realities of life. "Matter matters" (Simone Weil) for practical theology and certainly for pastoral theology. In many ways, practical theology is *the* theological field most equipped to articulate theological constructs, practices and epistemologies grounded in bodies and the present materiality of existence. Our discussion on climate trauma and theology suggests that there is an affective, phenomenological dimension embedded in all discourse and practice that can lean toward trauma reactive responses or toward the equilibrium of our optimal zone, our window of tolerance. In this final sub-section, I propose some questions for de-constructing our theological, practice-based and epistemological priorities and suggest resources for moving forward in these areas. I close in identifying opportunities for further research.

Drawing from the literature on trauma, climate change and theology, I propose here several questions that build on the questions above to help our discipline and field to de-construct theological frameworks, practices and epistemological sources and to move toward more earth-centered, decolonizing, trauma-informed approaches.

In relation to our theological constructs, practice and epistemologies:

1. Do they honour bodily and affective ways of knowing? Or do they reflect an escape into mental constructs that seek to master and colonize that which is "other" including human and other-than-human species and processes? ?
2. Do they take the material realities of existence seriously? Do they flee from the world to uninhabited mental worlds or do they engage the world as it is more deeply? Do they build up and open the theological imagination to recognize the sacred in the midst of creation rather than in some distant time-space?
3. Do they ground us in our bodies and the multiplicity of relationships within and by which we exist? Or do they distract us from our earthen-ness? Do they honour the embodied material integrity of what is, or do they deny and dismiss it?
4. Do they represent colonizing ways of reading and engaging earth and other human and other-than-human persons? Or do they open space to experience what is through the eyes of compassion—in awe and gratitude, in mourning and lament, in actions of care and resistance?
5. How does our research and practice help to widen the window, broaden the optimal zone, within the human species such that humans are freed to embrace our vulnerability with each other and within the community of creation?

In considering theological sources that may serve earth-centered, decolonizing and trauma-informed approaches to pastoral and practical theology, there are several areas to draw from within the larger Christian tradition. Theological frames are important because

they provide a hermeneutical landscape for experiencing life with theological imagination. As Eaton notes, of concern is how doctrines and theological sources support humans to embrace, rather than run from, the materiality and exigencies of being. Additionally, it is important to consider how theological frames can support earth-centered, rather than colonizing, approaches to life as these make all the difference to human living and experiencing. In the Christian tradition, helpful sources to draw on are those that enable humans to perceive the sacred in the here and now of existence. Notions of the Divine that include and focus on the earth and its processes help to re-sacralize matter and to expand theological imagination. While some have resistance to *panentheism*—the notion that G-d is in all things and all things are in G-d—it is a rich and abiding theological construct that offers much for an earth-centered, decolonizing, trauma-informed approach. It invites us to perceive the Sacred in the organic interconnectivity, ecosystemic resilience, relational reciprocity and gracious givenness in the earth and its processes.

Similarly, Christology that emphasizes the bodily reality of the G-d in earthen form offers much. Notions of the ubiquity of Christ (Luther), the Logos becoming flesh (John 1) and the incarnation can ignite theological imagination toward earth-centered approaches.[8] Not only do such lenses offer ways of interpreting Christ's presence here and now within the goodness of creation, they also help to broaden notions of the suffering of Christ within the suffering of creation itself. These doctrinal re-imaginings of G-d and Christ can open our theological imaginations to perceive the sacredness in creation, the holy in the ordinary materiality of what is. Indeed, we can feel it in our bodies when theology opens up vistas for experiencing the sacred close-up. We can imagine that such theology may well help us lean into our window of tolerance/optimal zone where openness, curiosity and spaciousness emerge.

In terms of theological anthropology, needless to say, it is important to re-image the place of the human within the creation in a way that honours the distinctive gifts of humans within the organic body of the earth. Indeed, the modern *imago hominis* of the "human as master" of the earth has been replaced by the late-capitalist "human as consumer" of the earth. Arguably, both images reflect colonizing trauma responses that deny and/or resist human vulnerability and finitude and have consequently led to devastation. Traditionally, pastoral theology and some eco-theology have imaged humans as "stewards" of the earth, caring for the earth. However, this image disconnects humans from the earth, as if earth is an object for humans' care. Additionally, it inverts the deeper truth—that humans are actually dependent on and recipients of the earth's stewarding care, not vice versa. As such, *the steward* reflects a soft colonizing motif. Reimaging the role and purpose of humans within the community of creation invites us to consider organic images of reciprocity and systemic interconnectivity as well as images that point to distinctive gifts of the human species within the larger community. By drawing on our capacity for awe and reverence, for mourning and grief, for creative expression, for conscious agency to confront and resist systems of colonizing oppression, pastoral and practical theology have much to offer in reconceiving the *imago hominis*.

In considering practices and epistemologies that serve an earth-centered, decolonizing, trauma-informed approach, this research challenges us to embrace practices and ideas that ground us where we are—as bodies within the multiple organic systems enabling existence. Developing our capacity to listen to and learn from the interconnected systems of the earth, including our bodies, is a steep learning curve in our context where prescriptive mental constructs of reality have colonized our imaginations and narrative frameworks. Central to this journey will be a capacity to honour the intrinsic systemic integrity of what is, being open to learn from it in a spirit of curiosity. For example, when we recognize the phenomenon of eco-anxiety or climate trauma, not only can we acknowledge it and normalize it—a "normal" human response to a sense of overwhelming threat—we can go further to perceive the intrinsic integrity of these phenomena as they arise in human experience. Indeed, rather than pathologies, eco-anxiety and climate trauma reflect how deeply bonded human persons are as part of the systems of the earth, experiencing the

earth's own distress in human bodies and emotions. Our epistemologies and practices can acknowledge our deep participation in the earth's systems and process. This relates also to our field's focus on suffering and flourishing. How might we expand our intersectional epistemology to recognize systemic interconnectivities of our earthen-ness? All suffering/flourishing reflects earth's suffering/flourishing. Suffering is experienced in relationships not rightly ordered among and within species and processes. The reciprocity of relationships means that when one suffers and is out of a right relationship, there is a whole interconnected system that also manifests and processes the suffering. So too, with flourishing, it is known when life is ordered in a right relationship within and among species and the earth. Earth-centered intersectional epistemologies and practices tend to the dynamic interconnectivities of being.

Finally, I present here some areas for further research in pastoral and practical theology:

1. Moral Distress/Injury—When we consider the ways trauma theory plays out in terms of the climate crisis, it would be interesting to explore the phenomena of moral distress and moral injury in relation to the climate crisis and to consider the theological resonance (see also Hickman et al. 2021). Notably, the presence of shame and guilt in the phenomenon of climate trauma alerts us to its moral dimensions and the potential for moral injury and distress. Given pastoral theology's research expertise on moral injury and distress, how might we contribute to the interdisciplinary conversation in this area?
2. Leadership—Amid the climate and related political-economic-social upheavals to come in the next decades, it will be wise to develop leaders across all fields and professions who are able to resist the urge toward trauma-reactive polarization or indifference and, instead, to lean into their window of tolerance. Especially for spiritual-religious, public and academic leaders, it will be important for us to develop a wide enough window to support populations to acknowledge and process their trauma, grieve their losses and to constructively facilitate earth-centered communal actions toward life. This kind of leadership presence will require much inner work, self-awareness and communal support (Moser 2012; Berzonsky and Moser 2017). How might theological education and practical/pastoral theological research contribute to the formation of leaders amid the climate crisis?
3. Ritual, spiritual and communal practices that acknowledge the sacredness of material processes and honour body knowing—One of the challenges with the trauma responses in the face of the climate crisis is the extent to which underlying grief, sadness and fear remain unacknowledged and, therefore, powerful. Facilitating spaces and practices that name, normalize and acknowledge the grief invites a cathartic release for and witness of these emotions and opens up space, widening the window and enabling positive actions. How might theological education and practical/pastoral theological research continue to build capacity in this area?
4. Stories of ecological creativity and resilience can feed hope and open up horizons of possibility. Sharing stories of hope is essential for widening the window and enabling us to remain present with the challenges of these times. How might our scholarship, research and teaching provide venues for sharing stories that expand and generate hope in times such as these?

5. Conclusions

In this paper, I have covered some vast terrain. My hope is that, in using trauma theory as a lens to explore human responses to the climate crisis and considering the theological import of this for pastoral and practical theology, this paper can contribute to the ongoing work of re-imagining the discipline and the field from an earth-centered, decolonizing, trauma-informed perspective. As a means to invite more sustained conversation in the discipline and the field, I have presented interdisciplinary research on trauma and the climate crisis acknowledging its theological and spiritual dimensions. I have deconstructed how theological frameworks can manifest trauma reactive responses that reinforce anthro-

pocentric, colonizing control/mastery. I have suggested avenues of potential fruitfulness by identifying theological sources, epistemological orientations and practices that enable us to perceive the sacred in the bodied materiality and interconnectivity of being. May we, as a discipline and a field, contribute to widening the window amidst the threat of climate crisis—being present with courage, compassion and equanimity.

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Notes

1 For this brief review of the pastoral theological literature on the climate crisis, I acknowledge the important work of Bonnie Miller-McLemore in her research review for the *International Journal for Practical Theology* (Miller-McLemore, forthcoming) and that of Panu Pihkala whose extensive review of this literature appears in this *Special Issue* (Pihkala 2022a).

2 White is quoting trauma researcher Ruth Lanius from a presentation, "Healing the traumatized self" 2014 Unpublished proceedings from the Boulder Institute for Psychotherapy and Research Front Porch Lecture, Boulder CO.

3 It is helpful to note that behind their discussion of grief is Elizabeth Kubler Ross's cycles of grief model

4 In *The Courage to Be*, Paul Tillich agrees with other existential thinkers when he distinguishes between fear and anxiety. Fear is considered to be related to an embodied threat, whereas anxiety is considered to be ultimately connected to nonbeing. The goal is to transform anxiety into fear so that the threat can be met with courage. In the face of climate crisis, fear and anxiety coallesce with striking ferocity. I choose the language of "fear" rather than "anxiety" to intimate the possibilities for courage and mindful agency in times such as these.

5 "Us" is used here to identify those who wield power by colonizing approaches. This manifestation of trauma response—the wielding of power/control over "otherness" and difference perceived as threat—may be seen as the primary *modus operandi* of colonial patriarchy that has functioned to colonize and control minds, hearts, bodies, species, habitats and the earth.

6 I use "G-d" to point to the reality that the divine source, reality and energy cannot be contained in human words and ideas.

7 I use this term here as it is a recognized term within trauma theory. It refers to a capacity to tolerate the sense of threat related to a triggering event or situation. I acknowledge of the complexity of experience in relation to "tolerance" as it has been used to colonize and undermine people who have been "othered" by the status quo. As much as possible I will use "optimal zone" or "the window" in this paper to refer to the same phenomenon.

8 Certainly understandings of incarnation have been an important theological frame for both pastoral and practical theology over the last few decades, particularly since the emergence of theologies of liberation.

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